COMMISSION STAFF WORKING PAPER

The effects of temporary State aid rules adopted in the context of the financial and economic crisis
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1. **INTRODUCTION: CONTEXT AND OBJECTIVES OF THE STAFF WORKING PAPER**

This Staff Working Paper (later "Paper") is the Commission's reply to the call of the European Parliament that the Commission prepares a detailed evaluation of decisions adopted within the framework of the application of the temporary State aid measures in response to the financial and economic crisis. In this context the Parliament stressed the question of the effectiveness of the crisis State aid measures, and their impact on competition and the economy as a whole.

The Paper provides a comprehensive account of how the Commission's State aid policy responded to the financial and economic crisis, and examines the extent to which the objectives pursued by this policy can be considered as having been met. In so doing, it contributes to the wide policy debate that has been opened by the unprecedented use of State aid during the crisis, and provides a comprehensive factual background and insights for the new rules that are in the making as regards rescue and restructuring aid (for both financial and non-financial firms) and bank resolution and regulation.

State aid, as defined by case law under Article 107 of the Treaty on the Functioning of the European Union, was only a part of the response to the crisis. Institutions and governments also responded through other means, such as liquidity interventions by the central banks. The effects of those other interventions, which do not constitute State aid – and therefore are not subject to authorisation by the European Commission, are not covered by this Paper. Also, the Paper does not discuss the potential or concrete effects of the regulatory responses that the crisis has prompted. They are developed under the lead of the Directorate-General for the Internal Market of the European Commission, in close cooperation with the other Directorates-General concerned, including the Directorate-General for Competition. Those regulatory initiatives have an important role to play given that regulatory gaps in various jurisdictions worldwide, especially on innovatory forms of financial securities with difficult-to-measure credit risk, were one of the many causes of the crisis.

The key messages that emerge from the Paper are gathered in the Executive Summary. They relate to the period from mid-2008 to end 2010 but should also be considered in light of the market developments of the first months of 2011. The overarching conclusion that can be drawn is that State aid to the financial sector and to the real economy under State aid control by the Commission has been effective in reducing financial instability, improving the functioning of financial markets and cushioning the effects of the crisis on the real economy. The bulk of the aid effectively granted benefited a limited number of financial institutions both in the EU as a whole and at Member State level, but State aid control by the Commission enabled to mitigate the resulting distortions of competition within the internal market.

Chapter 2 is an Executive Summary of the Paper. Chapter 3 presents the rationale and objectives of the temporary State aid rules adopted by the Commission in the context of the financial and economic crisis. Chapter 4 sets out in detail how the temporary State aid rules were enforced. Chapter 5 analyses the effects of State aid to the financial sector and to the real economy and the extent to which the above-mentioned objectives were met. Chapter 6 concludes by linking the assessment of the effects of State aid to their renewal for 2011.

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2. This Staff Working Paper was finalised in July 2011.
2. **EXECUTIVE SUMMARY**

The key messages of the Paper are the following:

1. State aid, with other policy responses, has been effective in reducing financial instability and avoiding a financial meltdown affecting the whole economy.

2. The Commission's swift and decisive action ensured that State aid control during the crisis provided a much needed consistent policy response across the EU.

3. Absent a fully harmonised regulatory framework, State aid control has been effective in mitigating distortions of competition across Member States and banks within the Single Market, and has contributed to pushing EU banks on a path of long-term viability.

4. The Temporary Framework of aid to the real economy has been a useful complement to the measures adopted for the financial sector and has allowed a coordinated response to tackle companies' difficulties in accessing finance during the crisis.

5. State aid policy has been an important asset to contain the crisis and the gradual exit from the exceptional State support should take into account market developments, cater for the possibility of an overall or country-specific deterioration of financial stability and be accompanied by improved financial sector regulation and supervision.

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1. State aid, with other policy responses, has been effective in reducing financial instability and avoiding a financial meltdown affecting the whole economy

The scale of the financial and economic crisis that broke out in the autumn of 2008, and the systemic risks associated with it, were such that Member States used unprecedented amounts of State aid to the financial sector – more than 10% of EU GDP – in order to restore financial stability and a normal functioning of financial markets, including EU companies' continued access to credit.

In view of those amounts, the question raised by the European Parliament and many others and to which this Paper strives to respond, is whether the sizeable amounts of State aid used by Member States under the control of the Commission have been effective. To that effect, this Paper looks at market developments in the period from mid-2008 to end 2010, but also considers the market developments of the first months of 2011. However, it is important to underline that because there is no direct or exclusive causal relationship between the levels of State aid used and observed market developments, it is extremely difficult, if impossible, to disentangle the effects of State aid from other policy responses to the crisis, in particular liquidity interventions by the European Central Bank, and from macroeconomic developments in the Member States and internationally.

State aid, as defined by Article 107 of the Treaty, has been a key response of Member States to the crisis. However, it has not been the only response: institutions and governments also made use of other policy instruments, such as liquidity interventions by the European Central Bank or fiscal stimulus, which fall outside State aid scrutiny and hence the scope of this Paper.
In the EU institutional set-up, it is the prerogative of Member States to decide whether or not to grant State aid to undertakings established in their territory, on the level of the aid, and its beneficiaries. Member States are also ultimately responsible for the "value for money" that society at large derives from the State aid.

The role of the Commission is to control that no State aid is granted in any form whatsoever which distorts or threatens to distort competition by favouring certain firms or the production of certain goods in so far as it affects trade between Member States. The Commission has the exclusive power to find State aid compatible with the Treaty, provided the State aid fulfils clearly defined objectives of common interest and does not distort intra-Union competition and trade to an extent contrary to the common interest.

Available market data show that together with the interventions of the European Central Bank (ECB) and National Central Banks, State aid has contributed to restore confidence and stability in the financial system. Those policy interventions reduced the significant turbulence that struck the financial markets in September and October 2008 and helped to re-launch the inter-bank and wholesale funding markets for banks. The risk of default of major financial institutions was also contained.

**Evolution of EURIBOR-OIS spread and of State aid to the financial sector pledged by Euro Area Member States**

As the financial crisis expanded, the growth of loans to the real economy was substantially reduced due to demand and supply factors. The crisis affected the real economy and the ensuing economic recession led to a decrease in investment and trade, and reduced demand for loans, the volume of which fell until the third quarter of 2010. On the supply side, banks reviewed their attitudes to risk taking and engaged in deleveraging. The resulting tightened credit standards contributed to a decrease in credit supply to non-financial corporations (NFCs). As a result, the stock of loans to NFCs decreased between the end of...
2008 and the end of 2009, which means that the issuance of new loans virtually came to a halt. The amount of outstanding loans to NFCs then stabilised in 2010, illustrating only a slow recovery in the issuance of new loans, in particular for small and medium sized enterprises.

**Supply and demand conditions of loans to the real economy in the Euro Area**

The major factor driving the halt of the tightening of credit standards, as reported by banks, has been the improvement in the health of their balance sheets, which was one of the key objectives of the governments' support measures to financial institutions. At the same time, the necessary deleveraging and improvement in banks' risk profiles were not rushed. Banks started to review their business practices and restructure their operations to be able to sustain lending to creditworthy firms. It is in particular the case of banks that received significant amounts of State aid since its approval by the Commission required thorough restructuring to ensure long term viability without State support. That experience contrasts positively with the Japanese banking crisis of the 1990s where recapitalisations and restructuring were protracted over eight years and public money was used to keep banks lending to insolvent borrowers.

Measures taken by both the authorities and the banks have allowed the sector as a whole to progressively start returning to profitability in the course of 2010. Whilst State aid in the form of heavy recapitalisations allowed aided banks to improve their solvency and the ECB's low interest rate policy has contributed to the sector's overall profitability, the long-term viability of the EU banking sector depends on the depth of the restructuring measures undertaken by both non-aided banks and aided banks, for which the Commission required thorough restructuring measures to ensure their long-term viability.

At the time when the crisis broke out, State aid control was about the only regulatory instrument available at the EU level to impose restructuring obligations on systemically important banks that needed State aid. The thorough implementation of those obligations will continue to be essential for long-term financial stability and good market functioning.
2. The Commission's swift and decisive action ensured that State aid control during the crisis provided a much needed consistent policy response across the EU.

The panic created by the collapse of Lehman Brothers in the autumn of 2008 and fears of a financial meltdown led the Member States to quickly design emergency aid packages. Their actions put the Commission's State aid policy to a tough test, because those packages could give rise to serious concerns regarding unfair competition and financial instability, as the external effects on other Member States were not sufficiently taken into account (e.g. the Irish blanket guarantee initially threatened to trigger a deposit run in neighbouring countries' banks).

Therefore, the European Council of 15 October 2008 expressly confirmed its support for the Commission's application of the State aid rules, "to be implemented in a way that meets the need for speedy and flexible action". In response, the Commission established workable principles under very tight deadlines to clear the emergency aid measures elaborated by Member States but remained firm on the conditions needed to ensure conformity with the Treaty's prohibition of all subsidies that distort competition within the internal market.

The Commission's response built on existing, well established rules, in particular those on rescue and restructuring aid to undertakings. They however had to be adapted as allowed by Article 107(3)(b) of the Treaty in the event of a serious disturbance in the Member States' economies that the crisis caused.

The temporary and extraordinary State aid rules that the Commission put in place from October 2008, although unique in a legal sense, did not entail any significant departure from the general State aid rules. They allowed the Commission to act in a coordinated and consistent way and to use the same legal basis for all its decisions, including where Member
States notified measures involving multiple instruments. They also allowed speeding up decision making, which was also supported by good cooperation by the Member States.

As soon as from October 2008, the Commission issued guidance to Member States and financial institutions on the conditions that would need to be met for the State aid granted in response to the financial crisis to be considered compatible with the Treaty.

Between October 2008 and July 2009 it published four Communications setting out the principles that it would apply to State guarantees for bank liabilities, recapitalisations, impaired asset relief and restructuring aid. In January 2009 it further issued a Communication providing for further possibilities for Member States to support companies in the real economy during the crisis and the conditions such support should satisfy.

The Banking Communication was the first instrument to set out the general principles to be applied, namely: non-discrimination, the need for the aid to be clearly defined and limited in time and scope, adequately paid for by the beneficiaries that should bring an appropriate contribution, and subject to behavioural constraints so as to prevent any abuse of the State support, such as aggressive expansion in the back of a State guarantee. That first Communication already emphasised the need for structural adjustment measures for the financial sector as a whole and for restructuring individual financial institutions that benefited from State intervention.

Building on these principles the Recapitalisation Communication provided additional detailed guidance on how it would assess recapitalisation measures specifically. In particular, it established detailed principles for the remuneration of the injections of capital made by States into banks, which should reflect the price that a normally functioning market would require for the relevant capital. The Impaired Asset Communication in turn provided guidance for aid linked to "relieving" banks from assets which were broadly considered as 'toxic" or "impaired".

The Restructuring Communication set out in more detail the Commission's approach to the conditions as to when banks needed to submit a restructuring plan and what measures such plan should include in order to meet the Commission' approval. In particular, it stipulated that banks in need of substantial amounts of aid must, in return for the aid, demonstrate strategies to remedy unsustainable business models and achieve long-term viability without State support under adverse economic conditions.

Finally, a Communication on a Temporary Framework of aid to the real economy was adopted to promote companies' access to finance and to support the production of green products.

Furthermore, in the absence of fully harmonised and effective financial sector regulation and surveillance at the time the crisis erupted, State aid control by the Commission allowed a degree of discipline into the financial sector to be reintroduced, in particular by seeking from the main beneficiaries of aid tough measures such as divestments and deleveraging to ensure their long term viability without State aid and by imposing burden sharing to curtail as much as possible moral hazard in the future.

The Commission's rapid and resolute action allowed the State aid discipline enshrined in the Treaty to be maintained. That discipline constitutes a cornerstone of the Single Market and the growth that the latter has spurred since its inception. State aid control
ensured legal certainty to the rescue packages and consistency of treatment as regards both the financial institutions and the Member States. It reconciled the objective of ensuring financial stability in the short term with the Commission's obligation, as required by the Treaty, of maintaining effective competition in the European banking sector in the medium and long term.

3. Absent a fully harmonised regulatory framework, State aid control has been effective in mitigating distortions of competition across Member States and banks within the Single Market and contributed to pushing EU banks on a path of long-term viability

Faced with State aid cases notified to it, the Commission has sought to minimise the potential distortions of competition arising from the aid. In particular, the Commission ensured that, in principle, the State aid did not come for free. It required that all beneficiaries paid adequate remuneration to the State and also imposed "competition measures" specially tailored to the markets at hand in each different case.

The amounts of State aid granted by Member States during the crisis have been concentrated both in terms of Member States and of financial institutions, which suggests that the aid granted had the potential to create significant distortions of competition. At Member State level, the top three banking markets, the United Kingdom, Germany and France, accounting for almost 60% of the EU banking sector, received 60% of the total amount of aid granted between October 2008 and December 2010. However, those Member States were not where the aid was the highest in relative terms, i.e. as a share of the total banking sector size. Member States granted on average the equivalent of 3.0% of the total assets of their national financial institutions. While France, Germany, and the UK granted 2.0%, 3.8% and 3.1% respectively, Greece and Ireland granted more than 8%.

Used aid to the financial sector as a share of the size of the banking sector
The aid was also concentrated on a limited number of financial institutions. In the EU as a whole, the ten largest beneficiaries of aid received more than 50% of the total aid granted between October 2008 and December 2010. Also, within each Member State that supported its financial sector, the aid granted was concentrated on a limited number of beneficiaries, both for asset support (recapitalisation and impaired asset relief) and for liability support (guarantees on newly issued bonds and liquidity aid). In addition to the amounts of State aid effectively and explicitly committed by Member States, certain financial institutions considered of systemic importance ("too big to fail") also benefited from implicit guarantees, i.e. from the perception by investors that governments would intervene should the banks come into difficulties, which the EU State aid control system is unable to scrutinise.

Concentration of aid on individual financial institutions and within each Member State

<table>
<thead>
<tr>
<th>Share of total aid granted in the EU (Oct. 2008 - Dec. 2010)</th>
<th>Number of Member States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 10 beneficiaries</td>
<td>BE, CY, FI, HU, IE, IT, LU, LV, PT, SE, SI, UK</td>
</tr>
<tr>
<td>Next 20 largest beneficiaries</td>
<td>AT, DE, EL, FR, NL</td>
</tr>
<tr>
<td>All other beneficiaries combined (over 190)</td>
<td>DK, ES</td>
</tr>
</tbody>
</table>

Whilst State aid control by the Commission could not entirely avoid distortions of competition caused by State aid to financial institutions, letting banks of systemic importance fail was to be prevented. In the imperfectly regulated environment at the time of the Lehman collapse and given the externalities that exists in banking, absence of State aid would not have resulted in an orderly disappearance of systemic banks whereby their competitors could gain market share, but rather in the entire collapse of the banking sector and, with it, of the real economy.

The most important tool with which the Commission has minimised these distortions has been the adoption of far reaching restructuring measures by all main beneficiaries of aid, after a swift rescue phase to avoid their collapse. Indeed, all of the 15 major beneficiaries of State aid on the asset side have had to engage in a restructuring process. Most of them were excessively funded short-term in the wholesale market and to a great extent managed to maintain their competitive position because of a mispricing of the risk that they were taking and imposing on the system as a whole. As a result, major distortions of competition had already occurred before the eruption of the crisis and their receiving State
aid. Such aid allowed them to stay on the market, and thus creates important moral hazard if not accompanied by proportionate restructuring measures.

**Under Commission State aid scrutiny, the business models of the main beneficiaries have been thoroughly reviewed.** The Commission required that their restructuring plans included measures to restore their long term viability, which ensures that in the future, no unfair competition is waged by banks whose business model is in fact unsustainable and harms entry and expansion of banks that compete only on the basis of the merits and profits generated by their services.

The Commission also required adequate sharing of the restructuring burden between the beneficiary and the State. Burden-sharing measures have systematically addressed the distortions of banks’ incentives to compete that arise from moral hazard. Those measures included for example dilution of capital, limitations of dividend and coupon payments and limitations on bonuses and stock options, including decisions to sanction past irresponsible behaviour and business decisions.

Additionally, tailor-made specific structural and behavioural measures have also been implemented to address the competition distortions in each case. They were devised as a function of the amount of aid received, the market positioning of the beneficiary bank and the market characteristics in general, and the extent to the bank contributed to the restructuring costs (additional competition measures have been required if the bank investors did not sufficiently share in the restructuring costs). They included measures such as divestments to enhance competition, market opening measures, and limitations on State-financed aggressive expansion in order not to crowd out competition.

As of end 2010, 26 institutions were implementing a restructuring plan agreed with the Commission or had been liquidated while another similar number of institutions had submitted a restructuring plan which was being assessed by the Commission – including the above-mentioned 15 largest beneficiaries of aid in the EU as a whole.

More generally, the Commission systematically applied consistent principles that allowed for a fair treatment of all Member States and banks, whether big or small. The Commission has required that all crisis aid schemes for financial institutions have allowed for non-discriminatory coverage of banks, and that in principle banks had to pay for the aid by providing adequate remuneration to the State and to ensure burden sharing (such as limitations on dividend and coupon payments). It has also ensured that there were appropriate safeguards against abuses of the scheme (e.g. bans on advertising the fact that the bank received State aid) and, where necessary, measures to address the structural problems of the beneficiary.

That consistent approach does not mean that the Commission imposed exactly the same conditions on all Member States and all banks since such a policy would have resulted in an unequal treatment. Such inequality would have occurred if, for example, the Commission had required the same remuneration rate for all aid granted. Each bank is different (e.g. in terms of risk profile and business model), each Member State is different (e.g. in terms of the applicable regulation) and distortions of competition arise and need to be remedied in a specific market context. Therefore, the Commission assessed each State aid case notified to it on the basis of the particular facts at hand.
An empirical analysis suggests that the Commission’s State aid control has been effective in mitigating the distortions of competition arising from the aid. However, it is too early to draw any definitive conclusions in that regard. The restructuring measures to be executed by a large number of high profile and important financial institutions are still in the implementation phase. Restructuring plans last for up to five years and their full effects, in particular on the competitive structure of the market, have not yet fully materialised.

To date and given the data at hand, the levels of State aid and their concentration do not seem to have significantly altered the structure of the European banking sector as a whole. While the rapid expansion of the sector in terms of aggregate balance sheet size stopped in 2008, the concentration trend affecting the sector since 2001 was not markedly accelerated as a consequence of the restructuring of the sector. The situation at Member State level is more contrasted. The Irish market has concentrated significantly (+13 percentage points in market share for the top five institutions, from 46% to 59%) and Spain, Germany, Finland or Slovakia also experienced accelerated concentration, though not to the same extent as Ireland. In contrast, the banking sectors of Belgium, Austria, France and Poland experienced a de-concentration phase during the crisis.

Evolution of structural indicators of the EU banking sector

<table>
<thead>
<tr>
<th>Year</th>
<th>Concentration of the sector (Herfindahl-Hirschman index - HHI*)</th>
<th>Size of the sector (total assets in EUR trillions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>504</td>
<td>24.7</td>
</tr>
<tr>
<td>2005</td>
<td>614</td>
<td>30.5</td>
</tr>
<tr>
<td>2006</td>
<td>592</td>
<td>34.3</td>
</tr>
<tr>
<td>2007</td>
<td>596</td>
<td>41.1</td>
</tr>
<tr>
<td>2008</td>
<td>665</td>
<td>42.2</td>
</tr>
<tr>
<td>2009</td>
<td>632</td>
<td>42.1</td>
</tr>
</tbody>
</table>

Source: ECB; Commission services

* Weighted average of HHI of EU Member States - the HHI is the sum of the squares of the market shares in total assets of EU financial institutions - the higher the HHI, the most competitive the market.

The aid granted to selected banks between October 2008 and December 2010 does not seem to have affected the market performance of non-aided banks: they have performed markedly better than aided banks. Compared with non-aided banks, aided banks have under-performed throughout 2009 and 2010 in terms of profitability (return on equity) and growth of assets. However, no definitive conclusions can be drawn as regards the respective competitive situations of aided and non-aided banks given that, already at the end of 2010, aided banks seem to have caught up the profitability levels of non-aided banks.

Finally and importantly, neither the crisis nor the crisis State aid seems to have caused banks to retrench behind national borders. The domestic-orientation of the EU banking
sector, as measured by the size of assets of a market owned by domestic credit institutions, was slowly declining before the crisis from 77% in 2001 to 71% in 2007. The financial and economic crisis led to a temporary halting of that trend since domestic institutions increased their share of total assets in 2008. However, that increase had already slowed down by 2009.

Merger and acquisition activity also highlights that no systematic retrenchment on own markets occurred in the years 2008 and 2009. The most active acquiring banks have expanded throughout the Euro Area. The large presence of French banks in terms of the number of transactions is notable. Other active acquirers (mainly from Spain, Italy and Germany) did not receive support at any point during the crisis. There is also little indication that restructuring following State aid has been the dominant cause of divestment within the Euro Area, as the top sellers were mainly banks free of any restructuring requirements. Thus, restructuring on banks’ own initiative, which in most cases has been a means to avoid government support, has been an important driver of changes in the banking sector. Where the restructuring plans entailed divestments, the Commission was mindful that they would not lead to retrenchments behind national borders.

Market share of foreign banks branches and subsidiaries in terms of total assets

4. The Temporary Framework of aid to the real economy has been a useful complement to the measures adopted for the financial sector and has allowed a coordinated response to tackle companies' difficulties in accessing finance during the crisis

As the crisis expanded to the real economy, the Member States and the Commission grew increasingly worried of its longer term effects on growth, competitiveness and jobs in Europe. That concern prompted the Commission to launch, in November 2008, a European Economic Recovery Plan aimed at stimulating demand by coordinated budgetary measures at Member State level and at maintaining "smart" investment, notably by enhancing
companies’ access to finance, including in clean technologies to boost sectors like construction and automobiles in the low-carbon markets of the future. To that effect, the Plan foresaw, among other things, a simplification package which would allow channelling State aid through horizontal schemes and speed up decision making procedures. It also announced that the Commission would temporarily authorise Member States to ease access to finance in order to restore confidence.

The ensuing Temporary Framework of aid to the real economy thus promoted companies’ access to finance by providing the Member States with the possibility to grant a limited amount of aid up to €500,000 per undertaking, subsidised loans and guarantees, more flexible risk capital funding and trade financing. A specific measure allowed for subsidised loans for the production of green products.

The effective take-up of the Temporary Framework has been limited. Member States committed €81 billion (amount approved by the Commission), but only about a quarter of that amount was effectively used. In particular, the key measure for promoting continued investments in green products has hardly been used, at least when it comes to the situation as of mid-2010. Member States mostly granted aid in the form of loan guarantees, subsidised loans and the limited amount of compatible aid of up to €500,000 per company which was used as working capital support to address a variety of situations.

Member States clearly seem to have considered the Temporary Framework as a useful safety net allowing for an emergency response tailored to tackling the difficulties stemming from financial turmoil. The existence of such a safety net can improve the confidence of companies that they can obtain relief to address those difficulties. It should be noted that during the crisis the Member States continued resorting to other available and non-crisis related possibilities to support investment and innovation, for example through the General Block Exemption Regulation.

However, it is difficult to assess how effective the Temporary Framework has been. The fact that it was implemented through horizontal schemes provided for transparency and non-discriminatory access. At the same time, the use of schemes, coupled with the fact that in a number of countries the aid was granted by several authorities (e.g. at central and regional levels) and that the most popular measure, i.e. the limited compatible aid amount of up to €500,000 per company was not linked to any specific objective or eligible cost, does not allow ascertaining its potential contribution to long-term recovery.

The fact that aid under the Temporary Framework has de facto been applied mostly to small and medium sized enterprises has been an important factor when it comes to potential distortions of competition. As was the case with the aid granted to financial institutions, State aid control by the Commission allowed minimising competition distortions within the real economy by preventing potentially discriminatory responses by Member States, such as those that would have made aid conditional on the location of the firms' activities or the use of suppliers based in the Member State concerned, for example in the car sector.
5. State aid policy has been an important asset to contain the crisis and the gradual exit from the exceptional State support should take into account market developments, cater for the possibility of an overall or country-specific deterioration of financial stability and be accompanied by improved financial sector regulation and supervision.

During the crisis, State aid was necessary to restore financial stability, and the Commission's State aid control was effective in putting aided distressed firms back to a long-term viability path, achieving a degree of burden-sharing, preventing subsidy races and mitigating other competition distortions within the Single Market.

However, there is no place for complacency. Whilst this Paper shows that the unprecedented levels of State aid and its high concentration on a limited number of institutions do not appear to have affected the competitive structure of the European financial markets, at least in the reporting period, governments' bail out of financial institutions has raised serious concerns about moral hazard. In addition, the sovereign debt crises which struck Greece and Ireland in 2010 and Portugal in the spring of 2011 illustrate that the turbulence of the European financial markets has not been durably overcome. Though the situation of each bank and Member State is different, the CDS spreads for the EU financial institutions as a whole sharply increased throughout 2010 to stand, at the end of the year, at levels similar to, or above, those of their 2009 peak, reflecting fears of exposure and contagion across these institutions.

It is in that situation of growing uncertainties that towards the end of 2010, the Commission was confronted with the expiry of the Restructuring Communication and the ensuing question as to whether the markets were ready for a phase out of the temporary State aid framework. Those uncertainties made risky a definitive ending of the framework. At the same time, many markets had initiated a redemption of aid and the Commission was keen to promote a normal market functioning and deter banks' reliance on State aid, notably for reasons of public finance sustainability.

All in all, in the second semester of 2010 the Commission considered that there was a sufficient level of stabilisation in the financial sector to embark on a gradual exit path, with a tightening of the conditions to grant aid. That process started with tighter conditions for government guarantees from 1 July 2010, and was then extended to the other temporary rules governing aid to both financial institutions and the real economy from 1 January 2011. In particular, from that date, every beneficiary of a recapitalisation or impaired asset measure has been obliged to submit a restructuring plan to the Commission's approval, irrespective of the level of aid it received. The possibility that existed under the Temporary Framework to grant a compatible limited amount of aid of up to € 500 000 per company was also removed.

That tightening of the conditions for approving aid conveys the signal that banks have to prepare for a return to normal market mechanisms without State support when market conditions permit such a return. In particular, they should accelerate the still necessary restructuring. At the same time, the applicable rules afford sufficient flexibility to duly take account the potentially diverse circumstances affecting the situation of different banks or national financial markets, and also cater for the possibility of an overall or country-specific deterioration of financial stability.

As this Paper is being published, there is still considerable uncertainty on the financial markets, and this Paper is intended to contribute to the policy debate sparked by the
crisis. It provides a comprehensive factual background and insights for the further design of the gradual exit process from temporary State aid rules and for the development of new rules as regards rescue and restructuring aid (for both financial and non-financial firms) and the financial markets in general.

Whereas State aid control allowed an effective short-term regulatory response, the adoption and thorough implementation of new and improved rules for bank regulation, supervision and resolution are essential for preventing the reoccurrence of a crisis and for dealing with the many challenges unveiled by the latter in the longer perspective. Indeed, the bank regulatory framework and State aid control are tightly inter-twined since an enhanced supervision framework would contribute to minimise the likelihood of a crisis in the future while the new bank regulation and resolution regimes would minimise the cost of such a crisis by more appropriately sharing its cost between the public and private sectors, thereby also addressing moral hazard issues.
3. **RATIONALE AND OBJECTIVES OF THE TEMPORARY STATE AID RULES INTRODUCED BY THE COMMISSION IN THE CONTEXT OF THE FINANCIAL AND ECONOMIC CRISIS**

3.1. **State aid intervention in the wider context of the European reply to the crisis**

3.1.1. *The crisis that propagated through the European financial sector entailed a systemic risk of collapse and hit hard on the real economy*

The size and extent of the financial crisis that hit the global economy since the summer of 2007 are without precedent in post-war economic history. It was preceded by a long period of rapid credit growth, low risk premiums, abundant availability of liquidity, high leveraging, soaring asset prices and the development of bubbles in the real estate sector. The vast expansion over the past decade of the balance sheets of banks and other financial institutions relative to their own capital, coupled with sometimes inadequate supervision and regulation, made them vulnerable to corrections in asset markets. As a result, the turn-around in a relatively small corner of the financial system (the US subprime market) toppled the whole system.

In its early stages, between the summer of 2007 and the summer of 2008, the crisis manifested itself as an acute liquidity shortage among financial institutions as uncertainties around their exposures to subprime assets increased and creditors consequently showed more reluctance to roll-over credit lines and short term bank debt. In that phase, concerns over the solvency of financial institutions were increasing, but a systemic collapse was deemed unlikely. This perception dramatically changed when a major US investment bank (Lehman Brothers) defaulted in September 2008.

In the ensuing second period, confidence collapsed, investors massively liquidated their positions and stock markets went into a tailspin as the crisis revealed contagious solvability problems related to a significant number of large-scale interconnected institutions holding of poorly performing assets. Those developments created a systemic risk of collapse, i.e. of a chain bankruptcy of financial institutions. From then onward the EU economy entered the steepest downturn on record since the 1930s. The transmission of financial distress to the real economy evolved at record speed, with credit restraint and sagging confidence hitting business investment and household demand, in particular for consumer durables and housing. The cross-border transmission was also extremely rapid, due to the tight connections within the financial system itself and also to the strongly integrated supply chains in global product markets. By the end of 2008 the Euro Area and several Member States were already in recession. EU GDP growth dropped from an average +2% before the crisis (in 2006 and 2007) to 0% in 2008 and turned negative at -5% in 2009.

Whilst some improvements in the financial market conditions were noted in the second half of 2009 and growth returned to positive levels in 2010 for the EU as a whole, notably thanks to

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3 The crisis has multiple and combined origins. The February 2009 Report of the High Level Group on Financial Supervision in the EU chaired by J. De Larosière and commissioned by the President of the European Commission, pointed to macroeconomic imbalances, risk management and corporate governance failures, regulatory and supervisory flaws, accounting deficiencies, problems related to credit rating agencies and global institutional weaknesses as major causes of the financial crisis.

4 See Economic Crisis in Europe: Causes, Consequences and Responses, European Economy 7, 2009, DG Economic and Financial Affairs, European Commission.
decisive policy measures by EU institutions and governments, the sovereign debt crises that affected Greece, Ireland and then Portugal marked the third period of the crisis in the EU. Indeed, the financial and economic crisis contributed to the deterioration of public finances of the European economies, which were often already in deficit or characterised by high-levels of outstanding debt. The financial distress for sovereign debt induced by those high and rising public debts in some Member States led to sovereign risk premiums shooting up to unprecedented levels, further endangering the sustainability of public finances.

3.1.2. The crisis was contained by massive and coordinated policy action at EU level

Aware of the risk of financial and economic meltdown, central banks and governments in the European Union embarked on massive and coordinated policy action, both on the supply side, through support packages to banks and adjusted monetary policy, and on the demand side through fiscal stimulus measures.

On the supply side, financial rescue policies focused on restoring liquidity and capital of banks and the provision of guarantees so as to get the financial system functioning again. Deposit guarantees were raised. Governments provided liquidity facilities to financial institutions in distress along with State guarantees on their liabilities, soon followed by capital injections and impaired asset relief measures. Those measures fell under the State aid control regime and are being assessed in this Paper, with the exclusion of the increase in deposit guarantees.

The European Central Bank and national central banks played a crucial role in containing the crisis. Right from the initial period of turmoil, the ECB adjusted the provision of liquidity to the banking sector and cut policy interest rates to unprecedented lows. The policy interest rate was reduced by 50 basis points on 8 October 2008 in a concerted move with other major central banks. In the months that followed, interest rates were cut further with the result that, overall, the ECB lowered the interest rate on its main refinancing operations by 325 basis points to 1.00% between October 2008 and May 2009, i.e. in just seven months.

From October 2008 the ECB also implemented a non-standard monetary policy during the period of acute financial market tensions, known as "enhanced credit support", comprising three main measures: (i) unlimited central bank liquidity to eligible Euro Area financial institutions at the main refinancing rate and against adequate collateral, so as to support the short-term funding needs of banks, with a view to maintaining and enhancing the availability of credit to households and companies at accessible rates, (ii) the extension of the list of assets accepted as eligible collateral for refinancing operations in order to further ease access to Eurosystem operations in an attempt to reduce asset-side constraints on banks’ balance sheets, and (iii) additional longer-term refinancing operations with a maturity of up to six months, and from May 2009 up to one year, allowing banks to attenuate the mismatch between the investment side and the funding side of their balance sheet. In addition, the ECB announced in May 2009 a €60 billion programme to purchase Euro-denominated covered bonds issued in the Euro Area over the period until June 2010. The aim of the programme was

5 The description of the ECB and Euro Area measures provided in this section is based on "Measures taken by Euro Area governments in support of the financial sector" in the ECB Monthly Bulletin of April 2011.

6 The Eurosystem consists of the European Central Bank and the Central Banks of the Member States that belong to the Eurozone.
to revive the market, which had virtually dried up. Those non-standard measures were withdrawn at the end of 2009 when the situation in the financial markets eased, but were reintroduced in part in the course of 2010 to contain spill-overs from the crisis affecting sovereign bond markets to other financial markets.

Alongside interest rate reductions and enhanced credit support measures, the so-called "Securities Market Programme" is the third main element of the ECB's response to the crisis, and was adopted to tackle the Greek sovereign debt crisis. Under the programme, Eurosystem interventions can be carried out in the Euro Area public and private debt securities markets to ensure depth and liquidity in dysfunctional market segments and to restore the proper functioning of the monetary policy transmission mechanism.

Policy action on the demand side was based on the European Economy Recovery Plan (EERP)\(^7\), a discretionary fiscal stimulus of some €200 billion (1.5% of EU GDP), made up of a budgetary expansion by Member States of €170 billion (around 1.2% of EU GDP) and EU funding in the order of €30 billion, was released to boost demand and stimulate confidence over 2009-2010. The EERP set common principles for fiscal stimulus and that they should be accompanied by structural reform measures. In particular, stimulus measures should be timely, temporary and targeted. Measures under the EERP combined revenue and expenditure instruments, such as public investments, guarantees and loan subsidies, well-designed financial incentives, lower taxes and social contributions.

It is estimated that, in gross terms, \(i.e.\) before taking account of fiscal consolidation measures being implemented at the same time, the fiscal stimulus measures taken or planned by Member States amounted to a total of 2.9% of annual GDP for 2009 and 2010 combined (compared to 2008). That total fiscal stimulus was about evenly split across the two years with 1.5% of GDP in 2009 and 1.4% of GDP in 2010. In line with the EERP principles, the size of stimulus packages differs across countries, reflecting their individual circumstances. In Member States with large macro-economic imbalances stimulus measures have often been financed by off-setting consolidation measures, while in some countries measures have focused directly on fiscal consolidation, resulting in no overall stimulus\(^8\). Direct EU support to economic activity was also provided through substantially increased loan support from the European Investment Bank and the accelerated disbursement of Structural Funds.

Finally, following the tensions in sovereign debt markets and financial support to Greece, on 9 May 2010 the Council agreed to set up a European Financial Stabilisation Mechanism with a total volume of up to €500 billion. Member States in difficulties caused by exceptional circumstances beyond their control may ask for financial assistance from the mechanism. The facility foresees a lending envelope of up to €60 billion, managed by the European Central Bank. In addition, Euro Area Member States are ready to complement such resources through a Special Purpose Vehicle up to a volume of €440 billion. That instrument is guaranteed on a \textit{pro rata} basis by participating Member States in a coordinated manner. It will expire after three years. The IMF will participate in financing arrangements and is expected to provide at least half as much as the EU contribution. Moreover, the EU has provided balance-of payments assistance jointly with the International Monetary Fund (IMF).


and the World Bank to Member States in Central and Eastern Europe, as they have been exposed to reversals of international capital flows.

The EU also launched a regulatory reform to remedy the weaknesses in financial regulation and supervision revealed by the crisis. Reacting to the situation in 2008, propositions to revise the Directive on Deposit Guarantee Schemes and the Capital Requirements Directive were swiftly put forward and both directives were revised by mid-2011. To reform the EU's supervisory architecture, the Commission proposed a European Systemic Risk Board, which will ensure that macro-prudential and macro-economic risks are detected sufficiently early, and as from 1 January 2011 three new European Supervisory Authorities responsible for banking, insurance and securities market respectively ensure reinforced supervision and better co-ordination among national supervisors. In this context, the European Banking Authority was established as of 1 January 2011 and conducted in July 2011 an EU-wide stress test exercise of the EU banking sector. A series of other important legislative proposals are in preparation, not least on crisis management, including bank resolution funds.

3.1.3. State aid control was only one, but admittedly a significant policy response to the crisis

The above summarised policy response entailed massive government spending. Part of that spending constituted State aid within the meaning of Article 107 of the Treaty on the Functioning of the European Union (TFEU) – see Box 1. In 2007 a first wave of cases was notified to the Commission that were clearly linked to the intensifying crisis. They involved two German "Landesbanken" (Sachsen LB and West LB)9 having invested in US subprime securities and two UK banks, Northern Rock and Bradford and Bingley10. Those cases were assessed and authorised by the Commission under "classical" State aid rules applying to companies in difficulty11.

Box 1: Definition and characteristics of State aid and State aid control in the EU

A measure constitutes State aid if the following four conditions are met: (i) there has been an intervention by the State or through State resources, (ii) the intervention confers an advantage to the recipient on a selective basis, for example to specific companies or sectors of the industry, or to companies located in specific regions, (iii) competition has been or may be distorted and (iv) the intervention is likely to affect trade between Member States.

Support granted to financial institutions and companies in "the real economy" during the crisis thus constituted State aid. By contrast, general measures such as general taxation measures or

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10 Cases NN70/2007 € - Northern Rock (OJ C 43, 16.2.2008, p. 1) and NN41/2008 € - $ - Rescue aid to Bradford & Bingley (OJ C 290, 13.11.2008, p. 2). However, in both cases, the final restructuring decisions were adopted under the temporary State aid rules based on article 107(3)(b).
11 Community guidelines on State aid for rescuing and restructuring firms in difficulty (OJ C 244, 1.10.2004, p. 2-17). These two cases are thus not part of the scope of this Paper. The first aid package granted to Hypo Real Estate (HRE) was also approved under the "classical" rules applying to companies in difficulties on 2 October 2008; however, given its timing and the subsequent aid packages provided to HRE, it was included in the scope of this Paper – see case NN44/2008 Rescue aid to Hypo Real Estate (OJ C 293, 15.11.2008, p. 1).
employment legislation are not regarded as State aid because they are not selective and apply to all companies regardless of their size, location or sector.

In the EU institutional set-up, it is the prerogative of Member States to decide whether or not to grant State aid to undertakings established in their territory, on the level of the aid, and its beneficiaries. Member States are also ultimately responsible for the "value for money" that society at large derives from the State aid.

Pursuant to Article 107 TFEU, the role of the Commission is to ensure that no State aid is granted in any form whatsoever which distorts or threatens to distort competition by favouring certain firms or the production of certain goods in so far as it affects trade between Member States.

The Commission has the exclusive power to find State aid compatible with the Treaty, provided the State aid fulfils clearly defined objectives of common interest and does not distort intra-Union competition and trade to an extent contrary to the common interest.

Member States are obliged to notify to the Commission any plan to grant or alter State aid. They are not allowed to put such aid into effect before it is authorised by the Commission. Any aid, which is granted without the Commission's approval, is considered as "unlawful aid" and can be challenged before national courts. Also, the Commission is obliged to order recovery from the beneficiaries of any unlawful aid that is found to be incompatible with the internal market.

As the crisis entered its second phase, its systemic nature and the special situation of banks (see Box 2) in the economy led the Commission to refine its State aid rules and base them on Article 107(3)(b) which provides that State aid may be compatible with the Treaty where it remedies a "serious disturbance in the economy of a Member State". That change of approach responded to the call of the European Council of 15 October 2008 that expressly confirmed its support "in the current exceptional circumstances [for] the Commission's implementation [...] of the rules on competition policy, particularly State aids". In the same statement, the European Council called for European rules "to be implemented in a way that meets the need for speedy and flexible action".

Accordingly, from October 2008 the Commission started applying Article 107(3)(b) to the general remedial schemes put in place in Member States and also to ad hoc measures. That change of legal basis enabled the Commission to act in a coordinated and consistent way, using the same legal basis for all its decisions, including where Member States notified measures involving multiple instruments, and to take its decisions quicker.

The Commission's swift and decisive actions in the second half of 2008 allowed the State aid discipline enshrined in the Treaty to be maintained, which constitutes a cornerstone of the internal market and an essential tool to maintain the level playing field in the EU. Despite initial protectionist instincts in some Member States, the EU however entrusted the Commission with a key role of coordinating Member States' action in a way that limited negative spill-over effects, such as untenable subsidy races and distortions of competition that would have fragmented the internal market.

The Commission's State aid policy ensured legal certainty to the rescue packages, reintroduced a degree of discipline into the financial sector and required State aid to be targeted and limited in time and size, thereby also contributing to the fiscal sustainability of
the rescue packages. In view of the absence, at the time the crisis erupted, of sufficiently harmonised and effective financial sector regulation, State aid control in fact constituted a short-term regulatory response, ensuring a consistent approach across Member States and banks.

3.2. Objectives and conditions of the temporary State aid rules for the financial sector

3.2.1. The rules governing State aid to financial institutions during the crisis pursued two main objectives: financial stability and return to functioning financial markets, whilst keeping competition distortions to the minimum

From October 2008 the Commission assessed the State aid to financial institutions notified by the Member States from the perspective that they could be declared compatible with the internal market if they remedy a serious disturbance in the economy of the notifying Member State. **In the presence of a systemic risk of collapse of the financial system, the Commission State aid policy pursued the twin objective of restoring financial stability and returning to functioning financial markets, whilst at the same time keeping to the minimum any competition distortions between aided and non-aided banks, between banks from different Member States and between aided banks.**

Those overarching objectives of the temporary rules for State aid to financial institutions were outlined by the Commission in four Communications adopted between October 2008 and July 2009. As regards financial stability, State aid was approved to **restore confidence in the banking sector, ensure inter-bank lending, limit the systemic risk of insolvency and avoid contagion between Member States.** State aid was also deemed compatible in order for the financial markets to **continue lending to the real economy and in order to ensure the long-term viability of the EU banking sector** through improved solvency and restored profitability of financial institutions. State aid had to include strict conditions to mitigate distortions of competition and to ensure burden sharing to remedy moral hazard.

3.2.2. **State aid to financial institutions during the crisis was based on strict requirements**

In order to increase transparency and predictability of support measures to financial institutions, the Commission set out the principles it would subsequently consistently applied to State guarantees, recapitalisations, impaired asset relief and restructuring aid in four Communications adopted between October 2008 and July 2009.

**In essence, the four Communications ensured that the aid would neither come for free nor at the cost of distorting competition in the Single Market.** Those Communications responded to the fact that at the peak of the financial panic created by the collapse of Lehman Brothers in the autumn of 2008 and due to fears of a financial meltdown, Member States were led to design emergency aid packages which, given their size and nature, could give rise to serious concerns regarding unfair competition and financial instability, as the external effects on other Member States were not sufficiently taken into account. The Irish blanket guarantee for instance initially threatened to trigger a deposit run in neighbouring countries’ banks.

The Commission emphasised that even during the crisis, approval of State aid would require the beneficiaries to pay an adequate remuneration for the aid to the State, *i.e.* ultimately to the taxpayers. Where the aid was substantial, the Commission obliged the beneficiaries to review their business model so that in future, they would be viable without State support. In the latter
case, the Commission required adequate burden-sharing from the beneficiaries to curb moral hazard and specific measures to make up for the distortions of competition arising from the aid.

**Box 2: The specificity of banks and financial institutions**

Banks firstly differ from ordinary firms in terms of the leverage of their business model, *i.e.* the share of debt in their funding compared to equity. The main activity on the asset side involves the purchase of claims on uncertain future cash flows and those purchases are financed through a limited amount of equity supplemented by funds provided by creditors. No other sector is characterised by such a high leverage; moreover, within the banking sector the (raw, not-risk-weighted) leverage has been historically high in the run-up years to the crisis.

Banks also differ from ordinary companies by the extent to which they can quickly expand (and contract) their balance sheet and hence the volume of their business. No other sector has grown as rapidly and as explosively in the last decades. Today, the balance sheet size of large banks is without comparison in the economy and dwarfs the balance sheets of the largest non-bank firms such as Microsoft, GM, and IBM. Whereas the latter had in mid-2010 balance sheets between $80 and $140 billion, the balance sheets of the largest banks were more than one order of magnitude greater, reaching $3,800 billion (RBS), $2,500 billion (BNP Paribas) or $2,950 billion (Deutsche Bank) at the end of 2007.

Markets in which banks operate are subject to systemic risk due to the massive negative externalities that a bank failure, or its anticipation, generates on competitors and the economy at large. Indeed, while the failure of an ordinary firm normally tends to favour its competitors and potentially even strengthens the economy as a whole by removing an inefficient player, a bank failure may weaken its competitors and negatively affects the financial markets in which they interact. The negative externalities of a bank failure arise through various channels. First, as banks have extensive exposures to one another, losses of one will be borne by the others. Losses can spread directly through interbank exposures or indirectly through guarantees, credit lines, or insurance against credit risks that are being called. Second, pure informational contagion can arise such that the failure of one bank leads to an adjustment in the expectations regarding the viability of other banks perceived to be "similar".

The social costs of a bank failure are relatively large and largely exceed the private costs. Banks can be deemed too big to fail, too interconnected to fail or too complicated to fail. Such banks are referred to as systemically important financial institutions (SIFIs). No other sector is characterised to the same extent by the presence of such institutions, which also lead the sector to enjoy implicit government guarantees, *i.e.* it benefits from the perception by investors that governments would intervene should the banks come into difficulties.

**The Banking Communication**

The Commission first guidance document, the Banking Communication¹², was adopted swiftly on 13 October 2008. It made the authorisation of State aid in the form of guarantee,

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¹² Communication from the Commission on The application of State aid rules to measures taken in relation to financial institutions in the context of the current global financial crisis (OJ C 270, 25.10.2008, p. 8)
capital, asset relief or liquidity support for financial institutions dependent on the following essential elements:

- **Access to aid should be non-discriminatory** in order to protect the functioning of the Single Market by making sure that eligibility for a support scheme is not based on nationality.

- **Access to aid should be limited in time** by opening a window for banks to apply for aid during six months. Access has to be reviewed at least every six months so that it is adjusted or terminated as a function of the conditions on the market, including (where necessary) a continuation in case of continued turmoil in financial markets.

- **State support should be clearly defined and limited in scope** to what is necessary to address the acute crisis in financial markets while excluding unjustified benefits for shareholders of aided financial institutions at the taxpayer’s expense.

- **An appropriate contribution should be provided by the aid beneficiary** ("burden-sharing") in the form of the coverage by the beneficiary of at least a significant part of the cost of assistance granted, so as to limit the State aid to the minimum necessary and to limit moral hazard in the future. It should be in particular reflected by the price paid by the beneficiary to the Member States for the aid – see Box 3.

- **Sufficient behavioural rules should be respected by beneficiaries** to prevent an abuse of State support, like for example a ban on advertising State-supported status or a ban on aggressive expansion on the back of State aid.

- **An appropriate follow-up should be included**, in the form of structural adjustment measures for the financial sector as a whole or by restructuring individual financial institutions that benefited from State intervention.

**The Recapitalisation Communication**

The support packages devised by Member States evolved swiftly from largely guarantee-based schemes to other measures such as recapitalisation of banks. In reply, the Commission promptly adopted on 5 December 2008 a Recapitalisation Communication\(^\text{13}\) which provided additional detailed guidance on how it would assess recapitalisation measures specifically.

Reiterating the principles of the Banking Communication, the Recapitalisation Communication provides guidance for the pricing of the injections of capital made by States into banks, which should be reasonable and linked to properly functioning markets\(^\text{14}\). This pricing issue is crucial, because in the absence of an appropriate risk-based justification, access by banks in one Member State to capital at considerably lower rates than that available to competitors from other Member States could have a significant impact on

\(^{13}\) Communication from the Commission on Recapitalisation of financial institutions in the current financial crisis: limitation of the aid to the minimum necessary and safeguards against undue distortions of competition (OJ C 10, 15.1.2009, p. 2-10)

\(^{14}\) The Commission recognised that the average yields of Tier 1 hybrid capital at the end of 2008 and beginning of 2009 (spiking to 35% and above) were excessive and reflected excessive risk aversion, financial panic, and confidence crisis and hence were deemed too high for the recapitalisation of sound banks – this is indeed the market failure that recapitalisation aid strived to resolve.
their competitive position in the Single Market. Likewise, an inappropriate price would distort the level playing field between aided and non-aided banks.

Also, recapitalisation schemes that were open to all banks without differentiation of their risk profile could distort competition and incentives, and weaken the overall competitiveness of European banks. The Recapitalisation Communication therefore distinguishes between banks that are fundamentally sound and receive temporary support to enhance the stability of financial markets and restore lending to businesses and consumers, and distressed banks whose business model has brought about a risk of insolvency that State aid aims at containing. The price of State capital injections should be linked to the risk profile of the beneficiary bank, the type of capital injected by the State (in particular its subordination) and the nature of the safeguards against abuse of public funding that accompany the recapitalisation measure.

Recapitalisation of banks "in distress" pose a greater risk of distortions of competition and they should in principle be required to pay more for State support and be subject to stricter safeguards. Injections of State capital into these banks are acceptable only if they are followed by in-depth restructuring to restore long-term viability, which may include changes to management and corporate governance, based on a plan to be submitted within six months of the recapitalisation and approved separately by the Commission. That distinction between fundamentally sound and distressed banks has been suppressed from 2011 on, so that from 1 January 2011 all beneficiaries of recapitalisation measures will have to submit a restructuring plan – see Chapter 6.

In order for the pricing of capital injections to carry sufficient incentives to keep the duration of State involvement to a minimum, the Recapitalisation Communication also proposes mechanisms to ensure the timely redemption of injected capital by beneficiaries in order to limit distortions of competition. Those "exit incentives" usually take the form of an increasing rate of remuneration of State capital over time.

### Box 3: The pricing of guarantee and recapitalisation support measures

The pricing principles of both guarantee and recapitalisation measures were set out by the Commission based on recommendations from the ECB from October 2008 and November 2008 respectively.\(^{15}\)

#### Pricing of guarantee of bank debt measure

The price of State guarantees on bank debt with maturities exceeding one year should be based on the risk profile of the beneficiary plus an add-on fee. The risk profile is measured through the historical 5-year senior debt CDS spread.\(^{16}\) The CDS spread is a widely available and liquid measure of the perceived market assessment of the credit risk associated with individual banks. The add-on fee is valued at 50 basis points and is imposed to cover for the operational costs incurred by governments for guaranteeing the beneficiary's debt as well as to preserve the level playing field by imposing a premium on State support. The add-on can be lower if guarantees are collateralised since the risk taken by Member States is lower.

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\(^{16}\) The historical 5 year senior debt CDS spread is the median spread in the reference period from 1 January 2007 through 31 August 2008, i.e. the median risk level of the beneficiary before the crisis.
The price of State guarantees on bank debt with maturities of less than or equal to one year should be equal to an overall flat fee of 50 basis points. A flat-fee for short-term debt is considered appropriate since CDS spreads may not provide an adequate measure of credit risk for such debt.

In order to induce banks – in particular the lower rated institutions – to seek private sector solutions, measures were taken in 2010 to bring the pricing of government support closer to current market conditions and to better reflect individual banks' creditworthiness. The approval of the extension of a guarantee scheme beyond 30 June 2010 increased the fee for a government guarantee compared to the pricing formula of October 2008. The increase should be at least of 20 basis points for banks with a rating of A+ or A, 30 basis points for banks rated A- and 40 basis points for banks rated below A-18. For that purpose, banks without rating will be considered to belong to the category of banks with a BBB rating.

Pricing of recapitalisation measures

The remuneration of State capital should be based on the risk level of the beneficiary and on the nature of the capital injected. The ECB recommendation of November 2008 provides a price corridor for Tier 1 capital injection, with lower and upper bounds depending on the nature (seniority in profit and loss, voting conditions, etc) of the capital provided by the State.

The lower bound is defined by the required rate of return on preferred shares and other hybrid instruments having economic features similar to those of subordinated debt (i.e. not redeemable by the issuer before a fixed period and redeemable at par value). The required rate of return on preferred shares and other hybrid instruments having economic features similar to those of ordinary shares (i.e. non-cumulative, without the possibility of pay back, or perpetual instruments with convertibility to ordinary shares) represents the upper bound. Each bound of the price corridor is determined as follows:

The lower bound is the sum of: (i) the government bond yield of the country where the bank is located (it represents the minimum risk yield at the time that the capital is provided and a measure of the government funding cost), (ii) the issuing bank's five-year historic CDS spread on subordinated debt (it accounts for the historic credit risk of the beneficiary, taking into account only the risk associated to the beneficiary before the crisis), and (iii) an add-on fee of 300 basis points per annum to cover operational costs and provide banks with adequate incentives for exit.

The upper bound is the sum of: (i) the government bond yield of the country where the bank is located (government funding cost) (ii) an equity risk premium of 500 basis points per annum and (iii) an add-on fee of 100 basis points per annum.

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17 This includes guarantees covering liabilities of 1 year or less.
18 Respectively A1, A2 or A3 depending on the rating system employed.
19 The government bond yield would be computed as the sum of (i) average yield on the European Monetary Union benchmark 5-year bond (German Bund) over the 20 business days prior to the capital injection, and (ii) the average historic sovereign yield spread for the country of domicile of the financial institution over the reference period 1 January 2007 through 31 August 2008.
20 This represents a measure of the realised nominal return on Euro Area banks' ordinary shares in excess of a minimum risk yield.
As a result, the average price corridor calculated by the ECB in mid-November 2008 for the average Euro Area bank for Tier 1 capital instruments is 7% to 9.3%, depending on the precise characteristics of the recapitalisation instrument (closer to subordinated debt or to common shares). Dynamics in the government rate may shift that corridor up and down over time. That level is an expected rate of return and hence should in principle take into account potential capital gains or losses, assessed ex ante at the time of the investment.

The Impaired Asset Communication

In early 2009 it became apparent that further measures were needed in order to restore trust and to return the financial sector to normal functioning. **One reason why credit remained squeezed seemed to be uncertainties about the value and location of impaired assets held by banks.** On 25 February 2009, the Commission adopted the Impaired Assets Communication\(^{21}\), which provides guidance on the application of the State aid rules to asset relief measures that could be adopted by Member States to remove impaired or toxic assets. Generally speaking, asset relief measures are government support measures aiming at "relieving" banks from assets which are broadly considered as 'toxic' or 'impaired'\(^{22}\).

Asset relief can take either the form of asset purchase, in which case the State buys the impaired asset portfolio at a determined transfer price higher than the market price, which constitutes the aid, or asset guarantee, whereby the State takes a share of the risk of default or loss relating to the asset.

**In the case of asset purchases**, impaired assets are transferred from the balance sheet of the beneficiary bank to another entity, often a special purpose vehicle, fully or partially sponsored by the State. The transfer price paid by the State to the beneficiary for the asset is above market value (that difference constitutes the State aid) but should not be above real economic value (which leaves a potential upside for the State). Moreover, the transfer price is usually below book value, which leads to a write-down of the asset by the beneficiary.

**In the case of asset guarantees**, impaired assets remain in the balance sheet of the beneficiary, but losses related to those assets are guaranteed by the State (often only up to a certain level) beyond a first tranche of losses fully borne by the beneficiary bank. In exchange for the guarantee, the State receives a yearly fee. The State thus partially bears the downside risk linked to the asset but has no upside other than the fee revenue.

The Impaired Asset Communication sets the following conditions for approval of asset relief:

- Member States must make asset relief measures conditional on **full transparency and disclosure of impaired assets** and must ensure that the costs of the impaired


\(^{22}\) The notion of "impaired asset" has broadened over time. Initially, impaired assets were understood as (i) assets whose intrinsic value is perceived to lie significantly above their market value, possibly due to failing or missing markets (due to massive asymmetric information and valuation uncertainty). However, over time, impaired assets are also understood as including (ii) assets that incorporate relatively high expected losses and even (iii) long-term assets without high expected losses ("good safe assets"), but that still need to be hived off the balance sheet, because the banks that carried them faced sharply higher funding costs that led them to record continuing losses over the life-time of the assets.
assets are shared between the Member States, shareholders and creditors of the financial institutions.

– Member States must take a **coordinated approach to identifying assets eligible for asset relief measures and to valuing assets**. The primary task of carrying out asset valuation is at the national level, and validated by the appropriate supervisory authority. However, each individual case is checked by the Commission with the help of external experts.

– Finally, for beneficiary banks which are either in distress, or having already received State aid on the asset side or having received more than 2% of their total risk weighted assets, restructuring measures must follow, so as to ensure the return to viability of the banks in question, and the return to normal market conditions. The measures in question could involve asset purchases (including “bad” bank scenarios), asset swaps, State guarantees, or hybrid systems – that is of course up to the Member States who are responsible for the methods and design of asset relief measures, taking into account the source of difficulties for each institution.

**The Restructuring Communication**

Finally, on 22 July 2009 the Commission published guidelines setting out its approach to assessing restructuring aid given by Member States to banks, setting out **firm conditions on those banks that have received large amounts of aid and that have unsustainable business models**. The Restructuring Communication stipulates that banks in need of restructuring have to demonstrate strategies to achieve long-term viability without State support under adverse economic conditions. The Communication specifies in detail the type of information that is required to determine whether the proposed restructuring measures are apt to **restore a beneficiary’s long-term viability**. The restructuring plan must include a thorough diagnosis of the bank’s problems, including a stress test to demonstrate that a restructured bank will be able to withstand adverse macroeconomic conditions, and details on impaired assets if applicable. That information is necessary to devise sustainable strategies for a return to viability. In some cases, divestments are not needed but in many cases they are essential, either to ensure viability of core businesses or to compensate the negative competitive impact of aid on key market segments.

Additionally, banks under restructuring obligations, and their capital holders, should contribute to the cost of restructuring as much as possible with their own resources. Such **burden-sharing** is of paramount importance as it contributes to addressing moral hazard and to creating appropriate incentives for future behaviour. It is achieved primarily by temporary restrictions on payment of dividends and coupons on hybrid capital by loss-making banks. Where such burden-sharing is not immediately possible due to the market circumstances at the time of the rescue, it needs to be addressed at a later stage of implementation of the restructuring plan, for example through exceptional claw-back clauses.

The restructuring should also include measures to **limit undue distortion of competition** caused by the aid. Tailor-made to the market circumstances of each case and to the scale of State intervention indicative of market distortion, measures to limit competition distortion

23 Communication from the Commission on The return to viability and the assessment of restructuring measures in the financial sector in the current crisis under the State aid rules (OJ C 195, 19.8.2009, p. 9)
may include divestments, temporary restrictions on acquisitions by beneficiaries and other behavioural safeguards. Where the immediate implementation of structural measures is not possible due to market circumstances (for example where finding buyers for divested assets is objectively difficult), the Commission can extend the time period for the implementation of those measures. They are designed not only to limit distortions between aided banks and those surviving and restructuring without State aid, and between banks in different Member States, but also to create conditions which foster the development of competitive markets. Therefore they focus on the overall national market structures and market opening, to avoid that the large number of simultaneous restructuring cases closes down national markets, and to preserve cross-border activities of banks.

3.2.3. **There was no departure from the State aid discipline established in the Treaty**

The above-mentioned four Communications have restated the generally applicable State aid principles, adapted to the situations of financial institutions during the financial and economic crisis. They have signalled that there would be no departure from the existing discipline and provided the clarity and transparency necessary for achieving a degree of consistency in Member State responses across Europe. They are therefore not new rules or fundamentally amended rules, but rules that allowed adjustment and sharpening of the Commission's practice.

**Firstly, they enlarged the scope for rescue aid by allowing aid schemes for large firms** – while the general rescue and restructuring guidelines allow schemes only for small and medium-sized enterprises, and **by allowing rescue aid for more than six months**, notably in the form of long term loans or guarantees on long-term debt. In addition structural measures such as recapitalisation and impaired assets measures were accepted as rescue aid, despite their structural character, by introducing the principle of temporal approval – while the general rescue and restructuring guidelines limit such form of aid to liquidity support (loans and guarantees).

**Secondly, the temporary rules amended the requirements for restructuring aid.** They extended the restructuring period up to five years. Given the goal of financial stability and the prevailing difficult economic outlook throughout the EU, special attention was paid to ensuring a sufficiently flexible and realistic timing of the necessary restructuring measures. The implementation of the restructuring plan could therefore last up to five years, compared to the usual practice of two to three years, in particular to avoid depressing the markets through precipitated asset sales. They also allowed for the Commission to extend the divestment period for example when finding buyers for divested assets was objectively difficult.

In addition, the requirement that the banks' own contribution to the costs of restructuring should meet the 50% threshold fixed in the general rescue and restructuring guidelines was set aside. As a result, difficulties in accessing private capital in the crisis context could be taken into account. The "one-time-last-time" principle was also temporarily lifted: the Commission did not strictly apply that rule to restructuring aid to banks in times of crisis, reflecting inter alia the uncertainty about the recovery outlook and financial stability concerns.

**Thirdly, the crisis measures also introduced a number of adaptations and improvements compared to the general rescue and restructuring guidelines.** They distinguish more clearly between the different aid instruments (guarantees, recapitalisations and impaired assets measures) and prescribe in more detail at what conditions State aid should be granted, notably
in terms of price of aid on the different instruments (with explicit reference to the ECB recommendations – see Box 3).

Because the new rules are sectoral, it was possible to define more clearly the type of information required to determine whether the proposed restructuring measures are apt to restore a bank's long-term viability. For instance, the restructuring plan needs to include a thorough diagnosis of the bank's problems, including a stress test and, where applicable, details on the treatment of impaired assets. They also clearly outline the principle that the aid should feature exit incentives. Similarly, the sectoral nature of the rules allowed the principle of burden-sharing to be refined and specific rules for hybrid capital instruments (coupon bans and buy-back rules) and distribution of dividends to be set. A more refined approach is also outlined for competition remedies, based on both the size of the aid as a proxy for the distortion and an assessment of the competitive conditions in the market, and introduced behavioural remedies to compensate for the lack of sufficient structural measures.

The new rules also introduced some technical adaptations and improvements. The stress test of the viability plan, with baseline and pessimistic scenarios, allowed the decision to predict upfront what will happen if the baseline assumptions fail. That approach increases confidence in the viability plan and its effectiveness. The monitoring trustee, a practice associated more with mergers in the past although used for some State aid decisions, has proved a useful tool in the implementation of the complicated restructuring decisions. Although trust has to be built between the trustee and both the Commission and the aid recipient, that structure allows for original commitments to include fall-back options and claw-back mechanisms, which eventually help the decisions to be adapted to the actual circumstances of each bank and better reach their objectives.

Last, the crisis rules develop an approach that is more centred on the overall balance of the compatibility conditions, based on a comprehensive assessment of the three pillars of viability, burden-sharing and competition remedies, allowing for some degree of compensation among the three requirements (the so-called "communicating vessels principle"). For example, where significant burden sharing was not immediately possible due to the market circumstances at the time of the rescue, that deficiency could be addressed at a later stage of the implementation of the restructuring plan, i.e. through more remedies.

3.3. Objectives and conditions of the Temporary Framework for the real economy

3.3.1. A Temporary Framework was adopted with the objective of tackling the knock-on effects of the financial crisis beyond the financial sector

The effects of the crisis were already being felt in the "real economy" before the end of 2008, and Member States began to consider what measures they could take to tackle the knock-on effects of the financial crisis. In the years preceding the crisis, in line with the State Aid Action Plan, EU State aid rules had already been simplified and improved to make it easier for Member States to grant the type of aid most likely to improve Europe’s prosperity and competitiveness (e.g. research, development and innovation, risk capital, training, environmental aid, aid for SMEs), and for the Commission to concentrate its scrutiny where
there is most risk of distortions of competition. The General Block Exemption Regulation\textsuperscript{25} adopted in July 2008 provides Member States with many possibilities to grant aid without having to notify it to the Commission. Similarly, the de\ minimis Regulation\textsuperscript{26} approved in 2006 increased the amount that Member States may grant without that assistance constituting State aid (and without a notification obligation) from €100,000 to €200,000 per undertaking.

As the crisis expanded to the real economy, the Member States and the Commission grew increasingly worried of its longer term effects on growth. As banks were becoming more risk averse and entered a deleveraging process by decreasing the supply of loans, the concern was that not only weak but also healthy companies would be faced with a worsening credit squeeze, with considerable risks for investment and employment.

Those developments prompted the Commission to launch, in November 2008, a European Economic Recovery Plan aimed at stimulating demand by coordinated budgetary measures at Member State level and maintaining "smart" investment, including investment in clean technologies to boost sectors like construction and automobiles in the low-carbon markets of the future, notably by enhancing companies' access to finance. To that effect, the Plan foresaw, among other things, a simplification package which would allow channelling State aid through horizontal schemes and speeded up decision-making procedures.

As a result, on 17 December 2008 the Commission adopted a Temporary Framework containing additional State aid measures aimed at facilitating companies' access to finance\textsuperscript{27}, based on Article 107(3)(b) TFEU, which is applicable in order to "remedy a serious disturbance in the economy of a Member State". The Temporary Framework pursues the objectives of unblocking bank lending to companies and thereby guaranteeing continuity in the latter's access to finance, and of encouraging companies to continue to invest in the future, in particular towards sustainable growth, maintaining investments in green products for early adaptation to future environmental standards.

The Temporary Framework provided constructive and coordinated ways of tackling the economic crisis by providing workable means of supporting companies while at the same time limiting distortions of competition. It was particularly important in view of the risk of a subsidy race among Member States that would undermine the level playing field in the internal market and of calls expressed at the peak of the crisis that the EU competition rules, including the State aid rules, should be relaxed. Historical experience provides evidence that such a course of action would only have deepened and prolonged the crisis\textsuperscript{28}. Indeed the Commission was rapidly confronted with risks of protectionist responses by


\textsuperscript{28} During the 1930s, some measures, such as allowing firms to collude if they agreed to raise wages, prevented price adjustment, were counterproductive and may have delayed recovery by several years. See Cole and Ohanian, “New Deal Policies and the Persistence of the Great Depression: A General Equilibrium Analysis".
Member States that would have made aid conditional on the location of the firms’ activities or the use of suppliers based in the Member State concerned, for example in the car sector\(^{29}\).

Three important general conditions apply to aid that can be granted under the Temporary Framework. Firstly, **the Framework only allows for temporary aid**, to be granted before its expiry on 31 December 2010 – the expiry date was subsequently postponed by one year, see Chapter 6. Secondly, **the Temporary Framework is a horizontal instrument**: it applies to all sectors of the economy, and to both large enterprises and SMEs. Thirdly, **aid under the Temporary Framework can be granted to sound firms or firms that were not in difficulty on 1 July 2008** but entered in difficulty thereafter as a result of the crisis. With that limitation, the Commission tried not to penalise fundamentally sound companies that were facing a shortage of credit due to the financial and economic crisis. Firms already in difficulty on 1 July 2008 were excluded because their difficulties were deemed not to be a result of the financial crisis. Their possible need for aid would continue to be assessed under the framework for rescue and restructuring aid.

### 3.3.2. The Temporary Framework provided Member States with new and simplified instruments to support companies during the crisis

The Temporary Framework sets detailed conditions as regards the detailed arrangements of the granting of aid under each of the six measures it introduces or amends. Among the new possibilities of aid provided by the Temporary Framework, Member States were allowed until the end of 2010 to give, within a scheme, up to €500 000\(^{30}\) per undertaking to cover investments or working capital over a period of two years (the "500k measure"). That measure should not be construed as an increase of the *de minimis* ceiling from €200 000 to €500 000 since it constitutes a new aid measure which is declared temporarily compatible by the Commission under Article 107(3)(b) of the Treaty, and must be notified and approved by the Commission. The new aid can be cumulated with *de minimis* aid, but within the maximum limit of €500 000 for the period 2008 – 2010\(^{31}\). In October 2009, the Commission introduced an amendment to the Framework in order to allow for a compatible limited amount of aid of €15 000 for the agricultural sector, which was initially excluded from the measure\(^{32}\).

**Member States were also given the possibility to offer subsidised guarantees for loans at a reduced premium.** The guarantee could cover up to 90% of the loan and the maximum loan could not exceed the total annual wage bill of the beneficiary for 2008. The State was allowed to grant a reduction of up to 25% of the annual premium to be paid for new guarantees for SMEs and up to 15% for large companies, while the reduction could be applied for a maximum period of 2 years. In addition, the loan could cover both investment and working capital. The Commission subsequently amended that measure in December 2009 in order to further facilitate access to finance, especially in Member States with low labour costs. The amendment allowed Member States to determine the maximum amount of the

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\(^{29}\) See for example MEMO/09/90 of 28 February 2009 following the announcements made by the French authorities regarding their intended plan to support the automotive sector.

\(^{30}\) For the purposes of the calculation, all figures must be gross, *i.e.* before any deduction of tax or other charge. Where aid is awarded not in the form of a grant, the aid amount is the gross grant equivalent.

\(^{31}\) Prior to granting the aid, the Member State must obtain a declaration from the undertaking concerned, in written or electronic form, about any other *de minimis* aid and aid pursuant to this measure received during the current fiscal year and check that the aid will not raise the total amount of aid received by the undertaking during the period from 1.1.2008 to 31.12.2010, to a level above the ceiling of €500 000.

\(^{32}\) Aid to firms active in the fisheries sector and aid to export or aid favouring domestic over imported products are excluded from the measure.
investment loan covered by a guarantee either on the basis of the total annual wage bill of the beneficiary or on the basis of the EU 27 average labour costs as established by Eurostat.

Another new possibility given to Member States under the Temporary Framework was aid in the form of subsidised interest rate applicable to all types of loans. That reduced interest rate can be applied for interest payments until the end of 2012. Under the original Framework, the rate could be at least equal to the Central Bank overnight rate plus a premium equal to the difference between the average one year IBOR and the average of the Central Bank overnight rate over the period from 1 January 2007 to 30 June 2008 (pre-crisis), plus the credit risk premium corresponding to the risk profile of the recipient. The aid element was calculated as the difference between the applicable interest rate and the reference rate. The schemes could cover loans of any duration, but the reduced interest payments could be applied for payments only before 31 December 2012, any interest rate after that date should be in line with market rates.

Finally, the Temporary Framework introduced a measure whereby Member States can offer subsidised loans for the production of green products, helping environmental goals to remain a priority despite the crisis. Such investment loans benefit from a subsidised interest rate that is calculated on the basis of the above-mentioned methodology plus an additional reduction of 50% for SMEs and 25% for large companies. The aid has to comply with a series of conditions. In particular, it should relate to investment loans for financing projects consisting of production of new products which significantly improve environmental protection and should only be granted for projects involving early adaptation to or going beyond future Union product standards (i.e. adopted standards not yet in force) which increase the level of environmental protection. For products involving early adaptation to or going beyond future Union environmental standards, the investment should start on 31 December 2010 at the latest with the objective of putting the product on the market at least two years before the standard enters into force.

In addition to introducing the above-mentioned new aid measures, the Temporary Framework also brought flexibility to existing measures by allowing for a temporary derogation from the Guidelines on Risk Capital guidelines so as to allow € 2.5 million of risk capital injection in SMEs per year (up from € 1.5 million) and a reduction of the minimum level of private participation (from 50% to 30%).

Finally, the Temporary Framework eased the procedural requirements for Member States to activate the so-called "escape clause" contained in the Commission Communication on short-term export credit insurance. In other words, it made it "lighter" for Member States to demonstrate that for short-term export credit insurance certain risks are temporarily non-marketable and can thus be covered by the State. Prior to the adoption of the Temporary Framework, Member States' notifications to the Commission

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33 Loans may cover the costs of investment in tangible and intangible assets with the exception of loans for investments which account for production capacities of more than 3% on product markets where the average annual growth rate, over the last five years before the start of the investment, of the apparent consumption on the EEA market, measured in value data, remained below the average annual growth rate of the European Economic Area's GDP over the same five year reference period.


35 Communication of the Commission to the Member States pursuant to Article 93 (1) of the EC Treaty applying Articles 92 and 93 of the Treaty to short-term export-credit insurance (OJ C 281, 17.9.1997, p. 4-10).
requesting the activation of the escape clause had to contain a market report demonstrating the unavailability of cover for the risks in the private insurance market by producing evidence from two large, well-known international private export-credit insurers as well as one national credit insurer. Moreover, it had to contain a description of the conditions which the public or publicly supported export-credit insurer intends to apply in respect of such risks. In the Temporary Framework, that condition is met if the Member State produces evidence from one large well-known international private export credits insurer and one national credit insurer produce that such cover is unavailable or evidence that at least four well-established exporters have been refused cover from insurers for specific operations.
4. **Analysis of the Temporary State Aid Measures Notified to the Commission**

4.1. **Use of Temporary State aid measures to financial institutions during the crisis**

4.1.1. *Most Member States had recourse to State aid to support their financial sector, committing unprecedented amounts*

All but five Member States adopted at least one measure to support financial institutions\(^{36}\). The large majority of Member States adopted both guarantee and recapitalisation measures. Indeed, only two Member States introduced a stand-alone guarantee scheme (Cyprus and Slovenia) and Italy was the only Member State to introduce recapitalisation support without providing support in the form of newly issued debt guarantees. Impaired asset relief measures were adopted less widely throughout the EU, in only nine Member States\(^{37}\).

With the exception of Belgium and the Netherlands which relied on *ad hoc* measures only, all the Member States that pledged support to their financial sector used schemes sometimes complemented by *ad hoc* measures. **The reliance on schemes implied that a very large proportion of the European banking sector was in the position to apply for State support.** Almost 95% of the European financial sector, as measured in assets, was eligible for State intervention, although a much more limited percentage actually relied on it.

The combined total support to financial institutions pledged by governments in the EU has been unprecedented. Over the September 2008 - December 2010 period, Member States committed a total of nearly €4 300 billion. **That total pledged support budget that has been approved by the Commission amounted to 36% of the EU GDP and to 10% of the total assets of the European banking sector**\(^{38}\). Nonetheless, there were strong differences in both absolute and relative size of support pledged by Member States throughout the crisis. The amount pledged by Member States ranged from less than €3 billion (Cyprus, Latvia) to more than €500 billion (United Kingdom, Germany). That discrepancy in commitment of resources to State aid is also visible when looking at support as a percentage of the size of the banking sector, ranging from less than 1% in Italy to more than 30% in Ireland, with nine Member States pledging more than the average of 11% of the assets of their national banking sector.

**The large majority of aid had been committed for guaranteeing financial institutions’ senior liabilities** (75% of total aid pledged), but a significant amount was also committed for potential direct capital support (13%) and for impaired asset relief measures (9%). Liquidity support was much lower (3%).

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\(^{36}\) Bulgaria, Czech Republic, Estonia, Malta and Romania did not adopt any specific measure in support of their financial sector; these five Member States combined represent less than 1% of total assets of financial institutions in Europe.

\(^{37}\) Austria, Germany, Ireland and Lithuania adopted impaired asset relief schemes while Belgium, France, the Netherlands, Spain and the United Kingdom pledged impaired asset relief support in *ad hoc* cases. Germany also provided asset relief to individual banks outside of its scheme, which was not activated.

\(^{38}\) Based on 2009 GDP and banking sector size measured in total assets. However, it should be noted that this support was mostly contingent (such as guarantees) and not disbursed. As a reference, the total support measures committed by the United States over the period October 2008-April 2010 amounted to 26% of GDP (ECB Monthly Bulletin, April 2010).
Not surprisingly, commitment of aid was front-loaded by governments at the beginning of the crisis, with a little less than 80% of aid pledged in the first quarter following the bankruptcy of Lehman Brothers (October 2008 - December 2008).

The characteristics of the aid committed by Member States – its sheer volume, the importance of aid committed through guarantee scheme, its frontloading soon after the Lehman Brothers' bankruptcy – highlight that one of the key objectives of Member States in committing State aid was to restore confidence in the sector by sending the clear signal that EU governments would step in to prevent the liquidity crisis turning into a systemic crisis.

Box 4: The different instruments of State aid to financial institutions and how to measure them

Two different concepts are used in this Paper to describe the volumes of State aid to financial institutions: the committed or pledged amount of aid and the used amount of aid.

The pledged volume of aid (aid approved) represents the overall maximum amount of State aid measures (such as guarantees, capital injections and other) set up by Member States and approved by the Commission. That figure corresponds to the upper limits of support which Member States are allowed to grant to the financial institutions. However, it neither expresses the amounts actually implemented nor the benefit which individual financial institutions obtained.

The used amount (aid used or aid granted) of the aid expresses the actual volume of the aid measure which Member States implemented:

- **For recapitalisation**: the used amount of aid is equal to the nominal value of the recapitalisation.
- **For impaired asset relief**: the used amount of aid is the difference between the transfer value paid to the beneficiary and the market value of the asset.
- **For guarantee**: the used amount of aid is the volume of the liability covered by the State.
- **For liquidity support**: the used amount of aid is the volume of the support (value of the loan).

Asset support measures (recapitalisation and impaired asset relief) are recorded at the time of their issuance. For liability support (liquidity and guarantee), aid can be recorded either once when the liability considered is issued, or can be recorded as long as the liability matures.

The data presented in this Paper relies on the State aid Scoreboard but with a different time scope, since this Paper covers the full year 2010. Moreover, as regards aid in the form of guarantees, figures in this Paper only consider the guarantees for newly emitted bonds by beneficiary banks and record such guarantee once at the time of their emission. That approach

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differs from the methodology used in the State aid Scoreboard and in particular overlooks guarantee aid for short-term liabilities. However, it allows for systematic comparison at the level of the beneficiaries. More details on the data coverage of this Paper are provided in Annex 1: Methodological note.

A large portion of the formally pledged aid made available was not used. Three Member States – Poland, Slovakia, and Lithuania – did not use any of the adopted measures while aid granted by Finland remained marginal. It appears that Member States over-committed their support to the financial sector in order to restore financial stability. Indeed, the take-up rate of aid, i.e. the ratio of aid that was effectively used by financial institutions out of the amounts committed by Member States, was only 30%, mainly driven by the low take-up rate of guarantee schemes (25%) which served as "insurance" for the EU financial sector.

Overall, aid granted by Member States throughout the reference period amounted to €1240 billion, or 10.5% of EU GDP and 2.9% of total assets of the EU financial sector. The majority of aid used was in the form of guarantees (61% with €757 billion) and of capital injections (24% with €303 billion). Impaired asset reliefs measures and liquidity measures represent respectively 8% (€104 billion) and 6% (€77 billion) – see Figure 4.1.

Figure 4.1: State aid to financial institutions in the EU: aid pledged and used between October 2008 and December 2010

<table>
<thead>
<tr>
<th>Total pledged amount of aid*</th>
<th>Total used amount of aid*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>€ billion</td>
</tr>
<tr>
<td>Guarantees</td>
<td>3208</td>
</tr>
<tr>
<td>Recapitalisation</td>
<td>560</td>
</tr>
<tr>
<td>Impaired assets</td>
<td>394</td>
</tr>
<tr>
<td>Others (liquidity)***</td>
<td>123</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4285</td>
</tr>
</tbody>
</table>

* Numbers may not add up due to rounding ** % of 2009 EU GDP and of 2009 total assets of EU banking sector *** October 2008-December 2009 period only

4.1.2. Aid to financial institutions was concentrated on a few Member States and on a few beneficiary banks within each Member States

The aid used was concentrated in the Member States where the banking sectors were the largest. The top three banking markets, the United Kingdom, Germany and France, accounting for almost 60% of the EU banking sector, also received 60% of the total amount of aid granted during the reporting period.

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40 These short-term liabilities can be of significant value, such as in the case of Dexia (where the total liability covered amounted to €100 billion) or in the case of the Irish scheme, whose maximum approved value was €386 billion. However, in most Member States, the vast majority of aid in the form of guarantee was used to guarantee the issuance of new bonds.

41 Excluding the Member States that did not grant aid, the total aid granted amount to 10.6% of the combined GDP of Member States that provided aid and to 3.0% of the total assets of the banking sector of such Member States.

42 Data differ from the latest State aid Scoreboard due to different time scopes and methodologies to account for guarantees and impaired asset measures. In particular, data presented in this Paper for guarantees are underestimated since only guarantee for newly issued bonds are included – see Box 4 and Annex 1.
However, those Member States were not where the aid was the highest in relative terms, \textit{i.e.} as a share of the total banking sector size. Member States granted on average the equivalent of 2.9\% of the total assets of their national financial institutions and France, Germany and the United Kingdom were around that average with 2.0\%, 3.8\% and 3.1\% respectively.

On the contrary, some Member States significantly exceeded the European average of support to the financial sector: Slovenia, Latvia, Ireland and Greece and to a lesser extent the Netherlands. Other Member States offered significantly less support than average, in particular Portugal, Luxemburg, Italy and Finland – see Figure 4.2.

\textbf{Figure 4.2: Used aid to the financial sector as a share of the size of the banking sector}

The aid used was also polarised within each Member State. There were on average twelve beneficiaries by Member State but the figure varies significantly across Member States\(^43\). Finland, Hungary, Latvia and Luxembourg granted aid to fewer than three beneficiaries while Denmark, France, Germany, Spain, and the United Kingdom granted aid to more than fifteen, and sometimes many more (Denmark to 63 and Spain to 41). These differences only partially reflect the variations between the structures of the banking sectors of Member States. While in small concentrated markets, the number of beneficiaries tended to be low (Sweden, Hungary, Portugal – with the notable exception of Denmark), in some more fragmented markets, aid was either granted to a comparatively high number of beneficiaries (Germany, Spain) or targeted on a few (Italy).

\textbf{Box 5: Differences in the structure of the banking sectors across Member States}

Banking sectors in Europe presented different structural characteristics across Member States before the crisis, depending on their size and concentration. The reference year for the data

\(^43\) These numbers do not include the beneficiaries of liquidity scheme in Austria, Greece and Spain.
presented here is 2007. The three largest banking markets in Europe, measured by assets, represent almost 60% of the total European market. The UK (25%), Germany (18%) and France (16%) are at least twice as large as the immediate following markets in size – Italy (8%), Spain (7%) and the Netherlands (5%). All the other markets combined represent only 20% of the total European sector, and in 14 Member States, in particular new Member States, national banking sectors make up less than 1% of the total EU sector. Smaller markets are especially inter-dependent with the rest of the EU banking sector: in such markets, the share of assets owned by institutions from other Member States varies between 20% and 70%. For the six largest markets, that share is below 10%.

Banking sectors can also be differentiated across Member States by analysing their concentration, measured by the weight of the leading financial institutions (combined market share in assets of the five leading institutions), and their fragmentation, measured by the average size of financial institutions active in the market. That analysis highlights the different structures of markets and the related competition dynamics:

- **"Concentrated" markets**: Belgium and the Netherlands are concentrated markets where the five leaders make up at least 80% of the total market, and the average size of competitors is medium in Europe. The total assets held by the top 5 banks in Belgium and the Netherlands represent 2.5 and 3.3 times respectively the GDP of Belgium and the Netherlands. Finland is also a concentrated market but with much smaller institutions on average.

- **"Small concentrated" markets**: a majority of banking sectors in Europe have a concentration between 55% and 70% and small institutions at the European level. Such markets include new Member States, Sweden, Denmark, Greece and Portugal.

- **"Average" market**: the French and Spanish markets are specific since they present both an average concentration of leaders (between 40% and 50%) and medium-sized banking institutions on average.

- **"Fragmented" markets**: Germany, Italy and Luxemburg present a lower than average weight of the top five leaders, in particular in Germany where it is just above 20%. Moreover, the average size of institutions in those relatively large markets at the European level is low, which confirms the fragmentation of the markets. Austria presents a similar pattern, but with a higher concentration at the top of the market.

- **"Large-player" markets**: the British and Irish banking sectors are also quite specific in Europe since the average size of financial institutions in those Member States is much higher than the European average. Those markets host very large financial institution but did not present high concentration ratio of leaders (between 40% and 50%) before the crisis (in 2007)\(^{44}\). However, leaders are outsized compared to the EU average: the top 5 banks in Ireland hold the equivalent of almost 5 times the Irish GDP (2.5 times in the case of UK banks).

\(^{44}\) In the case of Ireland, the concentration of the leading financial institutions increased significantly following the financial and economic crisis – see Section 5.3.3.
Those differences in the structure of the banking sectors has partially influenced how each Member State granted aid to domestic financial institution during the crisis, both in terms of the number of beneficiaries of aid and the concentration of aid – see Figures 4.3 and 4.4.

Moreover, the concentration of aid within each Member State, i.e. the aid received by the most aided banks in each Member State over the total aid granted in this Member State, is a good indicator of the nature of public support and its link with the structure of the banking sector. In twelve Member States, the three major beneficiaries of aid received more than 80% of the total support granted by the Member State – see Figures 4.3 and 4.4.

Figure 4.3: Concentration of asset support aid within each Member State

Figure 4.4: Concentration of liability support aid within each Member State
Concentration of aid within each Member State can be observed for both asset support (recapitalisation and impaired asset relief) and liability support (guarantee on newly emitted bonds and liquidity). For both types of aid, the top three beneficiaries in a given Member State received on average 80% of the total aid granted by that Member State.

However, a small number of Member States, in particular Spain, Germany, Denmark and Greece provided aid to more beneficiaries but also in more equal way. The asset support aid in Greece, Germany and Denmark was for instance provided to a relatively higher number of beneficiaries compared to the EU average. Similarly, liability support was also provided to a significant number of institutions in Denmark and Spain.

4.1.3. While the use of instruments was similar across Member States, each instrument was used for different purposes

Providing guarantees for the issuance of new bonds by beneficiary institutions was the most used instrument in the EU throughout the reporting period. More than 60% of State aid granted by Member States took that form (€ 757 billion), while recapitalisation and impaired asset relief measures accounted respectively for 24% (€ 303 billion) and 8% (€ 104 billion) of total aid. State originated liquidity aid, in the form of short-term loans for instance, represented 6% of total (€ 77 billion for 2008-2009 only).

The patterns of use over time of the different aid instruments have been similar. Both the use of recapitalisation and liability guarantee support measures were frontloaded in the first quarters of the crisis – 56% of asset support and 62% of liability support were granted between the last quarter of 2008 and mid-2009. The use of aid then experienced another peak in the end of 2009 and early 2010 to then steadily decrease throughout 2010 – the total use of aid in 2010 has thus been lower than the aid used in the last quarter of 2008 alone.

It is hard to identify consistent patterns in Member States' use of the different State aid instruments to support financial institutions with the exception that few Member States
provided support in the form of asset relief measures – those which did so were usually the Member States providing the largest amounts of support: Germany, the United Kingdom, Belgium\textsuperscript{45}, the Netherlands and Ireland. A large majority of Member States provided both asset and liability support\textsuperscript{46}. Belgium, the Netherlands and Luxemburg are the only Member States presenting the different pattern of having used recapitalisation aid more than guarantees, which can be explained by them not having introduced schemes but having provided only \textit{ad hoc} support.

Guarantees on new bonds issuance have been granted mostly through schemes (88\%) while impaired asset relief were almost exclusively granted through \textit{ad hoc} individual measures – the Irish scheme being the only impaired asset scheme that was effectively used. Recapitalisations were granted by Member States both through schemes and \textit{ad hoc} measures, with a majority of the latter (59\% of total recapitalisation volume).

**The specificities and objectives of each instrument have affected their use throughout the crisis.** Guarantees for new bonds issuance have been mostly used through schemes, for a large number of beneficiaries, consistent with their role of fuelling liquidity in the entire system in order to restore trust. Recapitalisations have been granted significantly both through schemes and \textit{ad hoc} measures, and also for a large number of beneficiaries. That pattern reflects the dual role of recapitalisations to avoid an uncontrolled failure of a systematically important bank and to inject capital in the banking sector to increase the credit supply. Last, impaired asset relief measures have been used in a very specific way by a limited number of Member States to remedy the financial situation of endangered banks.

Those differences are in turn reflected in the number of beneficiaries for each type of instrument, which is significantly higher for liability support (182 financial institutions received liability support\textsuperscript{47}, out of which 176 received State guarantees for newly issued bonds) than for impaired asset relief (18 beneficiaries in total). The number of beneficiaries of capital injection stands in the middle at 114. **In total, 215 financial institutions received State aid during the crisis.**

**The differences in aid across instruments are also reflected in the consequences of the aid on the beneficiary in terms of restructuring obligations.** 85\% of the recapitalisation aid and 100\% of aid in the form of impaired asset relief measures were granted either to beneficiaries that were restructured or that have submitted a restructuring plan\textsuperscript{48}. The link between restructuring and aid in the form of guarantees for new bonds issuance is weaker since only 60\% of guarantee aid was granted to beneficiaries having entered a restructuring process – see Figure 4.5.

**Figure 4.5:** Link between restructuring process and aid instrument

\textsuperscript{45} The impaired asset support was granted together with France in the case of Dexia.
\textsuperscript{46} The exceptions are Cyprus, Portugal and Slovenia which provided only guarantee for liability support, and Italy which provided only recapitalisation support.
\textsuperscript{47} Two banks were supported by several Member States: Dexia, by Belgium, France and the Netherlands and Fortis, by Belgium, Luxemburg and the Netherlands.
\textsuperscript{48} Beneficiaries of recapitalisation that did not enter a restructuring process had to submit a viability plan. Viability plans require that a return to viability needs to be demonstrated, but do not require burden sharing or competition measures. Viability plans need to be submitted for recapitalisations of sound banks in the framework of the review process by the Commission of implemented aid measure.
Overall, banks that have submitted a restructuring plan to the Commission have received 70% of the total aid to the financial sector in the EU. Those institutions come from 15 Member States.

4.1.4. Aid was concentrated on key institutions that were subsequently restructured

Since the total aid granted throughout the crisis was concentrated both in a few Member States and on a few beneficiaries in each Member States, it was also very concentrated on a small number of institutions. The top ten institutions that received most public support in Europe during the reporting period jointly received together more than 50% of the total support granted by European Member States.

The ten largest beneficiaries of asset support aid (recapitalisation and asset support) in Europe received two-thirds of the total asset support while the then largest beneficiaries of liability support received half of the total liability support. Thus, aid was concentrated on a small number of beneficiaries for each type of support – see Figure 4.6.

Moreover, the largest beneficiaries of aid in the form of asset support and aid of liability support were usually the same banks. For instance, the five largest beneficiaries of guarantee aid were all among the 20 largest beneficiaries of recapitalisation aid. Those three factors – high concentration of asset support, high concentration of guarantee support, and similar large beneficiaries for both types of support – explain the very high concentration of total aid in Europe.

Figure 4.6: Concentration of aid across beneficiaries in Europe for asset and liability support
That high concentration implies that the efficiency of the temporary State aid measures strongly depends on those limited number of cases where significant aid was granted, particular regarding potential distortions of competition on the market. In such cases, the Commission sought a restructuring plan from the Member State for the beneficiary.

Indeed, the 15 largest beneficiaries of State aid in the form of asset support during the reporting period have been restructured following a decision by the Commission or submitted a restructuring plan, which was still being assessed by the Commission\(^{49}\). Those heavily aided institutions originate from a few Member States: the UK (RBS and Lloyds Banking Group), Ireland (Anglo Irish Bank, Allied Irish Banks), Belgium (Fortis, supported together with the Netherlands and Luxemburg and Dexia, supported together with France and Luxemburg and KBC), Germany (Bayern LB, Commerzbank, HSH Nordbank, IKB, LBBW and West LB) and the Netherlands (ING and ABN Amro).

While the large aid packages were concentrated on a few institutions, they were only partially directed to the largest EU banks. Out of the top 25 banks in Europe\(^{50}\), 15 received public support during the crisis and 4 belonged to the heavily aided group of the 15 biggest beneficiaries described above: RBS, Lloyds Banking Group, Dexia and Commerzbank.

\(^{49}\) Out of the 15 largest beneficiaries of liability support measures, only four did not enter a restructuring process.

\(^{50}\) The list of the 30 biggest banks based on sales, assets, capitalisation and profits in Europe was extracted from Forbes, April 2011.
4.2. Implementation of the temporary measures in favour of the financial sector

4.2.1. The enforcement practice of the Commission contributed to ensure coordination and consistency across decisions

Over the period October 2008 - December 2010, the Commission adopted more than 200 State aid decisions relating to aid to the financial sector, either in the form of schemes or of *ad hoc* support. Those decisions enforced the guidance provided by the Commission to Member States under the successive Communications detailing how State aid would be assessed by the Commission in the context of the financial crisis, as described in Chapter 3.

The enforcement practice of the Commission constituted an essential element of the EU response to the crisis and its detailed analysis is necessary to understand the consequences that State aid had in practice on the EU financial sector in general and on specific financial institution or national markets in particular.

The majority of the decisions were adopted under a very short time frame, in particular in the few weeks following the bankruptcy of Lehman Brothers. The first schemes notified by Member States in the course of October 2008 were for instance approved by the Commission in less than 10 days.

The vast majority of the decisions adopted by the Commission were decisions not to raise objections, because the proposed State aid could be approved on the basis of Article 107(3)(b) of the Treaty and in light of the principles set out in the Banking, Recapitalisation, Impaired Asset Relief and Restructuring Communications.\(^{51}\) Exchanges between the Commission and Member States after the notification of State aid were essential in ensuring that the proposed aid measure would be approved by the Commission. The Commission only adopted one negative decision, with recovery of the aid, concerning aid to the financial sector throughout the crisis\(^ {52}\) and three decisions have been appealed by parties.\(^ {53}\)

The enforcement practice of the Commission throughout the crisis was essential to ensure that the State aid provided by Member States to financial institutions was delivered in a consistent manner. In particular, in accordance with State aid practice, the Commission reviewed for each State aid measure its appropriateness, necessity and proportionality before approving it.

- **Appropriateness:** State aid should be appropriate to effectively achieve the objectives set out in the Treaty, here to remedy a serious disturbance in the economy of the Member State. The Commission identified in its four Communications the

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\(^{51}\) In practice, a significant number of cases were first approved on a temporary basis to enable the delivery of the emergency measures needed (rescue phase) while keeping them conditional to the submission of a restructuring plan. In such cases, the final decision definitely declaring the aid compatible with the internal market was taken following an in-depth investigation procedure, in accordance with Article 108(2) TFEU (restructuring phase).


type of State aid to financial institutions that could contribute effectively to that objective and ensured in each decision that aid was indeed targeted to restoring financial stability or ensuring lending to the real economy.

- **Necessity**: State aid should be limited to the minimum necessary to achieve the objective. The Commission assessed the necessity of aid by monitoring that it was limited both in time and in scope. The Commission thus insured that all measures were temporary and had a pre-defined and reasonable budget.

- **Proportionality**: the positive effects of the State aid should be properly balanced against the distortions of competition, in order for those to be limited to a minimum. The Commission enforcement practice has focused on three points: (i) ensuring that aid provided by Member State was adequately remunerated and where possible incentivising exit from State support, (ii) ensuring that sufficient safeguards conditions were attached to the aid to limit distortions of competition and (iii) ensuring that both conditions (remuneration, safeguards) were stricter for distressed banks than for sound banks, seeking in-depth restructuring when appropriate, i.e. justified by the amount and nature of the aid received.

All measures approved throughout the crisis complied with the criterion of necessity since they were limited in terms of the timeframe in which the aid could be granted and in terms of size. Member States provided a budgetary limit to the amount of aid to be granted, either in total or by beneficiary. As regards timeframe, the entry window of support schemes to financial institutions were in general limited to six months, which was subsequently prolonged by successive six-month periods if the financial and economic situation of the Member States still justified it. Member States systematically notified the prolongation of measures before their expiry date and the Commission took independent decisions in authorising their prolongation. However, it should be noted that the aid measure in itself was not limited to the entry window of the scheme and that its duration in general exceeded it. For instance, State guarantees for newly issued senior debt remain valid until the issued debt matures, which can be up to five year for long-term debt. Similarly, recapitalisation and impaired asset measures produce effects until they are redeemed.

Sections 4.2.2 to 4.2.4 provide an overview of how the appropriateness and proportionality criteria were assessed by the Commission for aid to the financial sector approved in the period October 2008 - December 2010, focusing on guarantee, recapitalisation and impaired asset relief schemes set up by Member States and approved by the Commission.

Significant amounts of State aid were also granted on an ad hoc basis, and those cases entailed the need for the beneficiary to engage in a restructuring process if not deemed fundamentally sound. In practice, this was the case for virtually all ad hoc aid approved. They are thus analysed separately in Section 4.2.5 which provides an overview of the Commission's enforcement practice as regards the restructuring of financial institutions during the crisis.

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54 In all measures approved in the context of the financial crisis, beneficiaries were financial institutions (credit institutions or insurance companies) registered in the Member State. Subsidiaries from another Member State registered and active in the Member State were eligible, thus insuring non-discriminatory treatment across the Single Market.
4.2.2. *State aid in the form of guarantees*

The Commission approved guarantee schemes in 20 different Member States, most of them with subsequent prolongations\(^{55}\). The majority of the schemes were adopted between October 2008 and April 2009, either in stand-alone decisions, or as part of larger schemes including other support measures. Although schemes had similar features as regards objectives, eligibility criteria, remuneration and commitments, there are some important differences across Member States, reflecting the different features of each market.

**As regards appropriateness, the objective of all schemes was to remedy a serious disturbance to the European economy**, by way of supporting the short- and medium-term financing needs of banks and financial institutions. During the crisis, even solvent banks faced increasing difficulties in getting access to liquidity, and subsequently in providing lending on the interbank market but also to the real economy. By offering State guarantees to newly issued debt instruments by the banks, the Member States aimed to make them more attractive to investors, to restore confidence in solvent financial institutions and to effectively improve lending to the real economy.

In most Member States, practically all systemically relevant\(^{56}\) financial institutions incorporated in the country were eligible for issuing guaranteed instruments, including subsidiaries of foreign institutions. However, in some Member States, branches of foreign banks were specifically excluded, whereas other schemes remain silent on this issue\(^{57}\). In all but one Member State (Slovakia), only solvent financial institutions were eligible. That solvency criterion aimed at mitigating the potential effects of the guarantees on the budget of the Member States, by reducing the risks that the guarantees would be drawn. However, enforcing such rule was complex in the middle of a financial crisis due to the challenges of distinguishing illiquidity from insolvency.

Member States' guarantee schemes show a clear preference for guaranteeing instruments representing senior liabilities, which ensure that, in case of default, the State would be entitled to a certain degree of compensation. The Netherlands and the United Kingdom specifically included currency constraints, guaranteeing instruments only issued in Euros, British Pounds and US Dollars.

Most schemes only guaranteed debt issued during a limited temporal scope, an "entry window" of 6 months after the adoption of the decision. It sought to allow the Member States to control the issuance of new debt and to tackle moral hazard that could arise if foreign financial institutions established themselves in the country only in order to benefit from the scheme or if the guarantees were extended to existing debt. However, certain Member States guaranteed existing debt as well, but only in duly substantiated circumstances (Latvia). Another limitation on the scope of the guarantee scheme was in the form of a maximum budget notified by Member States linked to macro-economic variables: some Member States linked the budget of the guarantee scheme to GDP (maximum 10% thereof in Latvia) or to total budget expenses (maximum 10% thereof in Slovakia).

\(^{55}\) Initial schemes with chronological order in: Denmark, Ireland, the United Kingdom, Germany, Sweden, France, the Netherlands, Finland, Italy, Greece, Austria, Slovenia, Portugal, Latvia, Sweden, Finland, Hungary, Spain, Poland, Cyprus, Slovakia, Lithuania.

\(^{56}\) This notion is larger in scope than the notion of systemically important banks.

\(^{57}\) Hungary, Italy and Spain.
The Irish scheme is an exception with an extended scope of instruments being guaranteed, including all outstanding retail and corporate deposits (if not covered by other permanent schemes) as well as dated, rolled-over and newly issued subordinated debt. Ireland was also the only Member State that did not provide a budget for its scheme, which, in conjunction with its larger scope, led it to guarantee a very significant amount of debt which in turn had negative effects on its sovereign creditworthiness.

Based on the assumption that the lack of confidence in the debt markets would not last for more than five years and in order to avoid a massive refinancing wall at a given time in the future, the majority of the schemes only guaranteed debt issuance with a maturity of maximum five years. However, the subsequent prolongations, offering the possibility for instruments issued well after the beginning of the crisis to be guaranteed is a sign that the original assumptions about the timing of the recovery had to be reviewed.

The maturity of debt guaranteed differs across the schemes. A general cap for liabilities maturing in three years was required by Cyprus, Germany, Greece, Lithuania, Latvia, the Netherlands, Poland, Portugal and Slovakia, with Denmark having the more stringent maturity limitation (two years). Other Member States allowed for maturity up to five years, with limitations as regards the amount guaranteeing such instruments (usually one-third) or requiring the bank to provide adequate justification for the deviation from the general rule.

As regards proportionality, various safeguards were introduced to minimise the distortions of competition created by the schemes. First of all, the distortion was minimised through the remuneration of the guarantee, which should be reasonable and linked to properly functioning markets rates and reflect the beneficiary's risk profile. Member States largely implemented the recommendations of the European Central Bank of 20 October 2008, whereby the financial institutions should pay on average an adequate price for the guarantee, with a top-up for maturities longer than one year – see Box 3. Small modifications to the recommended pricing formula for short-term debt were introduced in the Cypriot and Irish schemes, which requested a halved guarantee fee at 25 basis points, whereas the French and the Slovenian schemes used the possibility to provide a reduced fee when liabilities were collateralised. For long-term debt, only Sweden requested a reduced add-on of 25 basis points, in addition to the five year historic CDS median of the beneficiary.

Some Member States provided exit incentives in the remuneration mechanism itself: the Italian scheme provided for a step-up clause in the remuneration for maturities longer than two years, as an indirect incentive for guaranteeing only short- and medium-term debt, whereas Portugal reserved the right to revise the fee, if the situation in the market were to improve.

Finally, a set of behavioural constraints for the beneficiaries of the guarantees also limited the distortions of competition stemming from the aid. An advertisement ban of the fact that the bank can issue State guaranteed debt was included in all schemes. Most schemes featured a limitation of balance sheet expansion or a ban on aggressive commercial policies. Some schemes featured limitations in the remunerations of the management of the financial

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59 With the exceptions of Hungary, Latvia, Poland and Slovakia; Finland and Sweden withdrew those commitments in subsequent amendments.
institution\textsuperscript{60} and commitments as regards the use of the new funding for the real economy, such as in Austria and Cyprus. Other behavioural constraints included a dividend ban\textsuperscript{61} and improvement of structures to ensure long-term stability of funding (Ireland).

Due to the exceptional circumstances, the Commission deemed that the mere issuance of guaranteed instruments did not automatically trigger the obligation to submit a viability review or restructuring plan. It was considered that the wholesale funding market completely dried up after the collapse of Lehman Brothers, due to a generalized mistrust of investors towards banks in general, and therefore also towards fundamentally sound banks. The provision of guarantees was thus not deemed a structural measure, even if certain institutions would depend on them for their funding\textsuperscript{62}. However, if the guarantee had to be called upon, the submission of a restructuring plan was required.

In the context of the phasing out of the exceptional regime, guarantee schemes to be prolonged beyond 30 June 2010 must include thresholds for the ratio of total outstanding guaranteed liabilities over total liabilities and for the absolute amount of guaranteed liabilities. If exceeded, a viability review\textsuperscript{63} would be required. The thresholds were set at 5\% for outstanding guaranteed liabilities over total liabilities and at €500 million for the total amount of guaranteed liabilities – see Chapter 6. If those thresholds are exceeded, the Member State concerned should submit a review demonstrating the bank's long-term viability to the Commission within 3 months of the granting of guarantees. That mechanism does not apply to banks already in restructuring or obliged to present a restructuring plan or that are already subject to a pending viability review. In such cases, additional State aid will be taken into account within the framework of the ongoing restructuring/viability process.

4.2.3. State aid in the form of recapitalisations

The Commission approved recapitalisation schemes in 15 different Member States between October 2008 and December 2010\textsuperscript{64}. The majority was adopted at the height of the crisis before June 2009. The sovereign-debt instability that materialised as of 2010 and the results of the stress-tests of June 2010 led some Member States to introduce recapitalisation schemes in the second half of 2010 (Spain) or to re-introduce a previously terminated scheme (Italy) or complementary scheme (Greece).

Following the guidance provided by the Commission in its Recapitalisation Communication, the majority of approved schemes exhibited similar objectives and

\begin{itemize}
\item Greece, Finland, France, Hungary, Ireland, Latvia, the Netherlands, Poland, Sweden, Slovenia and Slovakia.
\item Denmark, Greece, Ireland, Latvia, Poland, Slovenia and Slovakia.
\item In practice, this meant that the amount of guarantee provided for debt was not included in the amount of aid as a percentage of total risk weighted assets for banks under a restructuring obligation.
\item The assessment will be carried out when a Member State receives the application for an approval of guarantees for the issuance of new or renewed debt as from 1 July 2010 and will include the amount of debt to be covered by the requested guarantees as well as all existing outstanding guaranteed liabilities in relation to total liabilities/balance sheet at the material time. Outstanding liabilities that exceed the threshold due to issuances before 1 July 2010 do not trigger a viability review unless the bank resorts to the issuance of new debt keeping the guaranteed liabilities above the threshold.
\item In chronological order: United Kingdom, Germany, Greece, France, Austria, Italy, Denmark, Sweden, Hungary, Portugal, Finland, Slovakia, Poland, Spain, and Lithuania. The only significant banking markets in the EU without a recapitalisation scheme in place were Belgium, Luxemburg, Ireland and the Netherlands. In the case of Benelux Member States, recapitalisations took place in the form of \textit{ad hoc} measures; in the case of Ireland, an impaired asset relief scheme was adopted.
\end{itemize}
principles. They differed in the practical detailed arrangements of their application, in particular regarding the remuneration of State capital and the safeguard conditions attached to State support.

As regards their appropriateness, all recapitalisation schemes submitted to the Commission pursued objectives in compliance with those set out in the Banking and Recapitalisation Communications, i.e. to restore financial stability and to ensure lending to the real economy. Early schemes were more explicitly targeted on the former – for instance, the first approved schemes in the UK and Germany aimed respectively at "restoring financial stability" and "restoring confidence among market players". However, subsequently approved schemes included explicit reference to increasing the flow of credit supply to the real economy as a key objective of the measure, in particular in the French, Italian, Danish or Swedish schemes.

That distinction between the objectives of the recapitalisation measures was also reflected in whether distressed banks were a priori eligible for the scheme. In schemes targeted to ensure additional credit to the real economy, access to State capital was generally explicitly restricted to sound and solvent banks\(^{65}\) – for instance in the Italian, Danish and Swedish cases. Schemes that were in principle accessible to distressed banks compelled such beneficiaries to submit a restructuring plan in the six months after the recapitalisation. That obligation was also systematically imposed by the schemes on beneficiaries that became distressed after having benefitted from State capital.

In almost all cases\(^{66}\), recapitalisation schemes aimed at improving the regulatory capital position of beneficiaries by providing Tier 1 capital injections, thereby allowing the beneficiaries to continue their lending activity. Moreover, nearly 70% of the capital granted through schemes during the crisis was core Tier 1 capital. Approved schemes usually provided for both possibilities (core Tier 1 and non-core Tier 1) but Member States in majority used core Tier 1 capital. That approach reflects their willingness to share part of the increasing risks within the financial system and to help beneficiaries to withstand upcoming losses due to the degradation of market conditions, thereby significantly mitigating the risks of un-controlled failure of a systemically important institution.

The Recapitalisation Communication highlighted the importance of a market-driven and high enough remuneration rate for State capital to limit distortions of competition and recommended a pricing methodology\(^{67}\) taking into account the risks of the beneficiary and of the Member State. In the approved schemes, Member States adopted a wide range of mechanisms to determine the remuneration rate of hybrid State capital (such as preferred shares, silent participations, hybrid capital instruments, etc), which can be classified into three main categories:

- **Fixed or minimum entry rate**: some schemes (such as the British, German, Danish or Greek schemes) only provided for an indicative or minimum entry rate of

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\(^{65}\) The assessment of the eligibility of the beneficiary in terms of financial soundness was often based on the capital adequacy ratio, which should stand above a certain threshold (either before or after the recapitalisation).

\(^{66}\) The only exceptions were the Lithuanian and Polish schemes, which provided for Tier 2 capital interventions and which were not used.

\(^{67}\) This methodology was based on the ECB Recommendations of November 2008 – see Box 3.
remuneration for hybrid State capital, to be adapted to the market conditions and the level of risk of beneficiaries.

- **Entry rate based on the methodology of the Recapitalisation Communication**: a number of Member States strictly followed the given formula (such as Austria, Finland, Hungary, Lithuania, Portugal and Slovakia). Germany amended its initial scheme to enforce the formula.

- **Own methodology**: some Member States (such as France, Italy, Poland and Spain) developed their own methodologies for fixing the remuneration rate of State capital. They usually involved applying the higher rate of three possibilities: a fixed bottom rate, a rate based on the methodology of the Recapitalisation Communication and a rate based on the dividend policy of the beneficiary to ensure that the State would be at least remunerated as much as ordinary shareholders.

**In all schemes, the indicative entry rates of remuneration of hybrid capital were in compliance with the minimum rate provided by the recommendations of the ECB** and in some cases were indeed higher than the upper average of the corridor. Figure 4.7 presents the indicative entry rates of remuneration of hybrid capital by recapitalisation scheme.

It is important not to consider those rates in isolation from the overall context and elements of the relevant schemes (e.g., the type of capital covered, the presence of step up clauses). **The indicative entry rates of remuneration of schemes that have actually been used show limited differences and fall within the range between 9% and 10%, apart from a few cases.**

The high UK remuneration rate should be considered with caution since it is based on an indicative fixed rate communicated in the public version of the UK scheme. Similarly, the comparatively low Spanish rate can be explained by the less risky type of capital granted in the Spanish scheme.

**Figure 4.7: Indicative entry rate of remuneration of hybrid capital recapitalisation schemes**

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68 Sometimes, a slightly amended version of this methodology following the same principles of linking remuneration to the risks of the beneficiary and of the Member State was used.

69 The actual rate of remuneration of State capital that was applied in the UK scheme is confidential.

70 The Swedish scheme is not included since it only allowed for State intervention at market rate, alongside private investors.
In the case of Italy and France, the entry rate is also comparatively low while the type of capital granted is equivalent to core Tier 1 and should thus be remunerated around the upper average of the ECB corridor. However, given the important step-up clauses (i.e. clauses by which the overall return on an instrument is increased at pre-defined dates or in particular situations – see Box 6) attached to those entry rates in both schemes, the Commission deemed that the average remuneration rate in both cases would be sufficient to ensure appropriate State remuneration. A large majority of Member States have also included in their schemes such clauses aiming at increasing the remuneration of hybrid State capital over time and thus at providing the right incentives for banks to redeem the State support.

**Box 6: Description of step-up clauses included in recapitalisation schemes**

Three main types of clauses were introduced, sometimes simultaneously, such as in the French and Italian schemes:

- **Step-up clauses on remuneration rates** (German, Slovakian or Spanish schemes): the remuneration rate of hybrid State capital increases every year (between 15 and 50 basis points per year depending on schemes) so that hybrid State capital becomes more expensive than market capital as the financial sector recovers.

- **Step-up clauses linked to profitability of the beneficiary and dividend paid** (Austrian, Danish or Polish scheme): the remuneration of the State capital cannot be less than an increasing proportion of the dividend paid by the beneficiary to its ordinary shareholders (for instance 105% of dividend in 2009, 110% in 2010 and 115% in 2011-2017 in the French scheme). That type of clause also ensures that the State benefit from potential positive financial results of aided banks.

- **Step-up clauses on the redemption rate** (Hungarian or Austrian schemes): the total amount of hybrid capital to be redeemed by the beneficiary increases over time. Such
a clause ensures both that the amount of capital to be redeemed is at least at market value and provides for a minimum average remuneration rate for State capital.

The recapitalisation schemes approved by the Commission throughout the crisis thus contained detailed conditions on the remuneration rates of public hybrid capital, avoiding too low remuneration, ensuring convergence of pricing conditions within the Single Market and incentivising early exit.

In addition to an adequate rate of remuneration, the Recapitalisation Communication identified the need for "appropriate behavioural safeguards to limit distortions of competition", but remained open as to the specificities of such safeguards. **Member States consequently adopted a wide set of safeguard conditions to foster appropriate behaviour from beneficiaries**:

- **Requirements on the activity of the beneficiary**: in the first schemes approved by the Commission (United Kingdom, Germany and Greece), the Member States imposed a higher limit to the growth rate of the balance sheets of beneficiaries (based on historical growth rate) to limit potential aggressive expansion of the beneficiary financed by State capital. However, those limitations were dropped for fundamentally sound banks following the adoption of the Recapitalisation Communication since they could impede the lending activities of beneficiaries. On the contrary, the subsequent schemes contained mechanisms to ensure that State capital would be used to increase lending to the real economy through a minimum growth rate of the amount of incurring credits (France, Italy), formal commitments by the beneficiary to ensure lending to SMEs and households (Germany, Austria, Denmark, Sweden) with sometimes quantified target for those subcategories (United Kingdom, Portugal).

- **Structural constraints**: Member States (Germany, Austria or Greece) imposed structural limitations on beneficiary banks in the form of maintaining a minimum capital adequacy ratio while those banks were in receipt of State support to ensure the solvency of the beneficiary and its contribution to financial stability.

- **Shareholders' remuneration policy**: some schemes included a full ban on dividend for the duration of the State participation in the capital, as in the case of the British, German or Danish schemes, at least for the initial years. Other schemes provided strong limitations on the payment of dividends (Austria imposed a maximum share of 17.5% of profit to be paid as dividends). Those limitations applied only to sound banks – the Member States' ban on dividends was complete for distressed banks, in accordance with the Restructuring Communication.

- **Governance and compensation policy**: all schemes included potential changes in the governance of the beneficiary and its executive compensation policy. Some Member States imposed the appointment of new Board members (UK) or their direct participation in the Board, sometimes with veto power on key decisions (acquisition,

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71 Some Member States introduced specific agreements between the State and the beneficiaries to provide a dedicated legal framework for these conditions, either through the form of a "Convention" (France) or "Code of Conduct" (Italy) or through formal bilateral agreements (Poland, Portugal or Austria).
compensation, or dividend). In addition, all schemes included, in a more or less precise and stringent manner, constraints on the remuneration of top-management.

– **Commercial practice**: all Member States imposed a ban on advertising the State support and included limitations of aggressive commercial strategy as a condition of State support. However, the exact specifications of such conditions in the bilateral agreements between State and beneficiaries were not detailed.

The Commission ensured that the recapitalisation schemes notified by Member States throughout the crisis were in compliance with the principles described in the Recapitalisation Communication. There was thus an overall consistent approach to recapitalisation through schemes across Member States, respecting the key principles of requiring an adequate and increasing remuneration as well as imposing behavioural safeguards to restrain beneficiaries from using State aid at the expense of competitors. Nonetheless, there have been important differences across Member States in the detailed arrangements of the approved recapitalisation schemes, highlighted by the diversity of methodologies to define the remuneration of State capital and of safeguard conditions.

4.2.4. **State aid in the form of impaired asset relief**

**Very few Member States adopted an impaired asset relief scheme and Ireland was the only one to effectively use its scheme.** Austria and Germany introduced an impaired asset relief mechanism as part of their early comprehensive banking sector support schemes (also comprising guarantee and recapitalisation support measures) submitted in the last quarter of 2008. The other two Member States, Latvia and Ireland, notified such measures much later in the crisis, at the end of 2009 and beginning of 2010. The Commission assessed the compatibility of impaired asset relief schemes with the State aid rules in the context of the crisis as clarified in the Impaired Asset Relief Communication, focusing on ensuring an appropriate remuneration for that type of aid as well as an appropriate burden sharing by the beneficiaries.

The "liability for asset" support measure introduced in the Austrian scheme is an asset guarantee, only to be drawn in case of insolvency of the beneficiary. It amounts to a capital injection of the value of the guaranteed asset. Austria aligned its remuneration for this type of measure on that charged by it for simple recapitalisation.

The other impaired asset relief schemes involved asset purchase measure, whereby the remuneration of the State lies in (i) the discount rate used to estimate the net present value of expected cash flows – the so-called "real economic value" as defined in the Impaired Assets Communication and (ii) an additional annual fee.

The German scheme allowed financial institutions to transfer structured securities to a Special Purpose Vehicle (SPV) for a period of 20 years, while ultimately bearing the full risks of losses related to the assets. The Lithuanian scheme consisted of an asset purchase with a minimum haircut of 20%, *i.e.* the State would buy impaired asset with a minimum 20% discount on the real economic value of the assets.

The Irish scheme involved the creation of the National Asset Management Agency (NAMA) in order to arrange and supervise the purchase of approximately €83.5 billion in impaired assets (land, development property and associated commercial loans) from five financial institutions in Ireland. The purchase price of assets is paid through the issuance by a SPV of
State-guaranteed senior debt securities for 95% of the purchase price and the issuance of (non State-guaranteed) subordinated debt securities for the remaining 5%. The issued securities are held by the participating credit institutions pro rata to their share in the assets transferred to NAMA. It is anticipated that assets will be transferred by "impaired borrower" exposures across all participating institutions, i.e. Anglo Irish Bank, Allied Irish Banks, Bank of Ireland, Irish National Building Society and Educational Building Society. The remuneration of the State is embedded in the discount factor used to discount the loan cash flows when determining the bank asset's real (or "long-term") economic value.

For the first tranche of transferred assets approved by the Commission in August 2010, the real economic value of the transferred assets was estimated to be more than 10% higher than the transfer price paid by the Irish State, thus ensuring its adequate remuneration. In addition, the assets were transferred at a significant lower price than book value, implying an almost 50% haircut and thus an appropriate burden sharing by beneficiaries of the scheme. In addition, all the beneficiaries entered in a restructuring process following their use of the Irish scheme.

With the exception of Ireland, impaired asset relief schemes have not been used by Member States during the reporting period. That low take-up probably reflects the complexity of the support measure as well as the need to adapt it to the situation of the beneficiary in order to ensure the adequate remuneration of the State and burden sharing by the beneficiary. Impaired asset reliefs measures were thus more frequently designed for individual institutions on an ad hoc basis.

4.2.5. Enforcement of restructuring obligations

The Commission's assessment of State aid has been different for banks considered to be fundamentally sound and for banks considered not to be fundamentally sound, or distressed. Sound banks needed some temporary and mostly liquidity support in order to withstand exceptional liquidity funding conditions or exceptional and small losses driven by deteriorating market conditions while distressed or unsound banks faced structural business model-related weaknesses unveiled by the crisis or losses stemming from excessive risk-taking.

Aid to distressed or unsound banks was considered more distortive of competition than aid to sound banks since they required more support and since their problem was structural and linked to the beneficiary rather than the result of a genuine market failure that struck across the board. As a consequence, the conditions attached to aid to unsound banks needed to be more stringent to mitigate the negative effects on competition. Accordingly, unsound beneficiaries of aid had to enter an in-depth restructuring process by submitting a restructuring plan which would then be assessed on a case-by-case basis by the Commission along the principles set out in the Restructuring Communication.

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72 As detailed in the Restructuring Communication, situations where a beneficiary should submit a restructuring plan include "in particular, but not exclusively, [...] situations where a distressed bank has been recapitalised by the State, or where a 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 requirement to submit a restructuring plan and the evaluation of the soundness of the beneficiary were based on a comprehensive assessment of four indicators linked to the risk profile, the financial stability of the beneficiary and the intensity of the aid measure:

- **The capital adequacy ratio or solvency situation of the beneficiary**: a capital adequacy ratio not in compliance with regulatory requirement would generally signal a distressed bank. The Commission also used reviews by the national financial supervisory authorities to determine the solvency situation of the beneficiary.

- **The size of recapitalisation and impaired asset measures**: the Commission considered that a total recapitalisation or impaired asset measure of over 2% of the bank's risk-weighted assets (RWA) also signalled that the beneficiary would be distressed. It is important to note that debt guarantee aid is not taken into account for the 2% of RWA threshold, because the interbank market gridlock which triggered the need for guarantee support was a market failure that struck across the board.

- **The current CDS spread**: a spread superior to the average was considered as an indicator of a higher risk profile and of a potentially distressed situation.

- **The current rating of the bank and its outlook**: a rating under A was also considered as an indicator of a higher risk profile and a potentially distressed situation.

The fundamentally unsound banks, based on the Commission's assessment, had all been experiencing **structural difficulties** already present before the crisis. Some had relied on **excessive or insufficiently controlled risk taking**, for instance by building up excessive positions in derivatives or structured financial products or by having conducted aggressive growth strategies, in particular abroad. Others relied on an **inappropriate funding policy**, which was too dependent on short-term wholesale funding. **Inappropriate business models** were also an important cause of distress for financial institutions, for instance those based on extremely leveraged public finance lending through small margins and low-cost short-term wholesale market funding. The structural difficulties for some distressed banks originated from a mix of all the above factors.

**The restructuring obligations aimed at correcting the beneficiary's structural difficulties by restoring its long-term viability, at ensuring an appropriate burden-sharing of the restructuring costs between the bank's shareholders and creditors and the State, and at limiting the distortions of competition triggered by the aid granted.** The restructuring obligations could also lead to the liquidation of the beneficiary if the business model no longer makes sense under the new normal funding market conditions.

**Between October 2008 and December 2010, the Commission adopted 26 restructuring decisions of financial institutions linked to the crisis**, by which it formally approved and made binding the restructuring plans of the beneficiaries – see Figure 4.8. Those decisions concerned banks in twelve Member States. Four ended up with formal liquidation: Fiona in Denmark, Kaupthing Luxembourg in Luxembourg, and Dunfermline and Bradford &Bindley in the UK. **Moreover, a number of banks (around 25) have submitted a restructuring plan to the Commission in the course of 2010 which will lead to additional restructuring**

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73 The restructuring of Sachsen LB in Germany occurred in June 2008 before the outburst of the crisis and the adaptation of the temporary State aid framework.
decisions in 2011. They concern in particular institutions in Austria, Germany, Greece and Ireland. In the case of Portugal, the Commission concluded that the guarantee aid granted to BPP at the height of the financial crisis in December 2008 constituted illegal and incompatible State aid since BPP and Portugal did not comply with the obligation to present a restructuring plan⁷⁴.

Figure 4.8: List of restructured financial institutions and capital aid received as a share of Risk Weighted Assets (RWA)

<table>
<thead>
<tr>
<th>Member State</th>
<th>Restructured institution</th>
<th>Date of decision</th>
<th>Type of decision</th>
<th>Asset support as % of RWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>IKB</td>
<td>21/10/2008</td>
<td>Restructuring</td>
<td>26%</td>
</tr>
<tr>
<td>Denmark</td>
<td>Roskilde Bank</td>
<td>5/11/2008</td>
<td>Restructuring</td>
<td>-</td>
</tr>
<tr>
<td>Germany</td>
<td>Commerzbank</td>
<td>7/05/2009</td>
<td>Restructuring</td>
<td>8.2%</td>
</tr>
<tr>
<td>2009</td>
<td>Belgium, Netherlands and Luxembourg</td>
<td>Fortis</td>
<td>12/05/2009</td>
<td>Restructuring</td>
</tr>
<tr>
<td>Belgium</td>
<td>West LB*</td>
<td>12/05/2009</td>
<td>Restructuring</td>
<td>18.0%</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>Kaupthing Bank Luxemburg</td>
<td>9/07/2009</td>
<td>Liquidation</td>
<td>-</td>
</tr>
<tr>
<td>Latvia</td>
<td>Parex Bank</td>
<td>15/09/2009</td>
<td>Restructuring</td>
<td>29%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Northern Rock</td>
<td>28/10/2009</td>
<td>Restructuring</td>
<td>&gt; 14.4%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>ING</td>
<td>18/11/2009</td>
<td>Restructuring</td>
<td>5.0%</td>
</tr>
<tr>
<td>Belgium</td>
<td>KBC</td>
<td>18/11/2009</td>
<td>Restructuring</td>
<td>5.1%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Lloyds Banking Group</td>
<td>18/11/2009</td>
<td>Restructuring</td>
<td>4.1%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Royal Bank of Scotland</td>
<td>14/12/2009</td>
<td>Restructuring</td>
<td>19.6%</td>
</tr>
<tr>
<td>Germany</td>
<td>LBBW</td>
<td>15/12/2009</td>
<td>Restructuring</td>
<td>8.3%</td>
</tr>
<tr>
<td>2010</td>
<td>United Kingdom</td>
<td>25/01/2010</td>
<td>Liquidation</td>
<td>-</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Bradford &amp; Bingley</td>
<td>25/01/2010</td>
<td>Liquidation</td>
<td>-</td>
</tr>
<tr>
<td>Netherlands</td>
<td>SNS Reaal Bank</td>
<td>28/01/2010</td>
<td>Restructuring</td>
<td>16.0%</td>
</tr>
<tr>
<td>Belgium, France and Luxembourg</td>
<td>D exia</td>
<td>26/02/2010</td>
<td>Restructuring</td>
<td>5.5%</td>
</tr>
<tr>
<td>Sweden</td>
<td>Carnegie Investment Bank</td>
<td>12/05/2010</td>
<td>Restructuring</td>
<td>-</td>
</tr>
<tr>
<td>Belgium</td>
<td>Ethias</td>
<td>20/05/2010</td>
<td>Restructuring</td>
<td>13.8%</td>
</tr>
<tr>
<td>Spain</td>
<td>Caja Castilla - La Mancha</td>
<td>26/06/2010</td>
<td>Restructuring</td>
<td>15.1%</td>
</tr>
<tr>
<td>Austria</td>
<td>BAWAG</td>
<td>30/06/2010</td>
<td>Restructuring</td>
<td>2.4%</td>
</tr>
<tr>
<td>Ireland</td>
<td>Bank of Ireland*</td>
<td>15/07/2010</td>
<td>Restructuring</td>
<td>4.8%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Aegon</td>
<td>17/08/2010</td>
<td>Restructuring</td>
<td>3.8%</td>
</tr>
<tr>
<td>Germany</td>
<td>Sparkasse Koln/Bonn</td>
<td>29/09/2010</td>
<td>Restructuring</td>
<td>3.3%</td>
</tr>
<tr>
<td>Denmark</td>
<td>Fiona Bank</td>
<td>25/10/2010</td>
<td>Liquidation</td>
<td>-</td>
</tr>
<tr>
<td>Spain</td>
<td>Caja Sur</td>
<td>8/11/2010</td>
<td>Restructuring</td>
<td>19.0%</td>
</tr>
</tbody>
</table>

* Both institutions received State aid after the restructuring decision and are thus in the process of submitting an amended restructuring plan.

As mentioned in Section 4.1.4, financial institutions that have implemented restructuring plans received more than 60% of the State aid granted for asset support throughout the crisis. In total, the 26 restructured banks were granted 57% of total recapitalisation aid, 80% of impaired asset relief support – and only 31% of guarantee support. However, the intensity of aid, as measured by the contribution of State asset support to the capital adequacy ratio of the beneficiary differed across institutions. Restructured institutions can be broadly grouped into two main categories: banks for which support had been very significant as a share of RWA, around 15% and over (such as IKB, West LB, Parex, Northern Rock, RBS, SNS Reaal, Ethias, Caja Sur and CCM) and the others for which aid remained in the range of 3% and 5% of RWA⁷⁵.

Case C33/2009 € - $ - Restructuring of BPP (OJ L 159, 17.6.2011, p. 95-106). BPP is currently under liquidation procedure which mitigated the distortion of competition created by the illegal aid. The Portuguese State will claim its rights for the re-imbursement of the aid.

Commerzbank and LBBW are outliers in this respect since they both received around 8% of RWA.

⁷⁴ 74

⁷⁵ 75
For restructured beneficiaries as well as for other aided institutions, an adequate remuneration for State support was an essential safeguard to ensure that aid was limited to the minimum as well as to mitigate competition distortions. In principle, **distressed banks should pay a higher remuneration than sound banks**, not least because of the higher risk profile of the former. However, that constraint was only partially incorporated in the remuneration formula provided by the ECB. While remuneration was proportionate in principle to the risk profile of the beneficiary, the indicator used to value the remuneration according to risk relied on pre-crisis historic data (5-year historic CDS spread) and thus failed to fully measure the difference in current's risk levels between sound and distressed institutions.

In practice, the Commission ensured that the entry remuneration rate for hybrid capital recapitalisation of restructured institutions corresponded to the pricing corridor set by the ECB: between 7% and 9.3% for the average Euro Area bank in November 2008, depending on the subordination of the Tier 1 hybrid capital instrument. **In all of the cases, the entry rate of remuneration for State capital (Tier 1) was indeed in compliance with those limits, with a majority of cases around 8%-8.5% while some restructured banks to pay up to 10%**.

The remuneration of the Member States for their support in the form of impaired assets relief measures was assessed by the Commission on a case by case basis, given both the technical diversity of instruments used (guarantee of assets, purchase agreements, cash flow swap) and the complexity of valuing State interventions. In the case of asset guarantee by the State, the Commission ensured that an adequate fee was paid by the beneficiary. In all cases, the remuneration respected the principle of keeping aid to the minimum by ensuring that it was not lower than the remuneration the beneficiary would have had to pay for an equivalent amount of capital injection. Indeed, hiving off some risky assets from a bank's balance sheet improves its solvency ratio in a similar manner to a capital injection.

However, the specificity of the Commission's enforcement activity in the restructuring process lay in the detailed restructuring measures to be undertaken by the restructured banks. Those measures were aimed at restoring the long-term viability of the restructured bank, sharing the burden of restructuring among stakeholders or compensating for the distortions of competition caused by the aid. Those measures, tailored to each bank's situation, have included both structural commitments, such as divestments, and behavioural commitments, such as advertising or price leadership bans.

The restructuring measures proposed by Member States and approved by the Commission have generally been planned for the duration of the restructuring period which ranged between two to five years with intermediary milestones. They were adopted by the Commission in its restructuring decisions after an intensive scrutiny of the restructuring plans submitted by the beneficiaries and an investigation procedure during which the Commission had extensive contacts with both the Member States which provided aid and the banks under restructuring.

The different restructuring measures imposed by the Commission are detailed below based on their contribution to the viability of the beneficiary, to burden-sharing and to limit distortion of competition. However, such a classification, as useful as it is for reporting purposes, fails to reflect the fact that some measures can address two objectives at the same time.

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76 This was subsequently remedied – see Chapter 6 for the review of the remuneration rules.
time – for instance, a divestment could be instrumental in restoring the viability of the beneficiary and in mitigating distortions of competition.

**Measures to restore the long-term viability of the restructured institution**

Divestments of ailing subsidiaries or loss-making activities have been a central element of the restructuring process in many cases since they directly relieve the beneficiaries' difficulties and thus contribute to restore their viability. In some cases, such as Northern Rock\(^{77}\), the divestments took the form of a bad bank where all non-profitable assets were booked and put into run-off or progressively sold according to market opportunities. In other cases, some loss-making subsidiaries have been sold to third parties, in particular in international markets. Dexia\(^{78}\) for instance had to divest its US monoline subsidiary FSA as well as some non-core businesses.

In some cases, banks' difficulties have been addressed by constraining the ways in which they could perform their activities during the restructuring period through "business constraints". Those measures have taken a wide variety of forms, either by constraining the beneficiary's investment policy, its pricing policy or even the nature of its activities:

- **Whilst acquisitions are not per se bad for viability, insufficient capital buffers have in some cases contributed to the difficulties experienced by distressed banks during the crisis. In such cases, an investment restriction in the form of an acquisition ban** has been found consistent with the objective of reconstituting a solid capital basis to restore the viability of the beneficiary (as in the cases of RBS\(^{79}\) and Dexia for example). Whenever such acquisition bans have been imposed, acquisitions essential for the viability of the company as well as acquisitions where the firm has no discretion due to previous contractual obligations (e.g. in the case of previous joint venture arrangements) have been allowed, in line with the Restructuring Communication. Similarly, **constraints in respect of the investment portfolio**, when the company does not acquire any controlling interest, have been imposed when the viability of the beneficiary had been endangered by previous risky investment strategies. In order to ensure a more prudent investment strategy in the future, the Commission required commitments that the restructured institution would follow investment guidelines describing the acceptable level of risk, as in the case of Ethias.

- **Price leadership bans** have been offered for viability purposes in some cases, such as by ING\(^{80}\), when the Commission received evidence that aggressive pricing and commercial practices had contributed to the structural difficulties of the beneficiary. As regards **profitability targets**, a RAROC\(^{81}\) floor has for example been applied for some activities of Dexia since the prices it offered before the crisis were no longer compatible with long-term profitability (due to an increase in funding costs). Such

\(^{77}\) Case C14/2008 – Restructuring aid to Northern Rock (OJ L 112, 5.5.2010, p. 38-60)


\(^{81}\) The Risk-Adjusted Return on Capital (RAROC) is a financial indicator calculated by dividing the risk adjusted return (net income minus expected loss from risk plus income from capital) by the economic capital. It enables to take into account the effect of risk when comparing profitability and performance across various businesses.
restrictions on profitability have the advantage of leaving some flexibility for the direct price to the customer.

When some **specific activity or policy** had been contributing to the beneficiary's difficulties or was a cause of concern for its future viability, the Commission could respond appropriately. For instance, proprietary trading activities, which were one of the recurrent causes for difficulties on structured derivatives, have been stopped in many cases as part of the restructuring process. Thus, RBS restructured activities such as ABS trading, flow credit trading and equity derivatives.

In addition to divestments and business constraints measures, **corporate governance measures have been central for promoting the return to viability in restructured banks**, in particular where the viability assessment of the beneficiary was endangered by biased corporate governance influenced by political considerations of local authorities. Changes in the management of the bank were generally considered positively by the Commission, as occurred in the cases of Sparkasse Köln/Bonn82 and LBBW83. Governance commitments were also introduced in relation to business constraints, for instance by reinforcing the role of the risk control committee in order to improve and secure the bank's investment policy.

**Measures to ensure burden-sharing**

The Commission required restructured financial institutions to significantly contribute to the costs of restructuring so as to limit the aid to the minimum necessary and **safeguard State resources thereby curtailing moral hazard in the future**. That large own contribution ensures that the bank and its capital holders bear an adequate responsibility for the consequences of their past behaviour which left their institution in distress. Burden-sharing has thus been instrumental in fighting moral hazard, which also promotes the establishment of the right incentives for future prudence and answers public demands for accountability. Several measures imposed by the Commission contributed to burden-sharing: the dilution of shareholders in the recapitalisation process, constraints on capital payments operations for the beneficiary and governance measures.

State aid in the form of capital injections has **diluted the ownership (ability to receive part of the profits of the institution) and control (ability to decide of the management of the institution) of the existing shareholders** over the aided institution. Nationalisation of the restructured institutions was the most severe burden-sharing measure accepted by the Commission since it made shareholders bear the costs of the bank's bankruptcy. Nationalisations led to a full dilution of shareholders whereby existing shareholders lose completely the control of the beneficiary institution, as was the case for Northern Rock and Fortis84. The degree of dilution depended on the type of capital injected as aid by Member States. Injections through ordinary shares implied the highest dilution both in terms of profit sharing and control and thus entailed positive effects in terms of burden sharing. The injection of preferred shares were more favourable to existing shareholders since it did not lead to the State taking any control85 while the injection of hybrid capital (such as highly subordinated debt) did not lead to dilution of profit sharing or control. As regards the type of State capital injections used for restructured banks, 45% of the capital injected by the State was in the

82 Case C32/2009 € - $ - Restructuring of Sparkasse Köln/Bonn (not yet published)
84 Case N255/2009 € - $ - Aide à la restructuration de la banque Fortis (OJ C 178, 31.7.2009, p. 2)
85 No voting rights were generally associated to preferred shares.
form of ordinary shares while 47% was core Tier 1 capital (usually preferred shares). Dilution of existing shareholders was thus significant in restructuring cases.

In all restructuring decisions, the Commission ensured that they would be a limitation on operations on capital instruments in order to control the remuneration of capital. The objective of those limitations is to make sure that hybrid capital holders and common share holders do not mobilise available reserves to unduly cash out dividends and coupons. Capital providers have benefited from high returns in the good times and hence need to face some of the losses in bad times. That approach curtails moral hazard and also promotes viability because profits, reserves and State injections should not be cashed out to investors, but retained in the bank to build up capital cushions so as to increase the ability of banks to withstand losses.

The Commission has sought to ensure that all capital operations – whether in the form of payment of dividends and coupons, buyback of existing shares or early redemption of subordinated debt at nominal value (exceeding market value) – were banned for the duration of the restructuring period. Banks subject to a State aid investigation were invited to consult the Commission before making announcements to the market concerning capital transactions. That policy enabled the Commission to balance, in light of the concrete circumstances at hand, the interest of the return to viability of the bank with the interest in ensuring burden-sharing and of limiting competition distortion. The ban did no apply in certain restricted circumstances, for instance when payments were legally mandatory. In some cases, payments could be made out of current profits (e.g. KBC) or in newly issued shares but not in cash (e.g. Dexia). Last, payments could be made on newly issued instruments to allow the bank to raise fresh capital. In those circumstances, however, the payment on new instruments should not trigger any payment on existing instruments (e.g. RBS, Lloyds). Capital payments could also be made by some fully consolidated subsidiaries (e.g. Lloyds).

Most of restructured banks had to implement measures regarding their governance. Such measures concerned the remuneration policies of top managers, in several cases the replacement of managers and more rarely the very structure of the governance of the beneficiary. Measures concerning the remuneration of the management have mainly consisted in a commitment taken by beneficiaries to abide by the remuneration principles set out by the G20. In some cases, conditions were spelled out in more detail, such as for Commerzbank. It was decided to reduce bonuses for 2008 by € 500 million while the total remuneration of any member of Commerzbank governing bodies (management board and

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86 See MEMO/09/441 of 8 October 2009: " State aid: Commission recalls rules concerning Tier 1 and Tier 2 capital transactions for banks subject to a restructuring aid investigation".

87 Provided that such mandatory payments do not automatically trigger payments on other instruments that would otherwise have been discretionary.


89 If existing instruments can be converted into newly issued instruments not affected by the coupon ban, such newly issued instruments must be convertible in ordinary shares if the bank's solvency declines.


91 As mentioned in Sections 4.2.2 and 4.2.3, recapitalisation and guarantee schemes also included safeguard conditions linked to the governance and remuneration policy of the beneficiaries.

92 The G20 April 2009 London summit established the Financial Stability Board, an international body that monitors and makes recommendations about the global financial system. The FSB adopted "Principles for Sound Compensation Practices".

93 Case N244/2009 € - $ - Capital injection into Commerzbank (not yet published)
supervisory board) was capped at €500,000 per year for 2008 and 2009. In a few cases, governance measures introduced **safeguards to improve the decision-making process** and prevent conflicts of interests. For instance, in the LBBW case, a series of corporate governance changes were implemented with the aim of reducing political influence over and increasing the expertise in the day-to-day management of the bank. In the Sparkasse KölnBonn case, the number of external members in the supervisory board was increased from two to four as of 1 January 2011, in order to strengthen its independence.

The **change of the management** responsible for the difficulties of the restructured banks was also considered positively by the Commission in several decisions, such as in the Carnegie Investment Bank94 and Fortis cases (through the merger of the Belgium part of the bank with BNP Paribas).

**Measures to limit distortions of competition**

The Commission sought a wide range of measures regarding beneficiary banks to mitigate the negative effects of aid on competition in the financial sector. Those measures can be categorised as structural or quasi-structural (changing the structure of the beneficiary) such as divestments, behavioural (changing its behaviour and strategy on the market) such as price leadership or advertising bans or as targeting the opening of markets where the beneficiary was active. Figure 4.9 details the frequency of each type of measures in the 26 restructuring cases.

**Structural measures** include in particular the **divestment of entire stand-alone subsidiaries** that can allow entry of new competitors in concentrated sub-markets. Partial divestitures (or carve-outs), the transfer or sale of certain key assets, obligatory provision of access to infrastructure by the beneficiary to its competitors are other examples of structural measures that were obtained by the Commission. The carve out by RBS of part of its UK SME business activity was a good example of such divestment: the divested entity would have a 5% market share in that concentrated market and the divestment can facilitate the entry of a new competitor or the reinforcement of a smaller existing competitor – see Box 12.

**Quasi-structural measures** are commitments to pre-announced paths that alter the bank balance sheet towards a structure that no longer distorts the level playing field. Such balance sheet structure paths are built on quantified annual or semi-annual targets such as for instance: short-term funding compared as a percentage of total funding, the average maturity of long term funding, and the proportion of "stable funding". The improvement of such indicators was implemented in the Dexia case as part of its restructuring plan in order to improve its funding structure and to restore a level playing field with its more stably-funded competitors.

**Behavioural measures** are constraints on the behaviour of restructured banks and range from light restrictions such as the prohibition to advertise being a State supported bank to more biting restrictions such as acquisition bans. Light restrictions were more systematically favoured by the Commission; for instance, a large majority of restructured banks must respect an **advertising ban** on the marketing of their State-supported status for commercial purposes. **Acquisition bans**95, whereby the restructured banks have been prohibited from acquiring new assets, have typically been imposed in gross terms. It could in principle be imposed in net terms (which would be more lenient), allowing the bank to acquire certain assets whilst making sure that they compensate such acquisitions with equivalent sales.

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94 Case NN18/2010 € - $ - Restructuring aid to Carnegie Bank (OJ C 162, 22.6.2010, p. 3-4)
95 Acquisition bans have typically been imposed in gross terms. It could in principle be imposed in net terms (which would be more lenient), allowing the bank to acquire certain assets whilst making sure that they compensate such acquisitions with equivalent sales.
business during the restructuring period were put in place in more than half the cases. They have also been usually limited either over time, in scope or in amount:

– **Over time**: in some cases, the ban was applicable during the whole restructuring period (four to five years), while in others it was limited to the two first years of the restructuring period (such as for Commerzbank).

– **In scope**: in most cases the ban was applicable only to the acquisition of financial institutions in order to prevent aggressive expansion financed by State funds at the expense of competitors\(^{96}\).

– **In amount**: in some cases, only investments representing more than a certain threshold of the target's equity (from 5% to 20% according to cases) were banned; in others, the ban applied for acquisitions of more than an absolute amount (e.g. £500 million in the RBS and Lloyds cases).

**Figure 4.9**: Number of restructuring measures aimed at limiting distortions of competition imposed by type of measures

Another behavioural measure that has been employed by the Commission is **price leadership bans**. They were in particular put in place in specific sub-markets (such as for KBC or ING) or for specific products (such as for Fortis or RBS). Price leadership bans were limited in time or could be relieved if the market share of the beneficiary in the specified market fell under a certain threshold. Price leadership bans were imposed to ensure that State aid was not used to propose unsustainable low prices that would drive competitors out of the market.

\(^{96}\) Some measures nonetheless explicitly required that the restructured bank made no investment in equity, even outside the financial sector, if this would compromise its viability or compromise the repayment of the aid to the State. In such cases, the acquisition ban was also pursuing a viability objective.
Other behavioural measures to limit distortions of competition caused by the restructuring process include bans on coupon and dividend payments so as to prevent excessive risk taking in the future.

The Commission has also approved measures aimed at opening up markets beyond the divestment of activity. For instance, in the restructuring of Bank of Ireland\(^{97}\), measures to foster the retail market were addressed to Ireland itself, such as commitments by that Member State to facilitate the entry of competitors through enhancing electronic banking (high cost of maintaining a branch network), or improving the quality and availability of credit history information and reporting by banks.

### 4.3. Use of the Temporary Framework for the real economy during the crisis

#### 4.3.1. All Member States except one introduced schemes under the Temporary Framework, especially to allow aid up to €500,000 per undertaking

Between 17 December 2008 and 1 October 2010, the Commission authorized 73 schemes\(^{98}\) under the Temporary Framework, in all Member States. 52 of them were authorised in the first half of 2009. Cyprus is the only Member State that has not granted any aid under the Temporary Framework while Bulgaria, Estonia, Latvia and Sweden, adopted measures under the Temporary Framework, but had not effectively granted any aid at the end of 2009.

The most used measure was the so-called "500k measure", which was introduced in 23 schemes in all Member States apart from Belgium, Denmark, Sweden and Cyprus. The next most used measures were guarantee schemes – the Commission approved 18 such schemes covering 14 Member States, followed by short term export credit insurance for which the Commission approved 13 schemes. The Commission also authorised eight schemes for subsidised interest rate for loans in seven Member States, six risk capital schemes, and five schemes offering reduced interest rate loans to businesses investing in the production of green products. In addition, the Commission approved five ad hoc aid measures, most of which concerned car manufacturing.

**France and Germany made the most extensive use of the Temporary Framework.** Both adopted seven measures, making use of all aid categories under the Temporary Framework. Hungary adopted six measures, three of which concerned guarantees, and Italy adopted five measures, using all instruments except simplification of export credit insurance. Eight Member States\(^{99}\) only used one category of aid under the Temporary Framework: for all but one of them the approved measure concerned aid up to €500,000 per company.

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\(^{97}\) Case N546/2009 € - $ - Restructuring of Bank of Ireland (OJ C 40, 9.2.2011, p. 9)

\(^{98}\) This number does not include amendments to previously approved schemes under the Temporary Framework and only includes measures that constitute aid to industry and services (i.e. excluding support to agricultural undertakings). Schemes for aid up to €15000 for agricultural producers were introduced in twelve Member States.

\(^{99}\) Bulgaria, Estonia, Ireland, Malta, Poland, Portugal, Slovakia and Denmark (short term export credit insurance)
4.3.2.  Only about a quarter of the aid authorised was actually used

The total budget including all measures approved under the Temporary Framework amounted to approximately €81 billion, less than 1% of EU GDP\(^{100}\). The amount effectively used is estimated to be €21 billion, which represents about 26% of the approved budget.

The highest amounts of aid authorised by the Commission related to subsidised interest rate loans (€24 billion), guarantee measures and the 500k measures (€22 billion each). The latter represents more than half of the total aid element associated with the Temporary Framework\(^{101}\). The biggest users of the Temporary Framework, as measured by aid element and estimates provided by the Member States, have been France, Italy and Austria. For half of the Member States that had effectively granted aid at the end of 2009, the reported aid element did not exceed €50 million\(^{102}\).

Many Member States set their budgets at a higher level than the amounts actually disbursed in order to send the markets a signal of public authorities' willingness to meet potential demand. Moreover, the high levels of approved aid were linked to the uncertainties as to the depth and duration of the crisis which turned out to be lower than expected. Many Member States have also indicated that the strict granting conditions, which were also put in place because of budgetary constraints, may have limited the number of firms applying for aid under the Temporary Framework. It appears that Member States nonetheless have appreciated the safety net function that the Temporary Framework has played thanks to its flexibility and the additional possibilities to grant aid in the crisis period.

When considering the relatively limited take-up of the Temporary Framework, it should be noted that Member States continued to have recourse to other permissible forms of aid to support companies and the economy at large, for example under the General Block Exemption Regulation\(^{103}\). The Spring Scoreboard on State Aid\(^{104}\) published in June 2011 in fact showed that Member States have increased their spending to boost the EU's competitiveness as they have re-oriented public support measures to research, innovation, environmental protection and other objectives of general interest. State aid for research and development and innovation stood at 0.09% of GDP in 2009, against 0.05% in 2005. That figure only relates to State aid – total (private and publicly funded) R&D

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\(^{100}\) The analysis carried out in this section is largely based on information which the Commission collects from Member States, as governed by Article 6(1) of Commission Regulation (EC) 794/2004. The aid element, which Member States provided in their annual report, refers to State aid expenditure in 2009 as reported by Member States on 30 June 2010. Expenditure information from 2010 was not available for this Paper since Regulation 794/2004 obliges Member States to provide annual State aid expenditure by 30 June for the previous year. Furthermore, some State aid expenditure was estimated on the basis of information provided by Member States during the second quarter of 2010 in a questionnaire on the application of the Temporary Framework.

\(^{101}\) The aid element is the ultimate financial benefit contained in the nominal amount transferred to the beneficiary. For example, in the case of subsidised interest rate loans the aid element is the difference between the subsidised interest rate and the market rate.

\(^{102}\) This does not include short-term export credit insurance.


expenditure in the EU in 2009 stood at a record 2.01% of GDP\textsuperscript{105}. Also, €13.2 billion of State aid was granted in the EU for environmental objectives, either as direct aid or through tax reductions.

4.4. Implementation of the Temporary Framework for the real economy

4.4.1. Compatible limited amount of aid of up to €500 000 per undertaking

The 500k measure constituted the most used Temporary Framework (TF) measure, since 23 Member States introduced such schemes between October 2008 and December 2010. A key reason for the popularity of that measure is no doubt its flexibility: the measure can be granted in the form of any transparent aid, including aid in the form of guarantees whose grant equivalent does not exceed €500 000\textsuperscript{106}, and without reference to any specific objective or eligible costs. Therefore, it allows Member States to grant investment or operating aid that could be used, amongst other objectives, to remedy the negative effects of the crisis on employment, while under the normal State aid rules operating aid is normally not allowed.

Most of the schemes were adopted during the first year of application of the Temporary Framework (December 2008 - December 2009) and only seven were adopted during its second year of application, five of which concerned amendments of existing schemes. In general, numerous aid schemes were subsequently amended mainly to increase their budget (Ireland), modify the legal basis in order to include new forms of aid or new types of beneficiaries (France, Germany, Austria, Lithuania, Slovakia, Poland, Latvia), introduce a new authority managing the scheme (Poland) or make use of the possibility of determining the maximum amount of the investment loan to be covered by a guarantee on the basis of the EU average labour costs as established by Eurostat in line with the modification introduced in the TF on 8 December 2009 (Hungary, Slovenia).

In most schemes, the aid was granted through a direct grant or a guarantee (Spain, Greece, Latvia, Malta). However, other forms have also been used, such as interest rate subsidies, subsidised public loans, tax advantages, provision of risk capital, debt write-off, rescheduled public debt or, as in the Hungarian scheme, a reduction of social security contributions. Where the aid was awarded in a form other than a grant, the aid amount taken into account was the gross grant equivalent of the aid.

Whilst all schemes obviously had to comply with the conditions set out in the Temporary Framework in order for the Commission to be able to authorise them, some Member States also imposed additional conditions to further restrict or target the measure. For example, as regards eligibility under the schemes, whilst the Temporary Framework does not exclude that such a compatible limited amount of aid of up to €500 000 could be granted to a large company, some Member States voluntary restricted that possibility to SMEs. Some Member States also excluded certain sectors from the application of the scheme: Luxemburg excluded the coal sector, Latvia excluded the lease of vehicles, real estate activities, gambling, wholesale and retail activities, and Lithuania excluded the provision of financial or legal services, and the manufacturing of alcoholic beverages and arms.

In general, the number of beneficiaries has been very high in all Member States, and almost all beneficiaries have been SMEs with some exceptions. In the Netherlands, 40% of

\textsuperscript{105} The R&D intensity is though still below the Europe 2020 objective of 3%.

\textsuperscript{106} The calculation of the grant equivalent is based on the guarantee margin grid in the annex of the TF.
the beneficiaries have been large companies, 33% in Latvia and 30% in the Czech Republic\textsuperscript{107}.

Whereas the Commission strictly controlled \textit{ex ante} the compliance of the notified schemes
with the conditions set out in the Temporary Framework, \textit{ex post} monitoring of the aid
effectively granted under this instrument has been challenging. Member States provided
few details on the use of the scheme (eligible costs, types of investments financed) and in
many countries, for example Germany, Italy and Finland, the schemes were implemented in a
decentralised way by the relevant awarding authorities at regional or local level or by public
institutions. The challenges associated with the monitoring of the aid also make it difficult to
assess the impact of that measure.

4.4.2. State guarantees to loans with reduced interest rates

Providing State guarantees to loans with reduced interest rates was the second most
used instruments with 14 Member States having introduced such a scheme\textsuperscript{108}. As regards
the eligibility of firms, certain Member States chose to limit the scope of their scheme.
Belgium excluded agriculture, fisheries and transport and Latvia excluded the sectors of
wholesale and retail trade, insurance, financial intermediation and banking services, real
estate activities, construction (except for ensuring production of a borrower), gambling and
betting, and production and trade of weapons. The Slovenian scheme was only available to
only firms with high-rated collaterals, due to budgetary constraints. Slovenia and Romania
amended their original schemes to take opportunity of the amendment brought to the
Temporary Framework in December 2009 that the maximum loan level could be set as a
function of the annual EU average labour costs.

The number of beneficiaries under that measure has been small in most Member States
but they proportionally received high amounts. Germany is an exception in that almost all
beneficiaries were SMEs which received relatively low amounts\textsuperscript{109}.

The measure was implemented mainly through schemes, although individual aid to some
large companies was authorised. In that regard, the Commission considers that national
schemes are the most appropriate instrument for providing guarantees in a transparent,
consistent and efficient way. The individual measures notified to the Commission mostly
concerned the car sector, and more specifically guarantees by Romania to Ford Romania SA
covering a €400 million loan\textsuperscript{110}, and by Sweden to cover a €500 million European Investment
Bank's loan to Volvo Personvagnar AB\textsuperscript{111} and to Saab covering a €400 million loan\textsuperscript{112}. Under
the Temporary Framework, Member States could only guarantee up to 90% of the loan and

\textsuperscript{107} Based on replies provided by the Member states to Commission questionnaires of March 2010 (the
Netherlands, Latvia) and of March 2011 (Czech Republic).

\textsuperscript{108} Belgium, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Romania, Slovenia,
Spain, Sweden and the United Kingdom.

\textsuperscript{109} Information based on data collected from the Member States in reply to the Commission's questionnaire
of March 2010.

\textsuperscript{110} Case N478/2009 £ - Guarantees for EIB loans to Ford Romania (OJ C 46, 24.2.2010, p. 2-3) and Case
N680/2009 £ - Modification of safe-harbour guarantee premium to be applied to FORD Romania in
connection with the state guarantee authorised by the European Commission's Decision of 13

\textsuperscript{111} Case N80/2009 £ - € - $ - State guarantees in favour of Volvo cars (OJ C 172, 24.7.2009, p. 2-3) and
Case with N520/2010 £ - State guarantee to Volvo Cars (OJ C 79, 12.3.2011, p. 2-3).

\textsuperscript{112} Case N541/2009 £ - $ - State guarantee in favour of SAAB (not yet published).
the remaining 10% had to be free from aid, i.e. either not guaranteed or covered by a guarantee with a market-based fee. Those cases were notified individually for reasons of legal certainty as regards the remaining 10% of the loan that could not be covered by the favourable guarantee terms. The Commission indeed established that the guarantee on the remaining 10% did not contain State aid within the meaning of Article 107(1) of the TFEU. In Belgium, the Flemish government granted under an approved TF scheme a €180 million guarantee to finance the development of Volvo Car Corporation Gent plant – see Box 7.

**Box 7: The Temporary Framework and the automotive sector**

The Temporary Framework is open to all sectors of the economy, and does not contain any specific provisions regarding the automotive sector. However, while State aid schemes under the Temporary Framework have been formally compliant with this requirement of horizontal application, some Member States have in practice used it to support in particular their automotive sectors.

That pattern of usage emerged because the automotive sector was particularly hit by the financial and economic crisis. Over recent years EU sales had ranged from 16.7 to 17.7 million units on a yearly basis. Sales started to drop decisively in the summer of 2008 and then crashed further in the final quarter of the year. By January 2009, vehicle sales were running 3.5 million units lower than the historical trends. That fall led to several temporary plant closures and to a low rate of capacity utilisation (below 65% in certain instances) in a sector already characterised by significant overcapacities.

Despite that overcapacity, no major players exited the market during the crisis and no major restructuring case was notified to the Commission. That phenomenon may be due to the fact that the use of the Temporary Framework acted as a cushion in the most critical moments and the loans and guarantees granted under the Temporary Framework in fact allowed some restructuring to be initiated.

In addition to the above-mentioned companies that received aid in the form of guarantees (Ford, Saab, Volvo), Opel benefitted from a €1.5 billion loan from the German government in the context of the Temporary Framework. That loan allowed Opel to prepare a restructuring plan and already implement some of the planned measures. Eventually, following the decision of the German government and other concerned Member States not to subsidise the restructuring under the TF, Opel managed to obtain funding from its parent company GM. In France Peugeot and Renault benefited each from €3 billion loans in the context of the Temporary Framework schemes to finance their operations.

The aid schemes notified by the Member States for subsidised loans for the production of green products have also been strongly geared towards the automotive sector.

All in all, it is clear that the car sector has been one of the main beneficiaries of the Temporary Framework with at least €9 billion of loans and guarantees granted in favour of only six manufacturers: Ford, Volvo, Saab, Opel, Peugeot, and Renault in 2009/2010. Opel, Renault and Peugeot have repaid their Temporary Framework loans, possibly due to the fact that the level of remuneration required was quite high and constituted an incentive to exit.

Since the Temporary Framework does not include a threshold that would oblige individual notifications of such cases to the Commission, and in the absence of relevant complaints, the Commission cannot exclude that certain firms have received a guarantee under more
favourable conditions, in particular regarding the remaining part of the loan that should not be covered by the Temporary Framework guarantee but by a market-based guarantee.

As provided by the Temporary Framework, Member States could calculate the annual premium to be paid for guarantees either by following the safe harbour provisions of the Commission Notice on the application of Articles 87 and 88 of the EC Treaty to State aid in the form of guarantees\(^\text{113}\), or by using any other methodology already accepted by previous Commission decisions. Hungary is the only Member State that followed the second route\(^\text{114}\).

4.4.3. Loans at reduced interest rates

Seven Member States notified schemes for loans at reduced interest rates under the Temporary Framework\(^\text{115}\). While the Temporary Framework is open to all undertakings in all sectors, certain Member States nonetheless limited the scope of their schemes. For example, Germany applied one of its schemes to firms of the "commercially active economy", including manufacturing, handicraft, commerce and other services provided that the majority of shares are in private ownership, whilst its other scheme excluded undertakings under the application of Law for the establishment of a financial market fund.

The UK also indicated that it expected that one of its two schemes\(^\text{116}\) that it notified as regards loans at reduced interest rates would mostly be used by the automotive industry.

4.4.4. Subsidised loans for the production of green products

Only five Member States notified schemes under the green products instrument (France, Germany, Italy, Spain and the UK). The Temporary Framework defines quite clearly the "green products" that are eligible under the scheme (see Section 3.3.2 above). The authorised schemes reproduced those conditions. Germany, Spain and the UK indicated that their respective schemes were intended to facilitate adaptation to the "Euro 6 Regulation" covering emissions from light passenger and commercial vehicles\(^\text{117}\). In addition the German notification referred to the Ecodesign Directive on electric motors, circulators and boilers\(^\text{118}\). Since Italy did not refer to any particular standard, when approving the scheme the Commission requested that the monitoring report include information on the applicable Union standards.

As regards eligibility, schemes have formally been available to any firm in any sector and in any location of the Member State's territory, but in practice they have mainly been applied to the car industry, in particular car components manufacturers. For example, under the


\(^{114}\) Case N201a/2007 Method of Hitelgarancia Zrt for calculating the aid element in guarantees.

\(^{115}\) The Czech Republic, France, Germany, Greece, Hungary, Italy and the United Kingdom.


Spanish scheme, 40% of beneficiaries' turnover must stem from the manufacture of cars and car components. The UK scheme provides that while not sector-specific, it is initially expected to be used in the automotive sector, and that the scope of the scheme may be enlarged subsequently. The German scheme refers to firms whose production falls under the Ecodesign Directive. Only the French scheme does not refer specifically to the automotive sector, and when it authorised the scheme the Commission requested that in the monitoring reports France submit data on the sectoral coverage of its scheme.

When authorising those schemes the Commission paid particular attention to the fact that they remained formally open to all sectors of the economy and that all other conditions set out in the Temporary Framework were respected. However, it also noted in its decisions the material importance of the car industry to the economy of the concerned Member States. For example, the Spanish authorities provided data according to which the automotive industry represents 10% of industrial production and 20% of exports in Spain. Italy, where the automotive sector represents 6.2% of GDP and is the biggest sector in terms of employment, provided detailed data showing that (i) the overall turnover of the automotive sector had shrunk by 11% compared to 2007, (ii) 300 companies had been forced to close between 2007 and end of 2008, which led to the loss of around 30,000 jobs, (iii) the turnover fall in 2009 was estimated to be between 44% and 52% for the car and commercial vehicles segment and between 65% and 73% for the industrial vehicles segment; (iv) 70% of the companies communicated that they might face difficulties in being paid by their creditors. The Italian authorities also argued that the car component segment had been very negatively affected as well. Over the 2008-2009 period, the turnover of the aftermarket service sector decreased by 10%, component sales had decreased by 20-30% and the car components suppliers' turnover also decreased by 30-40%.

4.4.5. Simplification measure: Risk capital

The Member States only notified six schemes putting into place or adapting existing risk capital schemes as allowed by the Temporary Framework: Austria, Germany, Italy, Belgium and France, which notified two schemes. The notifications and Commission decisions relating to adaptation of existing schemes do not include much information on the latter, since they have already been subject to a Commission approval\footnote{119}.

In reality, there are many more risk capital schemes in the Member States. Since the entry into force of the 2006 Risk Capital Guidelines\footnote{120} and until end 2009 (date of adoption of the Temporary Framework), the Commission approved 61 aid schemes, of which 17 after detailed assessment, and decided that no aid was involved in 9 additional cases (in one case after a formal investigation procedure). Moreover, a total of 17 risk capital schemes have been put in place under the General Block Exemption Regulation.

The schemes notified under the Temporary Framework reflect the diversity of the measures that Member States have taken to facilitate the provision of private equity to SMEs. For example, the Italian notification concerns one national and four regional schemes. The German notification covers eight different schemes. In addition to public-private/public

\footnote{119} As to the overall budget of all approved aid schemes, meaningful comparisons are difficult since the notified amounts include (estimations of) fiscal revenue foregone, underwritten guarantees and total initial capital of funds (with or without private finance), and are very rarely on an annual basis.

\footnote{120} Community guidelines on state aid to promote risk capital investments in small and medium-sized enterprises (OJ C 194, 18.8.2006, p. 2-22)
investment funds\textsuperscript{121}, Member States have provided fiscal incentives to private investors or investment vehicles to encourage private investments. For example, one of the French schemes entails a reduction in the tax on wealth for individuals investing in SMEs through intermediary holding companies. In assessing the notifications, the Commission also paid particular attention that the rules on the cumulating of aid continued to be respected.

\textbf{4.4.6. Simplification measure: Short-term export credit insurance}

\textbf{Schemes under that Temporary Framework measure were notified by 13 Member States\textsuperscript{122} and took various forms.} As the Temporary Framework is silent on the form in which the State can intervene in the market under the escape clause, the Commission accepted the types of schemes as proposed by the Member States, provided that they complied with the conditions stated in the Framework. They included direct insurance, coinsurance and reinsurance or top-up.

Direct insurance requires the State's export credit agency to assume the whole risk of the publicly insured transaction without any risk participation by a private insurer. That type of scheme does not require any intermediation by the private credit insurer, although in some cases the administration (including underwriting) of the scheme on behalf of the State can be outsourced to a private insurer. For example Latvia notified such a direct insurance scheme. In that scheme, the Latvian Guarantee Agency is however supported in risk assessment by Coface Latvia, Coface being a major international private insurer. Under that scheme, insurance cover is 90\% and limited to €1 million per transaction, forcing the exporter to retain 10\% of the risk. Direct insurance schemes can also be combined with reinsurance schemes. For example, the Hungarian export credit insurance scheme contains two measures: a direct export credit insurance measure to be applied when the insurer fails to provide cover at all and a re-insurance measure to be applied when the private insurer's credit limits have been reduced and need to be complemented. The re-insurance part of the scheme will reinsure the topping up of credit limits by credit insurers.

Co-insurance measure can be applied where for a given exporter a private insurer grants a credit limit, which is however significantly lower than the credit limit requested by the exporter. In that case the State would intervene to grant the remaining amount of the requested credit limit directly to the exporter. In such schemes the private insurers are not simply substituted by the public insurer. Further, as the private companies still provide partial cover, they provide valuable benchmark for the terms and conditions of the insurance offered by the State, in particular for the level of premiums. For example, in the Lithuanian scheme, the direct insurance is supplemented by a co-insurance when private insurers continue to insure the risk but with a lower coverage than before the crisis. In such a scheme, the State export credit agency intervenes together with the private insurer and the State coverage share can generally not exceed that of the private insurer.

\textbf{However, most schemes notified by the Member States were re-insurance schemes.} Re-insurance schemes are in economic terms equivalent to coinsurance schemes and offer a

\textsuperscript{121} Most of the approved schemes have been based on a venture capital fund model where a number of public and private investors come together to create a large collective investment fund that is managed by professional fund managers. In these cases, public and private investors collectively share the risks across the portfolio of investments in SMEs.

\textsuperscript{122} Austria, Belgium, Denmark, Finland, France, Germany, Luxemburg, Hungary, Latvia, Lithuania, the Netherlands, Slovenia and Sweden.
similar complementary cover to the exporters. The participation of the private insurer in the cover allows for the application of his risk expertise and operational infrastructure. For example, under the Austrian scheme, the private insurers retain at least 20% of the risk. Under the Slovenian scheme, the primary insurer retains at least 10% of the risk, the exporter at least 15% and the public scheme reinsures the remaining risk. Under most schemes, the exporter retains 10% to 20% of the risk.

The Commission's assessment of the notified schemes focused on establishing that (i) the **unavailability of market cover** was demonstrated on the basis of reliable and comprehensive evidence; (ii) the **underwriting criteria** were sound so as to ensure that the public scheme reflects as close as possible the functioning of the private market under normal market conditions, and (iii) the **premium rates** charged for the public cover were aligned with those required by the private credit insurers. More generally, schemes should include incentives to exit public support as soon as feasible and safeguards against crowding out private insurers from the parts of the markets which they are still willing to cover.

**As regards unavailability of cover by the market** and according to the simplified escape clause under Temporary Framework, evidence by two private credit insurers or by four well-established exporters of the unavailability of cover is sufficient to allow the State's intervention in the short-term export credit insurance market. Many Member States submitted detailed quantitative data showing unavailability of cover. For example, Austria provided the assumption that premiums for private insurance had increased by 40-90 basis points per year depending on the underlying risk profile. The estimate for withdrawal of insurance coverage of private credit insurers in Austria was up to 15-30%. The corresponding withdrawal rate in Sweden was up to 20-30%. The Lithuanian authorities estimated that due to the financial crisis total export credit insurance supply had decreased by around 20-40%.

As the role of the State's intervention in the credit insurance market should be limited only to tackling the market failure caused by the crisis, the **Commission required the public schemes to replicate the business practice of the private credit insurers as closely as possible and apply sound underwriting practices to the risk assessment**. That goal was very often ensured by the involvement of private insurers in the management of the underwriting process (e.g. the administration of the scheme is outsourced to the private insurer) or even their partial retention of the assumed risk (e.g. in the top-up schemes). As a result, only risks which could be insured on the private market in the normal conditions (economically justifiable) should be eligible for the public scheme. On the other hand, the risk of the financially unsound transactions, which even in the normal market conditions would not be able to obtain private market cover, should not be eligible for the public scheme.

**The levels of the premiums applied under the public schemes have been aligned with those for private cover.** In many cases, the premiums proposed by the Member States have been significantly higher than those for private cover, which has provided for exit incentives and prevented those schemes crowding out the private insurance market. For example, for the BELGACAP scheme in Belgium, the premium (2% of the credit limit granted on an annual basis) charged is three to six times higher than the premiums which private export credit insurance firms charge for similar risks (from 0.3% to 0.7% of the credit limit granted on an annual basis). In Denmark, the premiums under the scheme were set at the level approximately [3 to 5] times higher than the [standard] benchmark provided by private credit insurers in order to reflect higher risk associated with the individual transactions, which otherwise would not be covered in the current market conditions. In Germany, the premiums were set at least approximately 50% to 75% higher than those for comparable private
insurance polices. In case of the other types of policy available under the notified scheme the
difference is even higher. In the case of Hungary, the level of the premium charged by the
private credit insurers oscillates between [around 0.25% and 0.35%] of turnover per year.
Under the State supported scheme, exporters are charged premiums rates between [around
0.4% and 3.5%], depending on the buyer's country and the length of the risk period, assuming
the standard retention rate.
5. ANALYSIS OF THE EFFECTS OF THE TEMPORARY STATE AID MEASURES

This Chapter explores market developments in the period 2008-2010 as a sort of rough "proxy" for assessing whether the above-mentioned sizeable amounts of State aid granted by Member States under the control of the Commission have been effective in reaching the objective of restoring financial stability and the functioning of the financial market, in particular when it comes to ensuring lending to creditworthy firms.

It is important to underline that there is no direct or exclusive causal relationship between the levels of State aid granted by Member States and observed market developments since it is extremely difficult, if not impossible, to disentangle the effects of State aid from other policy responses to the crisis, in particular liquidity interventions by the European Central Bank, and macroeconomic developments in the Member States and internationally. In that sense the Commission is not "controlling" for any of the variables analysed below and the analysis may also suffer from omitted variable problems. In order to complement its analysis and to overcome that issue, the Commission has also provided a macro-economic assessment of the effects of State aid to financial institutions – see Box 8.

The same methodological caveat applies to the analysis of market developments in terms of the competitiveness and structure of the European financial markets.

Box 8: Evaluating the macroeconomic effects of State aid to financial institutions

The macroeconomic effects of State aid to the financial sector have been analysed with the Commission's QUEST model. QUEST is a structural macroeconomic model augmented with a financial sector that has been used extensively to analyse the factors behind the recent financial crisis. In that exercise, three broad types of interventions in the financial markets are considered: (1) recapitalisation (capital injections into financial institutions); (2) guarantees on banks' liabilities by means of guarantees on new bond issuance; (3) purchases of toxic or impaired assets by governments (Impaired Asset Relief mechanisms).

The exercise considers the benefits and the costs of State aid measures, as they will have to be financed via the government budget (or constitute contingent liabilities, creating an expectation of future budgetary costs). There will be costs to society which can directly be measured in terms of GDP. Expectations of those budgetary costs (including contingent liabilities) will have consequences for current investment, employment and consumption decisions.

Recapitalisations are modelled as the issuance of new shares by banks which are bought by the government. As a result of the loan losses of the corporate banking sector during the crisis the equity premium rose sharply. By purchasing bank shares, the government contributes to dampening the increase in the equity premium and helps stabilise the income of shareholders. Recapitalisation measures amounted to a maximum of 2.7% of GDP. Government holdings of bank equity are in the simulations are assumed to peak at the end of 2011, and gradually reduced to half that level by 2014.

123 Based on a forthcoming ECFIN Economic Paper: "Evaluating the macro-economic effects of State aid to financial institutions in the EU by Jan in 't Veld and Werner Roeger."
The macroeconomic impact of those interventions shows a sizeable GDP multiplier, and a boost to investment spending which had been particularly hit by the crisis. The interventions support the value of banks and reduce the equity premium.

Government purchases of toxic assets from the banking sector amounted to approximately 2.8% of GDP at its peak, as measured by the size of toxic asset potentially covered by State intervention (transfer price)\textsuperscript{124}. The macroeconomic impact of those purchases depends on the assumed toxicity of the loans taken over by the government. In the extreme, if the assets are worthless, the government takes over all losses associated with those loans and effectively smoothens the dividend stream of corporate banks and reduces the equity premium. Taking over impaired assets increases corporate investment substantially, and thus targets a demand component which was particularly strongly hit in the crisis.

Guarantees on banks' liabilities amounted to more than 6% of GDP and tackled in particular the uncertainty problems or 'panic' after the Lehman Brothers' collapse, which manifested itself in large increases in CDS spreads and large discrepancies between actual losses from mortgage-related assets and the much larger total loss of market value of banks (equity plus debt). The government guarantees given act as an insurance policy for bond holders and have also large positive GDP effects, even if actual losses materialise and guarantees are called in. However, there is an inter-temporal trade-off as larger increases in government debt will require additional fiscal adjustments (increases in labour taxes) in future.

The model simulations suggest that the public interventions to support the financial sector have helped stabilise the financial markets and have partly offset the increase in equity risk premia and the decline in the value of banks that resulted from the crisis.

The measures have in particular supported corporate investment, in contrast to the standard fiscal measures in the stimulus packages (government consumption and transfers), which were more targeted to support incomes and tend to crowd-out private investment. State aid to banks has thus targeted the macroeconomic aggregate most severely affected by the financial crisis.

5.1. Effects of the approved State aid measures on financial stability

5.1.1. Government support measures have been instrumental in avoiding a major systemic collapse

The bankruptcy of Lehman Brothers in September 2008 led to increased fears that other major systemic institutions could collapse and lead to severe difficulties for the entire financial system. They triggered a coordinated policy response by the Member States to support the financial sector to restore stability and prevent a systemic crisis which could start a long term recession, or even depression, in the EU. Both the size of Member States' public interventions in support of the financial sector and their concentration in a very short time-frame between mid-September and the end of October 2008 (see Section 4.1) were evidence of how acute the risks of a financial crisis were perceived by policy-makers in Europe.

\textsuperscript{124} Note that this measurement is different from the one used in the rest of the Paper, where impaired asset relief measure are valued at the transfer price minus market price.
According to the ECB, "the extraordinary remedial action taken by central banks and governments since late 2008 has been successful in restoring confidence in financial systems around the world and in improving their resilience"\textsuperscript{125}. \textbf{Indeed, the worst case scenario was avoided}: as of end 2010, there has been no uncontrolled collapse of European financial institutions, no systemic crisis of the financial system and no long-lasting drying-up of financing flows to the real economy.

As from the last quarter of 2010 no additional aid had been pledged by a Member State with the exception of the Irish asset relief scheme. The amount of aid used by financial institutions had fallen almost sevenfold between the first quarters of the crisis and the end of 2010\textsuperscript{126}. Moreover, the number of Member States providing aid had also dropped – while 14 different Member States granted more than €1 billion in aid in the last quarter of 2008, only four Member States were in that situation (Germany, Greece, Spain and Ireland) in the last quarter of 2010.

This decrease in the use of aid has been paralleled by the gradual exit from support schemes by Member States. The number of schemes in place in 2011 has approximately halved compared to the peak of the crisis: in the beginning of 2011, seven Member States had still a recapitalisation scheme and eight a guarantee scheme in place (compared with respectively 15 and 19 at the peak of the crisis). \textbf{That strong decrease over time in both the amount of aid pledged by Member States and the amount of aid used by financial institutions suggests that the situation of the financial sector is more stable than at the outbreak of the crisis}. However, it should be noted that support provided by the ECB has been on-going throughout 2010, both in the form of liquidity support and reduced interest rates.

Beyond the absence of a collapse of the financial system, the evolution of the confidence that banks place in their counterparts is an indicator of financial stability. The EURIBOR-OIS spread\textsuperscript{127} can be considered as an \textit{indirect measure of the aggregate default risk of the banking system}. A high value of the EURIBOR-OIS spread indicates a low level of confidence and thus a low volume of activity on the inter-bank markets, which could if sustained over time lead to severe liquidity issues for financial institutions – see Figure 5.1.

The collapse of Lehman Brothers led to a skyrocketing of the EURIBOR-OIS spread, which reached a peak in October 2008 at more than twice its value of the preceding month. The vast majority of State aid support was pledged as a reaction to the confidence crisis that hit the inter-bank market. The heavy liquidity interventions of the European Central Bank were also concentrated in the same period. \textbf{Both measures contributed to the subsequent steady improvement of the inter-bank market situation throughout 2009}. However, the EURIBOR-OIS spread has not recovered its pre-crisis value as measured in the beginning of 2007, and has remained overall stable throughout 2010. That development suggests that \textbf{the current level of risks within the inter-bank market is still high}

\begin{itemize}
  \item \textsuperscript{125}“Measures taken by Euro Area governments in support of the financial sector”, ECB Monthly Bulleting, April 2010
  \item \textsuperscript{126}On average €250 billion by quarter from October 2008 to June 2009 compared to €38 billion by quarter for the period July 2010 - December 2010.
  \item \textsuperscript{127}The EURIBOR-OIS spread is the difference between EURIBOR (the interbank interest rate) and the overnight index swap rate (a derivative based on the overnight inter-bank rate). It provides a measure of the relative stress in the inter-bank markets. A higher spread is an indication of a decreased willingness to lend by major banks due to a perceived higher risk of defaults of other banks.
\end{itemize}
compared to the pre-crisis conditions\textsuperscript{128}. Moreover, the volatility of the EURIBOR-OIS spread increased over 2010, suggesting a potential renewal of financial instability, potentially linked to the sovereign debt crisis in the Euro Area\textsuperscript{129}.

Figure 5.1: Evolution of EURIBOR-OIS spread and of State aid support to the financial sector pledged by Euro Area Member States\textsuperscript{130}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure5.1.png}
\caption{Evolution of EURIBOR-OIS spread and of State aid support to the financial sector pledged by Euro Area Member States. EURIBOR-OIS spread* measures the confidence of banking institutions in their counterparts - a high spread indicates a low level of confidence. It is an indirect indicator of the health of the banking system.}
\end{figure}

5.1.2. Aid in the form of guarantees contributed to re-launch wholesale funding of financial institutions

The uncertainties in the inter-bank market triggered by the fall of Lehman Brothers affected the wholesale channel of funding for banks, whereby financial institutions issue debt securities for short-term and long-term funding.

According to the BIS, "the sharp deterioration in market conditions and investor confidence after the collapse of Lehman Brothers in September 2008 made it extremely difficult for banks to continue financing their activities through debt and equity markets\textsuperscript{131}. In particular, the total amount of long-term debt securities (i.e. with a maturity over 1 year) issued by financial institutions in the Euro Area decreased by 40% in the third quarter of 2008 compared to the previous quarter. Guarantee schemes and interventions by Member States were precisely

\textsuperscript{128} These pre-crisis values might never be reached again, given that one of the causes of the crisis has specifically been a general over-confidence into the creditworthiness of financial institutions. Risks were underestimated and underpriced in the run-up to the crisis, and thus abnormally low.

\textsuperscript{129} While the volatility of the EURIBOR-OIS spread is increasing, the volatility of the LIBOR-OIS spread in the US and in the UK is decreasing, highlighting the specificities of Euro area developments.

\textsuperscript{130} The EURIBOR-OIS spread measures confidence in Euro Area inter-bank market; the evolution of the LIBOR-OIS spread, measuring confidence in the UK inter-bank market is similar to the one of the EURIBOR-OIS.

\textsuperscript{131} BIS Papers No 48, An assessment of financial sector rescue programmes, July 2009
targeted at overcoming those difficulties and at restoring "normal" activity in wholesale markets – see Figure 5.2.

The take-up of guaranteed bonds in 2009 shows the importance of that aid instrument in restoring the issuance of long-term debt securities and alleviating the liquidity shortage in the financial sector. The total emissions of long-term debt securities picked up in the beginning of 2009, driven by the issuance of State-guaranteed debt. In the first semester of 2009, such guaranteed bonds represented more than 30% of the total emissions in the Euro Area and accounted for most of the increase in the issuance of long-term debt securities.

**Figure 5.2:** Evolution of gross issuance of long-term debt securities by financial institutions in the Euro Area

<table>
<thead>
<tr>
<th>June 2008-December 2010; € billion</th>
<th>Total long-term securities issued*</th>
<th>State-guaranteed bonds issued</th>
<th>Share of State guaranteed bonds in total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2 2008</td>
<td>362</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Q3 2008</td>
<td>229</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Q4 2008</td>
<td>285</td>
<td>67</td>
<td>23%</td>
</tr>
<tr>
<td>Q1 2009</td>
<td>350</td>
<td>118</td>
<td>34%</td>
</tr>
<tr>
<td>Q2 2009</td>
<td>357</td>
<td>105</td>
<td>29%</td>
</tr>
<tr>
<td>Q3 2009</td>
<td>249</td>
<td>38</td>
<td>15%</td>
</tr>
<tr>
<td>Q4 2009</td>
<td>236</td>
<td>89</td>
<td>38%</td>
</tr>
<tr>
<td>Q1 2010</td>
<td>319</td>
<td>43</td>
<td>13%</td>
</tr>
<tr>
<td>Q2 2010</td>
<td>273</td>
<td>54</td>
<td>20%</td>
</tr>
<tr>
<td>Q3 2010</td>
<td>257</td>
<td>2</td>
<td>1%</td>
</tr>
<tr>
<td>Q4 2010</td>
<td>248</td>
<td>28</td>
<td>11%</td>
</tr>
</tbody>
</table>

* Long-term (over 1 year) securities other than shares issued by monetary financial institutions (MFI) - Gross issues
Source: ECB Statistical Datawarehouse; Commission services

The emission of State-guaranteed bonds subsequently decreased in 2010 compared to 2009, in particular from the second half of 2010 onwards, both in the Euro Area and in those non-Euro Area Member States that provided guarantees support (the UK, Denmark and Sweden). Moreover, the number of individual banks using an existing guarantee scheme halved from 80 in the second semester of 2009 to 40 in the second half of 2010, most (25) of these being Danish banks. That clear exit from the reliance of European banks on State guarantees is an indication of a return to a more stable financial system, where banks are able to finance themselves on wholesale markets without State support. The decrease in the use of guaranteed bonds is all the more striking given that around € 150 billion of guaranteed bond issued in the beginning of the crisis came to maturity in the course of 2010, potentially creating additional needs for wholesale funds.

Moreover, the decrease in the use of guaranteed bonds does not seem to originate in a global decrease of the volumes of wholesale funding. The total value of long-term bonds emitted 132

132 Latvia also provided guarantee support on an ad hoc basis in the context of the restructuring of Parex.
by financial institutions in the Euro Area did not drop significantly in 2010 compared to previous years despite the gradual exit from State-sponsored debt issuance, suggesting that wholesale markets for financial institutions came back to "autonomous" functioning. There has thus been a clear decrease in the dependence on guaranteed bonds in the Euro Area – while guaranteed bonds represented 30% of total issued long-term securities in 2009, that ratio dropped to 11% in 2010\textsuperscript{133}.

Dependence on guaranteed bonds evolved similarly in non-Euro Area Member States, although in a more marked pattern\textsuperscript{134}. Financial institutions from the UK, Denmark and Sweden relied heavily on guaranteed debt emissions shortly after the outbreak of the crisis. Approximately 60% of the total emission of such debt was guaranteed in the last quarter of 2008, mainly driven by British guarantees. The ratio then declined to 25% in 2009 and was less than 5% in 2010.

The decrease in the dependence on publicly guaranteed bonds is also an indication of those bonds becoming more expensive than purely market-based financial instruments. An increasing number of financial institutions chose to finance themselves on long-term securities at market conditions rather than to bear the extra-burden in remuneration and conditions attached to public guarantees. The effectiveness of such incentives to return to market financing is further confirmed by the change in the profile of the financial institutions that issued State-guaranteed bonds. While 90% of the guaranteed bonds issued in 2008 were issued by banks rated A and above, the issuance of State-guaranteed debt shifted towards issuers with a rating of A- or below over the course of 2009 and 2010. At the end of March 2010, the latter represented around 80% of the total amount of State guaranteed debt issued through guarantee schemes since October 2009. This could suggests that sounder banks consider State guarantees as too expensive and turned back to purely private sources of funding\textsuperscript{135}.

State aid in the form of guarantees contributed to re-launch the wholesale sources of funding which had begun to dry up in September 2008. Their rapid take-up highlighted that financial institutions were indeed in need of additional and secure financing; their gradual exit suggests that State guarantees did not crowd out private financing. The incentives to return to private source of funding appear to have functioned throughout 2010 to decrease dependence on State-sponsored funds.

5.1.3. State aid to banks contributed to reduce the risks of default of major financial institutions at least in the short term

The support measures adopted by Member States contributed to decrease the risk of default of European financial institutions, as measured by Credit Default Swap spreads\textsuperscript{136} (CDS spreads). That decrease in the perceived risk of default of major banks was

\textsuperscript{133} These improvements in the whole Euro Area however hide different situations at Member State-level.
\textsuperscript{134} Since no quarterly data on bonds’ emissions in non-Euro Area Member States is available, the analysis relies on the evolution of yearly bonds’ emissions for the three non-Euro Area Member States that used guaranteed bonds: the UK, Denmark and Sweden.
\textsuperscript{135} It may also reflect the downgrading in the rating of banks which had to recourse to State guarantees.
\textsuperscript{136} A Credit default swaps (CDS) is a contract in which a "protection buyer" pays a periodic premium to a "protection seller" and in exchange, receives a pay-off if the reference entity (a firm or a government issuer) experiences a credit event (e.g.: a failure to meet interest payments). It is thus an indicator of the risk of insolvency of the entity concerned and works similarly as an insurance against credit event since
essential for a swift return to stability in the financial sector since it contributed to increasing the confidence that banks place on their counterparts and thus to a refuelling of short-term and longer-term funding markets.

The effect of State aid support on CDS spreads was essentially visible on a short-term basis. Two event-based analyses conducted by the IMF\textsuperscript{137} and the BIS\textsuperscript{138} has documented the strong link between the announcement and use of a State aid measure (either through guarantee, recapitalisation or asset relief) and the decrease in the CDS spreads of banks in the concerned Member States over the following days. According to the BIS, "government packages had a strong impact on bank CDS premia for the overall banking sector […] by about 20 basis points after 1 day and 30 basis points after 5 days". However, it also noted that those positive effects were generally offset after 25 days. Both studies also concluded that the effects of the measures on CDS spreads were dependent on the size of the measure and that individual support had a more lasting impact on decreasing the CDS spread of the beneficiary than scheme measures. The BIS concluded that "government interventions [had] been effective in reducing banks' default risk, at least over a short time horizon".

Taking a longer-term perspective, the effects of Member States State aid support on reducing risks in the banking sector are less straightforward – see figure 5.3.

**Figure 5.3: Evolution of CDS spreads of major European banks**

![Figure 5.3: Evolution of CDS spreads of major European banks](image)

it provides the buyer of the contract with protection against default, a credit rating downgrade, or another credit event.

\textsuperscript{137} Global Financial Stability Report, October 2009, IMF; based on 13 Member States analysing the effects of government interventions on key variables of financial stability, such as CDS spread around a very short "event-window" period, here of 5 days (1 day before the event, 3 days after the event).

\textsuperscript{138} BIS Papers No 48, An assessment of financial sector rescue programmes, July 2009
The CDS *premia* of European banks have significantly decreased in 2009 after reaching an unprecedented peak at the end of 2008 and beginning of 2009 which triggered the large-scale State aid measures to the financial sector. **On average, CDS spreads of European financial institutions decreased by more than 40% between their peak of Q1 2009 and the end of 2009.**

The decrease has nonetheless not proven sustainable and CDS spreads resumed a sharp upward trend throughout 2010 to stand at levels similar to those of the 2009 peak by the end of the year. In all Member States, and without clear connections with the State aid to the financial sector, the average risks of both aided and non-aided institutions increased sharply during the year 2010, driven by the increase in sovereign debt risks.

5.1.4. **The financial system nonetheless remains subject to uncertainties**

While State aid has contributed to restoring confidence in the financial system and to bringing back stability to the financial sector, the latest ECB Financial Stability Review still assessed the overall economic and financial situation as fraught with risks for financial stability. A major source of potential instability is the increase in the risks of sovereign debts in the Euro Area, combined with potential vulnerabilities of the financial sector, as had been highlighted by the Irish situation.

The ECB notes that "adverse feedback loops [exist] between downside risks to economic growth, bank funding vulnerabilities and fiscal imbalances" and that negative development of one element of that triangle in a Member State can lead to severe turmoil both in the Member State concerned and in the whole EU. The large support packages to financial institutions may have indirectly contributed to increase the uncertainty as regards at least two elements of that vulnerability triangle.

Firstly, the high level of State aid to the financial sector can be expected to have led to increased pressure on the sustainability of public finances in certain Member States. While most of the State aid did not have direct effects on public finance – since support was essentially contingent, such as through guarantees, it nonetheless brought additional uncertainty on the public budget and increased the risks attached to Member States' financing. An analysis by the ECB highlights that the success of State aid to the banking sector came at the cost of "government [having] assumed substantial fiscal costs and credit risks".

Secondly, as mentioned in Section 5.1.2, State aid in the form of guarantees led to an increase in the issuance of long-term debt securities concentrated in the first quarters of 2009. A significant proportion of those bonds will come to maturity in 2012. **European banks will thus need to roll-over more than €200 billion of guaranteed long-term funding in a short period of time, potentially bringing uncertainty in the financial markets and affecting the less sound banks.**

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139 Financial Stability Review, December 2010, ECB.
5.2. Effects of the approved State aid measures on the functioning of financial sector

5.2.1. Aid has contributed to maintaining the solvency of European banks during the crisis and to their gradual return to profitability, though at levels lower than before the crisis.

In addition to mitigating the risks posed to financial stability, State aid to the banking sector also pursued the objective of restoring a normal functioning of the financial system, both in terms of long-term viability of the banking institutions and in terms of them providing credit to European firms and households. Viability of financial institutions is assessed in this section through their solvency and profitability.

The solvency of European financial institutions did not significantly decrease in the course of the financial crisis. On the contrary, the average Tier 1 capital ratio \(^{141}\) of both aided and non-aided European banks increased between 2008 and 2010, as illustrated in Figure 5.4. That increase in Tier 1 capital ratio has been driven simultaneously by the raising of new Tier 1 capital, including of public capital, and by the decrease in the total risk-weighted assets \(^{142}\) through both deleveraging and risk-profile reduction by banks, sometimes driven by conditions attached to State capital support.

Figure 5.4: Evolution of solvency ratio (Tier 1 capital ratio) of European banks

Public recapitalisations have been instrumental in overcoming the sharp drop of the solvency ratio of aided banks between the end of 2008 and the beginning of 2009. The sharp rebound in their Tier 1 capital ratio (more than two percentage points) was a

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\(^{141}\) The Tier 1 capital ratio is the ratio of a bank's core equity capital to its total risk-weighted assets.

\(^{142}\) See in Section 5.3.3 for an assessment of the evolution of the size of the total assets of the European banking sector, whose growth came to a halt in the year 2009.
consequence of the injections of more than €200 billion by Member States during the same period. From mid-2009 onwards, there has been no visible difference in the evolution of the solvency of aided and non-aided banks – both categories of banks improved their Tier 1 capital ratio until the end of 2010 to reach an average solvency ratio of 11.5% in Europe.

The increase in solvency of European banks in 2010 can also be related to the renewed profitability of the sector, fostered by the maintained low interest rate policy of the ECB. Indeed, the European banking sector progressively returned to profitability in the course of 2010. Not surprisingly, the return on equity of both aided and non-aided banks plummeted in 2008 as the crisis unveiled its full scale. However, aided banks have experienced a much sharper decrease in profitability than non-aided banks – see Section 5.3.4 for the comparison of return on equity of aided and non-aided banks. The banking sector in general returned to profitability in the course of 2010, although at levels inferior to those before the crisis143.

The comparison of the evolution of profitability for aided and non-aided banks suggests that State aid has been targeted to financial institutions in distress. It contributed to restore their long-term viability by raising their profitability alongside the sector’s evolution. It also highlights that sound and profitable institutions did not have recourse to State aid and were able to maintain profitability, albeit moderately.

5.2.2. Lending to the real economy has resumed, albeit at a low pace and with some delays

The Member States' support measures to the financial sector aimed at preventing the risk of a "credit crunch", whereby banks and financial institutions no longer grant loans to the real economy (households and businesses), either because of a lack in confidence in the structural ability of borrowers to repay or because of the banks' need to reduce their risk profile and deleverage their balance sheet to restore solvency.

Member States' recapitalisation measures have in particular been targeted at ensuring that beneficiary banks would be able to maintain sufficient solvency ratios to finance continued loan activity144. Measures under the Temporary Framework were also designed to diminish any credit squeeze through loan guarantees and subsidised loans, and to mitigate its effects on beneficiaries that could not access financing by alleviating their liquidity constraints (compatible limited amount of aid of up to €500,000 per undertaking).

Analysis of the evolution of credit volumes to households and non-financial corporations throughout the crisis provides a mixed picture. As regards households, the total amount of credits to households in the EU experienced a sharp drop in the end of 2008 and beginning of 2009 but rebounded rather quickly and steadily. The demand for loans by households, in particular for mortgage loans, returned to positive growth rates as early as the second quarter of 2009. Simultaneously, banks and financial institutions adapted their credit policy and eased credit standards that had been tightened at the beginning of the crisis145. The situation was quite different for loans to non-financial corporations (NFC), which are the fuel of long-term investments and thus essential to prevent the financial and economic crisis turning into a long-

143 Return on equity is not a risk-adjusted performance metric, so a lower Return on equity as such may not be worrisome and may in fact be appropriate if the bank indeed runs less risk.
144 The ECB also conducted several interventions aiming at maintaining the flow of credit to non-financial corporations and to households, in particular the decrease in interest rate to support demand and the liquidity facilities to support supply.
lasting recession. As the financial crisis expanded, the growth of loans to the real economy substantially reduced due to demand and supply factors.

Demand for loans by non financial corporations seems to have been even more negatively affected by the crisis than the supply of loans. As the crisis affected the real economy and resulted in an economic recession, investment and trade decreased. The demand for loans fell accordingly. As early as the beginning of 2008, a majority of financial institutions were reporting a decrease in demand for loans by NFCs, thus anticipating the crisis. The demand for loans further worsened throughout 2008 to reach a low point in the fourth quarter. While the situation consistently improved from this point on, demand for loans by NFCs fell until the third quarter of 2010.

On the supply side, the crisis has obliged banks to review their attitudes to risk-taking and engage in deleveraging. The resulting tightened credit standards contributed to a decrease in credit to non-financial corporations. Bank lending to NFCs had increased until the end of 2008 and then started a steady decline throughout 2009. The stock of loans to NFCs decreased by 4% between the end of 2008 and the end of 2009 – that decrease should not be under-estimated since any decrease in the total stock of loans actually implies that the emission of new loans has virtually come to a halt. The amount of outstanding loans to NFCs then stabilised in 2010, illustrating a slow recovery in the emission of new loans.

European banks assess regularly the evolution of perceived demand and of credit standards, as a proxy for loan offers, in the ECB Bank Lending Survey. Supply and demand conditions for loans to NFC as well as the stock of loans to NFCs are presented in Figure 5.5 for the period 2007-2010.

Figure 5.5: Supply and demand conditions of loans to non-financial corporations in the Euro Area

Source: ECB Bank lending survey; Commission services
The share of banks reporting a tightening of their credit standards for loans to NFCs reached a record high at the peak of the crisis in the last quarter of 2008. Since then, that share has consistently declined but has remained positive indicating that while credit supply was still constrained, the situation was improving. That gradual return to more "normal" credit standards has been confirmed by a decrease in the average interest rate charged by banks to non-financial corporation after its sharp increase in 2008.

The major factor driving the halt of the tightening of credit standards, as reported by banks, has been the improvement of the health of their balance sheets, more than improvements in the perception of risks or the pressure of competition. It seems that one of the key objectives of the government support measures to financial institutions, i.e. relieving the constraints on banks' balance sheets, was achieved in the course of 2009, thereby contributing to the slow down of the deterioration of credit standards from then on.

The increased difficulty in accessing finance affected smaller firms more than larger ones. The issue of smaller loans (that are assumed to be contracted in majority by SMEs) decreased much earlier in 2008 than the uptake of larger loans (assumed to be contracted in majority by large firms) but started to recover simultaneously in mid-2010. Those figures highlight that small firms underwent a much longer drying-up of access to credit than larger firms. Results from the Bank Lending Survey and survey on SME access to finance by the European Central Bank indicate a continuing net tightening of lending conditions for SMEs in the Euro Area during the period discussed and a fairly large number of application cases where the loan has been refused or the amount offered by the bank reduced in comparison to the application. This situation has been persisting since 2009. The intensity of that credit squeeze for small firms was accentuated by the lack of alternative financing mechanism, contrary to larger firms. For instance, the tightening of credit market in 2009 led large companies to shift to bonds issuance to find substitution funds for the declining supply of credit. Meanwhile, SMEs, which usually do not have the critical mass to issue bonds, had to depend on declining bank lending. A traditional alternative funding channel for SMEs, venture capital, was also experiencing a severe decrease. According to European Venture Capital Association fund-raising in the venture capital segment in 2009 fell by 40% compared to 2008 and remained low in 2010.

No link can be established at Member State level between State aid in the form of capital and the evolution of loans to non-financial corporations. Figure 5.6 details for the main Member States the amount used for recapitalisation in the beginning of the crisis and the decrease in the volumes of loans to the financial sector between the end of 2008 and the end of 2009. One would expect Member States having invested heavily in recapitalising their financial sector to have mitigated the decrease in loans to NFCs more than others. However, the results suggest the opposite: credits to NFCs declined more heavily in Member States where large recapitalisations were granted. However, that outcome might simply be a sign that Member States which supported heavily their financial sector did so because the financial crisis was particularly acute.

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146 Period between the last quarter of 2008 and the third quarter of 2009 corresponding to more than two-third of the total recapitalisation that were granted under the temporary measures.

147 A more systematic assessment of the link between each recapitalisation event and the subsequent evolution of loans in the concerned Member State does not highlight any statistical link between the two variables. However, the analysis could not be conducted at the level of the beneficiaries, where the relation should occur in theory.
5.2.3. Redemption of aid has started but the long-term impact of Member States' aid packages are uncertain

The redemption of aid, in particular of asset support, is an indicator of the return to normal functioning of financial markets. It indicates that beneficiaries are viable enough to redeem State support and also that private capital has become less expensive than public capital. As of end 2010, almost €35 billion of recapitalisation investments had been repaid by beneficiaries. That figure represented more than 10% of Member States' investment in banks' capital, and was redeemed mostly in France, Belgium, the Netherlands and the UK. The declining dependence on government-guaranteed debt of European banks is another indicator of a return to a normal functioning of financial markets. However, redemption remains at a low level in the EU compared to the US, where more than 90% of State support had already been reimbursed by beneficiaries at the end of 2010.

On a longer term basis, public support to individual banks and to entire national financial markets have affected the perception of risks by financial institutions, in particular large and complex banking groups, which are perceived as "too-big-to-fail", "too interconnected to fail", "too complex to fail", "too systemic to fail", etc. Member States' interventions led to an increase in moral hazard by taking over a significant part of the loss incurred by risky investments of banking institutions. In order to ensure a proper functioning of financial market in the long term, it is essential to restore the appropriate level of coverage of risks and returns by financial institutions as well as to restore fair competition between financial institutions. Those goals were the objectives of the safeguard conditions attached to State aid measures.

However, it might also reflect a substitution effect with the Eurosystem covered bond purchases of €60 billion of mid-2010.
5.3. **Effects of the approved State aid measures on competition**

5.3.1. *State aid provided to banks is liable to distort competition in several ways which the Commission sought to minimise through the consistent application of transparent and strict rules*

State aid provided to banks in the context of the financial and economic crisis can distort competition in various ways:

- **Aid may give an advantage to the aided bank over a non-aided bank in a given market**, frustrating expansion of non-aided banks, with possible negative consequences on the various parameters of competition (price, quality, variety or innovation).

- **Distortions may also occur between two or more aided banks in a given market**, if some received a significantly larger amount of aid or received the aid under conditions that are much more advantageous than their aided competitors.

- **State aid to banks may also undermine the level playing field in the internal market** as it may prevent potential entry by foreign banks into the domestic market. It may have implications for location decisions and negative effects on employment in Member States that provide no or less support. It may also delay structural adjustments in Member States providing aid and the presence of inefficient banks may be detrimental to consumers in the longer run. Moreover, a wasteful subsidy race would not be in the interest of any Member State, especially in times of constrained public finances.

- **Last, but not least, State aid to the banks has raised serious issues of moral hazard**. The lack of market discipline and flaws in bank supervision and regulation allowed certain banks to gain market shares relative to their rivals by taking excessive risks and pursue an unsustainable business model. The fact that such banks then received aid to absorb the resulting losses poses at least two competition problems. Firstly, the aid may allow non-viable banks to stay on the market when in normal circumstances market forces would have sanctioned the unsustainable business practices and forced inefficient or excessively risky players to exit the market. Secondly, such aid may distort the incentives to compete if the aided banks only reap the benefits of their risk-taking but do not have to carry the burden of the losses. Indeed, aid may reinforce the market power of the aided firm, possibly resulting from the risky business decisions taken by the firm before the crisis, such as certain acquisitions which the aid later helped absorb. The ensuing moral hazard has been an important feature of the financial crisis, because some banks relying on cheap but unstable short-term wholesale market funding may have been able to increase or maintain market share compared to banks funding themselves more on the basis of more stable (and expensive) retail deposits.

It is challenging to assess how State aid granted during the financial and economic crisis distorted competition along any of the above four dimensions – between aided and non-aided banks, across aided banks, across Member States and through raising moral hazard. Indeed, measuring the intensity of competition in banking markets is in itself theoretically complex, notably because the banking sector is characterised by numerous market and regulatory shortcomings – see Box 9. Moreover, even when a change in the competitiveness
of the market can be identified, it is not straightforward to connect it to a specific distortion of competition potentially linked to State aid rather than to a normal development of the market.

**Box 9: Measuring competition and specificities of the banking sector**

In general, all practical measures of bank competition can be grouped in two main categories, namely (i) "market structure" measures and (ii) "elasticity" measures.

The Commission services responsible for EU State aid control mainly rely on "market structure" indicators to assess the competitiveness of a given market. Market structure indicators include concentration indices, such as the CR5 concentration ratio (the combined market share of the top 5 players in the market or CR5 ratio) and the Herfindahl-Hirschman index (the sum of the squares of the market shares of each firm competing in a market).

Alternatively, elasticity indicators assess the reaction of output prices (such as loan rates or profit) to changes in input prices or marginal costs. When the pass on from funding costs to loan pricing is approximately complete, it is a signal of competitiveness, whereas a partial pass-on would signal significant market power. **Whereas elasticity indicators are popular in empirical academic work, they have not been used by the Commission services throughout the financial crisis.** Elasticity estimates seem to lack robustness and vary widely over time and across studies. More formally, measures of elasticity have the disadvantage of requiring restrictive assumptions on banks' cost functions and on the status of the markets as being in a long-run equilibrium.

**Structural indicators as such may fail to provide a comprehensive picture of competitiveness of banking markets.** A mere structural view of competition conflicts with the contestability approach, which states that the intensity of competition depends on the contestability of the market, rather than on market concentration per se. Importantly, market structure measures contain little direct information on important signals of the actual degree of competition in a given market, such as switching costs, barriers to entry, pass-through of cost decreases. The Commission services also analyse entry barriers as well as other constraints in evaluating financial firms' behaviour in a static and dynamic environment.

**Measuring competition is particularly difficult in the banking sector.** Bank crisis prevention, management, and resolution tools (such as regulation implementation, supervision, recapitalisations, asset relief, guarantees) lie mainly at the Member State level, opening the door to important competition distortions in the pan-European financial market. These kinds of distortions are manifold, complex and largely unique to the banking sector. For instance, banks can reap the benefits from a relatively loose regulation and supervision system compared to peers in other Member States, or from being headquartered in a Member State with a relatively loose resolution regime.

In that respect, none of the standard competitiveness measures mentioned here allows the full measurement of the competition distortions created by State aid to the financial institutions.

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150 A monopolist would act competitively if the market is fully contestable. Structural measures of competition are also criticised for relying on the "structure-conduct-performance" paradigm, built on the assumption that structure is entirely given (exogenous), rather than being the efficient outcome of conduct and performance (endogenous).
Irrespective of the development of any indicators of competition in the banking sector, it should be admitted from the onset that **State aid control by the Commission cannot entirely avoid distortions of competition caused by State aid to financial institutions.** However, letting banks of systemic importance fail was not considered feasible since such a policy would have had dramatic consequences both on competing banks and the real economy, given the lack of orderly resolution regimes and the externalities that bank failure entails, reflecting contagion through interconnectedness, pecuniary externalities through fire sales or liquidity spirals, and bank runs.

The Commission has had to reconcile the objective of ensuring financial stability in the short-term with the maintaining of effective competition in the European banking sector in the medium- and long-term. It has therefore made every effort, in assessing State aid cases notified to it, to tackle the potential distortions of competition brought about by aid to the financial sector, in particular by implementing specific safeguards aimed at minimising distortions of competition, not least by requiring adequate remuneration for the State aid.

Through the systematic application of those general principles (see Chapters 3 and 4), the Commission effectively operated a coordination tool that allowed for a consistent treatment of all Member States and banks. That consistent approach does not mean that the Commission imposed the same conditions on all Member States and all banks, for example by requiring the same remuneration rate for all aid granted, because to do so would have resulted in an unequal treatment in that each bank is different (e.g. in terms of risk profile and business model), each Member State is different (e.g. in terms of the applicable regulation) and distortions of competition arise and need to be remedied in a specific market context.

The remainder of this Chapter is structured as follows. Section 5.3.2 details the importance of the measures implemented in the context of restructuring decisions, and in particular the importance of the specific competition measures agreed with banks to mitigate the negative outcomes of State aid on the competitiveness of the EU banking sector. Those measures have aimed at preserving competitive conditions on the market, but also at providing the right incentives to aided (and non-aided) banks to prevent them from taking inappropriate risks in the future, thereby curtailing moral hazard. Section 5.3.3 looks at the evolution of key structural indicators of competition in the banking sector and Section 5.3.4 attempts to assess whether the contestability of the banking market has been affected by State aid by comparing the market performance of aided banks with that of non-aided banks. Finally, Sections 5.3.5 and 5.3.6 analyse the potential distortions of competition within the Single Market created by the use of the Temporary Framework for the real economy.

5.3.2. The obligations linked to restructuring aid have been the key means by which the Commission has tackled the identified major risks of distortions of competition

**Two major risks of distortions of competition** have resulted from the State aid granted to banks during the crisis. The first risk relates to the fact that, as explained in Section 4.1.4, the bulk of the aid granted to financial institutions was concentrated on a limited number of individual financial institutions in the internal market as a whole, which could lead to important distortions of competition between aided banks and non-aided banks and across aided banks. The second risk relates to the fact that State aid has been granted to financial institutions that, contrary to fundamentally sound banks whose difficulties merely stem from generalised market failures, got into distress as a result of their particular business model or investment strategy. **Without the aid such non-viable banks would have had to exit the**
market and the absence of such a sanction creates moral hazard, threatening the level playing field in the future.

The most efficient means that allowed the Commission to minimise these risks of distortions of competition has been far-reaching restructuring obligations to be observed by all the main beneficiaries of aid. Indeed, where banks benefited from large amounts of asset support, that aid was only approved by the Commission on the basis that the Member States would submit a restructuring plan for the aided banks. In particular, when the aid amount received in the form of recapitalisation and impaired asset relief aid cumulatively exceeds 2% of the bank's total risk weighted assets\textsuperscript{151}, a restructuring plan had to be submitted to the Commission.

**Competition measures** have of course been the key means through which the Commission has sought to minimise distortions of competition from rescue and restructuring aid. However, measures implemented to comply with the two other conditions of any restructuring plan – that is, long-term viability without State support and burden sharing – may also have contributed to the fulfilment of the third condition of mitigating distortions of competition.

**Viability measures**

Measures aimed at ensuring the beneficiaries' long-term viability without State support ensure that in the future, no unfair competition is waged by banks whose business model is in fact unsustainable to the detriment of entry and expansion of banks that are competing only on the basis of the merits and profits generated by their services. The business model is studied to make sure it will make sense in the new normal market conditions.

**Box 10: Example of viability measures agreed with the Commission: Kommunalkredit\textsuperscript{152}**

The Kommunalkredit (KA) decision provides an illustration of how the Commission has dealt with banks whose business models were challenged by the crisis. Several cases scrutinised by the Commission (Northern Rock, Dexia, Hypo Real Estate) share the distinguishing characteristic that retail deposits made up a relatively unimportant part of their funding, whereas they relied to a large extent on the wholesale market for their funding. Their insufficient deposit base gave rise to a relatively large customer funding gap (i.e. loans minus deposits) which needed to be filled by wholesale market funding. As a result, any gridlock in interbank or wholesale markets cut these banks off their primary funding base (funding liquidity risk). KA is particularly representative since, as a pure player operating on the public finance market, it did not have any retail deposits (except non material deposit by public authorities clients).

In its assessment of KA's business model, the Commission identified major issues regarding the bank's viability. In the first place and despite recent improvements, KA still relied to a large extent on wholesale funding, especially short-term funding. That funding model made the group vulnerable to market disruptions and credit spread variations. Second, margins on

\textsuperscript{151} For banks that received a limited amount of recapitalisation and asset relief aid, no restructuring plan is required. However, Member States have to submit a viability review enabling the Commission to assess the viability of these banks.

\textsuperscript{152} Case SA.32745 € - $ - Restructuring of Kommunalkredit (not yet published).
KA’s assets were very low and potentially not high enough to absorb sustained increases in funding costs and provisions. Third, KA’s funding cost, especially for capital markets financing (e.g. covered bonds and senior unsecured bonds), had increased significantly and were still materially higher than pre-crisis levels, despite the sharp improvement in market conditions over 2009. Fourth, KA had expanded geographically in Eastern Europe through a joint-venture with Dexia and had aggressively increased its balance sheet.

In order to address those viability issues, the main elements of KA’s restructuring plan were (i) to refocus the good bank (KA Neu) on its core business (its securities portfolio being separated and isolated in a bad bank, KA Finanz), (ii) to stop any trading activity, (iii) to ensure a balance sheet reduction of more than 60%; (iv) to ensure sustainable pricing through commitment to refrain from lending at a RAROC level below 10%, and (v) to restore a sustainable structural liquidity position through commitments on a maximum short-term funding ratio (13% ceiling) and a minimum stable funding ratio (50% floor). Those commitments were particularly necessary from a viability point of view since KA Neu will remained mostly wholesale funded\(^{153}\).

To assess whether the planned measures are sufficient to restore the long-term viability of the group at the end of the restructuring period, the Commission reviewed KA Neu’s business plan and the results of the stress tests performed by the bank under assumptions as least as conservative as those of the supervisory authority. Such tests were aimed at assessing: (i) the resistance of the group to severe macro-economic shocks; (ii) the vulnerability of the group to material increases in the cost of wholesale funding; and (iii) the liquidity of the group under severe assumptions. The Commission also relied on the expertise of the regulatory authorities. Those elements showed an adequate solvency position and improving liquidity.

**Burden-sharing measures**

Burden-sharing not only contributes to limit the amount of State aid, but may also be a particularly important tool to address the distortions of banks' incentives to compete arising from moral hazard. Measures such as limitations on the distribution of dividends by aided banks and control of share buyback programmes, as well as limitations of bonuses and stock options contribute to sanctioning past irresponsible behaviour and decisions of shareholders and managers. Certain banks have even implemented measures to sanction individuals such as the dismissal of former management (e.g. Fortis).

**Box 11: Example of burden sharing agreed with the Commission: KBC\(^{154}\)**

KBC is an integrated bancassurance group, with activities in Belgium, Central and Eastern Europe, Russia, USA and Southeast Asia. KBC received two recapitalisations of €3.5 billion each (total €7 billion). Both recapitalisations were in the form of Yield Enhanced Securities (YES) with a coupon set to be the higher of either 8.5% or an increasing percentage of the dividend paid on ordinary shares. The repurchase price of the first €3.5 billion of YES was fixed at 150% of the issue price. Alternatively those YES can be converted into ordinary shares after three years from issuance. The second €3.5 billion YESs can only be repurchased at 150% of the issue price.

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\(^{153}\) All the measures are subject to periodic monitoring by the Commission over the restructuring period, with the support of a monitoring trustee.

KBC also received an impaired asset measure covering a portfolio of Collateralised Debt Obligations (CDO) with a notional value of €20 billion. The impaired asset measure consists of three tranches, the first one being a first loss borne by KBC of €3.2 billion. If the losses exceed that amount, KBC can opt for a capital increase by the State of up to €1.8 billion as part of the second tranche. If the losses exceed the first and second tranches, KBC can avail of the cash guarantee provided by the State for an amount of 90% of the losses. KBC pays an underwriting fee for the right to receive a capital injection (second tranche) of 650 basis points per annum over the €1.8 billion of equity the State is willing to underwrite (€120 million per year). KBC furthermore pays a guarantee fee for the cash guarantee of a total €1.33 billion.

In its restructuring plan, which was approved by the Commission on 18 November 2009, KBC proposed the divestment of 15 of its businesses and a financial restructuring which included the listing of 40% stakes in its Czech and Hungarian business, a buy-back of hybrid capital instruments, a sale and lease back of its headquarters and a sale of Treasury shares (KBC's holding of its own shares). The proceeds of the financial restructuring measures in the plan were intended to contribute to the repayment of the State. KBC furthermore also provided behavioural commitments, including a price leadership ban, an acquisition ban and a ban on the payment of coupons on and the calling of hybrid capital instruments.

In assessing the burden-sharing measures in the restructuring plan, the Commission took into account the fact that the aid granted to KBC was limited by the fact that KBC paid an adequate remuneration for the recapitalisations and a considerable fee for the impaired asset measure in excess of what the Commission would require. As own contribution of KBC, the Commission took into account the 40% listings of KBC's Czech and Hungarian business, KBC’s commitment to divest its private banking business KBL, the first loss KBC would take on the CDO portfolio and the coupon and call ban on hybrid capital instruments. On that basis, the Commission concluded that the burden-sharing measures provided by KBC were sufficient.

Although it makes economic sense to impose losses on hybrid capital holders, no bank was initially willing to do so fearing the stigma and signalling effect of such a unilateral initiative. The Commission has effectively resolved the coordination problem by consistently requiring that loss-making banks under a restructuring obligation forego dividend and coupon payment on capital instruments, to the extent legally possible, so as to ensure participation of hybrid capital holders and to foster a swift build up of capital buffers.

Measures to preserve adequate conditions for competition in the specific markets at hand

Finally, in all restructuring cases the Commission has sought competition measures in order to preserve adequate conditions for competition. Compared with the compensatory measures that undertakings have to take in the context of the generally applicable rules for rescuing and restructuring firms in difficulties, the "competition measures" in bank restructuring cases

\[155\] On 27 July 2011, the Commission approved several changes to the restructuring plan of KBC. The Commission approved that KBC replaces the listing of 40% stakes in its Czech and Hungarian business and the sale and lease back of its headquarters by the complete exit of KBC from its Polish banking and insurance business and the unwinding of certain CDO assets. These amendments were necessary due to changes in the regulatory, fiscal and accounting framework KBC is subject to that occurred after the 18 November 2009 decision and that limited the effectiveness of the financial restructuring measures – see case SA.29833 € - $ Monitoring of KBC (not yet published).
constitute a more systemic approach to competition remedies, less focused on competitors’ compensation and more on the general competitive conditions. That focus reflects the presence of important positive externalities of a bank rescue on competitors in the current regulatory and institutional setting in which it was not possible for a systemically important financial institution to be wound up in an orderly way.

The Commission required such competition measures to be effective and proportionate. Competition measures are a function of the aid received (in particular in terms of amount and pricing – additional competition measures being sought if the bank was unable to remunerate the State aid), the market characteristics and market positioning of the beneficiary bank (more competition measures are sought when the beneficiary bank is part of a concentrated and weakly contestable market with high barriers to entry or expansion), and the extent to which managers and bank investors contribute to the restructuring costs (additional competition measures are sought if the bank investors do not sufficiently share in the restructuring cost).

With reference to the typology of competition measure given in Chapter 4, in the Commission’s experience, structural measures are best suited to address competition concerns in given markets. Such structural measures usually took the form of divestments of stand-alone viable business or of carve-outs of business entities potentially capable of entering as a new market player. Some examples of structural measures that have been implemented with high interest from the market (i.e. from competitors) include the divestiture of Eurohypo by Commerzbank, the RBS carve out of a branch-based retail and SME business in England and Wales, and of the NatWest branches in Scotland, the divestment of Centea and Fidea by KBC, and Ethias’s divestiture of Nateus.

Divestments are not a practicable solution when the quality of the overall balance sheet of an aided bank makes it difficult to propose a divestment of a viable stand-alone entity. While some business operations are relatively easy to divest from the mother company, e.g. because they operate largely as a stand alone entity, it is not the case for all operations. In particular, divestitures within business units (“carve-outs”) are generally complex and may be difficult to realise. For instance they involve the separation of highly integrated IT systems, management reporting lines, back office operations, front office operations, etc. Therefore they may only be implemented at great cost, in addition to creating concerns of finding a viable package. Consequently, in some cases, there is a need for finding alternative measures to divestitures of stand alone business in order to address State aid concerns in a satisfactory way.

Targeted behavioural measures monitored by a trustee have proven to constitute an appropriate complement in certain cases. As has been explained, behavioural measures aim at disciplining the behaviour of the beneficiary bank, when it is assumed that the market is not functioning properly to ensure such disciplining (e.g. when aid is still within the bank, allowing the beneficiary to offer better terms than its non-aided competitors) or where structural or quasi-structural measures were not deemed sufficient. Alongside burden-sharing measures, behavioural commitments are particularly helpful to address the issue of moral hazard. They are particularly effective when linked to incentives to exit, such as in the cases of RBS and Lloyds where the expiry of the acquisition ban is linked to the divestment period.

In addition, measures have been implemented to open markets so that banks have specifically to facilitate the competition of new or smaller entities on the market, such as in
Ireland. Those measures have proved useful when no divestments could be made or when the market was dominated by a small number of major players.

**Box 12: Examples of competition measures implemented in the context of restructuring plans agreed with the Commission**

*Royal Bank of Scotland*

The restructuring plan of Royal Bank of Scotland (RBS) was approved by the Commission on 14 December 2009. By the end of 2010, RBS had received the largest amount of aid in the EU in the form of recapitalisations, guarantees and impaired asset measures. It was also the largest bank subject to restructuring.

The restructuring plan of RBS calls for significant divestments. Firstly, it requires the carve-out and sale of a business that accounts for around 5% of UK SME and mid-corporate banking. That business comprises the RBS branch-related Retail and SME business in England and Wales, the NatWest branch-related Retail and SME business in Scotland, the Direct SME business and the approximately 1150 mid-corporate customers. It includes 318 branches, 6000 staff, around 50 SME and mid-corporate banking centres and the Williams & Glyn brand. RBS will also carry out the sale of a global transaction (i.e. processing credit cards payments, internet) business called Global Merchant Services, the sale of a commodity (largely energy) trading business called Sempra and the sale of RBS insurance, which is the leading non life insurer on the UK market.

The aim of the carve-out of the SME and mid-corporate banking business in the UK is to create a new entity which could, on its own or combined with a smaller existing competitor, be a real challenger to the leading four banks (RBS, Lloyds Banking Group, HSBC and Barclays). The Commission decision indicates that the purchaser of those activities can not have a market share above 14% post acquisition in order to have the activities acquired by a small competitor or a new entrant and not by one of the existing leading banks in the market segment.

*Aegon*

Aegon is a Dutch company providing life insurance, asset management and retirement products. The Commission approved its restructuring plan on 17 August 2010 after it had temporarily approved a rescue measure by the Dutch State in November 2008, which consisted in making available €3 billion in new capital in the form of convertible core capital securities.

The coupon of those instruments was set to be the higher of either 8.5% or an increasing percentage of the dividend paid on ordinary shares. The repurchase price of the securities was fixed at 150% of the issue price. One-third of the securities could be repaid within 12 months at more favourable terms; alternatively the securities can be converted into ordinary shares after three years from issuance. In its restructuring plan, Aegon focused on repaying the aid early and paying a high remuneration, which is an important measure to limit distortions of competition. Aegon finished redeeming State capital in June 2011, financing the repayment of

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156 N422/2009 € - $ - RBS restructuring plan (OJ C 119, 7.5.2010, p. 1)
with the divestment of its life reinsurance activities and capital raised on the market, ensuring an internal rate of return for the Dutch State of more than 17%.

Aegon also presented a number of measures which further contributed to limit precisely identified distortions of competition. In the Netherlands for instance, the company had gained market share via a relatively aggressive pricing policy in some segments implemented after having received the aid, e.g. in the mortgage market. The Commission received an official complaint in that respect and Aegon committed not to be a price leader in a number of segments of the mortgage and savings market. That measure ended after the full repayment of the aid in June 2011.

Finally, State aid intervention enabled Aegon to keep a higher rating than in a no-aid context. In the insurance sector, a higher rating is an important commercial asset to win extra business. To soothe that particular concern, Aegon committed to reduce its importance in a number of niche activities in its group life business in the Netherlands and in the UK. The plan was complemented by a number of additional measures which guaranteed that Aegon did not make expansions it would not have pursued without the State capital injection, e.g. through balance sheet reduction in the US and the sale of its Dutch funeral insurance business.

Great caution should be applied when comparing the competition measures laid down in the different restructuring decisions. In any event, whether in the context of competition safeguards outside a restructuring plan or of competition measures within such a plan, the Commission was careful to ensure that they were effective and proportionate.

Importantly, where the underlying problems triggering the aid were related to generalised market failures, such as the gridlock in interbank markets following the Lehmann Brothers' bankruptcy, the Commission did not require a restructuring plan and hence it did not impose competition measures or burden-sharing. Shortly after Lehmann Brothers collapsed, it turned out to be impossible to issue any debt without government guarantees attached to it, even for perfectly prudent and sound banks. Hence, the Commission authorised debt guarantee aid without requiring burden-sharing or competition measures, since the aid was targeting a genuine market failure that was affecting the banking sector across the board. In contrast, asset support aid in the form of recapitalisation or impaired asset relief measures have been more targeted to specific banks in specific Member States\textsuperscript{157}, and hence cannot be justified by reference to a generalised market failure that hits at all banks, irrespective of their soundness and business model.

Where competition measures have been imposed, the Commission has been careful to ascertain that they did not compromise the prospects of the bank’s return to viability and preserved effective competition on the market. In highly concentrated markets, for instance, where a large proportion of the main players have benefited from State aid, it would be undesirable to impose limitations on price leadership on the aided players.

Generally speaking, conditions and methodological limitations have to be kept in mind when making comparisons across cases. In particular, the amount of aid, to which the scope\textsuperscript{157} Sometimes the banks in a specific Member State were more exposed to the shocks, sometimes the Member State specific regulation and supervision failed to a larger extent (looser regulation or supervision, asset price bubbles, etc.), sometimes the banks are systemically more important given the smaller size of the Member State in which it is headquartered, and sometimes the problems originate from outside the banking sector (Greece).
of measures to limit competition distortion is linked, represents only a proxy for the level of competition distortion. In addition to the amount of aid, it is also necessary in each case to take into account the conditions and circumstances under which the aid was granted. Similarly, when comparing the extent of measures to limit competition distortions, caution has to be applied when comparing the size of balance-sheet reductions across cases. The size of the reduction might not always reflect the quality of the structural measures undertaken. There is in particular a need to distinguish between run-offs of activities and divestitures of existing businesses, between measures undertaken in the interest of restoration of viability of the aided bank and those implemented to address a concrete competition concern and, finally, between structural measures put in place in core markets and in ancillary markets in which the aided bank is active.

Overall, structural divestment of stand-alone entities that allow for new entry of credible competitors in concentrated submarkets, whilst taking care that financial institutions would not unduly retrench from other EU markets, has been the Commission's favoured remedy to tackling distortions of competition.

5.3.3. Available indicators do not suggest that State aid to financial institutions granted during the crisis significantly altered the structure of the European banking sector

The structure of the banking sector is analysed by looking at its size, concentration, consolidation, inter-dependence and contestability at the top of the market\textsuperscript{158}. None of those indicators suggests that the State aid granted during the crisis significantly altered the structural trends that were observed in the banking sector prior to the crisis.

Size of the EU banking sector

The financial crisis stopped the rapid expansion of the financial sector's aggregate balance sheet, but did not lead to its marked decrease so far. The total assets of the EU banking sector ballooned in the period between 2001 and 2009, from roughly €25 trillion to €42 trillion, an increase of 6.9\% per year throughout the period. That growth was more than twice as high as GDP growth in the EU (2.8\% per year over the same period). The growth of the EU financial sector was in particular high in the years immediately preceding the crisis, between 2005 and 2007 – see Figure 5.7.

Banking sectors in all Member States but Germany and Luxemburg experienced a growth higher than the EU's average GDP growth. However, there have been significant differences across Member States. Banking sectors have in particular exploded in new Member States (with annual growth rates sometimes over 20\%, such as in Latvia, Estonia or Romania). The Irish banking sector experienced the highest growth in the Euro Area (15\% per year between 2001 and 2009), followed by Spain (+13.5\%).

That sharp historical increase in total assets first significantly slowed down to 3\% between 2007 and 2008 as the first consequences of the crisis began to be felt, in particular in the British market, and then came to a halt between 2008 and 2009 with a zero-growth.

\textsuperscript{158} All data in this section are from EU Banking Structures, September 2010, ECB, except from data on market capitalisations of Top 20 European banks which are from Bloomberg. Structural information on the EU banking sector is not available for 2010 since it is recorded with a one year delay.
The impact of the crisis on the size of the banking sector varied widely across Member States. **In a majority of Member States, the banking sector was still growing between 2008 and 2009**, either because the effects of the financial and economic crisis had not yet been fully felt (Greece, Portugal, Italy), or because the Member States were already recovering (United Kingdom, Denmark, Sweden), or because the financial crisis did not significantly impact the sector altogether (Poland, Bulgaria, Czech Republic). On the contrary, banking sectors in some Member States contracted markedly, such as in Germany (-6%), Belgium (-9%), Ireland (-6%) or Latvia (-7%).

**Figure 5.7:** Growth of the EU banking sector and of selected Member States' banking sectors, as measured in total assets

The financial and economic crisis thus led to a general slowing down of the previously rapid expansion of banking sectors in Europe, driven by private restructuring and generalised reduction in risk undertaken. While contributing to that trend, the impact of the restructuring plans imposed under State aid control have not yet materialised, not least due to the relatively long time-frame of restructuring plan.

**Concentration of the EU banking sector**

The concentration of the banking sector mildly increased between 2001 and 2005 and saw a stabilisation in the 3 years preceding the crisis (2005-2007). That trend had occurred both at the top of the market, as measured by the combined market share in terms of total...
assets of the 5 largest institutions\textsuperscript{159} (CR5), and across the market, as measured by the Herfindahl-Hirschman index\textsuperscript{160} (HHI) – see Figure 5.8.

The financial and economic crisis does not seem to have altered the concentration trend of the European banking sector. While both indicators suggest a break in concentration in 2008, with increase of 7\% (CR5) and 10\% (HHI), that break was not sustained in 2009 so that the overall evolution of concentration between 2007 and 2009 does not depart than that between 2001 and 2007 – the evolution of concentration had been similar in the Euro Area\textsuperscript{161}.

However, those modestly increasing concentration indices average different situations across Member States. A majority of Member States did not experience significant changes in concentration between 2007 and 2009, either measured by the CR5 ratio or the HHI. In contrast, the Irish market significantly concentrated during the same period (+13 percentage point in market share for the top 5 institutions, from 46\% to 59\% and an almost 50\% increase in the HHI). Spain, Germany, Finland or Slovakia also experienced accelerated concentration, though not to the same extent than Ireland. On the contrary, the banking sectors of Belgium, Austria, France and Poland experienced a de-concentration phase during the crisis. For instance, the HHI of the Belgian banking sector decreased by more than 20\% between 2007 and 2009 and its CR5 fell down 6 percentage points.

Figure 5.8: Evolution of structural concentration indicators of the EU banking sector

\textsuperscript{159} Structural measures by definition necessitate a delineation of the (relevant) geographic and product markets, which is not straightforward in banking. Estimated concentration ratios may differ significantly when the relevant market is for example deemed regional.

\textsuperscript{160} The sum of the squares of the market shares of each firm competing in a market; again, the market shares are in total assets.

\textsuperscript{161} Interestingly, a different trend can be observed outside of the EU in this respect. International Financial Services London (IFSL 2010), drawing on The Banker database, reports that the increase in worldwide concentration has been particularly pronounced during the crisis. They find that the share of the 10 largest global banks (in the assets of the largest 1 000 banks) has risen from 19\% in 2007 to 26\% in 2009. Banks ranked 11 to 20 saw their market share only increase marginally, whereas the group of banks ranked 21 to 50 saw their market share decrease in the period 2007-2009.
As can be inferred from the examples provided above, **there does not seem to be any relation between State aid to the financial sector and the evolution of the concentration of the market**, since significant State support either led to concentration of the market (Ireland, Spain, Germany) or to de-concentration (Belgium, Austria, Netherlands).

**Consolidation of the EU banking sector**

The number of credit institutions had been declining in a large majority of Member States before the crisis. In the whole EU, it declined by 2.5% per year on average in the period 2001-2007. **The crisis did not lead to a change in that trend since the number of credit institutions in the EU also declined by 2.5% per year between 2007 and 2009.** In the Euro Area, the decline in the number of credit institutions has accelerated in the course of the crisis.

Indeed, in some Euro Area Member States, the decrease in the number of credit institutions became sharper from 2007 on. In France for instance, the decrease between 2007 and 2009 was of 6% per year when it was of 4% before 2007. The trend before 2007 kept on after the crisis at the same pace in other Member States (Spain, Netherlands). **In some rare cases, the crisis led to a deceleration of the consolidation.** In Germany for instance, the decrease in the number of credit institutions slowed down from 4% before 2007 to only 2% after 2007. In the case of the United Kingdom, the number of financial institutions even stabilised after 2007.

The lack of a clear structural break in the consolidation trend most probably reflects the fact that banks have been deemed too systemic to fail and that few Member State had an appropriate bank-resolution regime in place when the crisis struck. Whereas the US banking sector has witnessed hundreds of small- and medium-sized orderly bank failures (Washington

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162 Excepted some new Member States (Estonia, Lithuania, Romania, Slovakia) and Greece.
Mutual being one of the biggest), the EU only dealt with a handful of liquidation cases of small banks (Fonia, Bradford & Bingley, Dunfermline, Kaupthing\textsuperscript{163}).

In terms of mergers and acquisitions, a steady decline in the number of deals and in the total value of deals has taken place since the beginning of the crisis in 2007\textsuperscript{164}. Moreover, public-sector driven deals sustained the merger and acquisition activity in 2008 and 2009. Restructuring obligations linked to State aid control do not seem to be the dominant cause of divestment within the Euro Area, as the top sellers were mainly banks free of any restructuring requirements\textsuperscript{165}. Divestments for competition reasons in the context of restructuring requirements amount to a small percentage of total outstanding assets (roughly 2.5\%) of the sector and banks are allowed to spread the divestment over a relatively long five-year horizon. Thus the continuing consolidation trend was also driven by banks' restructuring on their own initiative, which was also a means to avoid government support. The majority of the EU top acquirers during the crisis were either banks which did not receive State support\textsuperscript{166} or were considered sound by the Commission.

\textit{Inter-dependence of the EU banking sector}

The impact of the crisis on the internal market has been limited to the extent that banks do not seem to have retracted behind national borders. The domestic-orientation of the EU banking sector, as measured by the size of assets of a market owned by domestic credit institutions, had been slowly declining before the crisis from 77\% (86\% in the Euro Area) in 2001 to 74\% in 2008 (81\% in the Euro Area). The financial and economic crisis led to a temporary halting of that trend since in 2008, domestic institutions increased their share of total assets. However, that increase was already cancelled out by 2009 – see Figure 5.9.

\textbf{Figure 5.9: Market share in assets of foreign banks branches and subsidiaries}


\textsuperscript{165} Top European sellers include: Intesa Sanpaolo, Commerzbank (restructured), UniCredit, RBS Holding NV, Banco Popolare (aided), HSBC, Deutsche Bank, and BNP Paribas (aided)

\textsuperscript{166} Top European acquirers include: BNP Paribas (aided), Crédit Agricole (aided), Deutsche Bank, Société Générale (aided), Intesa Sanpaolo, Deutsche Postbank, Natixis, and Banco Santander.
Merger and acquisition activity also highlights that no systematic retrenchment on own markets occurred in the years 2008 and 2009. The most active acquiring banks have expanded throughout the Euro Area. The large presence of French banks in terms of the number of transactions is notable. Other active acquirers, mainly from Spain, Italy and Germany, did not receive support at any point during the crisis.

**Contestability of the EU banking sector**

Contestability of the EU banking sector is only considered here at the top of the market, *i.e.* for market leaders. While there has been a big shake-up of the positions of the leading financial institutions at the global level, the EU banking sector has not experienced a strong variability of market leaders before and after the crisis.

The analysis of the evolution of the ranking of the top 30 banks according to market capitalisation throughout the crisis highlights the clear decline of US banks. Their number in the world top 30 has been halved from ten to five, with Chinese and Australian banks filling the gap. The impact of the crisis is also illustrated by the fact that twelve of the banks that were in the top 30 in 2006 (around 40%) were no longer in the same situation in 2009. Large European banks did not lose their market position to such an extent – 14 of the top 30 banks came from the EU in 2006 and compared with twelve in 2009. In that interval, three banks from Belgium and the Netherlands exiting the top 30 while a Swedish bank joined it.

Looking at the European banking market only, the ranking of the top 20 financial institutions further confirm that relative stability of the banking sector despite the financial and economic crisis. Only 20% of the institutions (four) exited that top 20 while the division by nationality also remained fairly stable – see Figure 5.10. The three Belgium banks and the Greek bank that were in the top 20 in the beginning of 2008 were replace by a Polish, an Austrian and two Swedish banks in the end of 2010. Out of the 20 top European banks, seven were restructured or are in the process of being restructured (ING, RBS, Fortis/Ageas, Lloyds, KBC, Dexia and the National Bank of Greece), four exited the top 20 ranking (Fortis, KBC,
Dexia and the National Bank of Greece) while ING lost 7 ranks. On the contrary, RBS and Lloyds have gained positions on the ladder, despite requiring aid and being under formal restructuring obligations.

Figure 5.10: Market capitalisation of top European banks

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<th>Market capitalisation € billion; 2008 Q1</th>
<th>Institutions</th>
<th>Market capitalisation € billion; 2010 Q4</th>
<th>Ranking evolution</th>
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<td>HSBC Holdings PLC</td>
<td>124</td>
<td>HSBC Holdings PLC</td>
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<td>▲</td>
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<td>Erste Group Bank AG</td>
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</table>

Restructured institutions out of the Top 20 in 2010 Q4

Restructured institutions still in the Top 20 in 2010 Q4

5.3.4. Banks under restructuring obligations have recovered more slowly

The stability of the structure of the European banking market and of the key trends affecting the sector is only an indication that State aid did not provide an unduly advantage to aided banks that would have structurally altered competition on the market. Another perspective towards assessing whether State aid significantly distorted competition in the European banking sector is to compare the relative performance of European banks throughout the crisis.

Figure 5.11 compares the evolution of profitability, as measured by the return on equity167, of aided and non-aided banks throughout the crisis. It appears that aided and non-aided banks had similar return on equity levels before the crisis (early 2008) at above 15 %. Return on equity of both aided and non-aided banks plummeted in 2008 as the crisis unveiled its full scale. However, aided banks have experienced a much sharper decrease in profitability than non-aided banks: aided banks have under-performed non-aided banks throughout 2009, remaining unprofitable during the full year 2009 and returning to profitability in the first quarter of 2010. At the end of 2010, aided banks had reached return on equity levels similar to those of non-aided banks, at around 7%, half the level of the beginning of 2008.

Figure 5.11: Evolution of profitability of European banks (return on equity)

\[\text{Return on equity} = \frac{\text{Net income}}{\text{Total equity}}\]

167 The return on equity is the net income over the total equity of the bank. It is one indicator of the profitability of a firm or a sector. It should be noted that return on equity is a performance metric that is not correcting for risk, and that a higher return on equity could be explained by a higher risk exposition.
While the overall evolution of profitability suggests that non-aided banks were able to maintain better performance than aided competitors, and thus to potentially improve their position on the market, the speed with which aided banks caught up their profitability deficit compared to non-aided banks is noticeable. **It took on average five quarters for aided banks to return to profitability and then less than three quarters for them to reach equivalent level of profitability than non-aided competitors.**

That respective evolution of the profitability of aided and non-aided banks is confirmed by the analysis of their relative performances in terms of market capitalisation of the top 20 European banks – see Figure 5.10. The market capitalisation of both restructured and non-restructured banks dropped significantly at the end of 2008, but institutions without restructuring obligations had already recovered by the end of 2010 with a capitalisation of 90% of their value at the beginning of 2008. **The recovery has been less pronounced for banks under restructuring, whose market capitalisations were worth by the end of 2010 only two-thirds of their value at the beginning of 2008.**

5.3.5.  *The consistent application of the principles set out in the Temporary Framework and its focus on SMEs contributed to mitigating distortions of competition*

The aid measures authorised under the Temporary Framework have been tailored to address the specific difficulties and market failures stemming from financial turmoil. It was introduced when it became increasingly evident that the financial crisis was affecting not only structurally weak companies but also healthy companies which were facing a sudden shortage or even unavailability of credit. The Temporary Framework (TF) was intended to guarantee **continuity in companies' access to finance** and to encourage them to **continue to invest in the future**, in particular towards sustainable growth through investments in green products for early adaptation to future environmental standards.

In addition, **companies' access to capital was limited** as the crisis hit the real economy and led to a drop in demand and supply, affecting SMEs generally and risk capital markets in
particular. Due to the increased risk perception associated with the uncertainties resulting from possibly lower yield of risk capital, investors tended to invest in safer assets than risk capital investments. Furthermore the illiquid nature of risk capital investments was a further disincentive for investors. The resulting restricted liquidity widened the equity gap for SMEs.

**Investment in green products is also an area that was put at risk during the crisis.** In particular, aid in the form of guarantees may not be sufficient to finance costly projects aiming at increasing environmental protection by adapting earlier to future standards not yet in force or by going beyond such standards.

Also, in adopting the TF, the Commission indicated that it considers that, as a consequence of the financial crisis, a lack of insurance or reinsurance capacity does not exist in every Member State, but it cannot be excluded that, in certain countries cover for marketable risks (for which State aid is in principle prohibited) could be temporarily unavailable.

In order to limit any distortions of competition potentially arising from aid granted under the TF, the Commission has ensured that the allowed aid measures are proportionate to the objectives pursued, and that they complied with the general and instrument specific conditions within the TF. Important conditions that mitigate potential distortions of competition stem from the **temporary nature of the Framework** as aid could only be granted during its duration (originally applicable only until the end of 2010), and from the fact that aid under TF has mainly been granted through schemes.

Furthermore, the Temporary Framework is of **cross-sectoral application.** That horizontal approach is justified by the need to support the economy as a whole. The Commission did not allow the adoption of schemes that were not formally open to all sectors since such schemes can be expected to have distortive effects in terms of companies' decisions as to location and investments. Some Member States chose, in practice, to mainly apply the TF to one or several particular economic activities. For example, notified aid for green products has mainly been targeted at the production of green cars, and Sweden basically only made use of the TF in the form of **ad hoc** guarantees for the two main national car manufacturers (SAAB and Volvo).

A particularly important safeguard has also been provided by the fact that the **Temporary Framework is not applicable to companies that were in difficulties before 1 July 2008.** Indeed, companies whose difficulties date from before the financial crisis must address their structural problems exclusively on the basis of the general rules regarding rescue and restructuring aid to make sure that Member States do not revitalise structurally failing firms to the detriment of healthier firms.

**The Temporary Framework has been targeted mostly on SMEs.** Aid to SMEs is generally considered to be less distortive of competition at EU level than aid to large companies since SMEs are less likely than large firms to have market power that can be used to implement exclusionary practices. At the level of the rules, in compliance with the generally applicable Risk Capital Guidelines, SMEs are the only beneficiaries of the provisions of the TF concerning risk capital injections. With regard to investment aid and subsidised guarantees, they benefit from higher aid intensities. As to the 500k measure, it is clearly of more importance to relatively small firms than to large ones.
At regards the actual use of the TF, the Commission sent in 2010 a questionnaire on its application in which Member States were asked to give an approximation on the share of aid for small- and medium-size enterprises (SME) and for large enterprises. The replies of the Member States show that overall, most aid measures authorised under the Temporary Framework benefit SME over large enterprises. For instance, Belgium, Germany, Spain, Estonia, Hungary and Ireland indicated that they devote more than 90% of their aid measures authorised under the TF to SMEs. The Czech Republic, France, and Poland, devote more than 75% and the Netherlands and Austria more than 60%. Furthermore, the UK indicated that it devoted to SME more than 90% with respect to the 500k measure and 100% of guarantee measures whereas the scheme offering reduced interest rate loans solely benefit large enterprises. In Latvia, too, 67% of the aid granted under the 500k measure should benefit SMEs, whereas a second guarantee scheme is targeted at large companies only. That focus on SMEs was again confirmed when the Commission consulted the Member States in preparing this Paper.

**Competition distortions have also been limited due to the intrinsic features and characteristics of the various Temporary Framework measures.** For example, as regards subsidised loans, the difference between the base rate set in the TF and the base rate in the Commission's Reference Rate Communication had narrowed considerably, namely from 80 basis points in August 2009 to 20 basis points in August 2010. Also, the short-term export credit insurance schemes approved by the Commission have been carefully framed in terms of remuneration, risk assessment and fees, so as to prevent a crowding-out of the private market.

**It is not possible to make an exact assessment of the 500k measure.** On the one hand, Member States have stressed its role in supporting creditworthy SMEs temporarily hit by liquidity problems during the crisis. Some of them have stressed that in most instances the ceiling of €500,000 was not reached. On the other hand, the fact that the 500k measure was not linked to any particular objective or eligible costs but was rather designed as an emergency measure to address a worsening credit situation and that the aid – like all aid under the TF – was granted through schemes made it very difficult to assess the impact of this measure, including on competition. For that reason, among others, the possibility to grant that kind of aid was removed from the TF when the latter was extended until the end of 2011.

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6. CONCLUSION

6.1. The extraordinary State aid framework has achieved its objectives, but still had to be maintained in 2011 due to market conditions

The State aid granted to restore financial stability and a normal functioning of financial markets has achieved its objectives during the reporting period (mid-2008 – end 2010) and the EU's coordinated policy response, including State aid control by the Commission, has contributed to preserving the Single Market throughout the crisis.

Since the beginning of the crisis, many banks, both aided and non-aided, have embarked on far-reaching restructuring. At the same time, as mentioned in Section 5.2.3, an increasing number of banks are redeeming the support from which they benefited. Whilst guarantee schemes were still prolonged in 14 Member States before the end of 2010 as a "protection measure", recapitalisation schemes were hardly used in 2010. Compared with the peak of the crisis, there has also been a marked decrease in ad hoc capital injections throughout 2010, which suggests that most banks either no longer need additional capital or can raise it in the market. These developments show that the market has initiated an exit from State support.

However, there is no place for complacency. Whilst this Paper shows that the unprecedented levels of State aid and its concentration on a limited number of beneficiaries do not appear to have affected the competitive structure of the European financial markets, at least in the reporting period, governments' bail-out of financial institutions has raised serious concerns about moral hazard. Also, the sovereign debt crises which struck Greece and Ireland in 2010 and Portugal in the spring of 2011 illustrate that the improvements in financial stability and the functioning of financial markets, in particular relative to the situation at the peak of the crisis, are not necessarily sustainable.

It is in that situation of growing uncertainties, with quite some differences in the economic outlook of the Member States, that towards the end of 2010, the Commission had to decide whether the markets were ready for a phase-out of the crisis State aid framework, which was always meant to be an emergency response to the unprecedented stress in financial markets that would be in place only as long as those exceptional circumstances prevailed. The question arose not only from market developments, but also for procedural reasons: the Restructuring Communication for the financial sector and the Temporary Framework for the real economy were due to expire on 31 December 2010. Growing uncertainties made it risky to discontinue the temporary aid framework altogether. The Commission thus decided at the end of 2010 to continue to assess State aid notified under Article 107(3)(b) of the Treaty for another year, i.e. thereby acknowledging that there remains a serious disturbance in the economy of Member States given the persistently precarious situation in financial markets and the above-mentioned risk of wider negative spill-over effects.

However, the Commission considered that a gradual exit path could be initiated, starting with the tightening of conditions for government guarantees for bank liabilities in April 2010, and regarding the temporary rules in general in December 2010. Many markets had initiated a redemption of aid and the Commission was keen to promote a normal market functioning and deter banks' reliance on State aid, notably for reasons of public finance sustainability.
6.2. A gradual exit from State aid has been initiated by tightening the scope of permissible aid and the conditions under which aid can be granted

In April 2010 the Commission published a Staff Working Paper setting out the principles governing State guarantees for bank liabilities, applicable from 1 July 2010\textsuperscript{170}. The ECOFIN Council endorsed those principles in May 2010. In a nutshell they consisted in making the conditions of access to such guarantees more stringent. The implementation of those conditions was conducted through the prolongations of guarantees schemes until 30 June 2011 for all Member States that notified such an extension.

Firstly, the guarantee fee was increased by 20/30/40 basis points, depending on the beneficiary's rating, as compared with the pricing recommendations of the ECB of October 2008. The strengthened focus on the beneficiary's rating is an important development in terms of burden-sharing and mitigating distortions of competition as it aligns better the price of guarantees with the risk profile of the beneficiary institution. Indeed, the credit risk element taken into account until 1 July 2010 was based upon data that predated the most acute phase of the crisis which followed the bankruptcy of Lehman Brothers in September 2008 and banks that had been downgraded since then were still benefiting from their pre-Lehman credit rating and perceived credit worthiness. They thus benefited disproportionately more from the State guarantees than banks with a higher rating because normally they would have had to pay a higher fee.

Secondly, to curb or at least discourage continued reliance on State guarantees, banks issuing new or renewed guaranteed debt in the second half of 2010 which takes or maintains their overall reliance on government guarantees beyond 5% of their total outstanding liabilities and the total amount of €500 million have to undergo a viability review by the Commission. Prior to 1 July 2010 no such conditions or thresholds were specified that would necessitate a viability review in the case of the use of guarantees only. Those thresholds triggering the requirement of a viability review provide an incentive for individual institutions to scale down or discontinue the reliance on government guarantees.

In December 2010, the crisis regime for financial institutions was also extended when it comes to recapitalisations and impaired asset relief\textsuperscript{171}, but the Commission made clear that as from January 2011, every beneficiary of a recapitalisation or impaired asset measure would be obliged to submit a restructuring plan for the Commission's approval.

By so doing, the Commission effectively did away with the different treatment of unsound/distressed financial institutions and fundamentally sound financial institutions that it had established in the beginning of the crisis. The original rationale for establishing that distinction and for setting a range of indicators, including a threshold of 2% of the bank's risk weighted assets, was the fear that capital needs resulting from impairments, higher expectations of the markets as to the capital levels of banks and temporary difficulties in raising capital on markets would otherwise lead to sound banks diminishing their lending to the real economy in order to avoid having to submit a restructuring plan when having recourse to State resources.

\textsuperscript{170} DG Competition Staff Working Document on the application of State aid rules to government guarantee schemes covering bank debt to be issued after 30 June 2010, 30 April 2010.

\textsuperscript{171} Communication from the Commission on the application, from 1 January 2011, of State aid rules to support measures in favour of banks in the context of the financial crisis (OJ C 329, 7.12.2010, p. 7-10).
As shown in Chapter 5, compared with the most acute stage of the crisis, the banking sector overall faced fewer difficulties in 2010 in raising capital on the markets or through retained earnings. Most banks could therefore meet their capital needs without recourse to State aid. Therefore, it was considered appropriate that banks have recourse to the State in 2011 for raising capital or for impaired assets measures should undertake the necessary restructuring efforts and return to viability without undue delay, in accordance with a restructuring plan duly approved by the Commission.

Those tightened conditions signal that banks have to prepare for a return to normal market mechanisms without State support when market conditions permit and the financial sector gradually emerges from crisis conditions. In particular, they should accelerate any still necessary restructuring. At the same time, the applicable rules afford sufficient flexibility to duly take account of potentially diverse circumstances affecting the situation of different banks or national financial markets, and also cater for the possibility of an overall or country-specific deterioration in relation to financial stability.

As was done for the temporary State aid rules for the financial sector, the Commission also prolonged until 31 December 2011 some of the measures of the Temporary Framework for the real economy, but again subjected that prolongation to stricter conditions. In particular, from 1 January 2011, firms in economic difficulty should no longer benefit from subsidised guarantees on bank loans and subsidised bank loans. That alteration should ensure that aid measures are targeted to investments which contribute to a long-term sustainable economy by providing support to viable firms. Indeed, even in crisis periods necessary restructuring of ailing firms should take place in order to put them on a sound footing in the long-term. That limitation is essential in order not to avoid delaying the necessary restructuring of the economy, which could deepen the recession.

The Temporary Framework was also increasingly centred on SMEs, which have been most hit by the credit squeeze and difficulties in financing themselves through capital markets at large. The possibility for large firms to benefit from reductions from the margin grid (i.e. the estimated market rate) for subsidised State guarantees was removed and they can no longer benefit from support for working capital loans as concerns both guarantees and subsidised interest rates for bank loans. The possibility to grant a compatible limited amount of aid of up to €500,000 per undertaking was scrapped altogether given the difficulties in singling out or confirming that it encouraged long-term recovery since the aid was not linked to any particular objective or any particular eligible costs.

With the exception of the rules applicable to short-term export credit insurance, which were prolonged without any change (i.e. with the flexibility introduced by the Temporary Framework prolonged for another two years), all of the measures under the Temporary Framework were also subjected to stricter conditions, such as reductions in the rates or coverage of support (subsidised guarantees and investment loans for green products) and in particular the exclusion of firms in difficulty from the scope of application. By contrast, in the light of the impact that the financial crisis has left on venture capital markets and the increase in the upper boundary of the SME equity cap, the possibility for increased maximum

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172 Communication from the Commission on Temporary Union framework for State aid measures to support access to finance in the current financial and economic crisis (OJ C 6, 11.1.2011, p. 5).
permitted tranches of finance per SME over a period of twelve months was carried over (and thus ceased to be temporary) into the Guidelines on aid to risk capital\textsuperscript{173}.

6.3. State aid control has proved to be a flexible and efficient tool, but preventing the reoccurrence of the crisis requires effective financial sector regulation

Based on the experience from the temporary State aid framework, the Commission is preparing new guidelines for the rescue and restructuring of financial institutions. They will take into account the developments in the financial markets and the "real economy" at Member State and internal market levels, and will build on the tightened rules aimed at facilitating the process of disengagement of extraordinary support measures. It has also started to prepare new rescue and restructuring rules for firms in difficulty, in view of the expiry of the current rules in October 2012\textsuperscript{174}.

However, as this Paper is being published, there is still considerable uncertainty in the financial markets. There is persistent and even growing volatility due to the direct impact of a deterioration of the creditworthiness of some Member States on their banking sector and of individual banks in other Member States heavily exposed to such risks. Those banks face increased risks and may even have to reckon with the risk of future write-downs on government bonds and with the risk of further losses as a result of the effect of severe austerity programmes on macro-economic conditions.

This Paper is intended to contribute to the policy debate sparked by the crisis, notably regarding the gradual exit process from temporary State aid rules and the development of the new State aid rules as regards rescue and restructuring aid (for both financial and non-financial firms) and the financial markets in general.

The insights and experience that the Commission has gained through its control of the State aid granted to the financial institutions, as outlined in this Paper, also contribute to the ongoing development of financial sector regulation.

Indeed, the bank regulatory framework and State aid control are tightly inter-twined since an enhanced supervision framework would contribute to minimise the likelihood of a crisis in the future while the new bank regulation and resolution regimes would minimise the cost of such a crisis by more appropriately sharing its cost between the public and private sectors, thereby also addressing moral hazard issues. In this regard, the 2011 exercise of stress-testing the European banking sector conducted by the European Banking Authority in July 2011 is a good example of the close links between the regulatory framework and State aid control.

Whereas State aid control can allow an effective short term response, the adoption by the Commission and thorough implementation of new and improved rules for bank regulation, supervision and resolution are essential for preventing the reoccurrence of a crisis and for dealing with the many challenges unveiled by the latter in the longer perspective.

\textsuperscript{174} Commission Communication concerning the prolongation of the Community guidelines on State aid for Rescuing and Restructuring firms in difficulty (OJ C 156, 9.7.2009, p. 3-3).
ANNEX 1: METHODOLOGICAL NOTE

This Paper draws from a detailed analysis of the Commission's official public documents published throughout the crisis, in particular the successive Communications on aid to the financial sector and to the real economy that outline the Commission's approach to the application of Article 107(3)(b) of the Treaty in the context of the financial and economic crisis.

The section on how the rules set out in those Communications were enforced in practice during the period 2008-2010 is based on a detailed analysis of the public version of the decisions taken by the Commission under Article 107(3)(b), in particular decisions regarding banking sector support schemes (either through guarantees, recapitalisation or impaired asset relief or through multiple instruments) and schemes under the Temporary Framework as well as decisions regarding the implementation of restructuring plans by the beneficiaries of aid.

As regards quantitative information, the analysis on the use of State aid by instrument across Member States draws from the information contained in the Commission's yearly Autumn State Aid Scoreboard, which includes the amounts of State aid approved and used by Member States in the context of the financial and economic crisis, based on information provided by the Member States.

Regarding aid to the financial sector, due to the period covered by this Paper, DG Competition has had to anticipate to quite some extent the data that will be presented in the forthcoming Autumn 2011 State Aid Scoreboard for recapitalisation and impaired asset measures. Thus, the data presented in this Paper depart from the 2010 State Aid Scoreboard by adding information available as of the end 2010, but do not prejudge the final amounts to be reported by the Member States. The Autumn 2011 State Aid Scoreboard, which will be published before the end of 2011, will be the authoritative source on the levels of aid to financial institutions for the period 2008-2010.

In order to ensure maximum transparency, a description of the key differences in data between this Paper, the Autumn 2010 State Aid Scoreboard and the upcoming Scoreboard is provided below by instrument. For all instruments apart liquidity support, data in this Paper differs from the Autumn 2010 Scoreboard due to difference in the periods covered: cases before October 2008 are not included (Sachsen LB, first Northern Rock) while data for the year 2010 are added.

– Recapitalisation aid: Pending any change in Member States assessment, there should be no significant differences in comparison with the upcoming Scoreboard.

– Impaired asset relief aid: data in this Paper differs from the Autumn 2010 Scoreboard due to a change in the methodology to record the used amount. The Autumn State Aid Scoreboard recorded the total nominal value of impaired assets covered by the aid. The methodology in this Paper values the measure at the transfer price of the assets minus the market price of the assets and thus provides a lower amount. Pending any change in Member States assessment, there should be no significant differences in comparison with the upcoming Scoreboard.

– Guarantee aid: data in this Paper differs from the Autumn 2010 Scoreboard due to a change in the methodology to record the used amount and a change in the scope of
the guarantee covered. The scope of the guarantee covered: in this Paper, the 
guarantees included only relate to the emissions of senior debt bonds by the 
beneficiary. Guarantees on other liabilities, such as short-term debt, wholesale and 
retail deposits, or interbank liabilities, are not included. In the State Aid Scoreboard, 
all guarantees are included. The methodology to value guarantee: in this Paper, the 
amounts for used guarantees is the value of the senior debt bonds issued under those 
guarantees, and attributed (once) to the date on which the bonds were issued. The 
Autumn 2010 State Aid Scoreboard recorded the maximum outstanding amounts of 
liability covered at the end of each year (2008 and 2009). Those differences explain 
the sometimes important difference existing for guarantees. Moreover, the 
methodology in the upcoming Scoreboard of Autumn 2011 will be modified to 
record the average outstanding amounts of liability covered over a given year.

– Liquidity aid: there is no difference between the Autumn 2010 State Aid Scoreboard 
and this Paper.

Changes in methodology to value aid adopted in this Paper were justified by the objective of 
analysing the effects of aid not only at the Member State level, but also at the level of the 
individual bank aided. Thus, it is essential for the consistency of this Paper that it relies on 
data on guarantees that are detailed by individual beneficiary. Only newly emitted debt 
guarantees provide such a comparable instrument across aided banks.

Finally, the analyses in this Paper of a set of key performance indicators of European banks 
are based on a sample of European banks compiled by the Commission Services based on the 
Bloomberg database, sometimes complemented by data from ORBIS. The exact definition of 
the sample varies depending on the indicator analysed, but on average the sample includes 
over 60 European banks, both aided and non-aided, from all the Member States that provided 
aid to their financial sector during the reporting period. The characteristics of the sample for 
each indicator are provided below.

– CDS sample: a sample of 63 banks from 13 Member States, 40 of them aided during 
the crisis. The 15 top banks in Europe are included. The sample represents in assets 
more than the 75% of the credit institutions' assets of the Member States included.

– Tier 1 capital ratio sample: a sample of 35 banks from 9 Member States, 17 of 
them aided during the crisis. 9 out of 15 of the top banks are included. The sample 
represents in assets more than the 55% of the credit institutions' assets of the 
Member States included.

– Return on Equity sample: a sample of 45 banks from 10 Member States, 19 of 
them aided. 9 out of 15 of the top banks are included. The sample represents in assets 
more than the 50% of the credit institutions' assets of the Member States included.
# ANNEX 2: CHRONOLOGY OF CRISIS-RELATED SCHEMES

## Guarantee and liquidity schemes

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* Mixed scheme (guarantees as part of banking support) ** Liquidity scheme only

Dates of modifications of schemes are in plain; dates of prolongation or extension of schemes are in italics.

## Asset support schemes

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* Mixed scheme (impaired asset relief and recapitalisation) ** Impaired asset relief scheme

Dates of modifications of schemes are in plain; dates of prolongation or extension of schemes are in italics.
## Temporary Framework schemes

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