



EBA RECOVERY PLANNING

COMPARATIVE REPORT ON RECOVERY OPTIONS

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Executive summary

With the implementation of the Bank Recovery and Resolution Directive (BRRD) in January 2015, recovery planning has become a key aspect of European banking groups' planning and risk management and is now embedded in the standard cycle of supervisory activities. As part of its ongoing efforts to provide supervisors and banks with valuable support in effectively taking forward recovery planning activities, the EBA has conducted a fourth thematic comparative analysis. This follows the peer-group exercise on core business lines and critical functions (published in March 2015), the comparative report on the approach taken for scenario testing in recovery plans (published in December 2015) and the comparative report on governance arrangements and indicators (published in July 2016). This time, the focus of the comparative analysis is recovery options, which are crucial for assessing the actual capacity of institutions to regain viability following a period of severe financial distress.

In line with Article 18(1)(b) of Commission Delegated Regulation (EU) 1075/2016, a recovery plan is complete if it contains a sufficient number of plausible and viable recovery options which make it reasonably likely that the institution or group would be able to counter different scenarios of financial distress quickly and effectively. Therefore, the institution should provide a thorough assessment of the potential success of the implementation of a given option, as well as quantitative and qualitative estimates of its impact. This should help in reaching a comprehensive assessment of the plausibility of the option, that is, it should help in understanding whether such a measure would actually be available in times of severe financial distress and if it is reasonably likely that it could be implemented to an extent that sufficiently achieved its objectives without any significant adverse effect on the financial system.

In general, all the recovery plans in the sample provided a good overview of recovery options and – with respect to plans that had been submitted in the past, prior to the entry into force of the BRRD – clear improvements could be seen across the board with regard to analysis of financial impact, possible interaction with the scenarios and assessment of credibility. Nevertheless, several areas where some challenges remain were identified.

The linking of recovery options to governance and scenarios is particularly important. The former helps in understanding whether an option is feasible in terms of actual implementation and possible obstacles, while the latter relates to the need to test the actual effectiveness of the selected measures against situations of severe financial distress. In this regard, the analysis revealed that roughly half of the recovery plans provided details on governance, decision making and implementation for each specific option. However, there were a number of plans where these features were not specified and recovery options relied on only general governance procedures, so that the actual feasibility of each option was not clear. Similarly, while the majority of recovery plans specified the suitability of different recovery options under the stress scenarios

(mostly in qualitative terms), many plans were lacking a detailed assessment that would enable an analysis of the feasibility of the options under each scenario.

Coverage and integration of material legal entities seems to be a challenging task across the majority of recovery plans. Around half of the recovery plans identified recovery options available at subsidiary level. However, these actions almost always consisted in support (capital/liquidity) from the parent, although this was never specified in terms of intra-group support agreements designed in line with Article 19 of the BRRD. This clearly weakened the case that the recovery plans in question would be able to restore the group and the subsidiaries to viability.

Regarding impact assessment, almost all the plans provided figures on the financial impact on key capital and liquidity metrics. However, in almost half of the plans, the level of detail on which the calculations were based was extremely limited (i.e. no background information or reasoning behind assumptions), while in a number of plans the impact of options was often calculated on the basis of the same assumptions, regardless of the scenario, thus reducing their credibility.

In terms of operational impact, the vast majority of plans included some consideration of the impact of options on critical functions and core business lines (in some cases also with mapping to relevant legal entities), and roughly one third of the recovery plans included detailed information on operational impact and continuity in the individual analysis of the options, including on access to financial market infrastructures (FMI), management information systems (MIS), infrastructure and IT services, and risk management. However, the explanation of operational continuity was often part of the general description of operational systems, and it was not specified if operational continuity was warranted when implementing a particular option, since only general statements were provided as assurance that continuity of operations was always guaranteed.

Finally, all the recovery plans included an analysis of the credibility and feasibility of recovery options. However, divergent practices were applied by banks in describing key factors (e.g. past experiences, estimated execution timelines for recovery options and potential impediments to their implementation) that may influence the extent to which recovery measures are reasonably likely to be implemented quickly and effectively in situations of financial stress. In particular, many institutions made explicit references to past experiences of executing similar measures. However, such references could have been more useful if additional details had been provided on how banks leveraged on these experiences in drafting recovery plans (e.g. for estimating execution timelines and valuation assumptions).

In addition, it should be noted that all banks also estimated timeframes for executing recovery options, but many of them did not provide sufficient explanation to enable an assessment of whether such timelines were realistic and conservative. Furthermore, the majority of banks were able to identify potential risks and impediments to the execution of options and, to a lesser extent, also to outline potential mitigating actions to remedy them. However, many plans contained only a limited suite of preparatory measures to facilitate the implementation of options. In addition, mitigating actions and preparatory measures were often generic, thus resulting in limited evidence for their effectiveness.

Introduction

Following the entry into force of Directive 2014/59/EU (Bank Recovery and Resolution Directive – BRRD)¹ in January 2015, and in accordance with the EBA's role in contributing to effective recovery and resolution planning (Article 25 of Regulation (EU) No 1093/2010), the EBA aims to provide insights into the development of recovery planning in the European banking sector through, inter alia, peer-group analysis, thereby promoting better and more consistent practices.

In line with this mandate, the EBA compared the recovery plans of 23 European cross-border banking groups with parent institutions located across 12 different EU countries, focusing on how institutions have approached and developed their recovery plan options. These plans were submitted to competent authorities in the second half of 2016.

Pursuant to Article 5(1) of the BRRD, a recovery plan must provide for 'measures to be taken by the institution to restore its financial position following a significant deterioration of its financial situation'. Article 5(6) of the BRRD states that recovery plans should include appropriate conditions and procedures to ensure the timely implementation of recovery actions as well as a wide range of recovery options. Article 6(2)(b) of the BRRD specifies further that during the assessment of recovery plans it should be checked whether recovery options within the recovery plan are reasonably likely to be implemented quickly and effectively in situations of financial stress. Furthermore, Articles 8-12 of Commission Delegated Regulation (EU) 2016/1075² (hereafter referred to as 'the Delegated Regulation'), adopted on the basis of EBA technical standards, contains specific provisions on the extent of the information that institutions should include in their recovery plans for recovery options to be considered credible and feasible.

This report is the fourth thematic analysis performed by the EBA on recovery planning. It follows the peer-group study on core business lines and critical functions (report published in March 2015),³ the benchmarking exercise on the approach taken in developing scenarios (report published in December 2015),⁴ and the comparative analysis on governance arrangements and

¹ Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 [establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations \(EU\) No 1093/2010 and \(EU\) No 648/2012, of the European Parliament and of the Council.](#)

² Commission Delegated Regulation (EU) 2016/1075 of 23 March 2016 [supplementing Directive 2014/59/EU of the European Parliament and of the Council with regard to regulatory technical standards specifying the content of recovery plans, resolution plans and group resolution plans, the minimum criteria that the competent authority is to assess as regards recovery plans and group recovery plans, the conditions for group financial support, the requirements for independent valuers, the contractual recognition of write-down and conversion powers, the procedures and contents of notification requirements and of notice of suspension and the operational functioning of the resolution colleges.](#)

³ EBA, [Recovery planning: Comparative report on the approach to determining critical functions and core business lines in recovery plans.](#)

⁴ EBA, [Recovery planning: comparative report on the approach taken on recovery plan scenarios.](#)

recovery indicators (report published in July 2016).⁵ Like other benchmarking reports, the present analysis is not a grading assessment; rather, it aims to understand how, in their recovery plans, institutions approached the requirements on recovery options set out in the BRRD and in the Delegated Regulation. It also considers the impact assessment and feasibility of recovery plans' options across a sample of European banking groups.

This report aims to support supervisors in identifying in their assessments the crucial elements that should be considered by institutions when designing and selecting credible recovery options. Moreover, resolution authorities also benefit from well-structured recovery plans, as the information provided therein is useful in developing resolution plans.

⁵ EBA, *Recovery planning: comparative report on governance arrangements and recovery indicators*.

1. Approach

1. The sample of recovery plans included in this comparative study was driven by the availability and status of recovery plans at the time when the benchmarking analysis was carried out by EBA staff. The plans included were all submitted during the second half of 2016. By that time, the BRRD had been transposed in all Member States. Moreover, it should be noted that the BRRD was published in the Official Journal in June 2014, and relevant EBA technical standards had been published in draft form for consultation during 2013,⁶ thus providing for at least a draft common approach.
2. The sample consists of the recovery plans of 23 European cross-border banking groups with parent institutions located in 12 different EU countries. The sizes of the institutions, as well as those of the countries, are quite heterogeneous, and therefore the risk of specific size or country bias is limited.
3. Institutions and supervisors have reached a more advanced stage in recovery planning than they had achieved in previous years. However, the plans themselves remain at very different stages of development. The number of plans included in the sample allows for a reasonable comparative exercise, while ensuring that only those recovery plans that were developed on the basis of EU rules on recovery planning are included in the analysis.
4. The essence of any recovery plan is the quality of the recovery options that an institution may be able to deploy in the event of serious financial problems emerging. Recovery options are crucial for assessing the feasibility and credibility of recovery plans. In particular, according to Article 6(2)(b) of the BRRD, the quality of the recovery plan and the specific options within the plan should be assessed against the criterion that they are reasonably likely to be implemented quickly and effectively in situations of financial stress. In addition, pursuant to Article 8(2) of the Delegated Regulation, this means that recovery options included in the recovery plan should be reasonably expected to contribute to maintaining or restoring the viability and financial position of the entity or entities covered by the recovery plan.
5. On the other hand, credibility also relies on the level of integration and consistency of the recovery plan. Therefore, this report investigates whether recovery options support recovery plans that are credible, feasible and of good quality. Accordingly, the analysis is divided into three sections.

⁶ [Consultation Paper on Draft Regulatory Technical Standards on the content of recovery plans \(EBA/CP/2013/01\)](#), published on 11 March 2013; [Consultation Paper on Draft Regulatory Technical Standards on the range of scenarios to be used in recovery plans \(EBA/CP/2013/09\)](#); and [Consultation Paper on Draft Regulatory Technical Standards on the assessment of recovery plans \(EBA/CP/2013/08\)](#), published on 20 May 2013.

6. **The first section** gives an overview of the descriptions of recovery options included in the recovery plans. In particular, this section provides an overview of the number and types of recovery options covered in the recovery plans, as well as the analysis of availability of recovery options at subsidiary level and coordination within a group for their implementation. In addition, it gives an overview of whether recovery plans include governance, decision making and implementation arrangements in relation to selected recovery options, as this is an essential element for the feasibility of recovery options. Finally, this section investigates whether recovery plans specify suitability testing of recovery options under the stressed recovery scenarios.
7. **The second section** focuses on financial and operational impact assessment, which is essential for determining the overall recovery capacity of an institution. In particular, the report analyses whether recovery plans include financial impact assessment of recovery options on key supervisory ratios. It also provides an analysis of whether recovery plans include operational impact assessment of recovery options on operation continuity, continuity of critical functions, core business lines and access to FMIs.
8. **The third section** sheds more light on assessment of the credibility and feasibility of recovery options. In particular, it describes whether and how institutions refer in their recovery plans to previous experiences of executing similar measures. It also provides a comparative analysis of the timeframes proposed by banks for executing their recovery options. Finally, it describes how banks identified potential risks and impediments to executing recovery measures, and indicates the extent to which they managed to propose specific mitigating actions and preparatory measures to address identified impediments.

2. Overview and integration in the recovery plans

9. The identification and description of recovery options in the recovery plans plays a key role, as it helps in determining and assessing whether these options are relevant for the institution. Similarly, an analysis of the availability of recovery options at subsidiary level and of the coordination within the group for their implementation provides insights on how well the whole banking group is covered by the recovery plan. Furthermore, governance, implementation and decision-making arrangements for each recovery option, as well as suitability testing of different recovery options under the stressed recovery scenarios, are essential for the overall integration and feasibility of recovery options.
 10. In this regard, the analysis of the recovery plans included in the sample has revealed a number of interesting findings:
 - a. The majority of plans include description of recovery options, although the level of detail provided in the description of selected recovery options varied from very specific to quite general. In the latter case, assessing the feasibility of the selected recovery option was difficult.
 - b. The number of recovery options included in the plans varied greatly, from a minimum of 8 recovery options to a maximum of 56. The most frequently included recovery options were (i) disposal of subsidiaries, (ii) sale of assets/loan portfolios, (iii) liquidity improvement measures and (iv) capital raising.
 - c. Around half of the recovery plans identified options available at subsidiary level, and these measures almost always envisaged that a parent entity would provide capital/liquidity support to its subsidiaries. None of the analysed institutions structured their intra-group financial support agreements set in accordance with provisions of Article 19 of the BRRD; however, some of them were considering introducing such arrangements in the future.
 - d. Roughly half of the recovery plans provided details on governance, decision making and implementation for each recovery option. However, there were a number of plans where these elements were not specified and the recovery options relied on only general governance procedures (i.e. escalation and decision making).
 - e. The majority of recovery plans specified the suitability of different recovery options under the recovery scenarios, but mostly in qualitative terms. Many recovery plans were lacking a detailed assessment that would enable an analysis of the feasibility of the recovery options under each scenario.
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2.1 Description of recovery options

11. The BRRD does not impose detailed requirements on the structure of recovery plans. However, the Delegated Regulation identifies a minimum list of items that should be included in the plan. According to Article 6 of the Delegated Regulation, the strategic analysis section of the recovery plans should include: (i) a description of the entity or entities covered by the recovery plan and (ii) a description of recovery options. Moreover, Article 8(1) of the Delegated Regulation requires recovery plans to include a list of all recovery options and a description of each option.
12. All the analysed recovery plans included a dedicated section that provided a description of recovery options. The level of detail provided in the descriptions of recovery options varied greatly, from very specific to quite general. The analysis of selected recovery plans revealed that, if the institution had previous experience of implementing a selected recovery option, the plan featured quite a detailed description and analysis of that option.
13. The list of recovery options was not always included and in some cases, if it was included, the terminology used in the list and in the descriptions of the recovery options did not match. Only one third of the recovery plans provided a description of the selection criteria for recovery options. Those recovery plans that included selection criteria (e.g. quantitative criteria such as impact on regulated capital, group CET1 ratio, liquidity position, funding, etc., or qualitative criteria such as whether there are any legal, regulatory, operational or commercial constraints, time required for implementation, how effectively the plan can be implemented in situations of financial stress, etc.) usually provided quite a comprehensive assessment of the recovery options against these criteria. However, there were some recovery plans that included only a general statement, for example 'the bank selected recovery options which are feasible' or 'considering that each crisis is different the range of recovery measures should be as wide as possible'.
14. Roughly one third of the recovery plans also provided details on recovery options that had been considered but were subsequently excluded. A few plans identified excluded recovery options but did not provide reasons why they were excluded. In a few cases, a recovery option was excluded because it would have required changes to the group structure. This is not in line with the regulatory framework, as recovery options should not be excluded for the sole reason that they would require a change to the current nature of the business of the entity or entities (Article 8(5) of the Delegated Regulation).

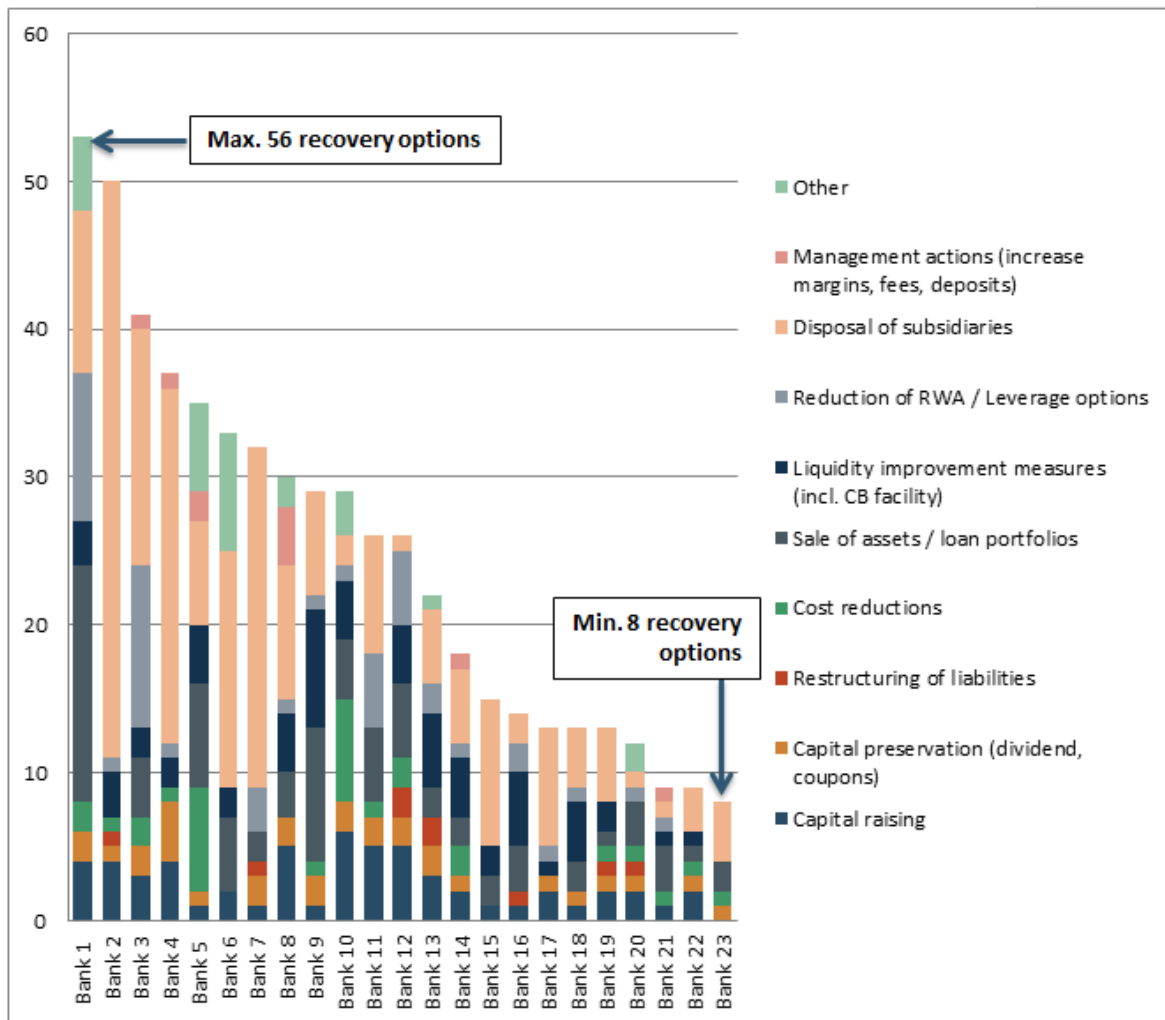
2.2 Recovery options included in the recovery plans

15. According to Article 5(6) of the BRRD, recovery plans should include 'appropriate conditions and procedures to ensure the timely implementation of recovery actions as well as a wide range of recovery options'. Article 8(1) of the Delegated Regulation specifies further that the subsection on recovery options should set out a range of recovery options designed to respond to financial stress scenarios and which could reasonably be expected

to contribute to maintaining or restoring the viability and financial position of the entity or entities covered by the recovery plan. Article 17(1)(3)(b) of the Delegated Regulation also states that the plan should contain a sufficiently wide range of recovery options.

- The recovery plans used various approaches for the categorisation of recovery options (e.g. categorised depending on implementation speed, impact on capital/liquidity, overall attractiveness, likelihood, etc.). Figure 1 provides some detail regarding the numbers of recovery options included in the analysed recovery plans, which varied greatly – from a minimum of 8 recovery options to a maximum of 56.

Figure 1. Composition of recovery plan options



- Unsurprisingly, the most common recovery options included in the analysed recovery plans were (i) disposal of subsidiaries, (ii) sale of assets/loan portfolios, (iii) liquidity improvement measures and (iv) capital raising. For more detail with regard to valuation assumptions and other assumptions for these recovery options, please see section 3.1.2 of this report. Annex 1 to this report also provides a list summarising the recovery options included in the recovery plans.

2.3 Availability of recovery options at subsidiary level and coordination with the group for their implementation

18. The BRRD and the Delegated Regulation set out specific requirements for the appropriate coverage of entities in the group recovery plans and the consistency of recovery options at group level and material subsidiary level. In particular, Article 7(1) and (4) of the BRRD requires that the group recovery plan (i) identifies recovery measures at the level of the EU parent undertaking and each individual subsidiary; (ii) aims to achieve stabilisation of the group as a whole or any institution of the group; and (iii) includes arrangements ensuring the coordination and consistency of measures to be taken at parent and subsidiary level. Article 7 of the Delegated Regulation also sets out requirements regarding the description of entities covered by the recovery plan.
19. Around half of the recovery plans identified options available at subsidiary level. These options almost always consisted in the provision of capital/liquidity support by a parent. None of the analysed institutions structured their intra-group financial support agreements in accordance with the provisions of Article 19 of the BRRD, although some of them were considering introducing such arrangements in the future. The descriptions of other recovery options at subsidiary level were less detailed than the description of those at parent level.
20. Where an entity is part of a group, Article 5 of the Delegated Regulation requires the recovery plan to include a description of the measures and arrangements taken within the group to ensure the coordination and consistency of recovery options at the level of the group and of individual subsidiaries. The analysed recovery plans usually provided an explanation and a description regarding coordination with the parent for the implementation of recovery options, although in a number of cases they provided only a general statement (e.g. 'coordination is ensured' or 'relevant measures were taken to ensure coordination'), without providing any further details.

2.4 Governance, decision making and implementation of recovery options

21. Pursuant to Article 5(1)(3) of the Delegated Regulation, the information on governance should include the conditions and procedures necessary to ensure the timely implementation of recovery options, including a description of internal escalation and decision-making processes that apply when indicators have been triggered. In turn, this would require the institution to describe at least (i) the role and function of persons involved in this process, including a description of their responsibilities, or, where a committee is involved in the process, the role, the responsibilities and function of committee members; (ii) the procedures that need to be followed; and (iii) the time limit for the decision on taking recovery options and when and how the relevant competent authorities will be informed of the fact that the indicators have been met.

22. The linking of recovery options to governance is particularly important, as it helps in understanding whether a recovery option is feasible. Furthermore, clear governance arrangements are important, as at a time of severe stress, unexpected delays in taking decisions or confusion about who bears the ultimate responsibility could have an adverse impact on an otherwise valid recovery option, as such issues might prevent its being implemented effectively and in a timely manner.
23. In this regard, the analysis revealed that roughly half of the recovery plans provided details on governance, decision making and implementation for each specific option. There were a number of plans where these elements were not specified and recovery options relied on only general governance procedures; therefore, in those cases the actual feasibility of the options was not clear.
24. A few plans, when describing governance arrangements for recovery options, made reference to internal handbooks on procedures, without specifying further details, making it difficult to assess the feasibility of such procedures.

2.5 Interaction with recovery plan scenarios

25. The BRRD stipulates in Article 5(6) that the competent authorities should ensure that firms test their recovery plans against a range of scenarios of severe macroeconomic and financial distress, varying in their severity, including system-wide events, legal entity-specific stress and group-wide stress. Article 7(6) of the BRRD requires group recovery plans to include a range of recovery options specifying actions to address those scenarios.⁷ Article 8 of the Delegated Regulation states that the subsection on recovery options should set out a range of recovery options designed to respond to financial stress scenarios and which could reasonably be expected to contribute to maintaining or restoring the viability and financial position of the entity or entities covered by the recovery plan.
26. While recital 10 of the Delegated Regulation states that recovery options should initially be described without reference to a specific scenario of financial stress, according to Article 8(2) of the Delegated Regulation, a recovery plan should set out a range of recovery options designed to respond to financial stress scenarios and which could maintain or restore the viability and financial position of the entity or entities covered by the recovery plan. This is quite important, since the same recovery options can have different impact, both financial and operational, depending on the recovery scenario in which they are deployed. Appropriate testing of recovery options against the different recovery scenarios can thus provide a practical measure of the efficiency and effectiveness of the recovery strategy of the institution.

⁷ Article 5(7) of the BRRD mandates the EBA to develop, in close cooperation with the European Systemic Risk Board, guidelines specifying the range of scenarios to be used for the purposes of Article 5(6).

27. The majority of the analysed recovery plans specified the suitability of different recovery options under the stressed recovery scenarios. The means used to indicate the suitability of options under each scenario varied. For example some plans categorised options' attractiveness as 'low', 'medium' or 'high'; some ranked them from 1-3; some showed the impact on key metrics, such as CET1 ratio, total capital ratio, liquidity, etc.; some gave each option a likely success rate on a scale of 1-10; and so on. On the other hand, many recovery plans were lacking a detailed assessment that would enable an analysis of the feasibility of the options under each scenario.
28. Some recovery plans in each scenario included estimated results of all the available recovery options under the assumption that all of them were applied in a specific scenario. However, a number of institutions did not test all recovery options. This raises questions about the usefulness of the remaining recovery options not included in the testing in relation to the range of scenarios, which is intended to cover all the most relevant events that could result in the failure of the institution.
29. Roughly one third of the recovery plans ranked the selected recovery options by order or priority. However, only some recovery plans included a detailed strategy or methodology for the considerations and rationale to be applied when ranking recovery options, while the majority of recovery plans did not provide such information or included only a general statement, for example 'the prioritisation of the recovery options will be assessed only during the execution of the recovery plan in order to maximise their effectiveness and timing of execution'.
30. Finally, in a few of the recovery plans it was difficult to determine which recovery options were tested under particular stress scenarios because the terminology used in the description of recovery scenarios was significantly different from that used in the section devoted to recovery options.

3. Impact assessment

31. In line with Article 8(3) of the Delegated Regulation, each recovery option in the recovery plan should be described in a way that enables the competent authority to assess its impact and feasibility. Article 10(1) of the Delegated Regulation further specifies that recovery plans should include a financial and operational impact assessment in the strategic analysis of the options. Depending on the types of options, different elements can be included in the analysis. Such an impact assessment allows competent authorities to review the credibility of recovery options and how likely they are to maintain or restore the viability and financial position of an institution in case of distress.
32. In this regard, the examination of the recovery plans included in the sample revealed that all the plans provided at least an estimation of the financial impact of the options with regard to key metrics on capital and liquidity. However, only roughly half of them gave details of the impact on profitability and funding positions. The estimation of the impact on the capital position was almost always estimated in absolute terms, but in some cases it was difficult to understand the real effectiveness of the option, since there was no relative or percentage impact (e.g. basis points or percentage points on CET1 or TC ratios) in the selected metrics. The impact analyses in the recovery plans also included – in most cases – information on the operational impact of the recovery options. However, the level of detail and the means of presenting these elements varied across recovery plans.
33. More specifically:
 - a. In the examination of the impact assessment of some of the most frequently included recovery options, including ‘capital raising’, ‘sale of assets/loan portfolios’ and ‘disposal of business lines and subsidiaries’, some room for improvement was found in that more detail on the elements pertinent to the option type could have been provided. Moreover, the valuation assumptions could be further improved with regard to the background information used for the impact calculations.
 - b. Most recovery plans included some assessment of the operational impact of the recovery options. However, this was not always provided in the individual descriptions of options; sometimes it was included in a more general description of operational arrangements. Some institutions would seek to decrease operational interdependencies when executing recovery options by establishing single service entities for the group, although the benefits of such arrangements are not always clearly stated.
 - c. In the context of operational continuity, most of the recovery plans provide information on critical functions and core business lines, as well as on the institutions’ IT systems, although this is not always set in the context of the implementation of specific recovery options. Moreover, more than half of the

reviewed recovery plans do not provide a comprehensive assessment of the likelihood of continued access to FMI upon execution of recovery options.

- d. More than half of the recovery plans took into account the cross-effects of executing different recovery plan options in the same stress scenario. This is a very good practice, as it helps in understanding the real effectiveness of a given set of options.

3.1 Financial impact

3.1.1 Quantitative analysis of recovery options

34. For competent authorities to be able to analyse and/or challenge the assumptions underlying the recovery options, the financial impact assessment would need to be supported by a quantitative analysis. In line with Article 10(1) of the Delegated Regulation, the quantitative analysis of the recovery options needs to demonstrate that institutions have taken into account and identified correctly and clearly every main expected impact of each option on the institution's capital, liquidity, funding positions and profitability.
35. In the vast majority of the reviewed recovery plans, the impact assessment section provided information on the financial impact on key regulatory ratios concerning solvency and liquidity, while the impact on profitability and funding positions tended to be described in less detail. Moreover, in some instances, even with regard to the impact on the capital metrics, it was difficult to assess the real effectiveness of the options, since the impact was expressed only in absolute values and not – for instance – in percentage or basis points.
36. Nearly all the recovery plans provided a quantitative assessment, in particular concerning key solvency and liquidity ratios. There were, however, isolated cases where only a qualitative assessment was provided for the recovery options, for example by rating them as having a high, medium or low impact on solvency and liquidity. As explained in section 3.1.2, the area where the greatest room for improvement could be found was here: more detail could be included on the assumptions used to derive the quantification of the impact of the options.

3.1.2 Valuation assumptions and other assumptions

37. Pursuant to Article 10(3) of the Delegated Regulation, recovery plans should include valuation and other assumptions for the purpose of the financial and operational impact assessments. According to Article 18(1)(h) of the Delegated Regulation, competent authorities should review whether the assumptions and valuations made within the plan and each recovery option are realistic and plausible, as this will help to make clear the quality of the recovery plan and the real effectiveness of the options.

38. Almost all the plans in the sample included sections dedicated to valuation assumptions and other assumptions made to estimate the impact of recovery options. Many institutions stated that, when making such assumptions, they relied on their own experiences, the experiences of their peers, and their own systems and data. However, almost half of the recovery plans based the calculations made in the analysis of the options on only a very limited level of detail. This was true of cases where there was lack of background information when the impact of the option was assessed in a 'business as usual' situation, as well as those where there was no analysis that could validate the assumptions made when calibrating the impact of the option in stressed conditions.
39. For example, it was not clear why the same discount was applied across different 'disposal of subsidiaries' options or why the same timeframes were applied to recovery options that would clearly differ in this aspect. In a few cases, while comprehensive assumptions were provided for some options, this was not the case for others. Overall, plans that lack a clear basis for the assumptions made may hamper the ability of competent authorities to assess the credibility and feasibility of the recovery options.
40. Article 18(2) (e) of the Delegated Regulation requires that the plausibility of recovery options should be assessed taking into account "the coordination of recovery options within the group". In turn, this would imply that institutions' recovery plans should take into account the extent to which options may conflict with one another when implemented at the same time. More than half of the reviewed recovery plans considered the cross-effects of executing potentially incompatible options in same scenarios. There were a few different approaches taken to examining this aspect. In some recovery plans, potential cross-effects were included in the individual descriptions of each recovery option. In other recovery plans, there were charts identifying potential interactions among all recovery options. In addition, some plans excluded specific combinations of recovery options. The analysis of any cross-effects between different options that may be implemented at the same time is clearly a good practice that can help in better understanding the real feasibility of a recovery strategy, as well in quantifying the recovery capacity of an institution.

Capital raising options

41. The issuance of new capital was one of the recovery options most frequently included in the recovery plans, and more than half of the plans in the sample analysed the financial impact and other assumptions with regard to this type of option. The recovery plans include various types of capital raising options, such as rights issues, private share placements, initial public offerings (IPO) of subsidiaries, and issuance of Additional Tier 1 (AT1) and Tier 2 (T2) instruments.
42. One of the main assumptions when describing capital raising options in the case of rights issuance is the discount to share price in stress scenarios. Discounts are frequently assumed relative to theoretical ex-rights price (TERP). A positive finding was that roughly

one third of the recovery plans included a detailed explanation of the calculation of discounts, which were often based on past experiences, including from the most recent financial crisis, as well as on the experiences of peers. Nonetheless, there were also cases where recovery plans completely lacked explanation and it was hard to understand why a certain discount had been chosen. In other cases, assumptions on discounts were lacking.

43. Another assumption that recovery plans included for capital raising options was information on possible types of investors. The availability and level of detail of this information varied across recovery plans, depending largely on if such measures had been undertaken in the past, so that there was some experience in this regard. Almost all the recovery plans in the sample included the expected timeframe for implementation, although the degree of detail varied significantly, from including a simple timetable summarising the main steps to providing a specific explanation of every phase.

Sale of assets/loan portfolios

44. Another recovery option widely included in the recovery plans was sale of assets/loan portfolios. The vast majority of the recovery plans included assumptions made in estimating the impact of the option. However, in most cases, the information provided in this regard was either too general or only partial, that is, the impact assessment did not always cover all the relevant elements relating to the execution of the option.
45. In most recovery plans, there was limited or no comprehensive assessment of important elements such as the risk profile of assets/loan portfolios, their market liquidity and the sale price, trade volume or level of residual commitments of the assets/loan portfolios being sold. In some recovery plans, where some of these elements were considered there was lack of explanation of the basis for the calculations made, for example with respect to haircuts applied in the valuation of the assets or the loans in the portfolio.
46. Some best practices were observed, where the analysis of sale of assets/loan portfolios options relied on past experiences in calculating haircuts and where further information was considered, for example by estimating the sellable amount per sub-portfolio.

Disposal of business lines and/or subsidiaries

47. One of the recovery options most frequently included in the plans was the disposal of business lines and subsidiaries. The elements that recovery plans should include when providing details of this type of option include the valuation approach, the franchise value of entities disposed of, operational and financial interdependencies, potential purchasers and sale of similar entities. While all the recovery plans contained some of the information above, they varied in the range of elements considered in the impact assessment.
48. Frequently, recovery plans contained information on the methodology applied for the valuation assumptions, explaining the parameters considered. However, it was not always

clear how calculations for the assumptions were made, since the description of the methodology was often not specific to a particular option.

49. In some cases where valuation assumptions were provided, the assumptions were based only on business as usual circumstances as opposed to a stressed situation, so that it was difficult to evaluate the credibility of the assessment of the impact of the option, since its effectiveness was unknown under crisis conditions. However, it must be noted that some recovery plans already followed best practice in quantifying the expected implementation of the recovery options in the different stress scenarios.
50. Roughly half of the plans included information on the potential purchasers of the business lines and subsidiaries, how their availability would affect the valuation amount and the timeframe, and how their availability might change in a severe crisis. On the other hand, an area where improvement would be expected in the next iterations is the addition of information on the financial interdependencies of the entity being sold within the group, and the potential impact on sale price.

3.2 Operational impact

3.2.1 Overview

51. According to Article 10(1) of the Delegated Regulation, recovery plans should include information on the operational impact of the recovery options. This is to allow competent authorities to assess the operational complexity of the implementation of the recovery options. This means that information should be provided on whether the implementation of the selected options could negatively affect the normal functioning of the institution, in particular with regard to continuity of operations, including IT systems and services and access to FMI.
52. Moreover, the recovery plans should include information that would allow competent authorities to assess operational interdependencies across the entities of banking groups. The recovery plans, consequently, should provide clear mapping of the intra-group operations for each material legal entity and business line. This is to facilitate the analysis of recovery options with regard to the possibility of transferring operational service and the likely effects on critical functions and core business lines of the implementation of recovery options.
53. The reviewed recovery plans included information on operational impact. Where available, the analysis often varied in detail, including in terms of elements such as the impact on franchise value, the external impact and the reputational risk of the recovery options.

3.2.2 Continuity of operations

54. According to Article 12(1) of the Delegated Regulation, each option in the recovery plan should contain an assessment of how the continuity of operations would be ensured when

- implementing that option. In particular, in accordance with Article 12(2) of the Delegated Regulation, the assessment should include an analysis of internal operations (e.g. information technology systems and human resources) and of the access of the entity or entities covered by the recovery plans to market infrastructure.
55. The analysis of the recovery plans in the sample revealed significant variation in the approaches used when providing the information on continuity of operations. The following different practices were observed:
- a. In some recovery plans, the information on operational continuity was included in a general description of various operational systems in the institution in question. However, apart from mentioning the existence of contractual arrangements concerning external and internal interconnectedness, there was no further evidence that continuity of operations was assured in the implementation of specific recovery options. In some of the cases, critical functions and core business lines were identified and mapping to material entities was provided.
 - b. There were a number of recovery plans where information on operational impact and continuity was included in the individual analyses of the options. The elements considered included information on the access to FMI, MIS, and ICT services. In a very few cases, the description was very detailed and included a description of the considered specific steps that the institution would need to take to ensure the continuity of operations in the implementation of a specific recovery option.
 - c. Some recovery plans described continuity of operations as part of the business continuity plan. Those analyses, however, did not provide a comprehensive view of how continuity of operations would be ensured in a recovery situation.
 - d. The sample also included recovery plans where merely general statements were provided, declaring that continuity of operations would be ensured where necessary. In some of these cases, the need for an agreement with potential buyers on operational continuity in the case of a disposal of subsidiary option was explained. However, there was no further detail on how this would be implemented.
56. In addition, some institutions stated their interest in reducing operational interdependencies through the establishment of a single service entity for the whole group (i.e. a ServCo). In many of those institutions, efforts are under way, but there is no clear view yet on the potential effectiveness of a ServCo for operational continuity.
57. A number of plans also mentioned the possible review of service level agreements (SLAs) and transitional service agreements (TSAs) with the aim of improving operational continuity, especially in cases where disposal options were available. However, in most of the cases where such considerations were explained, this was done in general terms, rather than in the context of descriptions of specific recovery options.

3.2.3 Information technology systems and services

58. According to Article 12(2)(b) of the Delegated Regulation, the assessment of operational contingency in the recovery plan should include any arrangements and measures necessary to maintain the continuous functioning of operational processes, including IT services.
59. With regard specifically to the continuity of IT services, most of the recovery plans provided some information on IT systems and services. Most recovery plans described one of the following two operational structures: (i) institutions' subsidiaries operating on stand-alone IT systems and (ii) the banking group sharing an IT platform. In this regard, some of the recovery plans explained institutional interdependencies in the context of preparatory measures. Others simply noted that there was an 'IT disaster recovery plan', without giving further details.
60. In the vast majority of the plans, information on IT systems was included in general descriptions of IT and/or other systems; only in some cases was it included in the individual analyses of recovery options. In both cases, the degree of detail was quite variable and not always appropriate to the complexity of the institution or of the option under consideration.

3.2.4 Access to financial market infrastructures

61. As part of the operational impact assessment, pursuant to Article 12(2)(a) of the Delegated Regulation, recovery plans should take into account the need to maintain continuous access to FMI, including clearing and settlement facilities and payment systems.
62. The analysis found that more than half of the reviewed recovery plans did not include such an assessment. The recovery plans that did consider this aspect varied in how they provided the required information. For example, in a small number of cases the impact assessment on FMI access was included in the individual descriptions of the recovery options where it was relevant. In other instances, there was a detailed list of FMI necessary for entities to carry out their business. Moreover, some of the recovery plans in the sample included an overview of FMI and their mapping to entities. However, the information on continuous access to FMI was often provided without linking it to the implementation of recovery options or without a sufficient level of detail.

3.2.5 Impact on critical functions and core business lines

63. In line with Article 6(2) of the Delegated Regulation, an analysis of recovery options must be included in the strategic analysis section of the recovery plan, the aim of which is to identify the key steps to maintaining the proper functioning of core business lines and critical functions in a situation of financial stress.

64. In this regard, the vast majority of the reviewed recovery plans contained information on the process for identifying critical functions and core business lines and on mapping to material legal entities.
65. Often, the information on critical functions and core business lines was included in the individual descriptions of the recovery options. In some of the recovery plans, there was a qualitative analysis identifying the positive/negative impacts or the no/low/medium/high impacts on critical functions and core business lines of implementing specific recovery options. However, in most instances the assessment of this aspect was very limited and not provided for all recovery plan options to which such an assessment was pertinent.
66. Best practice was identified in a few cases, where the recovery plans provided an account of the relevant links between critical functions, core business lines and material legal entities, and included an analysis of the impact of implementing the recovery options.

4. Credibility and feasibility

67. It is crucial that the recovery options proposed by banks in their recovery plans are credible and feasible. It can be concluded that options are credible and feasible if they are reasonably likely to be implemented quickly and effectively in situations of financial stress, taking into account the preparatory measures that the institution has taken or has planned to take. The key factors that might influence an option's credibility and feasibility are:
- a) past experience in implementing similar measures;
 - b) estimated timeframes for executing recovery options; and
 - c) potential risks and impediments to timely and effective implementation of recovery measures, as well as possible mitigating actions and concrete preparatory measures that can be undertaken to eliminate identified risks and impediments.
68. The vast majority of institutions explicitly referred in their recovery plans to past experiences of implementing similar measures. However, in many recovery plans the explanation of how banks leveraged on past experiences was very limited, and therefore it could offer only limited evidence for the feasibility of the recovery measures. While most banks specified expected timeframes for executing each of their recovery options, many of them did not provide sufficient explanations to support their estimates or demonstrate that the proposed timelines were realistic.
69. The BRRD requires that banks conduct an analysis of impediments and possible mitigating actions in a business as usual situation to ensure that their recovery options would be implementable in a situation of severe financial distress. In addition, banks should take possible preparatory measures to increase the possibility of successful implementation of recovery measures. Almost all banks outlined risks and impediments to the timely execution of their recovery options, providing various levels of detail and comprehensiveness of analysis. However, mitigating actions and preparatory measures proposed to address these impediments were often very general and/or proposed only for future implementation, which limits their genuine effectiveness.
70. It is also worth mentioning that around half of the recovery plans identified options available at subsidiary level, which almost always consisted of receiving capital/liquidity support from a parent entity. Many banks identified impediments to providing intra-group support related to their current arrangements. Some of these banks also indicated that, to remove existing impediments, they were considering introducing intra-group financial support agreements complying with Article 19 of the BRRD.

4.1 Previous experience

71. According to Article 11(1)(a) of the Delegated Regulation, ‘Each recovery option shall contain a feasibility assessment, which shall include at least: an assessment of the risk associated with the recovery option, drawing on any experience of executing the recovery option or an equivalent measure’.
72. Previous experience constitutes a very important source of information for estimating the expected financial and operational impact of a given option, describing accurately the timeframe and execution process, and for identifying potential impediments to its implementation. Furthermore, past experience demonstrates banks’ preparedness to execute complex recovery options, such as divestments of subsidiaries, securitisations or issuance of capital. It also increases the probability of the success of recovery options in case of severe financial distress (e.g. due to the acquired expertise of staff members and established relations with market participants relevant for the execution of a given measure).
73. Almost all the banks made explicit references in their recovery plans to their own experiences of executing similar recovery measures in previous years, at least with regard to some of their recovery options. The descriptions of past experiences varied significantly among banks. Some institutions only indicated that they had already gained experience relevant for executing particular recovery options, without providing any further details, while other institutions included relatively detailed descriptions of their past actions and/or explanations of how they had used past experiences in estimating execution timeframes and the expected impact of recovery options (e.g. using a previous transaction as a reference point to specify valuation assumptions). A few banks also described how they leveraged on lessons learned during the activation of similar measures to identify potential impediments to the effective implementation of particular options. Often, banks that had already gained some experience in executing similar measures included more detailed descriptions of these recovery options than their inexperienced peers. This may indicate that previous experience was used in drafting recovery plans even in cases where banks did not explicitly explain how this had been done.
74. The best approach was applied by banks that provided clear explanations of how they used past experiences in developing recovery plans, because it enabled their supervisors to leverage on this information when assessing the feasibility and credibility of recovery options.

Box 1. Leveraging on previous experiences

Examples of where banks can leverage on previous experiences of implementing similar measures when drafting their recovery plans:

- estimating the expected impact of recovery options (e.g. valuation assumptions);
- estimating execution timeframes;
- identifying risks and impediments to an option's successful implementation;
- demonstrating an ability to implement a recovery option (e.g. due to having the necessary expertise).

75. While most of the banks referred to their own experiences of executing recovery options, some institutions also mentioned the past experiences of peers. Typically, this was done to justify quantitative impact estimations (e.g. assumptions for valuations) and/or demonstrate that it had been feasible for a peer institution to implement a similar measure in recent times or in stressed market conditions.

4.2 Timeline for executing recovery options

76. One of the key properties of each recovery option is the speed of its implementation and the time necessary for a bank to receive the expected benefits. Therefore, in line with Article 18(1)(d) of the Delegated Regulation, when assessing whether recovery options are likely to maintain or restore the viability and financial position of the institution, the competent authorities shall review 'whether the timeline for implementing the options is realistic and is taken into account in the procedures designed to ensure implementation of recovery actions'. Furthermore, in line with Article 12(2)(c) of the Delegated Regulation, the institution's assessment of operational contingency (i.e. analysis of internal operations and access to market infrastructure) shall take into account the expected timeframe for the implementation and effectiveness of the recovery option.
77. Almost all the recovery plans provided a specification of the timeframe for executing each recovery option. This confirms that institutions fully recognise the importance of time in implementing recovery options and restoring institutions' viability. In most cases, banks provided specific time estimations (ranging from 1 day to 36 months). However, for some recovery options some banks described the timeframe only in a vague manner (e.g. using such expressions as 'immediately', 'rapidly' or 'in a short period of time') or included relatively wide time ranges (e.g. 6-12 months) without providing any explanation of the events that could drive these differences.
78. Approximately half of the banks included in the sample provided a granular description of implementation timeframes with a clear articulation of the phases needed to fully implement each recovery option and receive the expected benefits. Those institutions very often distinguished the following stages: (i) approval, (ii) preparation, (iii) implementation

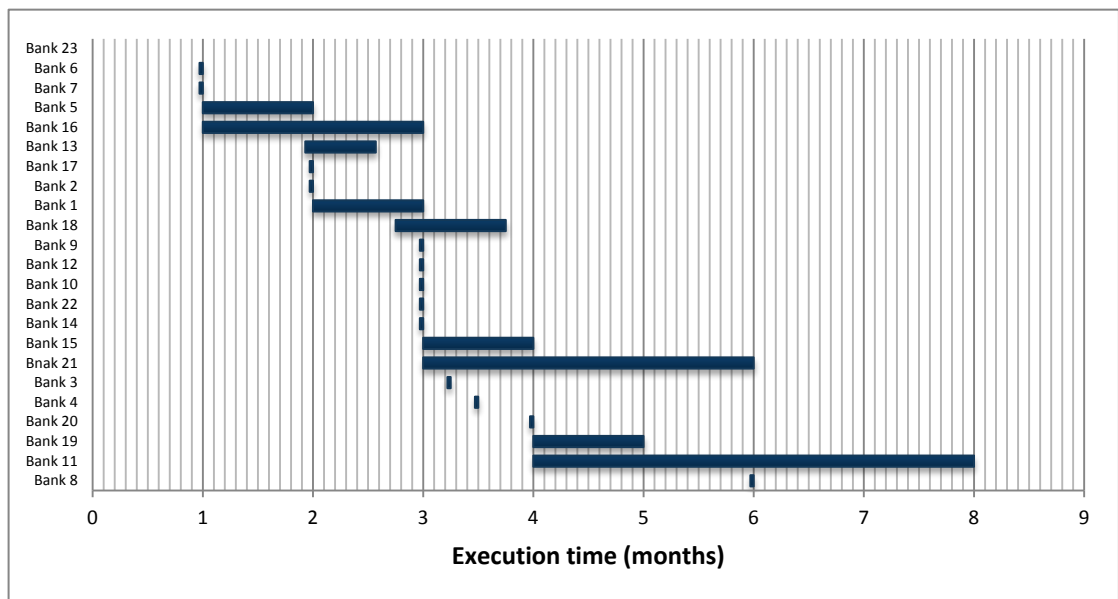
- and (iv) realisation of benefits. Other banks only indicated the estimated execution time (e.g. ‘timeline – 3 months’), without providing any explanation of whether it encompassed the whole timeframe or only particular phases within the execution process.
79. The level of detail in execution timelines differed not only among banks but also among particular measures proposed within the same recovery plan. Typically, more detailed timelines were provided for capital issues and disposals of subsidiaries. Very often banks gave more detailed descriptions of the timelines for recovery options for which they also gave a relatively granular description of the execution process.
80. One of the key drawbacks identified in many recovery plans was a lack of or an insufficient description of the assumptions underpinning the proposed timeframes for options’ execution. Only some banks provided explicit explanations of the proposed timeframes or referred to their past experiences of executing similar measures. Implementation of these best practices could significantly facilitate supervisory evaluation of options’ feasibility.
81. Another observation from the comparative analysis is that there were significant differences among banks in estimating the time necessary for executing recovery options of the same type (e.g. disposals of subsidiaries and capital raising through public offers). Figures 2 and 3 present the execution times of two recovery options commonly included in recovery plans:
- a) disposals of subsidiaries (i.e. sale of stockholdings resulting in losing control over a subsidiary) (Figure 2); and
 - b) capital increase through public offerings (Figure 3).
82. Among the recovery plans covered by the analysis, only one did not include any option for disposal of the bank’s subsidiaries. As shown in Figure 2, the expected time for selling a controlling stake in a subsidiary varied from 1 month (for divesting a special purpose entity created solely for issuing covered bonds) to 36 months (for a recovery option envisaging the sale in a single transaction of a few subsidiaries situated in various jurisdictions both within and outside the EU). Around 70% of institutions expected to complete a sale transaction in less than 12 months (based on their most conservative estimations expressed by the upper end of the time range). Moreover, a vast majority of institutions estimated the timeframes for executing recovery options by specifying time ranges (in more than 85% of cases) rather than providing specific time estimations (e.g. 6 months or 12 months). The time ranges proposed in the same recovery plan for selling subsidiaries varied from 2.5 months to 30 months. However, it should be noted that for some institutions the ranges presented in the chart below cover a cumulative timeframe based on the execution time for a few options for divesting different subsidiaries.

Figure 2. Execution time for full disposal options



83. As shown in Figure 3, all the analysed recovery plans, apart from one, included capital raising measures through public offerings, based either on rights issues or IPOs. Proposed timeframes ranged from 1 month to 8 months, with around 80% of institutions estimating that options’ execution timeframes would not exceed 4 months. In contrast to divestment options, more than half of institutions specified an expected execution time, instead of providing expected time ranges.

Figure 3. Execution time for capital increase options (public offer)



84. It is also worth mentioning that some banks proposed identical timeframes for various recovery options within the same recovery plan (e.g. with regard to disposal of subsidiaries in different jurisdictions), without providing any additional explanation. This may indicate that these institutions did not take into account conditions specific to national markets (e.g. for divestment options) or types of transactions (e.g. for capital raising options).

4.3 Impediments to the execution of recovery options

85. Pursuant to Article 11(1) of the Delegated Regulation: ‘Each recovery option shall contain a feasibility assessment, which shall include at least: (a) an assessment of the risk associated with the recovery option ...; (b) a detailed analysis and description of any material impediment to the effective and timely execution of the plan ...; (c) where applicable, an analysis of potential impediments to the effective implementation of the recovery option which result from the structure of the group or of intra-group arrangements, including whether there are substantial practical or legal impediments to the prompt transfer of own funds or the repayment of liabilities or assets within the group.’ Paragraph 2 of the same article specifies that ‘a material impediment shall include any factor that could potentially negatively affect the timely execution of the recovery option including, in particular, legal, operational, business, financial, and reputational risks such as any risk of a credit rating downgrade’.
86. Almost all the recovery plans, with the exception of one, contained an assessment of whether risks and impediments to the timely application of the recovery options existed. This assessment was made with regard to all recovery measures included in a plan. However, there were significant differences between banks in terms of their ability to identify the full extent of risks and impediments for the same type of recovery measure. In addition, the level of detail provided in describing potential risks and impediments varied greatly among recovery plans. Around one third of the institutions provided a comprehensive description of the risks and impediments identified for all or a majority of their recovery options. Whereas other banks provided only a high-level description of impediments (sometimes using such general statements as ‘depends on market conditions’) or merely indicated types of impediments applicable to particular options, with or without an evaluation of their potential impact (e.g. high, medium or low).
87. Substantial divergences were also observed in the level of detail provided in describing impediments for different types of recovery options. Typically, the largest number of impediments was identified for complex recovery options such as disposals of subsidiaries, whereas the range of risks to implementation for the remaining recovery options was generally estimated as smaller and their severity as lower.

88. Although banks applied various categorisation approaches, the following types of risks and impediments to options' execution were often distinguished in the recovery plans:

- a) legal;
- b) operational;
- c) business/financial; and
- d) reputational (including the risk of a credit rating downgrade).

89. Another category of impediments frequently mentioned in recovery plans comprised cross-dependencies identified between various recovery options. Here, banks indicated which recovery options were mutually exclusive or whether their execution would depend on the previous activation of other recovery options. Some institutions also distinguished between (i) impediments applicable in systemic and idiosyncratic scenarios; and (ii) internal and external impediments.

90. Moreover, some banks clearly identified internal impediments resulting from their group structure and/or existing intra-group arrangements, and usually classified such impediments as operational ones. The most common example of an impediment related to the current group structure was a shared infrastructure between different group entities (e.g. IT platforms and HR services). Some banks also indicated whether there were any practical or legal impediments to the prompt transfer of own funds or the repayment of liabilities or assets within the group (both upstreaming capital/liquidity support from subsidiaries to a parent entity, and downstreaming it from the parent to its subsidiaries). None of the banks included in the sample indicated in its recovery plan that it used intra-group financial support agreements complying with Article 19 of the BRRD. However, a few recovery plans envisaged the introduction of such BRRD-compliant agreements in the future, to remove limitations related to their existing intra-group agreements.

4.4 Mitigating actions to identified impediments

91. Apart from identifying potential risks and impediments to executing recovery options, Article 11(1)(d) of the Delegated Regulation also requires that a feasibility assessment of recovery measures include solutions to the potential impediments identified in points (b) and (c) of the same paragraph, in particular:

- a) a detailed analysis and description of any material impediment to the effective and timely execution of the plan and a description of whether and how such impediments could be overcome;
- b) where applicable, an analysis of potential impediments to the effective implementation of the recovery option which result from the structure of the group or of intra-group arrangements.

92. Almost all banks made an attempt to identify mitigating actions to identified impediments which could be implemented either *ex ante* or at the time of executing an option. However, many banks did not manage to identify possible solutions for all impediments (e.g. stating that 'remedial actions do not exist') or provided only a general/high-level description of potential mitigating actions (e.g. 'consider incentives for key staff during sale processes'). In general, the description of mitigants was less detailed than the specification of underlying risks and impediments.
93. As with the identification of risks and impediments, banks usually gave more elaborate descriptions of possible mitigating actions for disposal of subsidiaries than for other recovery measures.
94. Table 2 provides a high-level description of possible mitigating actions that were identified in the analysed recovery plans. The main purpose of this table is to present an array of possible remedial actions for each type of risk or impediment and indicate to which recovery options they might be relevant.

Table 1. Possible mitigating actions in relation to risks/impediments in executing recovery options.

	Risks and impediments	Recovery options	Possible mitigating actions
1.	Legal/regulatory		
1.1.	Regulatory approvals from authorities in all relevant jurisdictions for matters related to merger control, listing and licensing (including also competition law and 'fit and proper' assessment of a new management body). Regulatory confirmation that significant credit risk transfer has been achieved for synthetic securitisation (from all relevant jurisdictions if underlying exposures are domiciled in a few countries). Receiving confirmations from external rating agencies.	Disposal of subsidiaries Capital increase Securitisation (synthetic and true sale)	Regularly and frequently engaging with appropriate regulators/authorities in relevant jurisdictions. Preparing a list of potential purchasers taking into account restrictions imposed by the competition law. Preparing an initial feasibility study for securitisation. Engaging with a relevant regulator before executing securitisation transaction.
1.2.	Approvals from shareholders and/or bank's internal bodies (e.g. Board of Directors (BoD)) at group/local levels. Limitations on capital increase coming from the bank's Articles of Association.	Disposal of subsidiaries Capital increase Sale of assets/stocks AT1 coupon reductions Attracting additional deposits	Regular review and update of the level of available authorised capital (including an authorisation to exclude subscription rights). Acquiring an authorisation from the BoD to issue ordinary shares with pre-emptive subscription rights without a need for a shareholding meeting. Preparing an application for BoD approval. Developing a robust communication plan to support the external shareholder

	Risks and impediments	Recovery options	Possible mitigating actions
			approval process. Maintaining active investor relations.
1.3.	Due diligence and preparation of working capital statements to be reviewed by underwriters.	Capital increase Securitisation	Aligning the timing of equity raising with an announcement of the bank's financial results to assist due diligence.
1.4.	Contractual obstacles including: (i) internal and external operational services (e.g. breach of contractual covenants with suppliers, penalties for early termination of contracts); (ii) ownership of brand/banking licence; (iii) transfer of loans due to contract provisions (e.g. due data protection considerations under individual borrowers' terms and conditions); (iv) breach of contract and potential damages in case of deleveraging in the absence of provisions allowing a bank to cancel its commitment to lend; (v) pre-emption rights; (vi) protective clauses in joint ventures agreements (e.g. partners exercising put or call options in case of a change of control); (vii) compulsory buy-out offer (where a buyer of a majority stake must launch a public offer on the rest of the capital under at least equivalent conditions).	Disposal of subsidiaries Sale of loan portfolios Capital increase Deleveraging Cost reductions	Revising or renegotiating existing contracts (also to ensure they are 'resolution proof'), for instance: (i) outsourcing agreements; (ii) inter-company service level arrangements; (iii) contracts with third party service providers. Ensuring a high degree of transferability of loans. Performing full due diligence on each loan agreement. Where possible, avoiding long-term contracts without an option for their early termination. Revising shareholders' pacts.
1.5.	Obligatory approvals from shareholders and/or the bank's relevant internal bodies (e.g. BoD) at group/local levels. Limitations on capital increase included in the bank's Articles of Association.	Disposal of subsidiaries Capital increase Sale of assets/stocks AT1 coupon reductions Attracting additional deposits	Regular review and update of the level of available authorised capital (including an authorisation to exclude subscription rights). Acquiring BoD authorisation to decide on the issuance of ordinary shares with pre-emptive subscription rights without a need for a shareholding meeting. Preparing an application for BoD approval. Establishing a plan for communication with shareholders. Maintaining active investor relations.
1.6.	Labour law considerations (e.g. inflexible employee contracts with high severance payments in case of their termination, a need to negotiate with trade unions and work councils). Penalty fees and legal disputes	Disposal of subsidiaries Cost reductions	Revising employment contracts (e.g. with regard to notice periods, severance payments). Building up in advance sufficient accrual for severance payments.

	Risks and impediments	Recovery options	Possible mitigating actions
	following termination of employment contracts.		Maintaining constructive relationships with workers' representative bodies. Putting in place a catalogue of measures pre-agreed with staff representation. Maintaining relationships with recruitment agencies for guidance of terminated employees into new working relationships.
1.7.	Pension considerations related to liabilities from defined benefit pension schemes (in case of divestment options).	Disposal of subsidiaries	Designing a mechanism to ensure that an investor can purchase a subsidiary without any pension liability, and ensuring that it is approved by a relevant regulator. Providing a guarantee to a purchaser for any pension liabilities.
1.8.	Potential law suits from investors to claim back payment of their AT1 instruments.	Legacy AT1 coupon cancellation	Adhering to relevant regulations and gathering sufficient evidence.
1.9.	Closed periods – not providing new (public) information to private placement investors (to remain compliant with regulations). In a recovery period more requests on information may happen.	Covered bond issuance	Despite the fact that in a closed period no public issuance can be done, private placement transactions in a specific amount might be done.
2.	Operational		
2.1.	Impediments related to group structure (e.g. shared IT infrastructure, providing products and services among group entities).	Disposal of subsidiaries	Reviewing and documenting all IT and reporting systems provided to other entities within the group. Performing carve-outs to address problems related to shared infrastructure. Creating a separate entity offering shared services for the group. Using Transitional Service Agreements (TSAs) to ensure that services would continue to be provided to an acquirer until it has completed its migration.
2.2.	Problems in executing intra-group arrangements (e.g. due to local regulatory requirements for liquidity/capital, preventing an entity providing support according to letters of comfort). Existence of cross-guarantees between the group and subsidiary that could be divested.	Liquidity enhancement measures Disposal of subsidiaries	Concluding intra-group financial support arrangements in accordance with Article 19 of the BRRD. Unwinding cross-guarantees in the event of selling a subsidiary.
2.3.	Problems with data availability and quality that may cause severe delays in an option's execution or otherwise hinder it.	Disposal of subsidiaries Sale of assets New	Reviewing and improving data extraction and reporting capabilities (e.g. by enhancing the IT infrastructure, designing new tools for data extraction).

	Risks and impediments	Recovery options	Possible mitigating actions
	Meeting supervisory requirements for disclosing information on loans used for collateral of new securities.	collateralised securities	Preparing a data room with the information and data necessary for due diligence. Ensuring that data tape is formatted and presented in a manner that accurately describes key portfolio information. Ensuring compliance with supervisory requirements for loan data disclosure.
2.4.	Ineffective decision making and execution of recovery options leading to inadequate crisis response.	Liquidity enhancement measures	Organising a 'dry run' exercise to test execution of internal procedures.
2.5.	Temporary additional workload for employees responsible for executing specific recovery options (e.g. liquidity experts from a Treasury function). Higher level of workload for remaining employees after cost reductions.	Liquidity enhancing options Cost reductions	Training additional staff members from other units to step up and facilitate any increase in the workload as necessary.
2.6.	Potential inability to attract and retain qualified staff in case of executing divestment options. Negative perception of pay cuts, staff reductions and disengagement with suppliers, which may result in losing key staff.	Cost reductions Business reductions Disposal of subsidiaries	Introducing incentives for key staff to retain them. Introducing internal mobility of employees. Managing internal communication with employees. Establishing a culture of fairness in treating employees (e.g. a 'last-in-first-out' policy and an equal percentage reduction across all employees). Cost cutting in items of a discretionary nature, such as advertising and sponsorships, advisory services and outsourcing expenses.
3.	Business/financial		
3.1.	Lack of an interested purchaser/investor with an ability to acquire a subsidiary or assets designated for sale. Lack of liquidity on markets to finance acquisition transaction.	Disposal of subsidiaries Sale of assets	Preparing a list of potential purchasers and investors, with reasons why they might be interested in acquiring a subsidiary/other assets. Appointing external advisors that could help to identify/attract potential investors and provide assistance in a marketing process. Maintaining close contact with potential investors on an ongoing basis and maintaining an appropriate presence/profile in the market. Connecting with a sale advisor in respect of sourcing potential bidders from existing market contact listings.

	Risks and impediments	Recovery options	Possible mitigating actions
			Provision of vendor support (retained equity or ‘stapled debt’) despite the fact that it would decrease liquidity impact.
3.2.	Lack of market appetite for the bank’s capital instruments.	Capital increase Issuance of AT1 capital	Engaging in a hard underwriting process in which a broker commits to fully underwrite a capital amount. Maintaining contact with potential investors.
3.3.	Adverse fluctuations in market prices and/or deterioration of asset quality when a sale transaction is executed. Deteriorating value or quality of collateral used for issuing secured funding/liquidity enhancements, and potential non-compliance with asset eligibility criteria. Inaccurate assumptions used to identify liquidity buffer (e.g. with regard to assets available for use, transfer limitations and liquidity values).	Sale of loan portfolios Capital increase Covered bonds issuance Access to central bank funding Liquidity enhancement measures	Conducting a continuous analysis of loan portfolios/securities and making amendments to sale strategy if necessary. Concluding a service level agreement with a collateral management unit that regularly updates and monitors the value and quality of the asset pool. Performing a periodic analysis of the discountable assets and ensuring appropriate quality of available assets. Increasing frequency of monitoring, analysing and reporting liquidity buffers. Creating contingency eligible collateral. Facilitating availability of central bank eligible collateral by creating access to collateral that is not located at the central/group level.
3.4.	Geopolitical risks affecting recovery options’ execution (e.g. due to a lack of interested parties to purchase a subsidiary in a specific region, or the introduction of local regulations restricting the possibility of reducing new lending).	Disposal of subsidiaries Reduction of new lending	Not identified.
3.5.	Potential changes in a central bank tender process (e.g. an increase of haircuts; tightening of collateral rules).	Access to central bank funding	Preparing to have access to refinancing operations of the central bank. Having the required amount of collateral in custody with the relevant central bank.
3.6.	Termination of cross-selling arrangements between entities of a group, and/or losing tax benefits from current group structure. National tax rules on capital gains having a negative impact on a proposed sale of a subsidiary (as a going concern business).	Disposal of subsidiaries	Analysing and documenting potential reductions of benefits from cross-selling/tax benefits, and adequately reflecting them in options valuation.
3.7.	Reclassification of capital instruments for tax purposes triggering adverse tax	Liabilities management	Attempting to avoid tax inefficiencies by upfront tax.

	Risks and impediments	Recovery options	Possible mitigating actions
	<p>consequences.</p> <p>Accounting impact of a change from debt into equity triggering hedge accounting issues.</p> <p>Differences in the currency of covered bonds issuance and the currency of the underlying assets. Any required currency conversions will depend on the existence of a relevant basis swap market.</p>	<p>Hybrid capital – coupon deferrals/cancellation</p> <p>Covered bond issuance</p>	<p>Assessing the potential impact and proposing alternative solutions.</p>
3.8.	<p>Leakage of confidential information to the press/public domain before a recovery option is executed, which can lead to adverse market reaction.</p>	<p>Disposal of subsidiaries</p> <p>Capital increase</p>	<p>Ensuring that there are adequate insider and confidentiality procedures in place.</p> <p>Having a leak announcement prepared.</p> <p>Concluding a confidentiality and non-disclosure agreement with brokers and investors, and restricting the number of people involved within the bank through an insider list.</p>
4.	Reputational		
4.1.	<p>External rating downgrade during preparation for executing a recovery option.</p> <p>Negative market perception of being a distressed seller, which may cause a loss of confidence in the bank's franchise (also a potential contagion risk) and a withdrawal of deposits.</p> <p>Reduced number of counterparties willing to transact due to the bank's perceived lack of creditworthiness when external credit ratings deteriorate.</p> <p>Negative impact of selling loan portfolios on relationships with clients concerning collateral positions.</p> <p>Breaching memorandums of understanding or strategic commitments due to risk-weighted asset (RWA) reduction measures.</p>	<p>Disposal of subsidiaries</p> <p>Sale of loan portfolios</p> <p>RWA reductions</p> <p>Reduction of new lending</p> <p>Capital increase</p>	<p>Developing a robust plan for communication with clients and counterparties.</p> <p>Targeting the application of a disposal of loan portfolios with the aim of reducing negative impact by excluding key clients.</p>
4.2.	<p>Potential damage to the perceived value of the bank's assets in case a disposal transaction fails to be finalised in a normal timeline (it could also affect the value perception of other group entities).</p>	<p>Disposal of subsidiaries</p>	<p>Not identified.</p>
4.3.	<p>Reputational impacts of reducing AT1 coupons could hinder the bank's future</p>	<p>AT1 coupon reduction</p>	<p>Ensuring appropriate external communication by investor relations, media relations and corporate</p>

	Risks and impediments	Recovery options	Possible mitigating actions
	issuances. Earnings retention might negatively affect appetite for future share issuances.	Earnings retention	communications.

4.5 Preparatory measures

95. The recovery framework established in the BRRD requires that banks in a business as usual situation take specific actions to remove impediments to the effective implementation of recovery options. In particular, Article 15 of the Delegated Regulation provides that ‘a recovery plan shall include an analysis of any preparatory measures that the entity or entities covered by it have taken or which are necessary to facilitate the implementation of the recovery plan or to improve its effectiveness together with a timeline for implementing those measures. Such preparatory measures shall include any measures necessary to overcome impediments to the effective implementation of recovery options which have been identified in the recovery plan.’ Moreover, Article 18(1)(e) of the Delegated Regulation stipulates that when competent authorities assess the feasibility of recovery options they shall review ‘the level of the institution’s or group’s preparedness to redress the situation of financial stress, as determined in particular by assessing whether the preparatory measures necessary have been adequately identified and, where appropriate, those measures have been implemented or a plan to implement them has been prepared’.
96. More than 75% of the institutions indicated some concrete preparatory measures in their recovery plans; however, in most cases, banks included a very limited description of such measures. Typically, recovery plans included a wide range of material impediments but set out only a limited suite of preparatory measures to overcome these impediments. In other words, most banks had plans to implement only a limited fraction of possible mitigating actions and specific steps to remove impediments before there was a need to execute particular recovery options.
97. In a few cases, recovery plans provided more detailed descriptions of measures undertaken by banks at the request of their supervisors or resolution authorities (e.g. for complex projects undertaken to remove operational contingencies and increase the bank’s resolvability).
98. The best practices in the area of preparatory measures included a clear description of (i) already completed preparatory measures, (ii) ongoing preparatory actions and (iii) steps planned for the future (outlining specific timelines for completing them). Even the best recovery plans did not include any analysis of whether the preparatory measures would be sufficient to enable particular recovery options to be executed.

5. Conclusions

99. For a recovery plan to be effective, it should provide a good range of recovery options that could restore the viability of the institution or of the group in a situation of financial distress. For this reason, a comprehensive analysis of the various measures available to an institution in that regard is extremely important, since it will provide information on the feasibility of the selected recovery options and on the actual extent of the overall recovery capacity.
100. There are numerous elements that need to be considered when analysing recovery options, which range from the quantitative financial impact on some key metrics to the impact at operational level, in terms of FMI, IT, legal contracts and provision of critical functions. Clearly, the two types of impacts need to be considered together, as a recovery option with a high financial impact but a number of criticalities linked to operational implementation cannot be considered to be readily available in case of financial distress.
101. Equally important is the analysis of the extent of recovery capacity, not in abstract (or business as usual) terms but when tested against institution-specific recovery scenarios. Ultimately, a recovery plan is a special form of contingency plan and, therefore, it is important that the value of the recovery options to be implemented is derived within the context of a specific distress situation, as this will add to the overall credibility of the recovery plan itself. Similarly, the identification of potential impediments and an analysis of possible preparatory measures to speed up the implementation of recovery options can enhance the overall feasibility of the selected recovery strategies.
102. The analysis of the recovery plans in the sample showed that in the vast majority of cases institutions have well understood the importance of having a detailed analysis of recovery options in their recovery plans.
103. Taking into account that some good progress has already been made, the comparative analysis highlights some areas for improvement and the specific issues within these broader areas that might need further development. These improvements, in turn, would enhance the overall feasibility and credibility of recovery options.
104. To be credible and feasible, recovery options need to include a proper analysis that can link them to other two important aspects of recovery plans: (i) governance and (ii) scenarios. In this regard, the present report has found the following:
 - a. Governance: more than half of the recovery plans provided a description of the specific governance procedures for each recovery option, although the degree of detail varied. However, in some cases, the recovery plans did not provide any information and made only brief reference to general governance arrangements,

which of course lacked detail on the steps to be taken to implement a specific option.

- b. Scenarios: the majority of the recovery plans provided a high-level suitability analysis of the recovery options in the different scenarios. In many cases, the analysis specified only from a qualitative point of view which recovery options could be used under each scenario, and there was not always a detailed feasibility assessment.
105. A comprehensive assessment of the impact of each recovery option is clearly a key input in determining the overall recovery capacity of an institution. In this regard, it should be noted that, while most plans provided information on the key aspects of financial and operational impact, some room for improvement still remains, as follows:
- a. Financial impact: all the plans provided a financial impact assessment on key supervisory ratios. However, the valuation assumptions in the analysis of the options often lacked detail for the basis of the calculations made, which could hamper their credibility.
 - b. Operational impact: the explanation of operational continuity (including access to FMI) is often part of the general descriptions of operational systems in recovery plans. However, it is often unclear if operational continuity is warranted, since a number of plans provide only general statements and lack comprehensive analysis at the level of the individual options.
106. In terms of the feasibility and credibility assessment in recovery options, almost all banks specified key factors determining the extent to which the measures selected were reasonably likely to be implemented quickly and effectively in situations of financial stress. In particular:
- a. Previous experience: almost all the institutions referred to previous experiences of executing similar recovery measures, at least with regard to some of the proposed options. However, very often recovery plans lacked explanations of how banks had leveraged on past experiences, which could support supervisory authorities in assessing options' feasibility and credibility.
 - b. Execution timeframes: banks generally provided estimations of expected timelines for executing each of their recovery options. However, there were significant differences in the approaches applied in recovery plans in terms of specific time estimations and the level of detail provided. Moreover, a common shortcoming identified in the analysis was insufficient justification of the proposed timeframes, which made it difficult to assess whether they were realistic and sufficiently conservative.

- c. Impediments, mitigating actions and preparatory measures: in most cases, institutions identified potential risks and impediments to timely and effective implementation of recovery options. However, often banks faced challenges in identifying potential mitigating actions to remedy these impediments and in proposing specific preparatory measures aimed at increasing the feasibility of recovery options. In many cases, recovery plans included a broad outline of material impediments but set out only a limited suite of preparatory measures to overcome these impediments. In addition, the mitigating actions and preparatory measures were often general and/or intended for future implementation, resulting in limited evidence for their genuine effectiveness.
107. Finally, one important area where recovery plans could be improved and make overall recovery capacity more solid seems to be the coverage of material entities. The BRRD requires that the plan should cover the whole banking group and ensure consistency of recovery measures that can be applied at group level and for individual subsidiaries. However, the analysis shows that group recovery plans included in the sample were developed mostly from the parent perspective. In fact, around half of the recovery plans identified recovery options available at subsidiary level, but in many cases these consisted in support from the parent, in the form of capital or liquidity, without a proper set of recovery options that could be implemented at the level of subsidiaries being identified. Moreover, when support from the parent entity was proposed as a possible recovery measure, potential impediments to its execution were often identified.

Annex 1. List of recovery options

Capital raising options
✓ Rights issue
✓ Capital increase in kind
✓ Capital increase from authorised capital
✓ Ordinary capital increase
✓ Issue of share capital with pre-emption rights
✓ Issue of share capital without pre-emption rights
✓ Issue of mandatory convertible bond
✓ Issue of AT1 capital
✓ Issue of T2 capital
✓ Accelerated bookbuilding
✓ Write-down of contingent capital
✓ Conversion of contingent capital
✓ Conversion of T2 capital into T1 capital
✓ Parent support
✓ Intra-group credit line
✓ Intra-group capital increase
Capital preservation options
✓ No distribution of dividends to shareholders
✓ No payment of coupon on AT1/T2 issues
✓ Earnings retention
Restructuring of liabilities
✓ Liability management transactions
✓ T2 instruments buyback
✓ Senior debt buyback
✓ Organic loan portfolio reduction
✓ Reduce the trading book
Cost Reductions
✓ Reduction in personnel
✓ Reduction in working time
✓ Cut voluntary benefits
✓ Stop/delay investments in facilities and equipment
✓ Stop/delay IT investments
✓ Reduction in marketing expenses
✓ Cancel bonus payments
✓ Reduction in, or complete exclusion of, variable remuneration
✓ Clawback of variable pay
Sale of assets/loan portfolios
✓ Sale of leveraged loan portfolios

✓ Sale of portfolios (mortgage, loan book)
✓ Securitisation of portfolios
✓ Synthetic securitisation
✓ Securitisation – true sale (targeted to open market)
✓ Asset transfer of existing performing loan portfolios within the bank
✓ Asset sales – real estate
Liquidity improvement recovery options
✓ Retained covered bonds
✓ Increase of total funding spreads
✓ Accessing central bank liquidity facilities with routine collateral
✓ Accessing central bank emergency liquidity facilities
✓ Sale of central bank non-eligible liabilities
✓ Rollover/attract more commercial paper
✓ Repo or pledge high-quality liquid assets
✓ Pledge internal securitisation
✓ Replace, sell, repo or swap non-high-quality liquid assets
✓ Create and pledge new retained covered bonds and internal securitisations
✓ Issuance of covered bonds and RMBS
✓ Reduction in lending activity
✓ Monetisation of unencumbered securities
✓ Secured funding of assets
✓ Repricing of retail, corporate and wealthy customer liabilities
✓ Raising long-term funding
✓ Increasing the cover pool
✓ Central bank pledging of own issued bonds
✓ Activation of the liquidity contingency plan
Reduction of RWA/leverage options
✓ Unwind of portfolio management
✓ Unwind of credit cash products
✓ Unwind of equity financing group
✓ Unwind of fixed income financing
✓ Unwind of cash equity asset
✓ Unwind of equity derivatives business
✓ Sale of strategic equity stakes
✓ Securitisation of assets
✓ Portfolio run-off
✓ Run down businesses
Disposal recovery options
✓ Sale of business lines
✓ Sale of subsidiaries
✓ Sale of significant equity holdings
✓ Sale of minority stakes in large subsidiaries

Management actions
✓ Reduce market risk
✓ Reduce lending
✓ Margin increases
✓ Increase fee income
✓ Reduce costs
✓ Stop buyback and sale/repo of own shares



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