The EU Supervisory and Resolution Framework for Banks: An Inquiry into the Complexity and Instability of Bank Groups

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The author takes full responsibility for all errors in content or format.
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Abstract

The dissertation explores to what extent the post-financial crisis EU resolution regime, based on equity/debt write-down and conversion powers and bail-in tools will be effective in maintaining the stability of bank groups. To arrive at its unique angle, it first asks why bank groups are considered complex, thereby explaining the reasons for their proliferation and instability, and how this may inform the view regarding a desired regulatory framework. The main observation the dissertation makes is that, notwithstanding of other factors already pointed out in the literature, bank groups adopt complex structures with multiple entities, as it allows them, inter alia, to use double-leverage financing structures and internal capital markets.

Double-leverage financing structures allow bank groups to optimise the combination of their debt/equity funding from external parent entity investors with a combination of debt/equity funding downstreamed internally to subsidiaries and other entities in the bank group. An important component within this structure is also that the allocation of the bank group’s resources takes place through the internal capital market (ICM). The allocation of resources via the ICM allows bank groups to manage their liquidity constraint either to undertake activities that are more profitable, or to stabilise the financial position of the group as a whole.

While both double leverage and ICMs can optimise the funding and allocation of resources of the bank group, respectively, they can also generate perils to the stability of the bank group. In particular, this is because double-leverage can result in excessive risk taking and regulatory arbitrage. Moreover, the allocation of the intra-group resources in the ICM may not maintain the financial health of all subsidiaries in the bank group, which can prove to be incompatible with the financial stability goals of the regulators in the countries where those subsidiaries conduct their business.

Within this context, the dissertation argues that the current EU resolution regime does not clearly address issues of double leverage when setting out capital and other liability requirements, i.e. the ‘Total Loss Absorbing Capacity’ (TLAC) and ‘Minimum Requirement for Eligible Liabilities’ (MREL) requirements. Moreover, the dissertation emphasis that it is equally relevant to clarify the way in which the bank group resources are available ahead of, and in financial distress. It is argued that to this end, bank groups need to be allowed to make use of the ICM as it is often uncertain what may be the cause of the financial distress and how the resources of the bank group could be used to stabilise it. To this end, the dissertation highlights that there is lack of clarity in both the ex-ante provisions on intra-group support framework and in the ex-post provisions governing the allocation of any surplus TLAC/MREL resources.

Besides the ‘intra-group’ issues within the bank group, the third point the dissertation makes relation to the bank group’s presence in multiple jurisdictions. This transnational element adds to the complexity of the intra-group issues resulting from sub-optimal cooperation between home and host authorities. In this regard, the dissertation underlines that the current framework could adopt a more balanced way in which the regulatory fora will take into account the interest of the authorities of all parts of the bank group.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AT1</td>
<td>Additional Tier 1 Capital</td>
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<tr>
<td>BRRD</td>
<td>Bank Recovery and Resolution Directive</td>
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<tr>
<td>BU</td>
<td>Banking Union</td>
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<tr>
<td>CEE</td>
<td>Central and Eastern Europe</td>
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<tr>
<td>CET 1</td>
<td>Common Equity Tier 1 Capital</td>
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<tr>
<td>CRD</td>
<td>Capital Requirements Directive</td>
</tr>
<tr>
<td>CRR</td>
<td>Capital Requirements Regulation and Capital Requirements Directive</td>
</tr>
<tr>
<td>DGS</td>
<td>Deposit Guarantee Scheme</td>
</tr>
<tr>
<td>EBA</td>
<td>European Banking Authority</td>
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<tr>
<td>EBRD</td>
<td>European Bank for Development and Reconstruction</td>
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<tr>
<td>ECB</td>
<td>European Central Bank</td>
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<tr>
<td>ECJ</td>
<td>European Court of Justice</td>
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<tr>
<td>EIOPA</td>
<td>European Insurance and Occupational Pension Authority</td>
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<tr>
<td>ESAs</td>
<td>European Supervisory Agencies</td>
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<tr>
<td>ESMA</td>
<td>European Securities and Market Authority</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>FSB</td>
<td>Financial Stability Board</td>
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<tr>
<td>FSB Key Attributes</td>
<td>Financial Stability Board, Key Attributes of Effective Resolution Regimes for Financial Institutions</td>
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<tr>
<td>G-SII / G-SIB</td>
<td>Global Systemically Important Institution / Bank</td>
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<tr>
<td>GFC</td>
<td>Global Financial Crisis 2007-2009</td>
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<tr>
<td>ICAAP</td>
<td>Internal Capital Adequacy Assessment Process</td>
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<td>ILAAP</td>
<td>Internal Liquidity Adequacy Assessment Process</td>
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<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>LBHI</td>
<td>Lehman Brother Holdings Inc.</td>
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<tr>
<td>LBIE</td>
<td>Lehman Brothers International Europe</td>
</tr>
<tr>
<td>M&amp;A</td>
<td>Mergers and Acquisitions</td>
</tr>
<tr>
<td>MPE</td>
<td>Multiple Point of Entry</td>
</tr>
<tr>
<td>MREL</td>
<td>Minimum Requirements for Own Funds and Eligible Liabilities</td>
</tr>
<tr>
<td>MS</td>
<td>European Union Member States</td>
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<tr>
<td>NCAs</td>
<td>National Competent Authorities</td>
</tr>
<tr>
<td>NRAs</td>
<td>National Resolution Authorities</td>
</tr>
<tr>
<td>O-SII</td>
<td>Other Systemically Important Institution</td>
</tr>
<tr>
<td>PONV</td>
<td>Point of Non-Viability</td>
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<tr>
<td>RWA</td>
<td>Risk-Weighted Assets</td>
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<tr>
<td>SPE</td>
<td>Single Point of Entry</td>
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<td>SRB</td>
<td>Single Resolution Board</td>
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<tr>
<td>SREP</td>
<td>Supervisory Review and Evaluation Process</td>
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<td>SRF</td>
<td>Single Resolution Fund</td>
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<td>SRM</td>
<td>Single Resolution Mechanism</td>
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<tr>
<td>SSM</td>
<td>Single Supervisory Mechanism</td>
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<tr>
<td>T1</td>
<td>Tier 1 Capital</td>
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<tr>
<td>T2</td>
<td>Tier 2 Capital</td>
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<tr>
<td>TBTF</td>
<td>Too big to fail</td>
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<tr>
<td>TLAC</td>
<td>Total Loss-Absorbing Capacity</td>
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INTRODUCTION

One of the most discussed reasons behind the global financial crisis of 2007 (GFC) is that banks became ‘too big to fail’ (TBTF). The notion of TBTF is usually related to the size of banks’ balance sheet, although, at the same time, it is a more generic term encompassing the meaning of banks that are ‘too interconnected’, ‘too complex’ or simply ‘too many’ to be resolved in an orderly fashion, i.e. without disturbance to the financial system. Such disturbance may occur since banks provide critical services that support the everyday functioning of the financial system and economy. In the period before the financial crisis, while large bank groups were part of the policymakers’ discussion in context of their supervision in business as usual, the problems that could emerge if one of those large bank groups failed was not considered.

It is clear that the period before the GFC, a mitigating mechanism existed in the regulation of the banking sector in the form of explicit public guarantees provided under (national) deposit guarantee scheme (DGS). The DGS protection of depositors essentially seeks to alleviate negative effects from depositors’ runs on banks. However, besides depositors’ runs, in the lead up to the GFC, banks held short-term liabilities (other than deposits) that eventually exposed them to ‘silent bank runs’ in the wholesale markets. The combination of the large

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2 Banks that are ‘too interconnected’ are those whose failure will cause the failure of other financial institutions. ‘Too complex to fail’ are those banks whose links to other parts of the financial system are difficult to apprehend. And ‘too many to fail’ refers to a situation where a group of similar financial institutions is exposed to the same financial shocks. See Michael Schilling (2016) Resolution and Insolvency of Banks and Financial Institutions, Oxford University Press (Oxford), p. 3; see also Seraina Neva Grünenwald (2014) The Resolution of Cross-Border Banking Crises in the European Union - A Legal Study from the Perspective of Burden Sharing, Kluwer Law International (Alphen aan de Rijn), p. 13.


banks’ balance sheets composition and the fact that banks had become TBTF meant that explicit support provided with DGS was not sufficient to prevent disruptions in the financial system. Thus, it was expected that banks would be saved beyond the losses and the coverage of the DGS. Such expectation worked as an implicit public guarantee, materialising in the course of the GFC as government funded bail-outs. In the lead up to the GFC, the expectation of bail-out incentivised banks to take additional risks, thereby giving rise to ‘moral hazard’ and undermining the effectiveness of market discipline.  

In this regard, the general corporate finance logic suggests that the interest that creditors charge on the bank debt reflects the risk the creditors bear if the bank defaults on the debt. Thus, an increase in the interest rate and the subsequent inability of the bank to raise debt constitutes market discipline. Given the implicit guarantee, creditors expected to have recourse on their claim to the bank’s assets, regardless of the riskiness of the bank’s activities. This resulted in a lack of market discipline, allowing banks to take excessive risks at the expense of public funds. The expectation of the implicit guarantee was even formalised by credit rating agencies, whereby credit ratings for banks were presented both with and without implicit government guarantees.

In response to these events, the international financial reform aimed to eliminate (or at least mitigate) the TBTF problem by introducing bank recovery and resolution regimes that complemented the existing bank prudential supervision. Inter alia, these regimes aimed to mitigate moral hazard (and excessive risk-taking) and enhance market discipline by making shareholders and subordinated creditors of banks responsible for the bank losses once it was declared that such banks would be resolved. For this purpose, public administrative authorities were given powers to write down the equity, and write down or convert to equity the subordinated debt of banks. This included the introduction of write-down and conversion (WDC) powers and bail-in resolution tools in the toolkit of resolution authorities. The task of implementing such tools in the complex structure of bank groups is daunting. It leads to the question of how successful the post-financial crisis reform will be in dealing with the

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complexity and instability of bank groups.

Within the above context, this dissertation explores to what extent the post-financial crisis EU resolution regime, based on equity/debt write-down and conversion powers and bail-in tools will be effective in maintaining the stability of bank groups. To arrive at its unique angle, it first asks why bank groups are considered complex, thereby explaining the reasons for the proliferation and instability of bank groups, and how this may inform the view regarding a desired regulatory framework. In considering these aspects, the dissertation reviews the insights from the literature and, in parallel, draws up the unique niches it will discuss.

To arrive at its unique contribution to the literature, the dissertation first asks the question why bank groups organise as a complex group of companies, and why bank groups become instable and whether the legislative tools are adequate to prevent financial distress. Without disputing the existing literature on the reasons as to why bank groups organise as complex groups of companies, the dissertation cites additional reasons after reviewing the underlying legal mechanisms that construct a bank group.

The main observation the dissertation makes is that bank groups adopt complex structures with multiple entities, as it allows them, inter alia, to use double-leverage financing structures and internal capital markets. Double leverage occurs whenever a parent entity raises debt from external investors and downstreams it as equity to the entities lower in the bank group. Double-leverage financing structures allow bank groups to optimise the combination of their debt/equity funding from external parent entity investors with a combination of debt/equity funding downstreamed internally to subsidiaries and other entities in the bank group.

An important component within this structure is that the allocation of the bank group’s resources takes place through the internal capital market, which effectively substitutes the external capital market for the entities in the bank group. The allocation of resources via the internal capital market allows bank groups to manage their liquidity constraint either to undertake activities that are more profitable, or to stabilise the financial position of the group as a whole.

While both double leverage and internal capital markets can optimise the funding and allocation of resources of the bank group, respectively, they can also generate perils to the stability of the bank group. In particular, high levels of double leverage can generate increased risk-taking and constrain the available liquidity of a bank group. At the same time, internal capital markets can be used to shift assets, including to the detriment of certain entities in the bank group. The dissertation recognises that the way in which double leverage is employed and how the internal capital market is utilised depends on the bank group model and the underlying funding strategy.

With a view to the above, the dissertation underlines that both double leverage and resources allocation within bank groups are among the key elements of implementing and stabilising bank groups with the use of WDC power and the bail-in tool in the post-financial crisis.
resolution regimes. Based on this perspective, the dissertation reviews the EU framework and makes the following three claims.

First, the dissertation argues that the current resolution regimes do not clearly address issues of double leverage when setting out capital and other liability requirements, i.e. the ‘Total Loss Absorbing Capacity’ (TLAC) and ‘Minimum Requirement for Eligible Liabilities’ (MREL) requirements. The lack of consideration of the potential ‘double-leverage’ issue may result in a lack of sufficient capacity of the group to absorb the losses of all its entities. It may also lead to potential payment and maturity mismatches on commitments to external creditors of the bank group, thereby raising liquidity concerns.

Second, while it is important to ensure that bank groups have sufficient capacity to meet their losses, it is equally relevant how they allocate their resources, especially ahead of, and in financial distress. It is argued that, to this end, bank groups need to be allowed to have some optionality, as it is often uncertain what may be the cause of the financial distress and how the resources of the bank group could be used to stabilise it. The dissertation demonstrates that such optionality is provided in the EU framework, mostly by implementing provisions in the ex-ante supervisory rather than the resolution framework. The main issue is that in practice the effectiveness of such a framework may be highly doubtful, taking into account the limits of the powers of the relevant authorities.

In addition to the above two points, which mainly focus on the ‘intra-group’ issues within the bank group, the third point the dissertation makes relation to the bank group’s presence in multiple jurisdictions, under the remit of different national authorities. In this respect, the dissertation underlines the different interests that national authorities might have in safeguarding their own financial systems. Such differing interests could lead to less than optimal solutions often in the form of piecemeal decision taking and failures to address the problems of the bank group as whole. In this regard, in line with the existing literature, the dissertation argues that the different fora where cooperation and coordination in the supervision and resolution of bank groups should take place patchily includes national authorities. The inclusion in these fora (such as resolution colleges, crisis management groups, etc.) is often led by the determination of whether a bank group entity is material to the survival of the group. This may lead to authorities of more peripheral entities being less involved in the relevant discussion, which effectively will result in potential non-cooperative solutions in a financial distress.

To demonstrate the above points, the dissertation is organised as follows. The first chapter describes the reasons for bank group proliferation and instability, and provides the unique approach to review the EU supervisory and resolution framework. For the sake of clarity and conciseness of the terminology used, the second chapter provides the relevant legislative definitions and an overview of the underlying supervisory and resolution framework. The third chapter then focuses on the discussion of the issue of double leverage through the lenses of the EU supervisory and resolution framework. The fourth chapter continues to
review the allocation of the bank group’s financial resources in the ex-ante and ex-post supervisory and resolution framework. The fifth chapter discusses the transnational aspect of bank groups, emphasising the potential outstanding difficulties in international cooperation. The sixth chapter summarises the discussion and provides conclusions.
Chapter I: The Proliferation and Instability of Bank Groups

Introduction

In order to review the current regulatory reform, it is necessary to delve into the reasons why banks adopt complex corporate structures, and why this could lead to their instability. This will provide a perspective on how to think about the effectiveness of the resolution regimes introduced after the financial crisis. The hallmark of these regimes is that the shareholders and creditors of bank groups, who will bear the losses of the failure, will effectively fund resolution. For this purpose, resolution authorities, with the use of equity/debt write-down and debt conversion administrative powers, will assign the losses of the bank failure. One of the difficulties associated with the use of those powers is associated with the complexity of bank groups.\(^{11}\)

The complexity of bank groups can be measured by different parameters.\(^{12}\) At its simplest, bank groups are considered complex since they operate (i) through a large number of separate legal entities, (ii) which are located in different jurisdictions.\(^{13}\) When reviewing the literature, the discussion more often concentrates on point (ii). The focus is primarily on the difficulties of coordinating supervisory and resolution authorities’ actions (and/or, where applicable, insolvency proceedings) across the large number of legal entities located in different jurisdictions, particularly in times of financial distress.

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\(^{12}\) For example, the Financial Stability Board determines each year what financial institutions are considered as systemically important based on a methodology and indicators defined by the Basel Committee on Banking Supervision, see Bank for International Settlement, Global systemically important banks: revised assessment methodology and the higher loss absorbency requirement. July 2018, available here: https://www.bis.org/bcbs/publ/d445.pdf; also, the European Banking Authority sets criteria for the determination of other systemically important institutions, based on their size, importance, cross-border activity, and interconnectedness. See European Banking Authority, on the criteria to determine the conditions of application of Article 131(3) of Directive 2013/36/EU (CRD) in relation to the assessment of other systemically important institutions (O-SIs), 16 December 2014, available here: https://eba.europa.eu/sites/default/documents/files/documents/10180/930752/964fa8c7-6f7c-431a-8c34-82d42d112d91/EBA-GL-2014-10%20%28Guidelines%20on%20O-SIs%20Assessment%29.pdf?retry=1.

The discussions are less frequently concerned with the legal form of the bank group,\(^4\) i.e. with the legal devices that build up the bank group without the additional complexity of the cross-border element.\(^5\) It is obvious to note that, like other commercial groups of companies, bank groups have a legal design that is laid down in corporate and contract laws. Yet rarely is it explained whether and how the legal form based on corporate and contract law is connected to the (in)stability of bank groups. This chapter will highlight how the discussion on this intra-firm issue relating to bank groups can be further enhanced.

For the purpose of disentangling the issue of the complexity of bank groups, it is important to provide some background on the notion of bank groups, and explain why bank groups organise as complex legal structures of ‘groups of companies’ in the first place, i.e. what are the reasons behind their current form. At the same time it is also relevant to understand what drives bank group (in)stability, as described in the literature. The chapter does not try to contend with the reasons for the proliferation of bank groups. It rather adds an additional argument as to why banks organise as groups of companies. Such insights are then used to further explain the instability of complex bank group structures. Once this is clarified, it is easier to evaluate the extent to which post-financial crisis reform mitigates any instability issues related to complex bank group structures.

The chapter indicates that, when discussing instability, the arguments are made with regard to either (i) banks as individual units, without reference to the legal form, or (ii) bank groups as an assembly of interconnected entities operating on a cross-border basis. In the first camp, the main culprits of instability are leverage and risk-shifting. In the second camp, the emphasis is on the potential adverse allocation of resources in the bank group’s internal capital markets, the mismatch of the legal form and economic functioning, and the information asymmetries that arise among the bank group’s stakeholders. Often, the link between the two is not obvious. That is, what is the relation between the group form and leverage and risk-shifting?

The chapter proposes that, by disentangling the legal structure of bank groups, a meaningful connection can be made between the literature’s considerations regarding the reasons for (in)stability, including among leverage, risk-shifting, and the allocation of resources in complex bank group structures. It is explained that the group form provides a mechanism for banks to increase their leverage, namely by allowing the build-up of double leverage.

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Moreover, the chapter argues that the allocation of resources in the bank group’s internal capital market can serve to stabilise a bank group, but not in all circumstances. At times, the use of the group’s internal capital market raises concerns due to the possibilities to shift risks and spread contagion within bank groups.

To organise the discussion, the chapter starts by defining bank groups and explaining how they operate. This is followed by the explanations available in the literature regarding the reasons why bank groups exist in their current form and why they become instable. Finally, the chapter introduces the additional aspects to be considered and elaborates why and what provisions are made subject to analysis going forward.

1. Defining Bank Groups

1.1. The notion of a bank group

A bank group is a group of companies composed of multiple interconnected legal entities operating in the same or different jurisdiction/s. At the head of the bank group is a parent entity, which can be a bank, or a holding company. Hereinafter the term parent entity is used to include both cases. Under the parent entity there is a large number of subsidiaries, i.e. legal entities which the parent entity fully or partially owns and/or controls. Those entities can also be banks (i.e. credit institutions, investment firms) or other types of regulated entities (excluding insurance entities).16 The bank group can also include other operational (non-regulated) entities that provide various services to the regulated entities in the bank group; however, these may fall outside of the consolidated regulation of the bank group.17

In addition to subsidiaries, bank groups can operate via branches. The distinction between branches and subsidiaries is of major significance since branches do not have a separate juridical personality (i.e. they are not legal entities) and are legally dependent on the parent company. As such, branches are not considered in the current examination of the complexity of bank groups, although it is recognised that often, especially in the regulatory context, little difference is made between significant branches and subsidiaries.18

The parent entity and the subsidiaries are connected through a number of relationships. The parent entity has direct or indirect ownership participation in the subsidiaries, determining how decisions are made and control is exercised in the group. Besides through ownership

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16 The model with financial group including also insurance companies meeting the definition of a financial conglomerate is excluded, since it is subject its own set of specific issues.


(e.g. shareholdings), control in the group can be exercised by way of contractual arrangements between the entities in the group (e.g. profit-and-loss sharing agreements).

In addition, the entities in a bank group are financially interconnected for the purpose of capital and liquidity financing. Those financing arrangements often include intra-group loans where one entity in the group lends assets to another group entity. The intra-group loans are usually extended in the form of committed credit or liquidity facilities and subordinated loans, provided by the parent to the subsidiary (downstreaming of resources). As part of the centrally integrated capital liquidity management within the bank group, assets and liquidity resources (e.g. cash) from different entities can be pooled at the level of the parent entity (or other financial hubs in the group) and then redistributed where needed in the group.

Besides legal and financial interconnections, the legal entities in a bank group can share management, business or operational structures. For example, the bank group may organise the management along business lines, rather than legal entities’ lines. As a result, more legal entities in the bank group can be included in the provision of services under specific business lines and functions.

Depending on the extent of the above-mentioned legal, financial and operational interconnections, bank groups can range from being highly integrated to less integrated. When bank groups are highly integrated, they effectively function as a single economic unit without clear distinctions along the underlying legal entity boundaries when conducting their business as usual.

Integrated bank groups are usually centrally governed, following group defined policies, operating through integrated governance committees, and having overlapping board members on the parent and subsidiary boards. In terms of financial interconnections, in an integrated bank group, capital and liquidity funding is also usually centralised. This means that equity and debt financing are raised at the level of the parent entity. The funds are then downstreamed to the other entities in the bank group by the central treasury function. Operationally, more integrated bank groups may share a risk management function, IT systems, and other operational services, which can be provided by the different operating (bank) subsidiaries or designated service companies belonging to the same group.

In comparison, in less integrated bank groups, the subsidiaries are less dependent on the group to perform their activities. The local governance of the subsidiaries is usually more

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21 I.e. the Deutsche Bank Group.
22 Basel Committee on Banking Supervision, Report on intra-group support measures (February 2012), at p. 6; Schoenmaker (2013), pp. 38-42; and also in Jonathan Fiechter, İnci Ötker-Robe, Anna Ilyina, Michael Hsu, André Santos and Jay Surti (2011) Subsidiaries or Branches: Does One Size Fit All? IMF Staff Discussion Note (7 March 2011, SDN/11/04).
autonomous. Operationally, they may run their own management information systems and data centres. Regarding funding, in a disintegrated group, equity and debt can be raised at the level of the subsidiaries of sub-groups, often located in different countries.

In the aftermath of the global financial crisis, the categorisation of bank groups as integrated or disintegrated bank group models was further refined in the context of the introduction of bank resolution regimes. Both scholars and practitioners based their discussion on the following stylised models:24 the ‘holding company’ model, ‘big bank’ model, and ‘global multi-bank’ model.25 Normally, the ‘holding company’ model and the ‘big bank’ model are more integrated, as opposed to the ‘global multi-bank’ model, which is less integrated. The next sections briefly describe the stylised bank group models.

1.2. The Stylised Types of Bank Groups

1.2.1. The Holding Company Model

The ‘holding company model’ parallels the structural separation of banks that provide commercial or investment banking services, usually representative of the US banking system.26 In this model, the bank group is comprised of a holding company that has a commercial bank subsidiary and an investment bank subsidiary (or sub-groups). Effectively, the commercial banking and investment banking business lines are separated, and each of the relevant sub-groups includes subsidiaries down the corporate hierarchy of the bank group.27 Local legislation may ring-fence the activities of the commercial and investment bank parts of the group,28 imposing restrictions on the transactions between the two sides. In


25 Excluding here the model of ‘financial conglomerates’, which also includes insurance business and as such is excluded from the scope of this study.


27 Schilling (2016), at p. 82.

28 Structural reform in the banking sector, see, in the US, the Volcker Rule refers to § 619 (12 U.S.C. § 1851) which is part of the Dodd–Frank Wall Street Reform and Consumer Protection Act; in the UK, the Financial Services Banking Reform Act 2013 (c. 33) Part 1; and in the EU, the Proposal for a Regulation of the European Parliament and of the Council on structural measures improving the resilience of EU credit institutions, COM/2014/043 final - 2014/0020 (COD). The latter proposal was not adopted.
particular, structural reforms in the banking sector have gained prominence following the financial crisis. In spite of the structural separation of business lines, bank group entities in the holding company model may share branding, reputational, operational and technical infrastructure, as well as intra-group funding and liquidity management. As noted before, with respect to funding, usually the holding company at the top of the bank group raises equity and debt and downstreams the proceeds to the commercial and investment bank sub-groups.

1.2.2. The Big Bank Model

The big bank model is representative of the traditional European universal banks. In this model the parent company at the top of the bank group is itself a bank with a large balance sheet. The parent bank may be involved in conducting commercial banking and investment banking activities. Funding from external creditors is likely to be raised at the level of the parent bank, as the most creditworthy and therefore most cost-efficient counterparty. The parent bank will also have a wide range of other creditors concerning operational liabilities. Subsidiaries of the ‘big bank’ group may also hold certain assets and perform certain activities of the bank group. The activities of the subsidiaries are often organised according to business lines defined in different corporate divisions.

1.2.3. The Global Multi-Bank

Finally, the global multi-bank model refers to bank groups that are organised as a more or less ‘empty’ holding company at the top of the group with a number of subsidiaries incorporated in different jurisdictions. The subsidiaries are banks (i.e. credit institutions or investment firms) in the local jurisdictions where they are incorporated. Provided the subsidiary banks are involved in deposit-taking activities, the subsidiaries’ depositors are insured under the local deposit guarantee scheme. The subsidiaries in the ‘global multi-bank’ raise capital on

29 Gleeson and Guynn (2016), at p. 36.
30 Schilling (2016), at p. 83.
31 Institute for International Finance (2012), at p. 53; Schilling (2016), at p. 87.
33 Schilling (2016), at p. 84.
34 Gleeson and Randall Guynn (2016), at p. 38.
35 Additionally, there may also be other entities further in the bank group structure that perform other financial (or even non-financial) services in second-tier subsidiaries further down in the corporate hierarchy. This is known as the 'British Model', see Herring and Santomero (1990), at p. 483.
36 Schilling (2016), at p. 86.
their own, which makes them financially more self-sufficient and less dependent on other entities in the bank group.\textsuperscript{37} As such, the global multi-bank model generally corresponds to the disintegrated business model of bank groups.

\subsection*{1.3. The Complexity of Bank Groups}

The differences in bank groups’ organisation and integration thwart the ability to draw general conclusions on the problems associated with them. Nevertheless, this does not make it impossible to come to some general observations, which can be subsequently qualified on the basis of the degree of integration of bank groups. In particular, the common denominator that has been set for the complexity of bank groups is the \textit{number} of legal entities that they include.

In their comprehensive research on the complexity of bank groups, Herring and Carmassi reported that on average the number of legal entities (i.e. majority-owned subsidiaries) in Global Systemically Important Banks (G-SIBs)\textsuperscript{38} was 924, based on end of 2012 data. Not all of those entities are banks. In fact, the data shows that many are trusts and vehicles, other financial companies and non-financial companies. Additionally, Schoenmaker, who has analysed European G-SIBs, found that the number of legal entities ranged between 255 (BNP Paribas) to 43 (ING Group).\textsuperscript{39} Overall, there is a consensus in the literature that bank groups operate with a large number of subsidiaries, adding the risk of complexity to the objective of financial stability.\textsuperscript{40}

The cross-jurisdictional presence of those entities provides an additional level of complication to bank groups’ legal structures, taking into account that they operate in different jurisdictions and under different rules within the mandate of different national authorities.\textsuperscript{41} To understand why bank groups have arrived at these complex structures, the literature on the matter is consulted and the different reasons are laid out below in section 2.

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{37} In Europe, bank groups that follow this model are BBVA, Santander and HSBC. See Dirk Schoenmaker (2016) The different legal and operational structures of banking groups in the euro area, and their impact on banks’ resolvability, European Parliament In-Depth Analysis, November 2016, at p. 9; see also Carmassi and Herring (2014), at p. 111.
\item \textsuperscript{38} Every year, the Financial Stability Board (FSB) identifies G-SIBs on the basis of a set of criteria defined by the Basel Committee on Banking Supervision (BCBS), see BCBS (July 2013) Global systemically important banks: updated assessment methodology and the higher loss absorbency requirement, , available at: https://www.bis.org/publ/bcbs255.pdf .
\item \textsuperscript{39} Schoenmaker (2016)
\item \textsuperscript{40} Singh (2020) at p. 16, Herring and Carmassi (2014), at p. 117
\item \textsuperscript{41} Schoenmaker (2016), Gleeson and Guynn (2016).
\end{itemize}
\end{footnotesize}
2. Reasons for the Proliferation of Bank Groups

The literature provides multiple reasons why banks organise as a group of companies with a number of interconnected legal entities. Broadly, most of those reasons can be associated with bank prudential regulation, tax, and conceptually, information asymmetries between the firm and its stakeholders.

2.1. Bank Prudential Regulation

The reasons associated with bank prudential regulation include aspects of financial liberalisation, division of responsibilities among the different authorities responsible for conducting prudential supervision, as well as some corollary effects, such as increase in merger and acquisition activities and the politics of breeding more competitive ‘national champions’.

Regarding the first point, financial globalisation more generally is defined as the increase in cross-border financial flows through the expansion of financial institutions’ activities across national lines. These changes have affected the structure of banks, which have expanded their activities across geographical borders and financial sectors, forming large and complex financial institutions by means of both consolidation and conglomeration. Consolidation is the process of concentration of smaller banks into larger ones. In effect, this means increasing the number of legal entities within a bank group. In comparison, conglomeration is the process of combining different banking activities, including non-banking activities such as insurance, in one group, thereby creating financial conglomerates.

The processes of financial liberalisation particularly intensified through integration of regulatory policies at regional and national level. In Europe, this was achieved, inter alia,
through the establishment of the single common market\textsuperscript{48} under the Treaty of Rome in 1957. In particular, the objective of a single common market in the EU was attained by way of recognition of the right of establishment and coordination of legislation where needed.\textsuperscript{49}

In the banking sector, this included the harmonisation of legislation, commencing with the First Banking Directive on \textit{The Coordination of Laws, Regulations and Administrative Provisions Relating to the Taking Up and Pursuit of Credit Institutions}.\textsuperscript{50} Notably, the First Banking Directive set out the principle of ‘home country control’. This meant that the home countries of the parent entities were made responsible for the supervision of the solvency of the parent entity and the bank group on its consolidated basis (when considered as a whole).\textsuperscript{51} The control over the subsidiaries was retained by the host countries where those entities were established.

This allocation of regulatory responsibilities was aligned with the global standards as determined in the 1975 Basel Concordat.\textsuperscript{52} Namely, under the Concordat, the home country authorities\textsuperscript{53} are responsible for the supervision of the solvency of bank group’s parent entities and branches. Home country authorities need to consider the exposure of the foreign subsidiaries of their domestic banks, as the parent entity has a moral (albeit perhaps not legal) commitment to the financial stability of its subsidiaries.\textsuperscript{54} In comparison, host country\textsuperscript{55} authorities are responsible for the supervision of the solvency and liquidity of subsidiaries and joint ventures, and the liquidity of branches.\textsuperscript{56}

\textsuperscript{48} Dragomir (2010), at p. 14.
\textsuperscript{50} First Council Directive 77/780/EC on the coordination of the laws, regulations and administrative provisions relating to the taking up and pursuit of the business of credit institutions 1977, OJ L 322/30 [First Banking Directive].
\textsuperscript{52} Committee on Banking Regulations and Supervisory Practices, Report to the Governors on Supervision of Banks’ Foreign Establishment (85/75/44e) September 1975, revised in May 1983 as Principles for the Supervision of Banks’ Foreign Establishments; this is referred to as entity-based regulatory model, as opposed to effect-based regulatory model. See Katharina Pistor (2010) Host’s Dilemma: Rethinking EU Banking Regulation in Light of the Global Crisis, ECGI Finance Working Paper N°. 286/2010, Columbia University Law School Law & Economics Paper No. 378, at p. 3; see also Harald Benink (1999) European Single Banking Market, in Robert Eisenbeis, Frederick Furlong and Simon Kwan (eds.) Financial Modernization and Regulation, Special Issue of Financial Services Research, vol. 16.2/16.3, no. 2/3, at p. 231; The principle of ‘home country supervision’ was further fortified with the European Court of Justice (ECJ) decision in the Cassis de Dijon case, see Haar (2015), at p. 159. The indicated case was following: Case 120/78 Rewe-Zentral AG v Bundesmonopolverwaltung für Branntwein [1979] ECR 649.
\textsuperscript{53} According to the CRR, home country is the country where the parent entity has been granted authorisation. See CRR, Article 4(43).
\textsuperscript{54} Rosa Lastra and Rodrigo Olivares-Caminal (2013) From Consolidated Supervision to Consolidated Resolution, in Dalvinder Singh, Rodrigo Olivares Caminal and John Raymond LaBrosse (eds.) Managing Risk in the Financial System, Edward Elgar (Cheltenham, Northampton), at p. 311.
\textsuperscript{55} According to the CRR, host country is the country where a bank has branches or subsidiaries. See CRR, Article 4(44).
\textsuperscript{56} Lastra and Olivares-Caminal (2013), p. 309; Valia Babis (2013) Banks in Crisis: Rethinking the Roles of Intra-Group Transactions, King’s Law Journal 24: 85-101, p. 87; the EU legislation specifies these responsibilities in the CRD, Articles 49 and 50.
To this end, it should be highlighted that the sole existence of assets and liabilities within a specific country provides the relevant national authorities with a natural interest in how those assets and liabilities will be managed. These authorities have mandates to protect the financial stability of the financial system of the jurisdiction where they perform their functions and where they are accountable to national political bodies. In certain circumstances, national authorities can have an incentive to require a legal form for bank operations that will allow them to exercise greater control and oversight, namely a subsidiary as a separate legal entity, as opposed to a branch that is legally dependent on the parent company.

In particular, this could be case where the home and host authorities have conflicting interests. For example, from the perspective of home country national authorities their cross-border banks can be quite diversified given the parent entity's shareholdings in subsidiaries operating in numerous host countries and markets. Hence, they may not see a reason to intervene when an individual subsidiary experiences financial distress. This may be a matter for concern of host country authorities, which may anticipate the lack of intervention on the part of the home authority and therefore decide to use ex-ante mechanisms or discretions to protect national financial stability. Consequently, host authorities may see the establishment of subsidiaries in their respective jurisdictions as a matter of public interest, taking into account that having a ‘branch’ would reduce the level of host regulatory control and powers over the bank’s activities in the respective jurisdiction.

Further to the ‘home country control’ principle and the relevant division of responsibilities among national authorities, in the ‘White Paper on the Completion of the Internal Market’ of 1985 concerning the free movement of persons, goods, services and capital in the European

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59 For the definition of branches see CRR2, Article 4(1)(17).


61 Pistor (2010), at p. 6.

62 Jonathan Fiechter, İnci Ötker-Robe, Anna Ilyina, Michael Hsu, André Santos and Jay Surti (2011) Subsidiaries or Branches: Does One Size Fit All? IMF Staff Discussion Note (SDN/11/04 March 7), p. 4.
Community (EC), the European Commission called for a ‘single banking licence’, ‘home country control’ and ‘mutual recognition’ in the banking sector. These initiatives were incorporated in the Second Banking Directive. The ‘single banking licence’ or the single EU passport allows banks authorised in any EU (or European Economic Area) to provide services or perform activities for which it has been authorised throughout the single market, either by establishing a branch or without permanent establishment. The principle of ‘mutual recognition’ obligates each Member State to recognise the laws of, and licences from other Member States.

Considering these aspects of the process of financial integration throughout the last years of the 20th century and the beginning of the 21st century, Dermine noted that it would be reasonable for banks deciding to go cross-border, to choose to operate within a corporate structure based on a series of branches rather than subsidiaries, particularly since the European single banking passport would not apply in the latter case, as subsidiaries are considered as local banks in each country. However, the author found that a striking feature of the process of cross-border European banking is that it often takes place via subsidiaries, not branches. While division of home-host regulatory responsibilities as noted before can be one reason, Dermine discussed reasons of financial contagion and ‘information asymmetries’ as elaborated further down in the text. According to more recent studies, in the EU, bank groups operate via larger number of branches than subsidiaries, though the number of subsidiaries is still significant. This ‘simplification’, if one may call it that, could be a result of the introduction of the post-recovery and resolution regimes. Nevertheless, even such ‘simplification’ has not lead to bank groups no longer being considered as complex.

Further to the above principles in the Banking Directives, the deepening of financial integration in the EU continued with the introduction of the euro, in the 1990s, resulting in higher merger and acquisition (M&A) activity, and is identified as another factor that increased complexity. In the banking sector, due to consolidation based on merger and


66 Dermine (2005), at p. 16.

67 Singh (2020), at p. 16.

acquisition activity, the number of financial institutions dropped from 12,256 in 1985 to 7,444 in 2003, and to 6,360 in 2009. The decrease in the number of banks did not mean that they exited the market, but rather that consolidation processes occurred. This M&A activity continued as the number of Member States in the EU expanded.\(^69\) Notably, since the accession of ten additional EU Member States in 2004,\(^70\) both the number and value of M&A transactions have increased significantly, specifically in Central and Eastern Europe (CEE).\(^71\) However, cross-border mergers also took place in Western Europe. Examples include the takeover of Erste Bank in Austria and Hypobank in Germany by the Italian bank Unicredit and the takeover of the UK Abbey National by the Spanish Santander. Furthermore, the Dutch ABN AMRO Bank was acquired by Fortis in Belgium, the Royal Bank of Scotland and Banco Santander.\(^72\)

Finally, when considering the legal structure of bank groups, some political effects can be noted. In the above-mentioned consolidation processes, EU Member States promoted the political objective of creating ‘national champions’.\(^73\) The idea that the national identity of their banks remained intact was combined with the logic that a larger domestic bank was more likely to act as acquirer than as a target in cross-border consolidations.\(^74\) Therefore, national regulators allowed otherwise anti-competitive mergers between domestic entities.\(^75\) As the global financial crisis unravelled, governments and central banks in the EU allowed further mergers in an attempt to increase bank groups’ resilience.\(^76\)


\(^70\) The countries that acceded in 2004 were the Czech Republic, Hungary, Poland, Slovakia, Slovenia, Estonia, Latvia, Lithuania, Cyprus and Malta. In 2007, Bulgaria and Romania joined the EU. Croatia is the newest MS of the EU, joining in 2013, Fact Sheets on the European Union – The enlargement of the Union, retrieved at: http://www.europarl.europa.eu/atyourservice/en/displayFtu.html?ftuId=FTU_6.5.1.html


\(^74\) Véron (2013).

\(^75\) OECD, Competition and the Financial Crisis, paper for a discussion on the financial crisis in the OECD Competition Committee on 17-18 February 2009, p. 18.

\(^76\) Crisis fuels European talk of national bank champions, Reuters, 18 September 2018, doi: http://uk.reuters.com/article/sppage012-li594673-oisbn-idUKKIS59467320080918; For example, in the UK, competition regulators: did not stop the acquisition by Lloyds TSB of the troubled HBOS, which was thus able to save it. See The Failure of HBOS Plc (HBOS), report by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA) November 2015, at p. 22; see also Lloyds TSB seals £12 HBOS rescue, Financial Times, 18 September 2008, doi: https://www.ft.com/content/d7fa43e0-b496-11dd-b148-0000779fd18c
tremors from the collapse of Lehman Brothers,\textsuperscript{77} the focus of national authorities shifted to the protection of (national) financial stability. Given the lack of reliable legal frameworks for winding down large banks without adverse effects on the stability of the financial system, public bail-outs seemed to be the only recourse, in the EU and worldwide.\textsuperscript{78} A number of governments and central banks in the EU MSs came to the assistance of their troubled banks, in order to safeguard the stability of the (national) financial system.\textsuperscript{79}

In addition to the breeding of ‘national champions’, in the post-financial crisis world, with the UK departure from the EU an effect can be seen on the complexity of bank groups in terms of their legal entity organisation. After the UK departure from the EU, banks licensed by the UK (whether or not with their headquarters in the UK) lost their EU single passport. This means that banks need to obtain an additional licence from an EEA Member State in order to continue offering financial services in the EU. This is necessary for all forms of cross-border services, regardless whether they are provided by separate subsidiaries or branches or directly offered on a cross-border basis.\textsuperscript{80} The decision on the form in which banks will continue to provide their activities can contribute to the complexity of bank groups, particularly if the form chosen by a bank is a new subsidiary (including conversion of a branch into a subsidiary).

\subsection*{2.2. Tax Frictions}

In addition to regulation, another important factor for the corporate complexity of bank groups is tax laws. Like other commercial companies, bank groups establish entities in different jurisdictions, which makes it possible to shift the group’s profit from one entity to another and to be taxed in jurisdictions with lower taxes under more favourable rates.\textsuperscript{81} Additionally, the shifting of profit and losses across such entities is beneficial since it offsets the amount of profit and losses that can then be reported in a combined tax report to the extent that such offsetting is permitted in the relevant jurisdiction/s where the bank group operates.\textsuperscript{82} Consequently, tax laws and the exploitation of cross-jurisdictional differences

\textsuperscript{77} See for the events leading up to the failure of the bank Anton Valukas, Robert Byman and Daniel Murray (2017) The Rise and Fall of Lehman Brothers, in Dennis Faber and Niels Fermut (eds) Bank Failure – Lessons from Lehman Brothers, Oxford University Press (Oxford), at pp. 3-30.

\textsuperscript{78} In this respect see Simon Gleeson (2012) Legal Aspects of Bank Bail-ins. Special Paper 205, LSE Financial Markets Group Series, at p. 3.

\textsuperscript{79} For an overview of selected case studies Dirk Schoenmaker (2013) Governance of International Banking, Oxford University Press (Oxford), at pp. 69-89; for a detailed discussion of the form in which public support was provided in the financial crisis see Hans-Joachim Dübel (2013) The Capital Structure of Banks and Practice of Bank Restructuring, Center for Financial Studies, Goethe University, Working Paper No. 2013/04.


\textsuperscript{82} It should be noted that not all jurisdictions allow combined tax reporting (i.e. consolidated tax reporting) for legal entities outside the group.
therein provide important incentives that influence the decision of bank groups where to incorporate and with what level of corporate complexity.

As an indication of how much tax laws have affected the complexity of large bank groups, Herring and Carmassi took the number of legal entities that G-SIBs have in tax havens.\(^{83}\) For this purpose, tax havens are broadly considered to be “countries/territories/jurisdictions, which provide low or zero taxation, moderate or light financial regulation, and/or banking secrecy and anonymity”. For the EU G-SIBs, the number of legal entities in offshore centres ranged from 4% (ING Group) to 27% (Deutsche Bank) of the total number of their legal entities. Thus, relative to the bank group, the entities existing for tax purposes can add a significant portion of complexity to its structure.

2.3. Intentional Decisions to Opt for Corporate Separates

Both regulation and tax may not be apt to explain fully the corporate complexity of bank groups. The argument that bank groups are required to have separate legal entities by local regulatory authorities could be dubious. This is because bank groups often operate with more than one legal entity in a single jurisdiction.

In addition, tax laws apply to all commercial companies, which may also benefit from the incorporation in tax heavens. Yet, Herring and Carmassi find that bank groups operate with almost double the number of legal entities than other commercial groups of similar size.

Hence, besides the potentially corollary reasons that lead to the construction of large bank groups (i.e. regulation and tax), the questions of what degree of corporate separateness a bank group management body chooses, and why, has been also considered. The main reasons that are indicated include financial contagion and asymmetric information, including transaction costs. These views are considered and discussed below.\(^{84}\)

2.3.1. Financial Contagion

The need to prevent financial contagion has been pointed out as one of the reasons why bank groups decide to operate via separate legal entities, i.e. subsidiaries rather than branches.\(^{85}\) According to Cerutti et al., subsidiaries, as individual legal entities, are the preferred organisational form for banks operating in countries with high-risk macroeconomic

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\(^{83}\) Herring and Carmassi (2014), at p. 18.
\(^{84}\) See Dermine (2005), and Herring and Carmassi (2014).
\(^{85}\) Carmassi and Herring (2014), p. 205.
environments, allowing parent banks to use the shield of limited liability for the losses of the individual legal entities.\textsuperscript{86} 

The limited liability of the parent entity towards the subsidiary confines the exposure to the risks of that subsidiary in times of financial distress.\textsuperscript{87} The view that parent entities isolate risks by using subsidiaries in countries with higher macroeconomic and political risks was challenged in the global financial crisis, when some parent entities were the source of contagion for some of their subsidiaries.\textsuperscript{88} In the run-up to the financial crisis, some parent entities transferred assets away from some of their subsidiaries in order to shore up losses that they themselves or other subsidiaries made.

Moreover, the argument that corporate separateness provides limited liability for a parent entity, allowing it to walk away from an ailing subsidiary, has also been questioned by the assertion that such action can raise reputational concerns about the group’s financial health. For example, if the parent entity decides not to support an ailing subsidiary, it can trigger suspicion regarding the financial resilience of the entire bank group.\textsuperscript{89}

Even when putting aside reputational concerns, it has been pointed out that limited liability between parent and subsidiaries can be omitted by means of a contract, namely when a parent entity decides to guarantee the debt of the subsidiaries. As Pistor indicates, such was the case with Lehman Brothers, where the parent entity guaranteed the liabilities of the subsidiaries, thereby making the corporate separateness and its limited liability obsolete.\textsuperscript{90}

Given the above observations, the use of corporate separateness for limiting the liability of the parent entity to the financial contagion of the subsidiary may be dubious. It appears that it depends on the specificities of an individual case and how the funding arrangements are made across the different entities.

For example, based on the finance literature, parent entities are likely to support (including by extending guarantees) subsidiaries that are more profitable and more interconnected with the parent entity. For example, Cardena shows that the decision of the parent entity to


\textsuperscript{87} Limited liability is a widely accepted principle of corporate law that, on the upside, promotes economic growth, enables diversification, and enables share transferability and liquidity in capital markets. See in this regard Andrew Muscat (1996) The Liability of the Holding Company for the Debts of its Insolvent Subsidiaries, Dartmouth Publishing Company (Aldershot, Brookfield), p. 164.

\textsuperscript{88} Reputational concerns for banks are of great importance, since the banking business is highly reliant on the confidence among the participants in the financial markets. Damage to a bank’s reputation might result in loss of confidence that, in turn, may trigger bank runs, detrimental to the bank’s survival in view of its exposure to liquidity risks and maturity transformation activities. See further Thomas Baxter and Joseph Sommer (2005) Breaking Up Is Hard to Do: An Essay on Cross-Border Challenges in Resolving Financial Groups, in Douglas Evanoff and George Kaufman (eds.) Systemic Financial Crises: Resolving Large Bank Insolvencies, World Scientific (Singapore), pp. 175-91, at p. 187.

provide support (thereby omitting limited liability) is affected by the expectation of which entity is more likely to generate future profit.\textsuperscript{91} Additionally, Düwel and Frey point out that subsidiaries can be distinguished between those that are less reliant on the bank group intra-group funding and have their own, more stable (retail funding) bases in their home market, and those that are more reliant on the parent funding and the group. When the inter-bank and capital market froze during the financial crisis, and the parent entities were struggling to obtain external (wholesale funding), a more pronounced internal competition for the bank groups’ scarce resources ensued among the second type of subsidiaries.\textsuperscript{92} The greater interconnectedness with the parent entity or the group increased the significance of such entities for the survival of the group as a whole. This makes the relevant subsidiary more likely to receive support when it is in financial distress.

Preliminarily, the findings described above suggest that the ‘financial contagion’ argument is a complicated one and depends on the funding structure within the bank group as well as on the ways in which decisions about allocation of resources are made. The way in which this pairs with the parent entity’s limited liability is considered in section 2.3.4 below.

2.3.2. Information Asymmetries and Transaction Costs

In addition to the above, according to the discussions by Dermine, and Herring and Carmassi, the degree of corporate complexity is also determined by the asymmetric information that exists between firms and their different constituencies and counterparties. Information asymmetries occur in situations when one party to a transaction is more informed than the other party.\textsuperscript{93} In particular, for the capital and the resulting corporate structure of a firm the asymmetric information between creditors and shareholders is of relevance.

This is because creditors are concerned that a firm’s management representing the shareholders has more information and will engage in risk-shifting by substituting safer assets with riskier assets that could affect the ability of the firm to settle the claims towards its creditors. The risk-shifting from shareholders to creditors occurs since shareholders have a different payoff function than creditors. Namely, after the firm’s costs are covered, shareholders are entitled to all the upside returns of the business. If such business suffers losses, shareholders are the first in line to bear these losses. However, the amount is capped


\textsuperscript{93} Regarding information economics, see Joseph Stiglitz, Information and the Change in the Paradigm in Economics, Nobel Prize Lecture, 8 December 2001, Columbia Business School, Columbia University; see further Robert Frank and Ben Bernanke (2013) Principles of Economics, McGraw Hill (3rd edn, New York), pp. 664-665. In a firm, information asymmetries can exist between: (i) shareholders and creditors; (ii) shareholders and managers; and (iii) the firm and its customers.
to their equity stake due to the limited liability. In comparison, creditors have a fixed payoff limited to the amount of interest and principal owed to them. Unlike shareholders, they may lose everything they have lent if the firm fails. Therefore, while shareholders may prefer riskier investments that can bring higher returns, creditors may prefer safer investments.

The information asymmetry problem as described above is inherent to financial transactions. The reason is that financial transactions operate on a time interval extending from the moment the creditor transferred assets to the debtor, to the time the debtor needs to repay the transferred assets. In this time interval, the debtor’s position or behaviour may change in a way that diminishes the likeliness of repayment. As a result, creditors may fear that the firm as debtor will misrepresent the quality of the assets (adverse selection), or that it will make riskier investments in its own interest, but to the detriment of its creditors (moral hazard).

To safeguard against risk-shifting, creditors can include contractual covenants, charge a higher interest rate, or refuse to lend. In all cases, the cost of the transaction will increase. The choice of corporate structure can mitigate this problem. According to Kahn and Winton, isolating risky assets in separate subsidiaries can reduce the incentives for risk-shifting. This is because the safe subsidiary will then have higher net returns in a bad state of the world. The safe subsidiary will also improve the terms under which it can obtain funding from the market.

On this last point, it should be noted that the segregation of the debtor’s business into distinct legal entities within a group of companies improves creditors’ monitoring capabilities and decreases the information asymmetry problem, and therefore the costs related to this problem. It allows the business to separate the credit risk related to certain business lines, assets, and entities and enables creditors to lend according to their risk preference. This information asymmetry may also explain why bank groups organise with multiple entities, almost double the number than commercial entities of similar size. Specifically, this is because the banking business is considered to be more obscure than the business of other

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94 Dragomir (2010), at p. 42.
commercial companies and its information asymmetry problems can be more prominent than for other commercial groups of companies.

2.3.3. The Legal Basis Underlying the Proliferation of Bank Groups

2.3.3.1. Corporate Law: The ‘Entity Shield’

The finance literature’s argument that corporate separateness can reduce information asymmetries between the firm and its counterparties can be supplemented with views in the legal literature. Bank groups, like other commercial groups of companies, are based on legal mechanisms in company law that allow the setting up of legal entities. At the same time, contract law underlines the financial transactions and operational dependencies created among the different entities. In this sense, while company law builds the body of the group structure, contract law provides the circulation (of assets and liabilities) in this body. As will be explained in the next sections, both are relevant for the proliferation of bank groups that normally have highly leveraged business models, i.e. financed with more debt than equity.

Company laws offer different forms in which a business can be organised. However, most commercial and bank groups are organised as corporations with limited liability. Importantly, there have been longstanding discussions in the economic and finance literature on the role of corporate law in reducing transaction costs, including those that arise due to asymmetries of information. The most famous theory has been the ‘nexus of contracts’ theory. Proponents of this theory have argued that corporations are nothing more than a collection of standardised contracts between different parties, including shareholders, directors, employees, suppliers and customers. One party, i.e. the firm, coordinates the contracting of the different parties. Corporate law simply provides the concerned parties with boiler template provisions that essentially reduce the transaction costs of negotiating separate contracts.

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102 Company law and corporate law are used interchangeably. The aim is to encompass the literature from both Europe and the US that use these terms respectively.

In reply to this interpretation, legal scholars have asked: if contract law is capable of achieving this, why is there a need for corporate law at all? Regarding this question, Hansmann and Kraakman have argued that the essential role of corporate law is to facilitate asset partitioning.\textsuperscript{104} In a corporation, there are two forms of asset partitioning: (i) entity shielding and (ii) owner shielding, i.e. limited liability. The entity shield separates the assets of the firm from the personal assets of its shareholders (and or creditors) and managers. The owner shield separates the personal assets of the firm’s shareholders from the assets of the firm (i.e. limits the liability of a shareholder for the losses of the firm).

The said authors put the emphasis on the ‘entity shield’ when explaining the essential role of corporate law. This is because the ‘entity shield’ allows the pool of assets to serve effectively as a locus of contracts, i.e. allows to bond the contracts credibly – providing assurance that the firm will perform its contractual obligations. For this purpose, corporate law provides the firm with a ‘juridical personhood’ that allows it to own those assets and acquire liabilities in its own name.

Hansmann and Kraakman explain that this indeed reduces the cost of negotiating contracts with different stakeholders. However, the authors pinpoint that this is the result of the change in ‘property rights’. According to Hansmann and Kraakman, organisational law (which here includes corporate law) provides “a form of security interest that could not otherwise be established, and that plays a crucial role in permitting the formation of the large loci of contracts that are employed to organize most modern business activity.”\textsuperscript{105}

By providing ‘juridical personhood’ to the firm, which establishes the ‘entity shield’, the rights of the personal creditors of the firm’s shareholders are limited. This is because the shareholders, by investing in the firm’s equity, isolate a portion of their assets that their personal creditors cannot access, unless the firm is dissolved or the shareholder liquidates its shares in the firm. The authors explain that if such arrangement is attempted to be achieved by way of contract, instead of corporate law, each shareholder would need to (re-)negotiate the contracts it has with different creditors.\textsuperscript{106} This would be prohibitively expensive, especially in firms with many (potentially changing) shareholders where it would not be possible to police the personal dealings of each shareholder with its creditors.

To solve this problem it is conceivable to impair the rights of the personal creditors of the shareholders without their contractual consent (or even without notice of the change) by introducing a special law under which assets are committed and belong exclusively to the firm. This is what corporate law is achieving with the principle of entity shielding. It provides

\textsuperscript{104} This view differs from the renowned ‘nexus of contracts’ theory, which argues that corporate law has a role in decreasing the transaction costs of negotiating a number of contracts with shareholders and creditors of the firm.

\textsuperscript{105} Henry Hansmann and Reiner Kraakman (2000), Organizational Law as Asset Partitioning, European Economic Review, Volume 44, Issues 4-6, May 2000, at p. 10. (emphasis added)

\textsuperscript{106} The authors therefore provide a counter-argument to the proponents of the ‘nexus of contracts’ theory of corporate law.
legal personhood to the entity that owns the assets, which puts it out of reach from any personal creditor of the shareholders. In the words of Hansmann and Kraakman:

“When a firm is organized as a legal entity, and an owner of that firm – even the sole owner – transfers assets to the firm, the creditors of the firm are automatically given a contingent claim on those assets (exercisable in case of contractual default), while the contingent claim on those assets previously held by the owner’s personal creditors is subordinated to the claims of the firm’s creditors, all without any form of re-contracting or assent on the part of the owner’s personal creditors or the creditors of the business.”

In essence, according to the authors the real issue is that entity shielding is too costly to produce contractually, because the entity’s owners would put their own personal creditors on notice of the fact that they do not have access to the entity’s assets. It is however worth asking whether this argument holds much sway in a group of companies’ context, where the parent is often the sole (or majority) owner of all subsidiaries. The parent entity could put its personal creditors on notice, even in the absence of an entity shield. Thus, it seems that only at the level of the parent entity the issue becomes problematic.

On this point, Casey notes that a creditor can always require a debtor to keep its books and records for different assets separate and therefore be able to monitor even without an entity shield. Such a view challenges the explanation of the ‘information asymmetry’ argument that corporate separateness is needed to enhance monitoring by external creditors. Instead, from a legal viewpoint, as Iacobucci and Triantis explain, it is more important to have an ‘entity shielding’ as this will ensure that an enforcement action can be taken with regard to a specific pool of assets when a bankruptcy procedure is triggered. To this end, these authors explain that the separation of asset pools through other means, such as by providing ‘security interest’ rights over a certain pool of assets, cannot fully contain an enforcement action regarding a single asset or group of assets, like an ‘entity shield’ would.

In view of the above, unlike the information asymmetry argument that puts the emphasis on the external creditors’ ability to monitor (and accordingly price the debt) in the separate entities, the ‘legal argument’ focuses on the ability of those external creditors to enforce the claims over a specific pool of assets in the event of bankruptcy. In essence, the legal argument suggests that for monitoring purposes (and thus, for reducing information asymmetries) the ‘entity shield’ is not necessary. Instead, according to the legal argument, what is of greater importance for the creditors is the ability to enforce their claims over the segregated pool of assets protected with the entity shield.

Be that as it may, it is also worthwhile highlighting that the external creditors of the parent entity will only have a claim on the assets of the parent entity itself, not on the subsidiaries’ assets isolated with the entity shield. Thus, the ‘entity shield’ and any ‘monitoring information asymmetries’ or ‘enforcement of claim’ benefits that it provides are by far more important from the perspective of the ‘external creditors’ of the subsidiaries.

The reason for this emphasis is to point out that such rationale matters when considering the different funding models of bank groups, described earlier. In particular, when considering the ‘holding company bank’ and the ‘big bank’, which have centralised funding structures, it is the parent entity that raises the external debt capital and downstreams it to the subsidiaries further down in the structure. In other words, in these bank group models the parent entity will often be the sole funding creditor to the subsidiaries.\(^\text{110}\) Hence, often there is no external funding creditor.

Conversely, in a ‘global multi-bank’ model, subsidiaries are normally responsible for raising their own financing, thereby having potentially both external and internal funding creditors. Thus, potentially the ‘information asymmetry’ and the ‘enforcement’ arguments may have more merit.\(^\text{111}\)

In addition, it also relevant to underline that the arguments provided above are more pertinent for the creditors providing funding for the separate entities (funding creditors), as opposed to the operating creditors. For example, in a bank group, this would include depositors or derivatives counterparties. In other words, it could be suggested that corporate separateness is not as relevant for the operating creditors of the group. This is because the claims of these creditors are either insured with depositors under deposit guarantee scheme funds (DGSS) or they have collateralised claims over specific assets. Thus, their incentives to monitor the activities of the bank will likely be diminished.\(^\text{112}\) This will be the case in any of the models of bank groups set out above.

Given the above, it seems that the arguments set out in the literature on both ‘information asymmetries’ and ‘enforcing claims’ primarily concern external funding creditors of the bank group entities. As corporate separateness is not the only way to reduce information asymmetries, and bank group subsidiaries are often funded by internal creditors (which will not be involved as external ones with regard to the enforcement of their claims), it is

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\(^\text{110}\) There is a distinction between the operating creditors and the investment creditors of the bank group entities. Operating creditors are holding obligations such as deposits and derivatives, which are senior to the investment creditors (i.e. those holding the capital, equity or subordinated debt). All the entities in the bank group are likely to have operating creditors that are not part of the group. However, not all bank group subsidiaries have external investment creditors, i.e. creditors outside the bank group. See Thomas Huertas (2015) A Resolvable Bank, in Ken Scott and John Taylor (eds.) Making Failure Feasible: How Bankruptcy Reform Can End Too Big to Fail, Stanford University Press.

\(^\text{111}\) It should be noted, though, that the majority of bank groups operate on the basis of centralised group funding. Therefore, it may be warranted to focus on the centralised funding structures.

warranted to consider why bank groups, especially those with integrated funding models, would still choose to operate with a large number of legal entities.

Thus, as an addition to the explanation concerning the ‘external creditors’ of bank groups, I hypothesise that an additional rationale could be added. While such rationale could be true for all groups of companies, the answer is probably more pertinent for bank groups. This is because, they are normally more leveraged than other commercial businesses, as banks tend to hold higher debt than equity to finance their assets. This is a result of their role as financial intermediaries, taking the deposits or other loans to invest in other assets. In this context, the group structure is relevant, as it can facilitate the way in which a bank manages the level of its leverage.

To this end, it should be highlighted that the group structure allows the build-up of a double-leverage structure. This is achieved by the parent entity obtaining external debt funding from creditors and investing it as equity in its subsidiaries or even special purpose vehicle. With this, the group form allows the building of so-called equity capital pyramids, because the parent entity raises capital from external investors and uses that capital to invest in the subsidiaries, which then use this capital to support their own assets. This effectively means that the capital has been leveraged twice, once at the level of the parent entity, and once at the level of the subsidiary. When this goes further down in the group structure, the capital can be leveraged multiple times. This quantitative part of the process is referred to more precisely as ‘double gearing’, which, as described in Chapter III, is recognised in bank prudential regulation.

However, what is even more important to note in this process is that the group structure allows changing the quality of the capital that is being raised. While the parent entity may raise debt from external investors, it can invest the proceeds as equity in its subsidiaries. In this situation, the ‘entity shield’ has not only allowed the segregation of asset pools but has also promoted the transformation of debt into equity financing through the group structure. This double-leverage financing structure can be attractive since debt financing is less costly than equity financing. Of course, it is a structure that all commercial groups of companies may utilise in deciding their optimum debt and equity mix (i.e. their leverage). However, as noted earlier, it is probably more relevant for the banking sector, where the business model itself is

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more leveraged due to banks’ role as financial intermediaries. One may easily assume that in order to manage their already leveraged balance sheet, banks will seek to exploit the group structure in order to benefit from the balancing of their external and internal debt and equity financing. Potentially, this also explains why in practice bank groups operate with almost double the number of entities than other commercial enterprises of similar size.

2.3.3.2. Corporate Law: The ‘Owner Shield’

The second principle of corporate law, as noted above, is the principle of ‘owner shielding’ or limited liability. Unlike the entity shield, the ‘owner shield’ is not essential for setting up a group of companies. This is because it is a term that can simply be easily introduced in the contracts between the shareholders and creditors.116 As incorporation or other formalities are not prerequisites to obtaining the protection of limited liability, the presence of the principle and its necessity within corporate groups has been debated in the literature.117

It is worthwhile noting that limited liability has not always been the standard feature of corporate law. It was introduced relatively late, starting from the 19th century when legal system after legal system allowed it under its corporate statutes. Until the 19th century, commercial enterprises were normally structured as partnerships with unlimited liability. Partnerships and unlimited liability were considered beneficial since they promoted responsibility and accountability. Legislators feared that the introduction of limited liability would allow entrepreneurs to raise debt, take away profit, and leave creditors behind when the company failed. In other words, they feared that by limiting their liability, shareholders would engage in risk-shifting practices.118

Given the potential for risk-shifting and excessive risk-taking, in the banking sector, for a long time, partnerships and unlimited liability were considered a badge of prudence for banks’ organisational form.119 For example, in the UK banking sector,120 the legal form allowed for banks before the 1820s was a partnership, with a maximum of six partners.121 The partners had unlimited liability for the bank’s debts. Since partners stood to lose their own personal

121 Turner (2014), at p. 104.
assets should the business enterprise fail, they were less inclined to make risky investments. At the same time, unlimited liability made banks run-proof as it assured depositors that their claim extended beyond the assets of the partnership.\textsuperscript{122} Unlimited liability eventually proved to have its own deficiencies, such as limiting banks’ size (and therefore their capacity to serve a broader economy), as well as stripping the partners of their personal wealth followed by personal tragedies. As a result, the concept of unlimited liability was slowly abandoned.

Limited liability was adopted in the UK in 1862 (after being introduced once before and rejected). In the US, it was introduced in 1811 in New York law, and in 1932 in California law.\textsuperscript{123} In contrast to unlimited liability, limited liability had the benefit of promoting entrepreneurial activity since it allowed investors to limit the risk of their investments.\textsuperscript{124} Such entrepreneurial activities need to be supported also by large banks that could not had not been set up without limited liability.\textsuperscript{125} Before coming to today’s single liability, historically, different liability regimes were tested across different jurisdictions (including multiple, double liability).\textsuperscript{126}

As with the entity shielding principle, within a group of companies, the principle of limited liability operates on two levels. On the first level, the parent entity has limited liability as a shareholder in the group’s subsidiaries. This could be referred to as ‘internal limited liability’. On a second level, there is the limited liability of the external shareholders of the parent entity (or of the other entities, where such shareholders exist). This could be referred to as ‘external limited liability’.

While external limited liability may be justified by the merits of economic growth and investment, it is less clear why internal limited liability within a group of companies should be retained. The list of reasons for introducing shareholders’ limited liability includes the separation between ownership and control of companies. Since shareholders do not manage the firm, rather they delegate this activity to a manager, it would be unjust for them to be responsible for the losses of the firm with everything that they own. Moreover, since shareholders cannot monitor the behaviour of the managers at all times, it is warranted that

\textsuperscript{122} Turner (2014), at pp. 108-109 and p. 118,
\textsuperscript{123} Pistor (2019), pp. 60-61.
\textsuperscript{124} Ferran and Chan Ho (2014), at p. 19.
\textsuperscript{125} See House of Commons Treasury Committee, Too important to fail – too important to ignore, Ninth Report of Session 2009-10, Volume 1, 22 March 2010.
\textsuperscript{126} While contemporary understanding regarding limited liability is that equity holders are not required to pay anything beyond the paid-up capital (i.e. single liability), under extended liability, equity holders have an obligation to pay double or triple their principal amount, in proportion to their financial participation in the firm. Double and/or extended liability (as well as, ultimately, unlimited liability) was a way of keep in check banks’ risk-taking incentives in former banking systems in the UK and the US. See House of Commons Treasury Committee, Too important to fail – too important to ignore, Ninth Report of Session 2009-10, Volume 1, 22 March 2010; Turner (2014), as well as Joshua Hendrickson (2014) Contingent Liability, Capital Requirements and Financial Reform, Cato Journal 34(1): 129-144; Richard Grossman (2001) Double Liability and Bank Risk Taking, Journal of Money, Credit and Banking 33(2):143-159; and Alexander Salter, Vipin Veetil and Lawrence White (2017) Extended Shareholder Liability as a Means to Constrain Moral Hazard in Insured Banks, The Quarterly Review of Economics and Finance 63(2017): 153-160, p. 154.
they have limited liability. In the context of the group (including a bank group) ownership and control are normally vested in the parent entity as the majority shareholder that appoints the managers of the subsidiaries. Therefore, the above prominent argument for having external limited liability may not be as valid in the context of internal limited liability between parent and subsidiary entities.

Potentially then, the internal limited liability of the parent towards the subsidiary entities, in particular in the context of bank groups, could be justified on the merits of preventing financial contagion. However, as noted before, there have been parent entities that decided to contractually omit their limited liability, e.g. by way of extending guarantees. The reasons for this may be hypothesised as follows.

In a counterfactual situation where internal limited liability in the group is not a default rule (e.g. a statute requires unlimited liability), the parent entity will need to support all of its subsidiaries with all of its resources at all times. Besides financial contagion concerns, it is worthwhile indicating that a parent entity, as every private market participant, has its own liquidity constraints. Therefore, it will need to decide which entities are indispensable for the survival of the business and need to be supported and which may be allowed to fail. In this context, it can be suggested that the decision whether or not a parent entity will waive its limited liability is simply a decision on managing its own liquidity constraint. Having the contractual freedom to do so has facilitated this decision-making process.

Sure enough, the parent entity’s management of its own limited liability has at times been put into use for aggressive risk-taking strategies (such as that regarding Lehman Brothers), as explained in section 3.2, when deliberating the reasons for bank group instability. It cannot be ruled out that a parent entity may abuse this position and guarantee the debt of all its subsidiaries even when there are no sufficient resources to meet all the losses of the entities in the group.

2.3.3.3. Contract Law: The Internal Capital Markets

Finally, as noted above, describing the corporate law principles for the construction of a group is to describe the parts that create the ‘body’ of the group form. To fully grasp the structure, it is relevant to also emphasise that such a ‘body’ gets its ‘circulation’ from the different relationships that are established across those entities that support the flow of assets and liabilities. The separate legal entities may be connected through ownership participation as well as by contractual debt instruments as part of the financing mix in the group structure,

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and other contracts through which those legal entities shift assets and liabilities.\textsuperscript{128} However, in a normal course of business, a bank entity can have several interactions with the affiliates of the group to support the provision of services, or to provide loans and other funding.

For example, in a specific context of a bank group an entity can be associated with other entities by a set of financial relationships. For example, the entity may receive cash from other affiliates in the group in order to place it with a central bank in the region where it operates. The entity can also place the surplus cash with the parent entity (if it is an operating one) under a reverse repo transaction in order to support intra-day clearing activities. It may also engage in derivative transactions with other entities, in particular due to the use of back-to-back booking models in the group. Besides via financial interconnections, the entities can be connected through a number of intra-group contracts (standardised or otherwise) which cover services in the field of IT, compliance, facilities, software systems, personnel etc. which they provide to one another. All these relationships give rise to intercompany assets and liabilities. As such, they are part of the way in which capital is allocated in the bank group.

The way in which the capital is distributed to the group entities through this internal web of corporate and contract relationships constitutes the group’s internal capital market (ICM).\textsuperscript{129} The ICM has the economic potential to internalise the capital market function by substituting the group for the market for financing purposes. Like in the external market, the ICM is primarily based on contractual relationships, although in the ICM these relationships are established with the fiat of the bank group’s management. As such, the ICM avoids the information asymmetries or other issues that might be attached to the external transactions.\textsuperscript{130}

Notwithstanding this function of the ICM to reduce information asymmetries by negotiating contracts in an external market, the ICM is also useful in how the bank group manages its liquidity constraints by deploying its limited resources in more profitable endeavours, or by using them to shore up losses where needed in the bank group. In this respect, De Haas and Van Lelyveld\textsuperscript{131} argued that in bank groups (and larger financial institutions) ICMs have both ‘support’ and ‘substitution’ effects. This means that within a bank group, assets can be shifted across entities either to support subsidiaries that are financially distressed (‘the support effect’), or to optimise the profitability of the group depending on the lending conditions in the specific market and geographic areas where a particular legal entity is situated (‘the


\textsuperscript{129} See Robert Gertner et al. (1993).


substitution effect’).\textsuperscript{132} As further noted in section 3, such transfers are not always to the benefit of all entities in the bank group.

It is therefore relevant that the ICM channels the asset transfers across the group, which may address the liquidity squeezes in a specific entity. In other words, the asset transferability can improve the way in which the bank group can manage its own liquidity constraints and those of the separate entities in the bank group.

3. The Reasons for Instability of Bank Groups

The reasons for instability of bank groups are normally the subject of discussions where bank groups are regarded as unitary enterprises (i.e. without recognising the group structure), and discussions that recognise the group structure. Often, the link between the two is not explicitly provided in the literature. This section will make the relevant connection.

3.1. Leverage, Moral Hazard and Risk-Shifting

It is widely recognised that banks are more fragile because they are prone to liquidity risk than other commercial companies because their business model is based on maturity transformation of financial assets and liabilities. Famously, this means that banks borrow short-term liabilities (e.g. deposits) to finance long-term assets (i.e. loans). At the point where a bank cannot match the maturity of those assets and liabilities, it will be exposed to liquidity risk, which may turn into solvency risk. In particular, solvency risk can be generated if the bank is forced to sell assets at undervalue (‘fire-sale’) in order to meet its obligations under its financial contracts as they fall due.\textsuperscript{133}

Besides, banks provide a number of critical economic functions in the markets where they operate, including deposit-taking, lending, payment and settlement, etc. The interruption of those functions due to bank failures may have an effect on the rest of the financial systems (including other financial institutions, consumers and corporations).

For these reasons, in order to prevent adverse effects from bank failures on depositors, creditors, financial systems and the wider economy, banks are subject to regulation by public authorities.\textsuperscript{134} For example, before the financial crisis, explicit public guarantees provided under (national) DGSs sought to alleviate negative effects from depositors’ runs. However,

\textsuperscript{132} De Haas and Van Lelyveld (2009), p. 3.


\textsuperscript{134} See, for example, regarding the UK banking sector Rosa Lastra (2008) Northern Rock – UK Bank Insolvency and Cross-Border Bank Insolvency, Journal of Banking Regulation vol. 9(3): 165-186.
besides depositors’ runs, in the lead-up to the GFC, banks held other short-term liabilities that eventually exposed them to ‘silent bank runs’ in the wholesale markets. Such runs occurred as a result of uncertainty about the value of bank assets.

However, at that time, in addition to explicit public guarantees, banks also operated under implicit public guarantees, in the form of expectations of public bail-outs in case of failure of a troubled financial institution. The sole expectation of an implicit guarantee incentivised banks to take additional risks before the GFC, thereby giving rise to ‘moral hazard’.135 This also undermined the effectiveness of market discipline.136

In this respect, general corporate finance logic suggests that the interest that creditors charge on the bank debt reflects the risk which the creditors bear if the bank defaults on the debt. Thus, an increase in the interest rate and the subsequent inability of the bank to raise debt constitutes market discipline.137 The expectation of the implicit guarantee was even formalised by credit rating agencies, whereby credit ratings for banks were presented both with and without implicit government guarantees.138 The combination of large banks’ balance sheet composition and the fact that banks have become TBTF means that explicit support provided with DGS is not sufficient to prevent disruptions to the financial system.

The fact that banks have become TBTF has introduced the threat of systemic risk. Systemic risk is usually defined as the risk that an event will cause loss of economic value or confidence in the financial market, and increase uncertainty about a substantial portion of the financial system, with negative effects on the real economy.139 Since failure of large banks can have material adverse effects on other firms and sectors,140 it can cause systemic risk.

In addition to explicit and implicit guarantees, as part of the regulatory requirements, banks are required to hold certain levels and quality of capital. In accounting terms, capital is the difference between the assets and liabilities of the firm. It essentially represents the amount of equity instruments that can absorb losses from the firm’s activity before the liabilities side

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exceeds the assets side of the balance sheet and the firm is considered (legally) insolvent. Equity has the ability to absorb losses, since the holders of this capital (i.e. shareholders) have only a claim on the residual amount of the firm’s assets.\textsuperscript{141} As such, shareholders are last in line to claim the assets of the firm, after every other creditor of the bank has settled its own claims, and to the extent that anything is left of the firm’s assets. When considered from banks’ liabilities perspective, this reasoning suggests that, in crisis, the equity holders are the first in line to absorb the firm’s losses.

In addition to equity, bank prudential regulation accepts certain debt instruments that can easily ‘absorb losses’ due to the conditions in the relevant contracts that underlie these financial instruments.\textsuperscript{142} The expectation is that the cushion of regulatory capital will prevent banks from collapsing.\textsuperscript{143} Before the financial crisis, the stability of the financial system was maintained through ex-ante capital requirements pursuant to the prudential supervision of banks.\textsuperscript{144} Unlike now, at that time, there were no (harmonised) special regimes available ex post (i.e. resolution regimes) to tackle the failure of large banks. Hence, if the regulatory capital were exhausted, banks would enter normal insolvency proceedings that would be long and disruptive to critical functions in the economy. With the imminent threat of systemic risk, if a bank failed, the only viable solution left back then were bail-outs.

In the run-up to the financial crisis, at least two issues regarding banks’ regulatory capital marked its inefficiency in forestalling a bank failure. One was that the regulatory non-equity capital instruments proved to lack the qualities to effectively absorb banks’ losses.\textsuperscript{145} The second issue was that the equity-to-debt ratio in the regulatory capital mix was inadequate, as the experience from the financial crisis demonstrated. In the run-up to the global financial crisis, under the Basel II standards, further implemented in national laws, banks were asked to hold a minimum of 8% of their risk-weighted assets as regulatory capital. Under these requirements, banks could hold only 2% of equity as regulatory capital and still be compliant. Voluntarily, banks could have held a higher percentage of equity capital, but this was not the case.

For example, European banks operated with less than 3% of equity capital as a percentage of their total assets.\textsuperscript{146} This is significant taking into account shareholders’ propensity for risk-

\textsuperscript{141} On residual claimants more broadly, see Margaret Blair and Lynn Stout (2006) Specific Investment: Explaining Anomalies in Corporate Law, Cornell Law Faculty Publications. Paper 767, available at: http://scholarship.law.cornell.edu/facpub/767


\textsuperscript{144} Following the GFC, the regulatory reform included ex-post bank resolution regimes that complemented the ex-ante regulatory framework, for when bank capital is exhausted or nearly exhausted.


\textsuperscript{146} In this respect, evidence shows that the return on capital for financial institutions in developed countries was 20% compared to 9.5% in other commercial sectors; Alexander (2015) at p. 338; see also Admati Admati and Martin Hellwig
The low equity to debt level meant that banks were highly leveraged. Leveraged firms are risky since creditors expect fixed payments on their claims. Hence, if the value of the firm’s assets starts fluctuating (e.g. due to financial distress) the prospect for creditors to recover their investment may decrease, reducing the firm’s capacity to meet its debt obligations and potentially raising solvency concerns, which can ultimately lead to failure. It is correct to counter-argue that creditors could have charged a higher premium to curb this risk-shifting and thereby discipline excessive risk taking. However, as noted before, in the run-up to the financial crisis, the implicit government guarantee that large banks would be bailed out meant that creditors would be paid in any event. Thus, creditors essentially did not exercise market discipline, resulting in banks’ moral hazard practices under public guarantees (aimed at preventing disorderly disruptions of critical economic functions).

3.2. Double Leverage, Limited Liability and Resource Allocation

The reasons for instability as outlined generally for banks (irrespective of their corporate structure) can be explained within the context of a bank group. In this regard, it should first be clarified that leverage and double leverage are different measurements. However, they are connected. Normally, in the regulatory sense, leverage is calculated as ratio between the regulatory capital and the total assets of the bank group, taken either at a consolidated (group) level or at a legal entity level. It does not necessarily take into account the interaction of the composition of the capital and other financing instruments between both of these levels. In comparison, double leverage is a measurement of the proportion of equity issued externally by the parent entity to the equity it downstreams to its subsidiaries.

Although they are different, there is a relevant connection between leverage and double leverage. As noted in the previous section, shareholders of the parent entity, under their limited liability, can pressure management in to providing higher returns, e.g. by extracting dividends from the subsidiaries. Regarding the events before the financial crisis, particularly in the case of Lehman Brothers, Pistor showed that shareholders of parent entities extracted

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their dividends long before the parent entity declared bankruptcy. In that pre-financial crisis period, the external investment creditors of the parent entity were relying on the public guarantees and thus did not monitor this behaviour, thereby allowing banks to continue with excessive risk taking and moral hazard practices.

Nevertheless, even in the post-financial crisis era, the finance literature shows there is a statistical relevance between the level of risk and double leverage in a firm. In particularly, Bressan demonstrates that bank groups make use of double leverage in order to arbitrage their consolidated capital requirements and take severe risk. This is because consolidated capital requirements set for the group as a whole are not able to capture the risk incentive due to double leverage. Such risk incentives can be explained by using the following stylised example regarding the parent entity’s decision on how to fund its subsidiary by downstreaming equity or debt finance. In terms of the losses the parent entity could incur on those instruments, in principle, there should be not much difference if it funds subsidiaries with equity or subordinated debt. However, in terms of return, it could be more beneficial for the parent entity to provide equity. This would entitle it to the dividend distribution of the subsidiary, which could be higher than the interest it would have received e.g. as a subordinated debtor. Such decision would also be in line with the incentives of the shareholders of the parent entity, i.e., if the parent entity earns more from the dividends of its subsidiaries, it could also distribute higher dividend to its shareholders. While this is normal practice, the peril is that it may exacerbate risk-taking, potentially to the detriment of the bank group’s stability.

Besides potentially enhancing risk-taking, the risk of double leverage is that it may destabilise the bank group due to the mismatches in the external and internal funding of the bank group. The result of double leverage may be that the proceeds (dividends) received from the equity investments in the subsidiaries will be insufficient to meet the interest payment that the parent entity must make to its external creditors. This may materialise due to the difference in pay-out functions between equity and the debt instrument, whereby the internal equity investment provides volatile dividend payments, whereas the external debt financing requires fixed payments on a specific date. As a result, a parent entity might be exposed to liquidity risks due to payment and maturity mismatches. As a result, high double leverage might tighten the liquidity constraints of the parent entity. It may therefore affect the ability of the parent entity to allocate resources and support subsidiaries in financial distress.

As mentioned above, bank groups use their ICMs to support subsidiaries in the bank group. However, they may not be able to support all subsidiaries. In a later refinement of their study on the ‘support’ and ‘substitute’ effect of ICMs in bank groups, De Haas and Van Lelyveld

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151 See Standards & Poor Global Rating, General Criteria: Group Rating Methodology, 19 November 2013, at p. 27.
add that the support effects occur in a situation where the bank’s subsidiaries are subject to local financial shocks in the country where they operate. However, support is not extended to ailing subsidiaries in cases of widespread financial crisis or in a situation where the parent entity itself is exposed to shock.\textsuperscript{154}

In a widespread financial crisis situation, the parent entity might channel resources from its subsidiaries to repair its own position, or the position of more profitable or systemically relevant entities elsewhere in the bank group. For example, Alen et al. reviewed the channels through which the assets of the group move among the entities. In particular, the relationship between the parent entity and the subsidiary was underlined. Based on this study, assets and liabilities were shifted within bank groups in the EU, inter alia, via intra-group deposits and loans, derivatives, income transfers (dividends, expenses from related party transactions, other acquisitions, and disposal of assets), intra-group service fees and so on.\textsuperscript{155} Those intra-group transactions, eventually affected the capital positions of some entities of the bank group to the benefit of other entities, including the bank group’s parent entity.

It is therefore relevant how the parent entity decides to allocate the resources of the bank group and manages its own liquidity constraints, contingent also on the extent of its double leverage. This might make clearer why bank groups will prefer to retain their internal limited liability, as opposed to a hypothetical situation where they will have full liability under statutory law. Not only may the limited liability provide protection against financial contagion from subsidiaries, but the parent entity’s management can also choose to discretionarily waive the limited liability by means of a contract and protect the subsidiaries that are relevant for the survival of the group. It therefore provides the mechanism to manage the resources of the bank group, including by arbitrarily withholding or relinquishing the internal limited liability within the bank group.\textsuperscript{156}

3.3. The Interests of the Regulatory Authorities

In view of the above, given that the group and parent entities have their own liquidity constraints, not all subsidiaries can be supported in financial distress and some will need to be wound down. This is not necessarily erroneous, so long as the cessation of the bank group’s activities via its subsidiaries in different jurisdictions does not adversely affect financial stability or lead to disruptions in the critical economic functions which it provides to those jurisdictions. To this end, it is relevant that worries regarding financial stability and protection of economic functions are part of the responsibilities of different national authorities. The

\textsuperscript{154} De Haas and Van Lelyveld (2014).

\textsuperscript{155} Franklin Allen, Xian Gu and Oskar Kowalewski (2011) Corporate Governance and Intra-Group Transactions in European Bank Holding Companies During the Crisis, Working Papers, Financial Institutions Center, Wharton School.

\textsuperscript{156} That is, in absence of regulatory requirements such as those applicable to bank groups in the US, where the parent entity needs to act as a ‘source of strength’ for the bank group.
responsibilities of national authorities regarding the supervision of bank groups are also based on the separation of the legal entities. Normally, home authorities are responsible for supervising the solvency of parent entities and branches. The host authorities are responsible for the solvency of the subsidiaries of the bank group operating in their jurisdiction. The experience of the financial crisis shows that the entity-based division of responsibilities along national lines underlines the tendency of national authorises to protect their own financial system when dealing with ailing cross-border bank groups, thereby paying little attention to stabilising or saving the group as a whole. 157

For example, Fortis was a financial conglomerate with substantial banking and insurance activities in Belgium, the Netherlands and Luxembourg. 158 It was systemically important for all three jurisdictions due to its large presence and because it was a clearing member of several exchanges. 159 Following the acquisition of ABN AMRO in a consortium with the Royal Bank of Scotland and Banco Santander, Fortis’ financial position weakened. The situation further deteriorated with the failure of Lehman Brothers, causing the cessation of interbank lending for the bank. Eventually, the Belgium, Dutch and Luxembourg governments recapitalised the bank. However, the governments were willing to extend support to the parts of the banks that were located in their respective jurisdictions, but not to the Fortis Group as a whole. 160 Cooperation ultimately broke down as national preference became priority, e.g. with the Dutch government seeking to bring ABN AMRO back under Dutch control.

While there are many examples, the basis of home-host authorities conundrum is the fact that entity based nationally oriented supervisory and resolution policies for banks lead to failure of coordination between national authorities, which in turn could undermine fair competition between banks in different countries, sub-optimal supervision and resolution and possible financial instability. 161 The interests of the home and host authorities might be contradictory, specifically in view of the possible allocation of losses from the failure of the bank group individual entities along national lines and the relevant implication for national financial markets.

The application of regulatory measures along legal entity lines, with little consideration for the rest of the group or for jurisdictions, essentially added to the problem of having no effective solution for ‘too big to fail’. As a result, both the complexity of the legal structure


159 Schoenmaker (2013), p. 79.


based on multiple entities and the lack of cooperation among national authorities became part of the agenda of the post-financial crisis regulatory reform.


The above discussions on the complexity of bank groups and their instability allows forming a perspective on the potential effectiveness of the regulatory reform as introduced after the financial crisis of 2007. This reform was marked by the introduction of recovery and resolution regimes for bank groups in the EU and worldwide, aiming to end the ‘too big to fail’ problem and eliminate the need for public bail-outs.

In particular, the hallmark of the newly introduced regimes was the inclusion of write-down and conversion of debt to equity (WDC power) and the bail-in tool, allowing administrative authorities to assign losses to banks’ shareholders and creditors. According to one of the resolution objectives cited in the legislation, the aim is to enhance market discipline. For the WDC power and the bail-in tools to be operational, bank groups need to hold a certain amount and type of liabilities, above the instruments that count as their regulatory capital. As noted from the outset, how those provisions square with the complexity of bank groups, and whether they contribute to their stabilisation is still to be tested.

In view of the above discussion, the dissertation is informed by the legal structure of the bank group and the financing structure and risks it creates. This does not undermine the discussions on ‘information asymmetries’ or ‘enforcement rights of creditors in bank groups’ referred to before. It adds to this ‘external’ dimension by looking into the dynamics within bank groups ‘internally’ and the regulation that affects those dynamics.

In particular, it is considered to what extent the relatively new resolution framework solves issues of double leverage, as well as how to enable/disable the functioning of the internal capital market that may help stabilise the group. Moreover, it considers how the updated cooperation framework overcomes the concerns of the authorities involved in the process. Based on this discussion, the dissertation claims that the EU resolution regimes, based on WDC administrative powers and bail-in tools, may not function as expected since they do not sufficiently address the issues of double leverage, and that the way in which the ICM is regulated may limit the way in which the assets are allocated in the bank group. The situation is further complicated by the transnational aspect, as the cooperation framework does not instil confidence that all authorities will have their interests taken into consideration.
5. Organisation of the Dissertation

Based on the above considerations, three problems may be distilled for analysis: (i) double leverage, (ii) risk-shifting and allocation of resources, and (iii) cross-border cooperation of national authorities. Before embarking on the practical discussion, the next chapter provides an overview of the basic regulatory environment, in particular following the financial crisis, in order to facilitate the narrative in the subsequent chapters.
Chapter II: An Overview of the EU Supervisory and Resolution Regime for Banks and the Preconditions for Successful Bail-in-based Resolution

Introduction

This chapter aims to introduce the basic definitions and concepts of banking supervision and resolution as defined in the relevant EU framework. Additionally, it lays out the prerequisites needed for the successful implementation of a write-down and conversion of debt and equity, and/or bail-in based resolution. Both aspects will facilitate the discussion that follows in the subsequent chapters, by not burdening it with explanations of the institutional and conceptual underpinnings.

1. Definition of Bank Groups in EU Prudential Regulation

In EU legislation, the meaning of bank groups can be found in separate provisions that refer to the activities that banks perform, and to the relationship between parent and subsidiaries. The terminology referring to the activities of banks often coincides with the term ‘credit institutions’. Under the original Capital Requirements Regulation (CRR), and its subsequent amended version CRR2, credit institutions are defined as institutions or undertakings whose business is to take deposits or repayable funds and extend credits for their own account. Besides these traditional banking services, the CRR’s scope includes institutions whose main occupation is to provide investment services to third parties and perform investment services on a professional basis. Those institutions are referred to as investment firms. The combination of institutions performing traditional banking services and institutions providing investment services, i.e. credit institutions and investment firms (together ‘institutions’), encompasses the universal banking model existent in Europe.

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163 Regulation (EU) 2019/876 of the European Parliament and of the Council of 20 May 2019 amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) No 648/2012, OJ 150/1

164 CRR2, Article 4(1)(1).


The CRR2 defines the term ‘groups’ for prudential purposes as a group of undertakings of which at least one is an institution (credit institution or investment firm)\(^{168}\) and which consists of a parent undertaking and its subsidiaries, that are related to each other, with the links as set out in the Directive on consolidated financial statements.\(^{169}\) This includes a parent undertaking that:

- has a majority of the shareholders’ or members’ voting rights in another undertaking (a subsidiary undertaking); or
- has the right to appoint or remove a majority of the members of the administrative, management or supervisory body of another undertaking and it is a shareholder of that undertaking; or
- has the right to exercise a dominant influence over an undertaking of which it is a shareholder or member, pursuant to a contract or a provision in its memorandum or articles of association, where permitted in national legislation; or
- is a shareholder in or member of an undertaking, and a majority of the members of the administrative, management or supervisory bodies of that undertaking have been appointed solely as a result of the exercise of its voting rights; or
- is a shareholder in or member of an undertaking and controls alone, pursuant to an agreement, a majority of shareholders’ or members’ voting rights in that undertaking.\(^{170}\)

In addition, EU Member States may require any undertaking governed by their national law to have consolidated accounts where a parent undertaking has the power to exercise dominant influence or control over a subsidiary, or where the parent entity and the subsidiary are managed on a unified basis.\(^{171}\)

The CRR2 definition of a group complements the definitions of a ‘parent undertaking’ and ‘subsidiary’. The definitions for parent and subsidiary undertaking effectively mirror the definition of a group described earlier.\(^{172}\) The relevant articles clarify that subsidiaries of subsidiaries are also considered to be subsidiaries of the original parent undertaking. In comparison, a branch is defined as a place of business that forms a legally dependent part of

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\(^{168}\) CRR2, Article 4(1)(138).


\(^{170}\) Consolidated Accounts Directive (Directive 2013/34/EU), Article 22(1).

\(^{171}\) Consolidated Accounts Directive (Directive 2013/34/EU), Article 22(2).

\(^{172}\) CRR2, Article 4(1)(15) and (16) defines parent undertaking with a reference to Articles 1 and 2 of the Seventh Council Directive of 13 June 1983 based on Article 54(3)(g) of the Treaty on consolidated accounts, OJ L 193/1, which is no longer in force.
an institution and which performs directly all or some of the transactions of the business of institutions.\\footnote{CRR2, Article 4(1)(17).}

The generic definition of a parent undertaking comprises both parent entities that perform banking activities themselves (parent banks), and holding companies. With respect to the latter, EU bank law distinguishes between financial holding companies, mixed financial holding companies and mixed-activity holding companies.\\footnote{See CRR2 Article 4(1)(20), (21) and (22) respectively for financial holding companies, mixed financial holding companies and mixed-activity holding companies.} Financial holding companies are defined in relation to the definition of a financial institution. They have subsidiaries, which are exclusively or mainly credit institutions, and/or investment firms.\\footnote{CRR2, Article 4(1)(20).}

Unlike a credit institution or investment firm, a financial institution is defined in the CRR2 as a pure industrial holding company. The principal activity of financial institutions is to acquire holdings or to pursue one or more of activities such as lending, financial leasing, payment services, portfolio management and advice, trading in derivatives and securities, safe custody services, etc.\\footnote{These services are listed in Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC Text with EEA relevance, OJ 176/338, in Annex I, points 2-12 and 15, according to CRR2, Article 4(1)(26).} The definition of financial institution also covers ‘mixed-activity holding companies’, payment institutions and asset management companies. However, it excludes insurance and mixed-activity insurance companies.


2. Ex-ante Regulation: Banking Supervision and Capital Requirements

Prior to the GFC, the objective of financial stability was generally achieved by means of bank regulation and supervision. The latter relies on the requirement for banks to hold a certain amount and quality of capital that will be able to absorb losses of the bank in business as usual and even if there is obvious financial distress.\\footnote{See in this respect the discussion on capital requirements, contingent capital and the bail-in tool in Bart Joosen (2015) Regulatory Capital Requirements and Bail-in Mechanisms, in Matthias Haentjens and Bob Wessels (eds.) Research Handbook on Crisis Management in the Banking Sector, Edward Elgar Publishing (Cheltenham and...
assets and liabilities of the bank, capital serves as a buffer for the bank’s losses before the bank’s liabilities exceed its assets and the bank becomes insolvent, potentially causing negative externalities to the financial systems and economies where the bank operates. Prudential regulation and supervision aim to maintain the soundness and safety of the banking sector by forestalling the failure of banks and of protection of bank’s creditors (in particular depositors) and customers. Therefore, prudential capital requirements are an ex-ante mechanism as opposed to resolution, which is an ex-post mechanism dealing with distressed banks.

The amount of capital that banks are required to hold is normally expressed as a percentage of the bank’s risk-weighted assets (RWA). This means that each asset that the bank owns attracts a specific risk weight. This ensures that the regulatory capital the bank is required to hold for owning specific assets is aligned with the risk profile of such financial assets.

The capital with the highest quality is the bank’s equity. The bank’s equity capital usually consists mainly of bank shares and retained earnings. To the extent that it meets certain conditions, this type of capital is categorised as core equity tier one (CET1) capital for regulatory purposes. Other hybrid instruments, with elements of both debt and equity also qualify as capital of banks. This capital is counted as additional tier one (AT1) capital. The capital is contingent since it consists of debt instruments that turn into equity as soon as they fulfil the conditions for a contractual trigger (and after the post-financial crisis reform, or on the basis of a statutory trigger). Other debt instruments that can also absorb bank losses on a going-concern basis and count as regulatory capital are the tier two (T2) capital instruments.

The ex-ante capital that banks held to sustain losses at the time before the global financial crisis proved to be insufficient to endure the crisis. The reason was that many of the rules related to capital requirements had weakened over time, resulting in banks holding capital instruments that were inadequate for absorbing bank losses. For example, before the financial crisis, the financial instruments that counted as capital, including preference shares and other contingent convertible instruments, did not absorb losses incurred by certain large banks. Additionally, the seemingly strong capital ratios, often calculated with banks’

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180 See, for example, CRR2, Article 113.

181 See Bart Joosen (2015) Regulatory Capital Requirements and Bail-in Mechanisms, in Matthias Haentjens and Bob Wessels (eds.) Research Handbook on Crisis Management in the Banking Sector, Edward Elgar (Cheltenham, Northampton), at pp. 175-235. The proposal for amendment of the CRR changes the statutory and contractual requirements for T2 instruments, see in this respect Linklaters, CRD and BRRD Reform Proposals: A Road-map for DCM Practitioners, 23 November 2016, at p. 5.

internal models, turned out to be faulty. They did not include measures for off-balance sheet exposures of banks. In turn, this resulted in a build-up of leverage in the banking sector. As a result, both the quality and quantity of bank capital was deficient.

In response to the financial crisis, the Basel Committee on Banking Supervision (BCBS) improved the international standards for bank capital requirements, in terms of both quality and quantity, with the objective of improving banks’ resilience.\textsuperscript{183} Amongst other things, the Basel Committee modified the requirements under which contingent convertible instruments may count as capital and absorb losses of the bank at the point of non-viability or close to this point, based on a predefined contractual and/or statutory trigger.

Besides stepping up the risk-based capital requirements for banks, the Basel III framework established the non-risk-based minimum requirements for banks by introducing a binding leverage ratio. Its purpose is to prevent the build-up of excessive leverage, which was accumulated in the banking sector in the run-up to the global financial crisis in spite of the seemingly strong capital ratio that banks maintained.\textsuperscript{184}

In terms of quantity of capital, regarding the bank capital’s composition, banks were asked to hold a higher proportion of capital considered as higher-quality capital, i.e. CET1 capital. In fact, under the revised standards, banks need to hold up to 4.5% of the bank’s RWAs in CET1 capital, in comparison with the previously applicable rules which only required 2% RWA of such capital. Furthermore, banks need to hold AT1 capital to the amount of 1.5% of their RWA, and T2 capital of at least 2% of the RWA.\textsuperscript{185} These are the minimum requirements that banks are asked to meet, i.e. the Pillar I requirements.\textsuperscript{186} In addition, banks can be asked to meet increased capital requirements under the Pillar II framework if the relevant authority considers the minimum Pillar I requirements do not cover all the risks to which a bank is exposed.

In total, the amount of required minimum capital under Pillar I did not change, though its composition did. However, the level of capital increased with the introduction of the buffer requirements established to tackle macroeconomic and financial stability concerns. As regards macroeconomic capital buffers, banks need to meet the capital conservation buffers and the counter-cyclical (CcyB) buffers.\textsuperscript{187} Both are normally expected to be met with CET1 capital and may each reach up to 2.5% of the RWA. Besides, if the bank is considered as a

\begin{flushleft}
Financial Regulation, Oxford University Press (Oxford), at p. 343; for further comment in this regard see Joosen (2015), at p. 221.  \\
\textsuperscript{183} Basel Committee on Banking Supervision (December 2010, updated in June 2011) Basel III: A global regulatory framework for more resilient banks and banking systems.  \\
\textsuperscript{184} Basel Committee on Banking Supervision (January 2014, revised in April 2016) Basel III leverage ratio framework and disclosure requirements.  \\
\textsuperscript{185} See Basel Committee on Banking Supervision (June 2011, and as subsequently updated) Basel III: A global regulatory framework for more resilient banks and banking systems, at p. 12; see also CRR2, Article 92.  \\
\textsuperscript{186} CRR2, Article 92(1)(c).  \\
\textsuperscript{187} Basel Committee on Banking Supervision (June 2011, and as subsequently updated) Basel III: A global regulatory framework for more resilient banks and banking systems, at pp. 54 and 57; see also CRR2, Article 128.
\end{flushleft}
global systemically important bank in terms of its size and interconnectedness, it will be subject to a ‘G-SIB charge’, which should be met with CET1 capital. The requirements can range from 1-3% of the bank’s RWA. Other systemically important institutions (including domestically important and EU important banks) can be subject to a buffer requirement, to a maximum of 2% of the bank’s RWA that needs to be met with CET1 capital.

In the EU, in the aftermath of the global financial crisis, pursuant to the recommendation of the “de Larosière group”, bank prudential supervision was included in the Single Supervisory Rulebook. This Rulebook comprises rules not only on bank capital requirements, but also on recovery and resolution processes and a system of harmonised national deposit guarantee schemes. The above-mentioned rules on capital requirements under the Basel standards were initially implemented by means of the CRD IV package. This package contains the Capital Requirements Directive (CRD IV) and the Capital Requirements Regulation (CRR). On 23 November 2016, the European Commission issued a proposal for amendments of the package, which was adopted on 16 April 2019. With the adoption of the CRDV package, the new CRR2 and CRD5 entered into force as of 27 June 2019 and are effective now.

3. Ex-post Regulation: Resolution Regimes, Write-Down and Conversion Power and the Bail-in Tool

The global financial crisis made it clear that even though banks can hold a predetermined amount of capital, such capital can be exhausted in financial distress, depending on the nature and extent of such distress. It showed that it is virtually impossible for only ex-ante requirements to safeguard financial stability given the uncertainty of the events that can cause such distress. In effect, the need for ex-post resolution regimes became tangible. Such

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188 Basel Committee on Banking Supervision (November 2011, revised July 2013) Global systemically important banks: assessment methodology and the additional loss absorbency requirement.
194 Also referred to as the CRD5 package, see Andrej Stuchlík, Amending capital requirements -The ‘CRD-V package’, European Parliament Briefing (6 April 2017).
resolution regimes are expected to allow banks, even those considered ‘too big to fail’, to exit the markets in an orderly fashion, without causing adverse effects to financial stability and the rest of the economy. In this context, international standard setters put the creation of special bank resolution regimes at the top of their post-crisis policy reform agendas. The global standards for resolution regimes were set out in the Financial Stability Board’s (FSB) Key Attributes of Effective Resolution Regimes for Financial Institutions (FSB Key Attributes). The European Commission established the EU crisis management framework in the financial sector, including the Bank Recovery and Resolution Directive (BRRD) which provided harmonised powers and tools to national authorities in EU Member States in regard to ailing banks.

Together with the proposal for amending the CRD 4 package issued on 23 November 2016, the European Commission issued a proposal for amending the BRRD2; together these proposals were commonly known as the proposal for the Banking Reform Package. The aim of the proposed reform was to complete the post-financial crisis reform agenda in line with the global standards agreed at international level.

The objectives set out in the EU resolution regime include protection of financial stability by ensuring continuity of critical economic functions of banks and prevention of contagion to other parts of the financial system (e.g. financial market infrastructures). Additionally, the

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195 G20 Leaders Statement, The Pittsburg Summit, 24-25 September 2009, p. 9; see also Basel Committee on Banking Supervision, Report and recommendations of the Cross-Border Bank Resolution Group, March 2010; ten years after the financial crisis, the efforts to end ‘too big to fail’ are continuing, see Financial Times, Financial Stability Board Calls for Further Action to End ‘Too-Big-To-Fail’ (Caroline Binham, 6 July 2017), available at: https://www.ft.com/content/543359aa-8d0d-11e7-a352-e46f43c5825d
196 Financial Stability Board (October 2011, revised in October 2014) Key Attributes of Effective Resolution Regimes for Financial Institutions
framework aims to pursue the objectives of maintaining market discipline and protecting public funds.\textsuperscript{201}

The resolution regimes were enhanced through processes of recovery planning and supervisory early intervention measures that banks and supervisors may use, respectively, before applying more intrusive resolution powers. Recovery planning includes the process of a bank providing a plan (to the supervisory authorities) on the measures it is going to take by itself to restore its financial position following a significant deterioration.\textsuperscript{202} In comparison, early intervention powers enable supervisory authorities to remedy the bank’s financial and economic situation before it reaches a point where there is no other alternative but resolution.\textsuperscript{203}

One of the most important features of bank resolution regimes is that they are underpinned with administrative actions that allow public authorities to assign losses of banks and bank groups to their shareholders and creditors.\textsuperscript{204} Those actions are available under the provisions for the ‘write-down or conversion’ (WDC) power (which can be applied even before relevant resolution authorities trigger resolution) and the bail-in tool (which can be used after the relevant resolution authorities have trigged resolution). Resolution authorities can use the WDC power and the bail-in tool to write down or write off claims of banks’ shareholders and creditors and/or convert them into equity. In effect, it will be the bank’s shareholders and creditors that will absorb the losses resulting from its failure, rather than any public funds. By stipulating upfront that shareholders and creditors will absorb the losses resulting from bank failure,\textsuperscript{205} the write-down or conversion power and the bail-in tool affect, respectively, shareholders’ risk-taking and creditors’ monitoring incentives. The expectation is that this will curb moral hazard and enhance market discipline.

In order to ensure that the WDC power and the bail-in tool could be operationalised, it was necessary to ensure that banks held minimum liabilities that could be written down or converted to equity. At the international level, these instruments were introduced with the

\textsuperscript{201} BRRD, Article 31(2); on the interaction between BRRD objectives supporting financial stability and market discipline see Gustav Sjöderberg (2014) Banking Special Resolution Regimes as Governance Tools, in Wolf-Georg Ringe and Peter Huber (eds.) Legal Challenges in the Global Financial Crisis: Bail-outs, the Euro and Regulation, Hart Publishing Ltd., pp. 187-208.


total loss-absorbing capacity (TLAC) set out in the FSB TLAC term sheet. In the EU, the TLAC and MREL requirements are included as complementary requirements when it comes to EU G-SIBs. The harmonised minimum level of the TLAC standard for EU G-SIBs is included in the CRR2 and is referred to as a Pillar 1 MREL requirement. Additionally, EU G-SIBs continue to be subject to MREL requirements. In this context, for EU G-SIBs the MREL requirement is considered a bank-specific add-on under the BRRD2 and is referred to as a Pillar 2 MREL requirement. The Pillar 2 MREL requirement will be imposed by resolution authorities when the TLAC requirements as provided for in the CRR2 are insufficient to meet the required levels of loss-absorbing capacity of the bank as provided for in the proposal for amending the BRRD. The amended framework does not extend the application of the TLAC standard to non-systemically important banks in the EU. Non-GSIBs remain subject only to firm-specific MREL requirements.

Under the CRR2, EU G-SIBs will need to meet their TLAC requirements as a maximum of (i) 18% of their RWA (plus their buffer requirements), or (ii) 6.75% of the LE ratio, whichever is the highest. The logic behind the quantity of the TLAC requirements, i.e. the effective duplication of capital requirements, is as follows. In resolution, the ailing bank is expected to have sufficient capital instruments to absorb its losses. However, if such a bank has critical economic functions, it needs to be recapitalised in order to enable it to viably continue its business on a long-term basis after its liabilities have been written down/off or converted to equity (e.g. as per the bail-in tool). To this end, the bank will need to maintain the requirements for its authorisation as provided for in the CRD5, which means that it will need to meet its capital requirements afresh. To ensure that such capital is available, the resolution framework provides that the bank must have sufficient instruments that can be written down or converted into equity of the bank so as to recapitalise it. In effect, the requirements under the resolution framework for TLAC comprise the loss-absorbing amount (LAA) and a recapitalisation amount (RCA). An additional top-up to these requirements will also be needed to ensure that a resolved bank can credibly return to operating in the markets. This is referred to as ‘market confidence charge’ (MCA) that sits above the LAA and RCA requirements, and is applied with exceptions to some banks.

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206 Referred to as ‘own funds and eligible liabilities’ in the CRR2.
208 BRRD2 Article 45d, and CRR2, Articles 92a and 92b.
209 BRRD2, Article 45c.
211 CRR2, Article 92a(1).
212 In this regard, it should be noted that the bail-in tool under the EU legislation may only be used if there is a prospect of returning the bank to its long-term viability. See BRRD2, Article 43(3).
213 See CRD V, Article 8
Under the WDC power, the MREL instruments can absorb the bank’s losses both before and after resolution is triggered by the resolution authorities.\textsuperscript{214} In comparison, the bail-in tool is applied to the liabilities on the bank’s balance sheet after the resolution authorities have decided to put the bank in resolution. In principle, unlike the WDC power, the write-down and conversion pursuant to the bail-in tool can apply to MREL instruments and other liabilities on the balance sheet, except for the statutorily excluded liabilities. The stacking order in which the bank’s capital, and other TLAC/MREL instruments, as well as the liabilities, will absorb losses is shown in a stylised manner below:\textsuperscript{215}

\textit{Graph 1: Stylised example of the stacking order of loss absorption}

The WDC power and the bail-in tool can be used independently to recapitalise the bank, or in combination with other resolution tools and powers to convert debt to equity or reduce the principal amount of claims or debt instruments that are transferred to bridge institutions or

\textsuperscript{214} See Articles 59 and 63 of the BRRD2.

asset management vehicles or are sold to another party in resolution. As a result, one may even state that nowadays resolution is, in fact, WDC (or bail-in)-based resolution.  

It is worthwhile to also clarify that resolution actions may be undertaken only if this is considered to be done in the public interest, and where it is proportionate to achieve the resolution objectives; and if winding down the institution under normal insolvency law would not achieve the resolution objectives. This means that the legislation still stipulates that normal insolvency proceedings are the default option to resolve bank groups, and that the application of resolution actions is an optional process to be followed if a number of conditions are met. In this regard, the resolution regimes also provide a safeguard, namely that the resolution should result in a better outcome than normal insolvency proceedings. As a minimum, this means that no creditor should be worse off than in normal insolvency proceedings; this is the NCWO safeguard.

4. Bank Groups and the Resolution Regime

The application of the TLAC and MREL requirements is a precarious task due to the bank group structure being composed of multiple entities. It is not simply a matter of applying write-down and conversion powers in a single bank, which is a complicated process on its own, but rather across the balance sheets of inter-related entities. In order to accommodate the differences of centralised and decentralised (funding of) bank group business models the international framework recognises two broadly defined resolution strategies. In particular, the FSB sets out two approaches to bank group resolutions: single point of entry (‘SPE’) and multiple point of entry (‘MPE’). A combination of the two approaches is also possible, as there are no ‘clean’ bank group models, rather a wide spectrum of combinations of how banks may decide to organise their legal, operational, and funding structure. In this respect:

217 BRRD2, Article 32.
219 For example, Huertas describes all the preconditions a bank has to meet in order to be considered resolvable, see Huertas (2015).
221 For example, an MPE strategy may consist of the application of multiple SPE strategies at sub-group level in the bank group, see Financial Stability Board (2013) Recovery and Resolution Planning for Systemically Important Financial Institutions: Guidance on Developing Effective Resolution Strategies, 15 July 2013, at p. 13.
“There is no binary choice between the two approaches. In practice, a combination might be necessary to accommodate the structure of a firm and the local regimes in the key jurisdictions where it operates. For example, some MPE strategies may involve applying multiple SPE resolutions to different parts of the firm, for example, regional blocs that are separable from one another.”

In line with the FSB’s standards, the BRRD2 recognises both the SPE and MPE resolution strategy. Which of these strategies is used is decided in the process of resolution planning. The next section describes how the different resolution strategies should ideally operate in resolution.

3.1. Group Resolution Strategies

3.1.1. Single-point-of-entry (SPE) Resolution Strategy

Bank groups and sub-groups that operate on the basis of integrated centralised funding models are likely to be resolved by way of the SPE approach. The parent entity or the holding company in the bank group, or another top-level entity in the bank group, will need to be designated by the resolution authority as the resolution entity, at which point resolution actions (i.e. resolution powers and tools) will be applied.

The SPE resolution strategy involves the use of resolution powers at the level of the resolution entity (which may be the parent bank or holding company, or an intermediate parent in a sub-group) by a single resolution authority in the jurisdiction responsible for the consolidated

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223 BRRD2, new recital (4); a different approach from that contained in the resolution plan may be applied if it allows reaching the resolution objectives more efficiently; further specified in 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, OJ L 184/1, Article 25.


225 Resolution actions include both the application of resolution powers and tools, see BRRD2, Article 2(1)(40)
supervision of the bank group. The SPE strategy provides that losses incurred by group entities will be absorbed by the resolution entity, by way of writing down or converting to equity the resolution entity’s equity and unsecured debt in the group subsidiaries (pursuant to the WDC power or the bail-in tool, if needed).\textsuperscript{226} Provided that there are sufficient loss-absorbing instruments at the level of the resolution entity, the subsidiaries of the bank should be able to continue with their operations. During the process, the subsidiaries of the bank group should in principle remain “going concern”.\textsuperscript{227}

In this scenario, it is ultimately the shareholders and creditors of the parent, i.e. the resolution entity, who absorb the losses resulting from resolution. The write-down or conversion of the parent’s, i.e. resolution entity’s, debt held by external creditors does not in and of itself provide capital for the subsidiary bank that experienced losses.\textsuperscript{228} Instead, the SPE resolution strategy assumes that there is a funding structure where the parent bank/holding company raises capital from external creditors, and downstreams this capital in the form of equity or debt to the subsidiary. For this purpose, the subsidiary needs to issue equity and subordinated capital to the parent, i.e. the resolution entity in the bank group.\textsuperscript{229} In order to recapitalise the subsidiary, as a first step, the parent’s claims against the subsidiary (in the form of equity or subordinated debt) will need to be written down/off to the amount of losses experienced by the subsidiary. As a second step, the remaining loss-absorbing instruments will need to be converted into equity of the parent.

The loss on assets in the subsidiary needs to be matched by an equivalent reduction in the parent’s own liabilities. For this purpose, the parent’s shareholders and subordinated creditors are bailed in.\textsuperscript{230} As a result, it is the shareholders and creditors of the parent bank or group entity that will bear the losses resulting from resolution. If the loss-absorbing capacity of the parent bank or holding company is exhausted, resolution of particular subsidiaries will be necessary.\textsuperscript{231} This suggests that, further to the application of the WDC power, the bail-in tool will need to be activated, potentially also at the level of the subsidiaries.

\textit{3.1.2. The Multiple-point-of-entry (MPE) Resolution Strategy}


\textsuperscript{227} Ibid, at p. 15.


\textsuperscript{230} Huertas (2016), at p. 23.

\textsuperscript{231} Financial Stability Board (July 2013) Recovery and Resolution Planning for Systemically Important Financial Institutions: Guidance on Developing Effective Resolution Strategies, at p. 13; see also Huertas (2014), at pp. 5-6.
The MPE resolution strategy involves the application of resolution powers by two or more resolution authorities to different parts of the group in line with the rules and procedures in the respective jurisdiction.\textsuperscript{232} Consequently, the bank group might be disintegrated.\textsuperscript{233} For an effective application of the MPE resolution approach the subsidiaries designated as resolution entities in the bank group should be self-sufficient in their funding. This means that they will need to raise external TLAC/MREL instruments on their own (potentially downstreaming them in the form of internal TLAC/MREL to subsidiaries that are not resolution entities further down in the sub-group) and that they have no or a limited number of intra-group financial transactions. In this regard, an important precondition for the success of the MPE strategy is for the separate resolution entities of the group to become increasingly autonomous, thereby improving their ‘separability’ from the bank group and preventing possible contagion.\textsuperscript{234}

Besides limits to financial relationships, an additional assumption regarding the successful application of the MPE strategy is that there are arrangements related to operational linkages in the bank group, including IT, back-office and other support services related to the critical functions that the bank group entities performs. Thus, when a subsidiary enters a resolution procedure, it is necessary to ensure that shared services will continue to be provided for a transitional period. This might be achieved either by a revision of ‘service providing’ contracts\textsuperscript{235} or by setting up a separately capitalised subsidiary specialised in providing services (‘ServCo’) to other bank group subsidiaries.\textsuperscript{236}

For MPE strategies it is important that different resolution tools may be applied to different resolution entities, depending on the decision made by the relevant resolution authority. This means that while some parts of the bank group can be resolved by using the bail-in tool, others may be resolved by means of a ‘bridge institution’ or ‘sale of business’ tool. Such decision may affect the level of MREL and TLAC requirements under certain resolution authorities’ policies.\textsuperscript{237}

\textsuperscript{232} Huertas (2014), at p. 23.
\textsuperscript{235} Huertas (2014), at p. 25
\textsuperscript{236} Ibid; see Financial Stability Board (August 2016) Guidance on Arrangements to Support Operational Continuity in Resolution.
\textsuperscript{237} For example, see Single Resolution Board (2018) Minimum Requirement for Own Funds and Eligible Liabilities (MREL) 2018 SRB Policy for the first wave of resolution plans, p. 10, available at: https://srb.europa.eu/sites/srbsite/files/srb_2018_mrel_policy_-_first_wave_of_resolution_plans.pdf; under the policy, minus 20% RWA scaling of the RCA is applied to cases where the resolution strategy anticipated the use of the bridge bank tool.
3.2. Defining Resolution Groups and Resolution Entities

In relation to both strategies, it is worthwhile explaining that the definitions of a resolution group and a resolution entity do not necessarily overlap with the definition of ‘group’ as set out in the CRR2. In fact, the BRRD2 defines resolution entities as legal entities established in the EU, which are identified by resolution authorities as entities in respect of which resolution actions would be applied. In line with this definition, the Directive stipulates that a ‘resolution group’ is a resolution entity and its subsidiaries that are not resolution entities themselves. In view of these definitions, it becomes clear that what is defined as a group in line with the supervisory requirements under the CRR2 may not overlap with the resolution entities and groups defined discretionarily by resolution authorities in the course of resolution planning and determining the group resolution strategy. The repercussion of this potential discrepancy is further discussed in Chapter III.

In view of the above, it should be clarified that unlike the resolution entities, under the FSB standards, non-resolution entities of a G-SIB that are identified as material subsidiaries or sub-groups are subject to internal TLAC requirements. The determination of material subsidiaries is made on the basis of quantitative criteria and one qualitative criterion considering the presence of critical functions. The internal TLAC resources are the funding instruments that are issued between the bank group entities, e.g. by the subsidiaries to the parent entity. While the external TLAC requirements should ensure that a resolution group as a whole has enough loss-absorbing capacity to be resolvable, i.e. that enough instruments have been issued to third parties who will absorb losses in resolution, the internal TLAC requirements should ensure that they are appropriately distributed within the bank group.

In the EU, the CRR2 includes the concept of ‘material subsidiary’ with respect to non-EU (i.e. third-country) G-SIBs. ‘Material subsidiary’ is defined as a subsidiary that on an individual or consolidated basis meets the same quantitative criteria as set out in the FSB TLAC standards. Differently from the FSB internal TLAC standards, the CRR2 does not include the provision for a material subsidiary that provides critical functions. In case the non-EU G-SIB subsidiary is designated as a material subsidiary (but not a resolution entity) it needs to comply with the TLAC requirements by holding internal TLAC. As in the case of external TLAC requirements, the minimum internal TLAC requirements, i.e. the Pillar 1 requirements, can be supplemented with internal MREL requirement, as Pillar 2 requirements under the BRRD2. Other bank group entities in the EU that are not part of a non-EU G-SIB and that are not resolution entities themselves, are simply required to hold only internal MREL instruments.

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238 BRRD2, Article 2(83a).
239 BRRD2, Article 2(83b).
241 CRR2, Article 4(1)(135).
4. Institutional Framework and Relevant Authorities

In terms of institutional organisation, the EU response to the financial crisis was further integration in the context of the Banking Union (BU) with the establishment of supranational bodies for supervision and resolution of banks in the EU Member States that use the euro as their currency (Eurozone). The BU comprises three Pillars. While the first and second Pillar refer to the supervisory and resolution framework, respectively, the third Pillar is concerned with the arrangements for an EU deposit guarantee scheme. The dissertation focuses on the first two Pillars.

The first Pillar of the BU is the Single Supervisory Mechanism (SSM). It is a unified system for banking supervision in the EU, consisting of the European Central Bank (ECB) and the national supervisory authorities (NCA). Non-Eurozone Member States may also opt in to join the SSM, under close cooperation arrangements. The ECB and NCA share supervisory responsibility for banks in the Eurozone. The responsibility is divided on the basis of the significance of the banks according to prescribed criteria. The ECB is responsible for direct supervision of significant banks, whereas the NCA supervise less significant banks. If necessary, the ECB may decide to exercise direct supervision over specific banks. Within the EU, the cooperation regarding the supervision of cross-border bank groups takes place within supervisory colleges.

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245 SSM Regulation, Article 7; although, as Singh shows, there are difference between the participants in the BU that are part of the Eurozone and non-Eurozone Member States that opted in the BU via close cooperation agreements. See Dalvinder Singh (forthcoming) A Central European Perspective for Opting-in – Under the Shadow of the ECB?


247 SSM Regulation, Article 6(4); a bank is considered significant if: (i) the total value of the bank assets exceeds €30 billion or – unless the total value of its assets is below €5 billion – exceeds 20% of national GDP; (ii) the bank is one of the three most significant credit institutions established in a Member State; (iii) the bank is a recipient of direct assistance from the European Stability Mechanism; or (iv) the total value of its assets exceeds €5 billion and the ratio of its cross-border assets/liabilities in more than one other participating Member State to its total assets/liabilities is above 20%.

248 Such supervision takes place in cooperation with NCAs within Joint Supervisory Teams (JSTs).

The second Pillar of the BU is the Single Resolution Mechanism (SRM). The SRM consists of the Single Resolution Board (SRB) as centralised decision-making body responsible for the resolution of bank groups in the Eurozone, and a Single Resolution Fund (SRF) providing funding for the resolution process out of contributions from banks. The centralisation of the decision-making powers in the SRB aims at overcoming differences between national authorities in the process of bank resolution.

The SRM’s scope is equivalent to that of the SSM, with competencies divided between the SRB and national resolution authorities (NRAs). However, the SRB has jurisdiction over all cross-border groups, whereby both the parent entity and at least one subsidiary bank are located in two different Member States of the BU (i.e. irrespective of the significance). The cooperation as regards the planning and the process of resolution of cross-border bank groups takes place within resolution colleges.

The expectation is that many of the difficulties related to cooperation between home and host country and the consistency in the approach will be mitigated with the BU. Nonetheless, once national authorities outside of the BU are involved, consistency (and cooperation) will depend on the applicable provisions and development of Europe-wide standards.

In this respect, the work of the European Supervisory Agencies (ESAs), including the European Banking Authority (EBA), European Securities and Market Authority (ESMA) and European Insurance and Occupational Pension Authority (EIOPA), is of great significance. The ESAs represent the EU bodies as agencies of the European Commission, having their own legal personality, and provide micro-prudential regulation and supervision. In the banking sector, the EBA is responsible for ensuring effective cooperation and coordination among national authorities. It has the mandate to draft regulatory technical standards and implement technical standards, which are legally binding and are adopted by the European Commission; it may also draw up guidelines and recommendations which apply to national

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252 SRMR, Article 2.

253 SRMR, Article 7(2)(b).

254 BRRD, Article 88.


256 See, e.g., EBA Regulation, Article 5.
authorities on a ‘comply or explain’ basis. Moreover, in case of disagreements between national authorities, the EBA may take binding decisions on issues that have been declared subject to mediation.

With the above overview laid out, the next chapter engage in more detailed discussion of the issues underlined in Chapter I.

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257 EBA Regulation, Articles 10-16.
258 EBA Regulation, Article 19.
Chapter III: Double Leverage – The Case of Capital and TLAC/MREL Requirements for Bank Groups in the EU framework

Introduction

Chapter I described that double leverage may be a potential reason why banks choose to use the group structure, and set out how the group structure can affect banks’ stability. Within the context of the regulatory framework set out in Chapter II, the present Chapter III reviews how the double-leverage problem is addressed in the EU supervisory and resolution framework, and, in particular, how the combination of MREL/TLAC instruments at the consolidated parent entity level matches the levels of those instruments in the subsidiaries of bank groups.

To begin with, in order to determine what the portion of capital and other eligible instruments is that banks need to issue externally (in order to be able to compare this to what is issued internally in the bank group), this chapter reviews the process of consolidation of bank groups in the EU. It explains that, in principle, the consolidation process and the ‘deduction’ methods for capital among bank group entities have been used to avoid double counting of capital (i.e. at more than one level in the bank group). Notwithstanding the comprehensiveness of the approach, the chapter argues that:

(i) the potential uncertainties regarding the perimeter of consolidation,
(ii) the divergences in the consolidation methods used, and
(iii) the multiple levels at which the assessment of the consolidated external and internal capital and other instruments held in subsidiaries or other bank group entities, often carried out by different authorities,

may give rise to doubts as to whether double-counting and double-leverage issues have indeed been mitigated. To this end, the chapter explains that potential double-leverage issues will need to be considered not only at one level, namely external vs. internal, but potentially at a few inner levels within the bank group. The assessment may be further complicated in the areas where the perimeter of consolidated supervision does not match the perimeter of resolution and non-resolution entities.

Further to the difficulties in assessing the perimeters and the levels at which double leverage will need to be considered, the chapter explains that the legislation does not include outright provisions on assessing double leverage in the legislation on EU supervision and the resolution framework. While consideration for the issue of double leverage may be implicitly assessed pursuant to the process of setting out Pillar 2 requirements in supervision, such considerations are not present in the context of the resolution framework.

Based on these observations, the chapter concludes that the effectiveness of the application of WDC-based or bail-in-based resolutions to EU bank groups may be undermined due to the
potential persistence of double-leverage issues, which may normally result in insufficiency of resources held at group level.

To organise the discussion, the chapter is structured as follows. The first part gives some background to the issue of double leverage and double counting, setting out their inclusion in the international Basel standards. The second section considers the ‘consolidation’ process of bank groups, i.e. how different levels of bank groups are grouped for supervisory and resolution purposes. This makes it possible to consider at what levels the double leverage issue may arise. The third part discusses the qualitative aspect of externally and internally issued capital and other eligible instruments, i.e. the provisions relating to their composition and eligibility. The fourth part provides a discussion, including possible ways to address the issue, and considers possible counterarguments. The final part concludes.

1. Background to the Issue in the International Standards

It should be recalled from the overview in Chapter II that the MREL and TLAC requirements consist of a portion that is capital instruments and a portion comprising other eligible instruments. While the latter is regulated in the provisions of resolution regimes, the former is part of the supervisory regimes for banks. Therefore, when assessing double leverage it is necessary to consider the provisions in the supervisory and resolution frameworks.

Chapter I explained that double-leverage issues arise when the parent entity raises debt from external creditors and downstreams it as equity to its subsidiaries. This generates the potential of increased risk-taking. It also creates potential mismatches in the tenor and amount of payments of debt vs. equity instruments, generating liquidity risks.259 It may ultimately lead to the failure of the parent entity, and potentially the bank group as a whole. This problem may exist not only in the observation of debt vs. equity capital financing, but also due to differences in the quality of other funding instruments, including other eligible instruments. In order to assess where such mismatches might occur, it is relevant to note what the levels of funding are in the bank group, since, other than externally vs. internally issued liabilities, there may be other inner layers of funding in the bank group.

In order to determine the perimeter of the external funding of the bank group in supervision, one can consider the consolidated requirements of the group. Consolidation is a process introduced with the Basel Principles in the 1980s, inter alia, to address possible ‘double counting’ of capital in bank groups.260 The idea of consolidated supervision is to capture all the risks to which an internationally active bank group may be exposed, and treat the bank group as a single entity merely for prudential purpose.261 In particular, at the initial stage the

259 Deloitte Financial Services UK blog 08/06/2018, Double Leverage, available at: https://blogs.deloitte.co.uk/financialservices/2018/06/-double-leverage.html
Basel Committee on Banking Supervision (BCBS) considered the problem of ‘the multiplier process in banking affiliations’. This is a situation where banks were able to create an ‘equity capital pyramid’ by establishing subsidiaries. This allowed them to circumvent restrictions imposed by regulatory capital ratios. The following stylised example can be used to clarify the problem:

<table>
<thead>
<tr>
<th>Parent bank (PB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holding in subsidiary A</td>
</tr>
<tr>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subsidiary A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holding in subsidiary B</td>
</tr>
<tr>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subsidiary B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans</td>
</tr>
<tr>
<td>1000</td>
</tr>
</tbody>
</table>

The above table assumes that the hypothetical capital requirement for banks is 10% of their assets. If taken separately, each of the bank group entities meets this requirement. However, what effectively happens is that the same capital, i.e. own resources that support the assets in the parent bank, will effectively support the assets to the amount of 1000 in subsidiary B. If the bank group is regarded as a single entity, there will be not nearly enough own resources to meet the requirements and to absorb the losses of the assets held by the bank group entities.

To eliminate the problem of the ‘multiplier process in banking affiliations’ referred to above, the BCBS proposed applying the regulatory (capital and other) requirements at the consolidated level of a bank group, and consolidated supervision of bank groups.262 This consolidation of bank group accounts means that intra-group exposures are eliminated from the individual balance sheets of the bank group entities and a consolidated balance sheet is produced. The bank is essentially seen as a single entity for the purpose of consolidated supervision.

262 Committee on Banking Regulations and Supervisory Practices (1978) Consolidation of banks’ balance sheets: aggregation of risk-bearing assets as a method of supervising group solvency, available at: [https://www.bis.org/publ/bcbs00b.pdf](https://www.bis.org/publ/bcbs00b.pdf)

supervision. The perimeter of consolidated supervision normally includes banking subsidiaries, i.e. such credit institutions, investment firms, and financial institutions (other than insurance companies) that are covered by prudential supervisory requirements applicable in the banking sector. The BCBS set out that:

“Double gearing occurs whenever one entity holds regulatory capital issued by another entity within the same group and the issuer is allowed to count the capital in its own balance sheet. In that situation, external capital of the group is geared up twice; first by the parent, and then a second time by the dependant. Multiple gearing occurs when the dependant in the previous instance itself downstreams regulatory capital to a third-tier entity, and the parent’s externally generated capital is geared up a third time. Although double and multiple gearing are normally associated with a parent downstreaming capital to its dependant, it can also take the form of an entity holding regulatory capital issued by an entity above it in the group’s organisation chart (upstreamed capital) or by a sister affiliate. Supervisors need to be alert to the implications of double or multiple gearing in the entities that they supervise, regardless of whether those entities hold capital issued by a parent company, a dependant, or an affiliate.” 263

In its subsequent work, the BCBS further expanded the consideration of double counting, i.e. not only covering bank groups, but also financial conglomerates, which include both banking and insurance business combined. As full consolidation is considered punitive in a financial conglomerate sense, less intrusive methods to avoid double counting were introduced, such as various deduction methods. In principle, a deduction method ensures full (or partial) deduction of the investments made by the parent entity in dependant entities. The parent entity’s adjusted capital level is then compared with the parent’s individual/sole regulatory capital requirement, provided that the parent is a regulated entity. 264 Unlike a consolidated requirement, the procedure is not designed to assess group-wide capital adequacy, but merely to address any double counting related to the investment of the parent entity. 265

Normally, the deduction approach is used to avoid potential double-counting issues arising from investments in other (unconsolidated) financial sector entities. This means that while majority-held subsidiaries in the banking sector are included in the prudential consolidation, investments in other financial sector entities that fall outside the prudential consolidated scope are also considered for the purpose of calculating the amount of applicable capital requirements. The investment in financial sector entities can be significant and insignificant.

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263 Basel Committee on Banking Supervision Capital Adequacy Principles, paper BCBS, at pp. 18-19, available at: https://www.bis.org/publ/bcbs47ch2.pdf
264 Ibid.
265 Ibid.
Normally, the threshold for a significant investment is set at 10% of the issued common share capital in the (non-consolidated) entity.\textsuperscript{266}

In addition to the consideration of double counting provisions in supervision, the relevant principle to be put in the spotlight in regard to resolution regimes is the Financial Stability Board (FSB) term sheet for TLAC instruments. In particular, the FSB TLAC term sheet sets out that relevant authorities should avoid double counting by way of extension of the supervisory rules to the TLAC instruments, including any deductions that can be made under those rules, similarly as in supervision.\textsuperscript{267}

The FSB effectively proposes that participation in different resolution groups within the same group should be subject to deductions, which are applicable under the supervisory framework. As noted earlier, outside of the consolidated perimeter, these are financial sector entities that are not majority-owned or controlled subsidiaries of a bank group. The assumption here is that potentially the need for deductions might also arise among the different resolution groups in the same bank group, as further detailed below.

\section*{2. Consolidation Perimeter and Levels of Application of Regulatory Requirements in the EU Framework}

\subsection*{2.1. Application in the Supervisory Framework}

\subsubsection*{2.1.1. Scope of Consolidation}

In the EU framework, the consolidated supervision of banks groups is set out in the CRR2. The CRR2 stipulates that bank groups should meet their capital requirements at a consolidated level.\textsuperscript{268} Whether and how a legal entity is included in the scope of consolidation depends on the types of activities of the parent entity and the subsidiary, their location, as well as the size of the assets and the risk that they may bear. The scope of consolidation under the CRR2 includes institutions (credit institutions and investment firms), financial institutions, including financial holding companies (FHC), and mixed financial holding companies (MFHC), as defined earlier in Chapter II. A financial institution is an entity, other than a credit institution and investment firm, the principal activity of which is to acquire holdings or to pursue one of more


activities listed in the CRD5, or a payment institution or an asset management company. FHC are holding companies the subsidiaries of which are exclusively or mainly credit institutions, investment firms or financial institutions. In comparison, MFHC are holding companies which include subsidiaries that conduct both banking and insurance activities.

2.1.2. Levels of Consolidation

According to the CRR2 and the CRD5, consolidation can occur on several levels of the bank group, including the EU consolidated level, the Member State (sub-)consolidated level and the sub-consolidated level where an EU-based institution has a subsidiary in a third country (i.e. non-EU country). The EU consolidated level exists due to the presence of at least one institution, FHC or MFHC in the EU (as an ultimate parent entity) at the highest level of consolidation of that group that may include entities in several Member States (EU consolidation group). Consolidation is also triggered if the bank group has at least one institution (including an FHC or MFHC) in a Member State, regardless of where the ultimate parent entity is located, i.e. in the EU or in a third country. In this case, consolidation includes the entities in the relevant Member State (MS consolidation). Moreover, sub-consolidation in the same group may apply if an institution or financial institution is located as a subsidiary in a third country. The following chart provides a stylised graphic description of the different consolidation levels.

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269 Particularly the activities listed in points 2 to 12 and 15 of Annex I of the CRD5 (Directive 2013/36/EU AS AMENDED by Directive (EU) 2019/878)


271 See CRR2 (Regulation (EU) No 575/2013 as amended by Regulation (EU) 2019/876), Article 4 (1)(20). In a financial holding company at least one entity needs to be a credit institution or investment firm, and more than 50% of the financial institution’s equity, consolidated assets, revenues, personnel or other indicator considered relevant by the competent authority should be associated with subsidiaries that are institutions or financial institutions.


273 CRR2, Article 4(1)(28) and (29), including parent financial holding company / mixed financial holding company and EU parent financial holding company / mixed financial holding company as further defined in the same article under points (30)-(33).

274 CRR2, Article 22.

275 Graph based on publication by the Dutch National Bank (DNB).
In addition, under the revised provisions of the Banking Reform Package, FHC and MFHC need to obtain supervisory approval for essentially being responsible for the group or sub-group. Supervisors can also ask, on a temporary basis, another financial holding company, mixed financial holding company or a regulated subsidiary to comply with the requirements of the group on a consolidated basis.

Moreover, the CRD5 now requires that in a situation of two or more institutions in the EU, which are part of the same non-EU (third-country) group in the EU and the value of their assets exceeds EUR 40bn, an intermediate EU parent undertaking (i.e. an ‘IPU’) needs to be established. If for a legal or regulatory reason, one IPU is not allowed according to the applicable third-country legislation (e.g. in the case of ‘ring-fencing’ bank activities), the establishment of up to two IPUs is allowed. The IPU provisions add another potential layer that may either complicate the levels of application of capital and other requirements created with the CRR2.

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276 CRR2, Article 11(2)(b) in relation to CRD5, Article 21a.
277 CRR2, Article 11(2)(c) in relation to CRD5, Article 21(6)(d).
278 CRD5, Article 21a. Under the said Article, two IPUs will also be allowed: (i) if this is required under the structural separation rules in the third-country legislation; (ii) or if this is necessary for resolution purposes.
2.1.3. Methods of Consolidation

Finally, consolidation can be conducted pursuant to different methods. As a general rule, bank groups need to carry out full consolidation of all institutions and financial institutions that are subsidiaries.\textsuperscript{279} If the parent entity is a holding company, such consolidation should be carried out for the subsidiaries (covered by the CRR2) of that holding company (an FHC or MFHC, as defined above).

While the general rule in the CRR2 is that this should be a full consolidation\textsuperscript{280} there are possible exceptions to the rule, and supervisory authorities can allow different methods of consolidation. Such methods depend on the intra-group connections. For example, supervisory authorities may permit proportional consolidation on a case-by-case basis if the supervised entity submits an application.\textsuperscript{281} The proportional consolidation is applicable if the bank group complies with certain conditions, including: (i) if the liability of the parent entity is limited to the share capital in the subsidiary, (ii) if the liability of other shareholders and other members is clearly established in a legally binding way, and (iii) if the solvency of the other shareholders is clearly established.

In addition, supervisory authorities should require proportional consolidation in cases where institutions, financial institutions and ancillary services undertakings are managed by an entity included in the consolidation together with non-consolidated entities. In that case, the liability of each entity needs to be limited to the share of the capital they hold, and therefore the support is proportional to their capital share.\textsuperscript{282,283} In practice, this is the case where there are ‘joint agreements’ for sharing control in the group (i.e. joint operations and joint ventures).\textsuperscript{284}

Where other capital ties are present, consolidating supervisors can choose the method for consolidation (particularly, the equity method) but only for those entities which are related through such ties.\textsuperscript{285} This includes situations where special purpose vehicles can be included in the scope of consolidation, and where it can be assessed if those entities should be fully or

\textsuperscript{279} CRR2, Article 18(1).
\textsuperscript{281} CRR2, Article 18(2) and CRR2, Article 18(8).
\textsuperscript{282} CRR2, Article 18(4) and CRR2, Article 18(8), EBA Consultation Paper EBA/CP/2017/20, p. 26.
\textsuperscript{283} The CRR2 also includes a provision for consolidation in cases where the entities in the group are connected through a unified management based on a contract or otherwise, or where one institution exercises significant influence over other institutions (see CRR2, Article 18(3) and (6)). In these cases, relevant authorities can determine the way in which consolidation should be conducted. As these instances do not concern the problem of ‘double leverage’ (since. there are no capital ties), they are not further considered here.
\textsuperscript{284} Note that the IFRS 11 accounting standard requires an ‘equity method’ as opposed to proportional consolidation as required in the prudential provisions.
\textsuperscript{285} CRR2, Article 18(5).
When making such an assessment, supervisory authorities are required to take into account the impact on solvency and consider if any of those situations may artificially improve the capital position of the bank group.

2.2. Application in the Resolution Framework

2.2.1. Scope of Application

The level of application of the TLAC/MREL requirements is established by determining the resolution groups, which is part of the identification of a resolution strategy for a bank group. As noted in Chapter II, the resolution strategy can be the application of resolution tools either at a single point of entry (SPE) to one resolution entity in the bank group, or through multiple point of entries (MPE) to several resolution entities in the bank group. As a result, in the case of an SPE strategy, a bank group is considered as one resolution group headed by one resolution entity. In the case of an MPE resolution strategy, the bank group consists of several resolution groups (which can be sub-groups or individual entities of the bank group) and therefore has several corresponding resolution entities. In order to determine the relevant resolution strategy, pursuant to the Commission Delegated Regulation (EU) 2016/1075, the resolution authorities need to take into account:

(i) the choice of resolution tools, and whether they are available in the jurisdictions of the resolution entity where they will need to be applied;
(ii) the amount of eligible liabilities anticipated for the resolution strategy, including the risk of those instruments not contributing to loss absorption or recapitalisation of the entities that issue those instruments;
(iii) the operational structure of the group and its business model, depending on the centralisation and decentralisation of the group structure;
(iv) the enforceability of the resolution actions in third countries and the support of the relevant authorities for executing those actions in the third countries.

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286 EBA/CP/2017/20, p. 29.
288 BRRD2, Article 10(7)(e)(f).
289 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
In particular, when it comes to the financial and operational interconnections of the bank group, the legislation specifies the following. An SPE strategy is more appropriate where the group has operations that are highly integrated and have centralised capital and liquidity management, risk management, treasury functions, or IT and other shared services. By comparison, an MPE strategy is expected where the eligible liabilities are issued by more than one entity or regional or functional sub-group which would be resolved separately. A bank group is also expected to be divided into clearly identifiable sub-groups for operational purposes. In line with the BRRD2, group-level resolution authorities together with the resolution authorities of subsidiaries in the bank group determine which entities are resolution entities. Resolution entities together with their subsidiaries (which are not themselves resolution entities) represent resolution groups.

The resolution group should act as a source of loss-absorbing capacity for the subsidiaries that are not themselves resolution entities. In other words, the resolution group should hold the instruments issued by the non-resolution entities. As a result, there is a distinction between instruments issued to external investors by the resolution entity (external TLAC/MREL) and instruments issued by the non-resolution entities to the resolution entities (internal TLAC/MREL).

For the purpose of internal TLAC, the FSB sets out the parameters for the identification of material sub-groups (confirmed in the cooperation between home and host authorities). An entity or sub-group in a bank group is considered material if it:

(i) holds more than 5% of the consolidated risk-weighted assets of the G-SIB group; or
(ii) generates more than 5% of the total operating income of the G-SIB group; or
(iii) has a total leverage exposure measure larger than 5% of the G-SIB group’s consolidated leverage exposure measure; or
(iv) has been identified as material to the exercise of the firm’s critical functions (irrespective of whether any other criteria are met).

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291 The resolution group should act as a source of loss-absorbing capacity for the subsidiaries that are not themselves resolution entities. In other words, the resolution group should hold the instruments issued by the non-resolution entities. As a result, there is a distinction between instruments issued to external investors by the resolution entity (external TLAC/MREL) and instruments issued by the non-resolution entities to the resolution entities (internal TLAC/MREL).

292 BRRD2, Article 2(1)(83b); one bank group might include several resolution groups and resolution entities that may be resolved with a combination of SPE and MPE strategies.

293 For the purpose of internal TLAC, the FSB sets out the parameters for the identification of material sub-groups (confirmed in the cooperation between home and host authorities). An entity or sub-group in a bank group is considered material if it:

(i) holds more than 5% of the consolidated risk-weighted assets of the G-SIB group; or
(ii) generates more than 5% of the total operating income of the G-SIB group; or
(iii) has a total leverage exposure measure larger than 5% of the G-SIB group’s consolidated leverage exposure measure; or
(iv) has been identified as material to the exercise of the firm’s critical functions (irrespective of whether any other criteria are met).

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In EU legislation, the CRR2 provides an almost equivalent definition for determining a material subsidiary, excluding however the flexibility that materiality can be confirmed on the basis of the above point (iv) regarding the existence of critical functions.\textsuperscript{295}

### 2.2.2. Levels of Application

According to the CRR2, parent entities identified as resolution entities of G-SIBs need to comply with the external TLAC requirements on the basis of the consolidated situation of the resolution group.\textsuperscript{296} If the resolution entity of a G-SIB does not have subsidiaries, it will need to comply with the requirements at an individual level.\textsuperscript{297} Resolution entities that are G-SIB or part of a G-SIB also need to meet the additional (external) MREL requirements (on top of the TLAC requirements) on a consolidated basis of the resolution group.\textsuperscript{298} Similarly, resolution entities that are not G-SIB or part of a G-SIB have to meet the external MREL requirements on a consolidated basis. Material subsidiaries of non-EU G-SIBs need to meet internal TLAC requirements on the basis of their consolidated situation.\textsuperscript{299} The subsidiaries of a resolution entity or of a third-country entity that are not themselves resolution entities have to comply with the requirements for internal MREL on an individual basis.\textsuperscript{300}

In terms of levels of application, the provisions in the context of the relevant SPE or MPE resolution strategy have to be observed. First, the case of SPE can be considered. In principle, with regard to an SPE resolution strategy, there should be no particular issues in terms of levels of consolidation at supervisory or resolution level, at least for the purpose of applying the external and internal TLAC requirements. It has been indicated above that consolidation is required at the ultimate parent entity in the EU for supervisory purposes. If the bank group is headquartered by an EU parent entity, such consolidation should overlap with that of the resolution entity heading the resolution group in the EU (EU consolidation) for the application of the external TLAC requirements. If the parent entity of the bank group is located in a third country (non-EU bank group), the EU-level supervisory consolidation should overlap with the sub-consolidation of the ‘material sub-group’ that will be needed for the application of the internal TLAC requirements. The same may be argued for the MREL requirements.

### 2.2.3. The ‘Daisy Chain’

\textsuperscript{295} CRR2, Article 4(1)(135).
\textsuperscript{296} CRR2, Article 6 11(3a).
\textsuperscript{297} CRR2, Article 6(1a).
\textsuperscript{298} BRRD2, Article 45e.
\textsuperscript{299} CRR2, Article 92b and Article 11(3a) second paragraph.
\textsuperscript{300} BRRD2, Article 45f(1).
Nevertheless, even in this case, i.e. where seemingly there is no issue with the perimeters that are in place, there may be other concerns, particularly in the case of a number of intermediate (holding) companies between a subsidiary and an ultimate parent entity. In such case, except for direct issuances to the ultimate parent entity, indirect issuances are allowed through a chain of back-to-back issuances and purchases taking place at each level of the chain of ownership linking the resolution entity to all entities subject to an internal TLAC/MREL requirement (i.e. a ‘daisy chain’). Regarding these cases, the FSB states:

“Where the issuance of internal TLAC relies on the daisy chain approach, each subsidiary in the daisy chain should issue sufficient internal TLAC to cover any internal TLAC in which it has invested...to avoid double counting of internal TLAC...
One possible way to avoid double counting from a regulatory perspective would be a requirement for each subsidiary in the daisy chain to deduct any internal TLAC in which it has invested from its own internal TLAC resources.”

In other words, to enable losses to pass from the subsidiary to the parent entity when indirect issuances exist, it is necessary to ensure that sufficient capacity is available at the level of each entity in the bank group. It should be noted that this is different from having the resources at the level of the ultimate parent entity (as part of the consolidated or sub-consolidated requirements). As a result, at each individual level, when setting the requirements for the intermediate entities, the internal TLAC instruments issued by the subsidiary below the intermediate entity in the bank group structure should be deducted. In line with the FSB standards, under the revised CRR2, the supervisory deduction regime is extended to TLAC requirements.

However, in order to be effective, the deductions would need to be applied also in terms of the MREL requirements (on top of the TLAC requirements) of material subsidiaries. For this purpose, the BRRD2 has provided a mandate for the EBA to develop a draft regulatory technical standard (on the basis of which level 2 legislation will be endorsed) to sort out the ‘daisy chain’ issuance of internal MREL in the same resolution group. According to the EBA, the most prudent approach to avoid potential double counting of instruments issued in a resolution group via a chain of intermediate (holding) companies is full deduction by the investing entities in the MREL issuance of the subsidiaries below it that will result with a requirement for higher issuances throughout the levels of the chain.

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302 CRR2, Article 72e.
303 BRRD2, Article 46(f).
304 European Banking Authority, Draft Regulatory Technical Standards on methods to avoid that instruments indirectly subscribed by the resolution entity for the purpose of meeting the minimum requirement for own funds and eligible liabilities, applicable to entities that are not themselves resolution entities under Article 45f of Directive 2014/59/EU, hamper the smooth implementation of the resolution strategy, Consultation Paper EBA/CP/2020/18, paragraph 18.
More specifically to the case of the MPE resolution strategy is that there could be more than one resolution group and more resolution entities, including at the EU level. Even if in this case all resolution groups and entities ideally overlap with the supervisory perimeter, the problem that may arise is how to avoid double counting of TLAC and MREL holdings among resolution groups in the same bank group. In such cases, since consolidation will not be available to address double counting, it is proposed that the bank group should rely on a deduction approach similar to that applicable to cases where bank groups invest in other financial sector entities, as provided for in supervision.

Therefore, the above-mentioned deduction regime as available in the CRR2 is also important for the TLAC resources held through a daisy chain. In particular, the CRR2 sets out that any exposure of the EU parent resolution entity to a subsidiary that is not part of the same resolution group as the EU parent (suggesting an MPE strategy), in the form of either capital or TLAC instruments, should be deducted from the calculation of the TLAC-eligible liabilities of the parent resolution entity. In the event that the said subsidiary has surplus TLAC instruments, the resolution authority of the parent entity can deduct a lower amount of the exposure. However, the amount of TLAC surplus, which would reduce the parent entity’s exposure, should be deducted from the TLAC instruments of the subsidiary in the other resolution group.

With regard to MREL, such provisions for deductions do not exist. Nevertheless, the legislation seems to address the issue, since the CRR2 sets out that for MPE groups the EU parent entity should calculate the amount of the external TLAC in its consolidated situation as it were the only resolution entity of a G-SIB. If such a ‘consolidated amount’ of external TLAC is lower than the sum of the amount of all the (external) TLAC of the resolution entities belonging to that G-SIB, the resolution authorities will need to impose additional MREL requirements. Essentially, for the purpose of this calculation, the MPE strategy is considered as a hypothetical SPE bank group. According to the SRB, these adjustments can be used to achieve the same economic effect as the deduction regime. Pursuant to the BRRD2, such adjustments (i.e. add-ons) can be made in the calculation of the recapitalisation amount and market confidence charge, which are components of the calculation of the MREL requirement.

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305 CRR2, Article 72e(4). The Single Resolution Board explained that it will reflect the same economic effect of deductions of TLAC instruments in the MREL requirement, by using the possible adjustments (i.e. add-ons) in the MREL calculation, see Single Resolution Board (May 2020) Minimum Requirement for Own Funds and Eligible Liabilities (MREL), SRB Policy under the Banking Package (SRB MREL policy), p. 15.

306 CRR2, Article 12c, in relation to BRRD2, Articles 45d(3) and 45h(2).


308 See BRRD2, Article 45c(3) for resolution entities and Article 45c(7) for non-resolution entities.
2.2.5. Scaling of Internal TLAC Requirements

Finally, with regard to the amount of internal TLAC, the FSB stipulates that the amount of the internal TLAC should be lower for the non-resolution entities in the bank group. In this respect, the TLAC requirement for material subsidiaries and sub-groups can be scaled to 75%-90% of the amount they would have been asked to hold if they had been stand-alone resolution entities themselves. The logic is to allow some of the TLAC-eligible instruments not to be prepositioned at a specific entity in the bank group and to be freely distributable where needed in financial distress. The scaling allows the group to build surplus resources.309 The CRR2 limits the internal TLAC requirement for material subsidiaries to 90% of the requirements they would have been able to meet under the provisions for external TLAC.310 Therefore, it reduces the possibility for the bank group to build up surplus resources at the consolidated level.

Note that the scaling of the internal TLAC requirement does not mean that the amount of consolidated requirements should not match the sum of the amounts of the individual bank subsidiaries (i.e. the sum of parts issue) or that double-counting issues should not be avoided. It simply suggests that a portion of the internal TLAC requirements would not need to be prepositioned at the material subsidiary level. The consolidated requirements would still need to fully take into account the risks of the bank group. The issue that emerges is that a higher internal TLAC requirement will have to be matched with the consolidated requirement of the bank group. This will suggest an outcome where the parent (resolution) entity in one jurisdiction absorbs losses of a subsidiary in another jurisdiction, which will generate a burden-sharing question between home and host jurisdictions.

The CRR2 limits the internal TLAC requirement for material subsidiaries to 90% of the requirements they would have been able to meet under the provisions for external TLAC.311 Therefore, it reduces the possibility for the bank group to build up surplus resources at a consolidated level. In addition, the resolution authorities in the EU may top up this internal TLAC requirement with the Pillar 2 MREL requirement. In effect, it can further complicate the discussion of home-host resolution authorities in terms of the amount of eligible TLAC and MREL instruments that need to be issued externally and downstreamed internally in a resolution group, as it is further discussed in Chapter IV.

309 Financial Stability Board (July 2017) Guiding Principles on the Internal Total Loss-absorbing Capacity of G-SIBs, principle 7, p. 9; according to the explanation provided by the Bank of England, the external MREL requirement should ensure that the bank group as a whole has sufficient loss absorbency. There is a possibility that the sum of the internal requirements is higher than the external ones, since the internal requirements might be set to take into account more exposures present at legal entity level that effectively net out at group level. See Bank of England, Internal MREL – the Bank of England’s approach to setting a minimum requirement for own funds and eligible liabilities (MREL) within groups, and further issues, Consultation on a proposed updated Statement of Policy, October 2017.
310 CRR2, Article 92b(1).
311 CRR2, Article 92b(1)
2.3. Critical Reflection on the Consolidation Perimeter and Levels of Application of Regulatory Requirements in the EU Framework

Overall, consolidated supervision under the CRR2 addresses the double counting of capital and other eligible instruments by imposing comprehensive consolidation and deduction requirements for banks groups. The framework described above appears to provide a robust approach, although it can be undermined when taking into consideration ambiguities related to the perimeter, levels and method of consolidation, as discussed below.

The framework introduces several necessary levels for consolidation in an attempt to capture all possible scenarios of adequate assessment of double counting. However, one can easily come up with a stylised example of where the different levels of consolidation can thwart the assessment of double-counting if different authorities are responsible for the different levels of consolidation.

For example, there may be bank group ABC, with a parent entity (or FHC or MFHC) in Member State A that has a subsidiary in Member States B and C. The bank subsidiary in Member State B has other subsidiaries under it in the same Member State. In comparison, the subsidiary in Member State C has subsidiary in a third country. In this example, bank group ABC will have at least three levels of consolidation. One is EU consolidation at the level of the ultimate parent entity in Member State A. Then there will be sub-consolidation at the level of the subsidiary in Member State B, and its dependents in the same Member State. Finally, the subsidiary in Member State C will trigger a sub-consolidation of the third-country entity. Taking into account that all of the named entities are in different Member States, they will be subject to the supervisory regulation of three competent authorities, one in home jurisdiction A, and two in host jurisdictions B and C.

Now, if all these authorities have a different interpretation of the perimeter and use different methodologies for consolidation, differences may be expected in the approach that may thwart the discussion on the level of double leverage, if there is one at all. As discussed in the next section, such a discussion may not occur at all.

For example, different authorities may make a different assessment as to what entities should be included in the consolidation perimeter of a bank group. While the above provisions establish the perimeter for consolidation, there are various ambiguities regarding which entities are covered by consolidated supervision. For example, with regard to the definition of a ‘financial institution’, as set out above, according to the EBA, EU Member States have interpreted the definition of a ‘financial institution’ in an inconsistent manner. The lack of

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clarity is related to the interpretation of what is considered a ‘principal activity’ and whether a quantitative parameter (e.g. 50% of its total activity) should be introduced in order for a given entity to be considered as a financial institution. Furthermore, it is not clear either if and to what extent the definition of a ‘financial institution’ captures securitisation special purpose vehicles (Sec-SPVs). In particular, the question arises where Sec-SPVs carry out any of the activities set out in Annex 1 of the CRDV and that are listed in the definition of CRR2 regarding financial institutions. These types of ambiguities, as well as others noted by the EBA, cast doubt on whether the consolidation perimeter is inclusive enough to take note of and eliminate double-counting issues by means of consolidation, and thereby on whether it allows to identify possible double-leverage mismatches in the funding structure of the bank group.

Furthermore, given the different levels of consolidation in a bank group, it is possible for different resolution authorities to use different methods of consolidation relative to the intra-group relationships. There can be differences in the assessment of supervisory authorities as to whether proportional consolidation should be applied instead of full consolidation. It is therefore relevant that in the EU the EBA has published draft technical standards that aim to harmonise the way in which the methods of consolidation are to be applied by supervisory authorities.

Nevertheless, it is worthwhile noting that the proportional method is no longer used under the relevant accounting standards, such as the IFRS 10 and 11. This means that if supervisory authorities allow such a proportional method, additional consolidation of the bank group accounts will need to be performed and the relevant supervisory authorities will have to assess the accuracy of the results of such consolidation. This can be a significant responsibility for the supervisory authorities.

When considering how the supervisory framework for determining the scope of application of the consolidated requirements is applied, it should be noted that the levels of application of the TLAC/MREL requirements are set on the basis of resolution groups, resolution entities and material subsidiaries in the bank groups. The determination of the resolution groups and resolution entities to which consolidated TLAC/MREL requirements should apply takes place on the basis of criteria that are different from the rules and levels of consolidation as established for the purpose of supervision.

As noted above, the rules for identifying resolution entities are embedded in the rules relating to the determination of resolution strategies, including here the criteria for identifying ‘material subsidiaries’. In comparison, the supervisory consolidation is made relative to the different legal ties between the legal entities in the group, in line with different methodologies. Given the differences in parameters, whether the determination of resolution

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313 Ibid.
entities or resolution groups always necessarily and ideally overlaps with the supervisory perimeter for setting the requirements regarding consolidated, sub-consolidated or even individual entity levels, might be dubious.

Furthermore, the framework does not provide much clarity on how a combination of deductions and ‘add-ons’ would work in MPE strategies and thus as to whether the approach would be able to accurately count all the instruments that need to be issued externally by the resolution entities. In fact, this can significantly complicate the image of the extent of requirements that should be set for the different resolution groups and entities levels, and at the level of the ultimate parent of an MPE bank group, especially if different authorities have to make these assessments. For an MPE group located in the EU, such deductions and adjustments that need to be carried out even by a single authority (e.g. the SRB at Banking Union level) might prove challenging. For example, if the relevant adjustments and deductions apply to resolution groups in and outside the EU, it may happen that the non-EU legislation has not (yet) implemented the international standards for resolution regimes and therefore normal insolvency proceedings will apply to these parts of the group.\textsuperscript{315} The jurisdictional differences that the consolidating regulator will need to accommodate may not be easily resolved.

Moreover, for SPE resolution groups, the difficulties in making the deductions may not be straightforward in all cases. For example, one can imagine a case where there are intermediate holding companies between a subsidiary and an ultimate parent undertaking. Those intermediate holding companies can be located in non-EU countries (e.g. tax havens). With regard to TLAC, the CRR2 stipulates that internal TLAC instruments have to be owned by the ultimate parent entity of the non-EU G-SIB and must have been issued directly or indirectly through other entities within the same group. When the internal TLAC instruments are issued indirectly, all the intermediate entities need to be established in the same third country as that ultimate parent entity or in an EU Member State.\textsuperscript{316} Clearly, the legislation seeks to avoid uncertainties about the sufficiency of instruments held by entities in different jurisdictions that may or may not have similar regulatory provisions on deductions. This somewhat facilitates the situation. However, with regard to MREL, the EBA draft regulatory technical standards (RTS) do not provide for such a requirement.

All the issues stated above regarding the perimeter, levels and methods of consolidation and determination of resolution entities and groups may be even more complicated if the bank operates in an international environment. The above remarks do not propose that possible discretions should not be available, or that more specific rules should exist. In fact, provisions are plenty, potentially running the risk of not being comprehensible for those who need to comply with or apply them. The point is to suggest that the legislation could be enhanced by


\textsuperscript{316} CRR2, Article 92b.
specific responsibility for banks and relevant authorities to explicitly consider risks resulting from discrepancies that might exist at the different levels where capital and other eligible requirements are set for the various levels of the bank group.

Box 1: Explanation of the Role of Supplementary Supervision

More broadly than consolidation in the banking sector, the double-counting and double leverage issues are addressed in the EU in the context of financial conglomerates.\textsuperscript{317} The regulation of financial conglomerates is conducted as supplementary supervision under the provisions of the Financial Conglomerates Directive (FICOD). This supplementary supervision is added to the sectoral supervision for banking and insurance. The FICOD covers the relationship that bank group entities (within the scope of the CRR2 covered by prudential consolidation) have with insurance entities.\textsuperscript{318} As such, the FICOD aims at addressing double leverage arising from the combination of different types of business in the same group, and the differences in the capital requirements that apply in the banking and the insurance sector.\textsuperscript{319} The supplementary supervision, however, does not cover potential double-gearing issues that may arise in the narrower context of a bank group, or due to any omission of consolidated supervision under the sectoral regulation in the CRR2.

Since full consolidation as in the CRR2 is not deemed appropriate for cases of financial conglomerates, other techniques are applied which ensure that the parent entity holds sufficient capital to meet capital requirements imposed on other regulated entities in the group.\textsuperscript{320} When considering this Directive with regard to financial conglomerates and the issue of double gearing, the effectiveness of the supplementary supervision under the FICOD can be questioned, even in the broad context of financial conglomerates. This is because in order for a group to become a subject to this supplementary consolidation, it needs to be qualified by the relevant authority as a financial conglomerate. A financial conglomerate is defined as a group or sub-group where there is a regulated or unregulated entity at the head of the group (or sub-group) of entities with at least one bank and one insurance entity, which perform activities in such a way that they are considered significant as specified on the basis of the threshold defined in the Directive.\textsuperscript{321}

\begin{itemize}
  \item \textsuperscript{318} See FICOD, Appendix I, including accounting consolidation method, deduction and aggregation method, and combination method.
  \item \textsuperscript{319} In addition, the CRR defines mixed-activity holding companies (MAHC), holding companies which hold financial entities but whose business is predominantly non-financial, see CRR2, Article 4(1)(22). However, these companies are not covered by consolidated supervision as specified under Article 11 of the CRR2.
  \item \textsuperscript{320} Gleeson (2018), at p. 469.
  \item \textsuperscript{321} FICOD, Article 2(14) in relation to Article 3(2) and (3).
\end{itemize}
or sub-group is identified as a financial conglomerate, it will become subject to the capital adequacy requirements under the FICOD. 322

Clearly, not all bank groups are identified as financial conglomerates, and therefore they are not subject to the double-gearing provisions as those in the FICOD. Under the FICOD, the existence of a financial conglomerate is determined on the basis of quantitative thresholds. Supervisory authorities, however, may decide to waive the supplementary requirements of the FICOD where applying such supervision is not necessary, is inappropriate, or would be misleading with respect to the objectives of supplementary supervision, and where the group does not meet all of the thresholds in order to be identified as a financial conglomerate.323

The discretionary determination of which groups are considered as financial conglomerates can exclude certain bank groups from the scope of application of the capital adequacy provisions of the FICOD. According to the last available information, almost a third of identified financial conglomerates benefit from the waiver.324 According to the report of the European Commission, as at 2017, G-SIBs such as HSBC, Barclays, Banco Santander, Société Générale and UniCredit are waived from the financial conglomerate categorisation and therefore from the FICOD requirements.325 This figure represents half of the current list of EU G-SIBs (including HSBC and Barclays, taking into account the presence of their subsidiaries in the EU).

The most prominent aspect of the discussion on double leverage is the above mentioned FICOD requirement related to Member States to ensure an adequate level of capital at financial conglomerate level, the calculation of which can be based on three different methods. Such calculation should detect any differences between the total level of capital (own funds) and the total of all (sectoral) capital requirements at the level of the financial conglomerate. If the total capital of the financial conglomerate does not exceed the total of the sectoral capital requirements, the FICOD does not impose an additional binding requirement.326 As such, it does not effectively alleviate issues of double gearing in the context of financial conglomerates.

According to the general critique of the FICOD as a tool for supplementary supervision, the Directive does not extend to resolution and any level of instruments that a bank group (which is a financial conglomerate or part of a financial conglomerate) should hold at

323 Namely threshold 2 or 3, see European Commission, SWD (2017) 273 final.
325 European Commission, SWD (2017) 273 final, Appendix II.
consolidated or sub-consolidated level. As such, in absence of significant changes the Directive seems to be little effective.

3. Quality of the Capital and Other Eligible Instruments and Issues of Double Leverage

3.1. Background

Having considered the quantitative aspect of determining the areas of possible double counting that might affect the level of capital and other instruments available in the bank group, we can now turn specifically to the qualitative issues of double leverage. In the context of the BCBS standards, double leverage is mainly considered to be an issue of quality of capital, in particular, in financial conglomerates. To this end, the BCBS has highlighted the need for supervisors to consider the potential situation of excessive leverage:

A situation of excessive leverage can occur when a parent issues debt (or other instruments not acceptable as regulatory capital in the downstream entity) and downstreams the proceeds to a dependant in the form of equity or other elements of regulatory capital. In this situation, the effective leverage of the dependant may be greater than its leverage computed on a solo basis. While this type of leverage is not necessarily unsafe or unsound excessive leverage can constitute a prudential risk for the regulated entity if undue stress is placed on the regulated entity resulting from the obligation on the parent to service that debt. A similar problem can arise where a parent issues capital instruments of one quality and downstreams them as instruments of a higher quality. 327

(Emphasis added)

The BCBS primarily sought to address problems of double leverage in a situation where there is an unregulated (holding) company at the head of the group, which may raise external funding of lower quality and downstream it as regulatory capital. This concern demands that unregulated holding companies are covered by the scope of the prudential supervision of financial conglomerates. Importantly, the BCBS recognises that the issue of excessive leverage can present itself in terms of differences in the quality of the regulatory capital.

From this perspective, double leverage is an issue related to the composition of the required capital. Required capital needs to meet certain quality parameters (such as maturity and subordination) to ensure that this instrument will be readily available to absorb losses of the bank. The quality parameters are defined in the eligibility provisions for the three types of instruments that are allowed to be counted as regulatory capital. 328 For bank groups, the

328 See the discussion of the quality of capital instruments in Bart Joosen (2015) Regulatory Capital Requirements and Bail-in Mechanisms, in Matthias Haentjens and Bob Wessels (eds.) Research Handbook on Crisis Management in the
Basel principles stipulate that, at a minimum, banks’ capital should include common equity tier 1 (CET1), additional tier 2 (AT1) and tier 2 (T2) instruments. The instruments’ quality decreases gradually, from CET1 as the capital with the highest quality. In this respect, it is important to highlight that the entities in bank groups within the scope of prudential supervision are asked to meet the above requirements at consolidated group and individual bank/regulated entity level. This is because, even though it is considered that a bank group consolidated capital covers all the risks to which a bank group as whole it is exposed:

(i) the consolidated requirement does not specify how such capital will be allocated across the different entities in the bank group. Considering that there could be potential (cross-border) impediments to the transfer of capital (especially ahead of and in a financial distress), regulatory authorities require such capital to be prepositioned at the level of the individual entities at an amount prescribed in the individual requirements;

(ii) the consolidated requirement eliminates an entity’s risk resulting from its exposure to other entities in the bank group (intra-group risk), prompting the need to assess such individual risks.

In view of the two reasons mentioned above, the regulatory capital needs to be applied at an individual level in order to ensure adequate allocation of the capital, and to take into account the intra-group risks to which an entity can be exposed.

The dual levels of application of the capital requirements also mean that the double-leverage issue is in effect an issue of differences that can emerge between the type of capital held at a consolidated and an individual entity level, and any mismatches that can arise in this respect. Sure enough, the Basel minimum principles for the composition of capital is set at at least 6% tier 1 capital (CET1 and AT1) and 8% of total capital, suggesting that a bank can hold 4.5% CET1, 1.5% AT1 and 2% T2 instruments to meet its capital requirements. Such composition can apply at both individual and consolidated level of the bank group. In principle, the standardisation of the rules applied at group and subsidiary level should dispel the concerns about double leverage (although in practice this might be debatable).
Furthermore, in relation to point (ii) above, local authorities may assess that the minimum 8% capital requirements do not sufficiently cover the risks of the subsidiary under their remit. If that is the case, they can impose additional capital requirements (Pillar 2 requirements) on top of the minimum (Pillar 1) requirements. To make an assessment if Pillar 2 requirements are needed, the Basel Principles have provided a two-step approach. First, the bank conducts an internal capital adequacy process (ICAAP) and then the supervisory authorities follow a supervisory review and evaluation process (SREP). Normally, the resolution authorities determine the composition of the Pillar 2 requirements. These requirements can be added at both the individual and consolidated level of the bank group.

With the introduction of resolution regimes and MREL/TLAC instruments at the different levels of the bank group, a potential double-leverage issue may result from mismatches in the composition of the internal and external TLAC/MREL instruments held at the resolution group and non-resolution entities levels. In this respect, the FSB internal TLAC term sheet specifically sets out that the:

“...external TLAC in the form of debt pre-positioned at the material sub-group as internal TLAC in the form of equity could result in a scenario where the resolution entity is unable to finance its interest payments on its external TLAC debt because it has not earned sufficient dividend payments on internal TLAC instruments in the form of equity.”

The TLAC instruments consist of the capital requirements for banks and the other non-capital eligible requirements. For the segment of the TLAC requirements that overlaps with the capital requirements, clearly its composition will be determined with the minimum levels of CET1, AT1 and T2 capital stipulated by Basel, and correspondingly in the CRR2.

For the non-capital part of the TLAC instruments, the FSB expects that the sum of a G-SIB’s resolution entity’s or entities’ (i) AT1 and T2 regulatory capital instruments in the form of debt liabilities and (ii) other TLAC-eligible instruments that are not also eligible as regulatory capital, should be equal to or greater than 33% of their minimum TLAC requirements.

The FSB mirrors this provision with regard to internal TLAC, where it also includes the expectation that the sum of a material sub-group’s AT1 and T2 regulatory capital instruments in the form of debt liabilities plus other eligible internal TLAC that is not regulatory capital, is equal to or greater than 33% of its internal TLAC.

332 The Pillar 2 requirements at individual subsidiaries level can further add to the double-leverage issue, Prudential Regulation Authority, Consultation Paper CP19/17, Groups policy and double leverage, October 2017
333 See further Basel Committee on Banking Supervision, Overview of Pillar 2 supervisory review practices and approaches, June 2019, available here: https://www.bis.org/bcbs/publ/d465.pdf
335 CRR2, Article 92(1).
The FSB further notes that when determining the composition of the external TLAC and internal TLAC, the resolution authorities should take into account discrepancies that can arise in parameters that define the eligibility of external and internal TLAC instruments. This is because, variances in the eligibility criteria in different jurisdictions may create unavoidable mismatches in the nature and structure of instruments, thereby instigating double-leverage issues.

One parameter of eligibility requirements for TLAC instruments that the FSB notes as a potential source of double leverage is the requirement for the said instruments to be adequately ‘subordinated’ in order to be able to absorb the losses of non-resolution and resolution entities. To this end, the FSB notes that:

“external TLAC in the form of senior debt might be provided as internal TLAC to material sub-groups in the form of subordinated debt so that internal TLAC is subordinated to the material sub-group’s excluded liabilities.” (Emphasis added)

Subordination is one of the qualities related to the loss absorbency of the TLAC and MREL instruments. It defines the stacking order in which those instruments will absorb the losses of a bank or bank group. Normally, this stacking order follows the subordination of creditors’ claims on the relevant instrument in insolvency law.

The adequate subordination is particularly relevant in the event of resolution of the bank or bank group. This is because the post-financial crisis resolution regimes operate under the safeguard that the resolution should result in a better outcome than normal insolvency proceedings. As a minimum, this means that no creditor should be worse off than in normal insolvency proceedings, i.e. the NCWO principle.

To ensure that the TLAC instruments absorb losses of the bank before any other excluded liabilities, the term sheet sets out that TLAC instruments must be contractually, statutorily or structurally subordinated to those liabilities. Under contractual subordination, creditors of a firm agree the priority of the payment by contract. In comparison, statutory subordination is where the priority of the creditors’ claims to the firm is set out in a statute. Finally, structural subordination is subordination arising in a group of companies. In such cases, holders of senior claims are creditors of an operating subsidiary, whereas junior creditors are creditors of an (empty) holding company.

337 Ibid.
338 Policy Statement Responses to Consultation on ‘Internal MREL — the Bank of England’s approach to setting MREL within groups, and further issues’ and Statement of Policy, paragraph 3.34.
339 See for the current status of TLAC issuances of EU bank groups, the EBA report on the Monitoring of TLAC-/MREL-eligible Liabilities Instruments of European Union Institutions, EBA/REP/2020/27.
The risk of TLAC liabilities not being adequately subordinated is that they can be potentially excluded as eligible instruments, which would reduce the amount of losses that can be absorbed at the resolution or non-resolution entity level. As result, ensuring the quality, i.e. eligibility, of the instruments at the different levels, including any outstanding mismatches, is crucial to ensure that sufficient loss-absorbing and recapitalisation amounts are available in a resolution.

The next section discusses how double-leverage risks are addressed in the EU supervisory and resolution framework.

3.2. Double Leverage in the EU Supervisory Framework

In line with the Basel framework, the CRR2 stipulates that the composition of the Pillar 1 requirements, for both the consolidated and individual level of the parent and subsidiary entities, should be 4.5% of CET1 capital, 6% of T1 capital and a total capital of 8%. In effect, since the T1 capital consists of the sum of CET1 and AT1 capital, the bank can meet the 6% requirement either with CET1 or AT1 capital (of which 4.5% is mandatorily CET1 capital). The bank can meet the remainder of up to 8% with T2 capital.

In addition to the minimum capital requirements, i.e. the Pillar 1 requirements, the supervisory authorities can set Pillar 2 prudential capital requirements. The Pillar 2 requirements cover the credit, market and operational risks, insufficiently covered by Pillar I requirements, and other individual risks to which the bank group may be exposed.341 In line with the Basel standards, the Pillar 2 requirements are determined via two subsequent processes, i.e. the ICAAP and SREP conducted by (banks and) bank groups and relevant supervisory authorities, respectively.342

Under the ICAAP provisions in the CRDV, banks and bank groups are required to have343 in place sound, effective and comprehensive strategies and processes to assess and maintain on an ongoing basis the amounts, types and distribution of internal capital that they consider

341 CRDS, Articles 104(1)(a) and 104a. In addition, banks are required to meet ‘guidance on capital requirements’ based on the result of a stress-testing scenario, although immediate breach of such Pillar 2 guidance (P2G) is not considered as a breach of the bank capital requirements. See CRDS, Article 104b.


adequate to cover the nature and level of the risks to which they are or might be exposed.\textsuperscript{344} For this purpose, banks are asked to conduct an internal review to ensure that they remain comprehensive and proportionate to the nature, scale and complexity of the activities they perform. The legislation does not specifically set out what should be the composition of the Pillar 2 requirements. However, according to the EBA guidelines, supervisory authorities should set the additional Pillar II requirements at 56\% of CET1, or at least 75\% of T1 (CET1 + AT1).\textsuperscript{345} Such expectations appear to be applicable to both the consolidated and individual requirements set for the parent and subsidiary entities in the bank group.

3.3. Double Leverage in the EU Resolution Framework

3.3.1. Composition of the TLAC and MREL Requirements

In the context of the EU resolution regime, the potential risk will need to be considered for the external and internal TLAC issued by resolution entities and material subsidiaries of non-EU G-SIBs, respectively, including their relation to the external and internal MREL requirements set for resolution and non-resolution entities based in the EU. The composition and quality of the TLAC requirements for the part concerning capital requirements are determined with the minimum required level of CET1, AT1 and T2 instruments as set out in the supervisory framework. However, neither CRR2 nor BRRD2 include provisions on the composition of the non-capital requirement portion of TLAC. In this context, regarding both externally and internally issued MREL instruments, the legislation simply provides the eligibility criteria. However, it does not stipulate whether and how any interaction between the internally and externally issued instruments should be considered when setting or meeting the requirements.

3.3.2. Eligibility of TLAC and MREL Requirements: Subordination

Possible mismatches in the externally and internally available instruments can result from variances in the eligibility criteria set out for those TLAC/MREL instruments. One example provided by the FSB concerns possible mismatches in subordination requirements for external and internal TLAC instruments in the bank group.

With respect to subordination, the FSB stipulates that every TLAC instrument must absorb

\textsuperscript{344} CRD5, Article 73.

\textsuperscript{345} See EBA Guidelines on common procedures and methodologies for the supervisory review and evaluation process (SREP), EBA/GL/2014/13, and their revised version Guidelines on the revised common procedures and methodologies for the supervisory review and evaluation process (SREP) and supervisory stress testing EBA/GL/2018/03 (EBA SREP Guidelines), paragraph 348.
losses in insolvency, resolution or at any time before any other excluded liabilities. Such excluded liabilities are: insured, sight and short-term deposits, liabilities arising from derivatives, debt instruments with derivative-linked features (e.g. structured notes), liabilities arising other than through a contract (e.g. tax liabilities), liabilities which are preferred to senior unsecured creditors under the relevant insolvency law, any liabilities that, under the laws governing the issuing entity, are excluded from bail-in or cannot be written down or converted into equity by the relevant resolution authority without giving rise to material risk of successful legal challenge or valid compensation claims.

The CRR2 specifies that eligible TLAC liabilities are those where the claim on the principal amount of the liabilities under the provisions governing the instruments is wholly subordinated to claims arising from the excluded liabilities. The CRR2 provides a broader scope of excluded liabilities that can qualify as TLAC eligible instruments than the FSB term sheet. For example, in addition to those identified in the TLAC term sheet, the CRR2 also excludes the non-covered part of deposits of natural persons and micro, small and medium-sized enterprises (SME). All natural persons, micro and SME deposits are excluded to the extent they are not issued by branches of the bank group located outside of the EU. Further, the exclusion of secured liabilities specifically refers to the exclusion of covered bonds used for hedging purposes that are part of the covered pool and, as per national law, are secured in a manner similar to covered bonds. Moreover, the CRR2 also excludes fiduciary liabilities to third parties (as beneficiaries, as a result of an obligation of the resolution entity or the subsidiary as a fiduciary) as per the provisions of national laws.

The subordination requirements apply equally to external and internal TLAC. According to the BRRD2, the MREL instruments have the same quality as that under the criteria set out for the TLAC instruments under the CRR2. Therefore, the same subordination conditions apply.

3.3.3. Eligibility of TLAC and MREL Requirements: Permission Regime

Subordination is only one parameter for determining whether liabilities can qualify as external and internal TLAC/MREL requirements. In order to be counted as instruments that can absorb losses, TLAC and MREL should have a certain maturity that ensures that they are available to withstand the losses of the bank or bank group in the event of application of the write-down and conversion power or the bail-in tool. This permanency quality of the instruments is ensured, inter alia, with the eligibility requirements that limit the possibility for such TLAC instruments to be repaid, called or redeemed before their maturity. In particular,
the CRR2 includes a specific permission regime regarding the redemption of TLAC instruments.\textsuperscript{351}

The CRR2 includes two types of permissions for this purpose: (i) instrument-by-instrument permissions; and (ii) general prior permissions, where the institution can make early repayments of a predetermined amount set by the resolution authority and for a specified period not longer than one year, and provided that additional conditions have been met.\textsuperscript{352} One of the conditions is that before or at the same time as any redemption action, the bank replaces the TLAC instruments with capital instruments of equal or higher quality at terms that are sustainable for the income capacity of the institution.\textsuperscript{353}

3.4. Critical Reflection on the EU Framework

The provisions concerning the composition of the consolidated and individual requirements for bank groups can affect the level of their double leverage. With regard to the Pillar I requirements, the composition as set out in the Basel principles and in the EU framework is rather clear. However, it should be noted that such requirement is only a minimum one, and does not prevent the capital from being held in instruments of higher quality. Hence, it may be that a parent entity downstreams only CET1 capital and that, with that investment, the subsidiary will meet its capital requirements. This may initiate or aggravate a double-leverage issue in the bank group since, although the subsidiary may hold the highest quality of capital, if this quality is not balanced with the parent’s financing at the level of the group, the risk of double leverage may arise. While full CET1 funding is possible at subsidiary level, it is less likely that this will be the case for the parent entity and for the way in which it meets its consolidated requirements.\textsuperscript{354}

Under the Pillar 2 requirements, resolution authorities have more flexibility as these are more judgment-based requirements. Therefore, this flexibility can potentially serve as a basis for addressing double-leverage issues when setting the consolidated Pillar 2 requirements for the bank group, in a way that takes into account the individual requirements set at the level of the bank group subsidiaries. The provision in the CRD stipulating the objective of ICAAP, namely for banks to assess and maintain on an ongoing basis the amounts, types and distribution of internal capital, could be enhanced for supervisory authorities so as to take into account whether and how bank groups control the extent of their double leverage. The minimum limitations added by the EBA have restricted the flexibility in setting Pillar 2

\begin{itemize}
\item \textsuperscript{351} CRR2, Articles 78 and 78a.
\item \textsuperscript{352} See SRB Minimum Requirement for Own Funds and Eligible Liabilities (MREL) - Addendum to the SRB 2018 MREL policy on new CRR requirements, 25/06/2019.
\item \textsuperscript{353} CRR2, Article 78a(1)(a).
\item \textsuperscript{354} See for the differences between internally and externally issued instruments of parent banks and subsidiaries Bank for International Settlements, TLAC Quantitative Impact Study, November 2015, available at: https://www.bis.org/bcbs/publ/d341.pdf
\end{itemize}
requirements. However, it is important to note that the EBA Guidelines are just guidelines, and that supervisory authorities may explain why they do or do not comply with those guidelines. While most EU authorities have stated they comply with them, it is not clear whether there have been discussions between different authorities on the quality of the Pillar 2 instruments set at the consolidated level and for individual entities of the bank.

The situation becomes even more convoluted if other additional requirements that can be set for bank group entities are considered. These are the macro-prudential buffers discussed in Chapter II, namely the counterbalancing and countercyclical buffers. Furthermore, if a subsidiary is considered to be a systemically important one by its national authority (e.g. in the case of other systemically important institutions), it will be subject to the relevant financial stability buffers (i.e. O-SII buffers). The extent and context in which these additional requirements are discussed between the home and host authorities is questionable. As will be discussed in Chapter V, often home authorities do not have the same perception as host authorities as to which subsidiaries are relevant for financial stability.

When it comes to the provisions for the other eligible instruments, other than specifying the eligibility of the instruments, the legislation does not include specific rules that tackle double leverage. Unlike the supervisory framework, where double-leverage issues may potentially be considered as part of the determination of Pillar 2 MREL requirements, a similar adjustment may be possible for the resolution-related requirements.

As noted earlier, the legislation stipulates that an adjustment in the MREL can be made in the case of MREL determination for an MPE group (including to avoid double counting). However, there is no mention of the quality of the instruments that need to be used to meet the requirements at resolution and non-resolution entity levels.

Aside from the mention made above in the MPE context, the adjustments to MREL serve other purposes. For example, the composition of MREL includes the loss absorbency amount, i.e. LAA, and a recapitalisation amount (RCA), in sum being double the amount of the bank’s capital requirements. An additional top-up to these requirements is also needed to ensure that a resolved bank can credibly return to operate in the markets. This is referred to as ‘market confidence charge’ (MCC), which is on top of the LAA and RCA requirements for the

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356 On the composition of Pillar 2 requirements, see EBA SREP Guidelines, paragraph 348: “Competent authorities should set a composition requirement for the additional own funds requirements ... of at least 56% Common Equity Tier 1 (CET1) and at least 75% Tier 1 (T1).” Supervisory authorities are allowed to apply stricter requirements. The banks in the ECB’s remit are asked to meet its Pillar 2 requirements with CET1 capital, see European Parliament, In-Depth Analysis, April 2020, Banking Union: The ECB’s disclosure of Pillar 2 capital requirements, available here [https://www.europarl.europa.eu/RegData/etudes/IDAN/2020/645724/IPOL_IDA(2020)645724_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDAN/2020/645724/IPOL_IDA(2020)645724_EN.pdf) and ECB, Pillar 2 requirements, available at: [https://www.bankingsupervision.europa.eu/banking/srep/srep_2019/html/p2r_en.html](https://www.bankingsupervision.europa.eu/banking/srep/srep_2019/html/p2r_en.html)
The Pillar 2 adjustments of MREL mainly include adjustments of the RCA if any changes are expected as a result of the resolution action (e.g. depletion of the balance sheet) or because of the difference in the expected capital requirements that the bank may need after resolution. Similarly, adjustments can be made to the MCC if it is judged that upward or downward adjustment is necessary depending on whether the amount will reflect how much market confidence would be need for the institutions to continue its critical functions after resolution. The provisions on the adjustment however do not provide specification whether and if double-leverage concerns would be considered when setting the MREL requirement.

The double-leverage issues also seem to loom when considering the specific provisions related to the eligibility of the TLAC/MREL instruments. For example, when assessing if the eligible instruments are adequately ‘subordinated’, resolution authorities need to establish whether the subordination of the instrument might infringe the NCWO principle. This is assessed on the basis of the ranking of creditors in the national insolvency law of the Member State where the legal entity is resolved. As concluded by both the EBA and SRB, for lack of a harmonised regime for banks’ insolvency law, the results of the NCWO assessment will differ across a cross-border resolution group. As a result, there will be differences in how many and what instruments will be available to absorb the bank losses, depending on the insolvency law in the country where the bank group entities are located. In this regard, the risk of double leverage provides additional argument for further harmonising insolvency laws for banks.

Furthermore, the risk of building double leverage can also be associated with the permission regimes that affect the maturity of the relevant instruments. The reasons are twofold. One, if different authorities apply the permission regime at the resolution group and non-resolution entity level, there can be differences in their internal methodology and in the outcomes of the assessment. Moreover, these authorities are not necessarily obliged to cooperate in resolving double-leverage issues. The second reason is that the applicable permission regimes require that the instruments which are allowed to be redeemed before their maturity date be replaced with capital or eligible instruments of equal or higher quality. In practice, this can result in a parent bank downstreaming the highest quality of regulatory capital (CET1) to subsidiaries, which may not necessarily match with the issuances made to external investors.

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357 BRRD2, Article 45c.
360 See the mismatches in the internal and external TLAC, as reported by the Basel Committee on Banking Supervision (November 2015), TLAC Quantitative Impact Study Report, available at: https://www.bis.org/bcbs/publ/d341.pdf
4. Discussion

4.1. Potential Regulatory Implication

The above consideration suggests that the issues of double leverage may persist for EU bank groups

(i) because the quantity of the externally and internally issued instruments might be complicated by the levels, perimeters and methods of calculation; and

(ii) due to the lack clarity and consideration regarding the composition, i.e. the quality, of the instruments that should be held at these levels..

Even if double counting is eliminated, double leverage and the possible qualitative differences that bank group entities hold at the parent entity and subsidiary entities (and any other intermediate undertakings) are not as clearly addressed in the legislation. Other than general statements on ensuring that bank groups have adequate internal capital, there seems to be no mention of how bank groups and their supervisory and resolution authorities should address potential risks of mismatches in the payment functions of capital and other eligible instruments at different levels of the bank group.

In comparison, since the UK’s departure from the EU, its relevant authorities, i.e. the Prudential Regulation Authority (PRA), being the relevant supervisory authority, and the Bank of England (BoE), as the relevant resolution authority, have explicitly included consideration of double leverage in their respective policies. For example, in terms of supervision, the PRA published a Policy Statement on ‘Groups Policy and Double Leverage’, according to which UK bank groups need to calculate a ‘double-leverage ratio’ in the context of their ICAAP as follows:\textsuperscript{361}

\begin{quote}
Where a firm is a member of a group in which a qualifying parent undertaking has a double leverage ratio above 100\%, or is projecting a double leverage ratio above 100\%, the PRA expects the firm to assess and mitigate the risks of double leverage, including the cash-flow risks incurred by its qualifying parent undertaking, as part of its stress testing and scenario analysis. For this purpose, double leverage ratio is defined as a qualifying parent undertaking’s Common Equity Tier 1 (CET1) capital investment in its subsidiaries, divided by its own CET1 capital.\textsuperscript{362}
\end{quote}

Normally, when the ratio is higher than 100\%, the parent is considered to have acquired significant stakes in the equity of subsidiaries by not holding sufficient capital (or capital of


\textsuperscript{362} See Prudential Regulation Authority (PRA) Supervisory Statement SS31/15, The Internal Capital Adequacy Assessment Process (ICAAP) and the Supervisory Review and Evaluation Process (SREP), July 2020, at paragraph 3.29.
sufficient quality) itself.\textsuperscript{363} For example, credit rating agencies consider a double-leverage ratio of 115% or 120% as high.\textsuperscript{364} The regulator obviously aims to take a more prudent approach.

As with supervision, in the context of resolution the BoE included specific wording regarding double leverage in its MREL policy. It set out the following:

\begin{quote}
The Bank [of England] maintains the view that it is important for institutions to consider whether differences in the form of internal and external MREL are likely to reduce the resolvability and resilience of a group, especially where the resolution entity may rely on dividend payments in order to service externally or internally issued debt... the Bank [of England] will consult with the PRA on any actions that the Bank [of England] proposes to take in this regard and will take into account the reasons behind the mismatch and the consequences of removing them. This will help to coordinate any resolvability concerns that the Bank [of England] may have with any PRA prudential concerns, particularly in view of its policy on double leverage.\textsuperscript{365}
\end{quote}

Unlike the supervisory framework, the UK MREL policy does not prescribe that bank groups should calculate a double-leverage ratio. However, it does expressly ask institutions to take into account potential mismatches in the MREL instruments they issue. Further to this, the BoE suggests that it will take into account possible mismatches between externally and internally set MREL requirements, and also explicitly anticipates coordination with the relevant supervisory authority (i.e. the PRA).

This might be a logical approach considering that double-leverage issues, if defined as mismatches occurring due to differences in the quality of the eligible instruments, will be more complicated to assess. This is because the eligibility requirements for TLAC/MREL instruments include a wide range of instruments, which cannot easily be compared in terms of their pay-out functions. In other words, it will not be a simple case of calculating a ratio between internally and externally issued CET1; a wider range of instruments will be included. As a result, the proposal for a double-leverage ratio in resolution seems to require a more granular assessment, potentially tailored to specific cases of bank groups.


The double-leverage ratio has been considered as a useful additional measurement to assess the total leverage ratio calculated for bank groups on a consolidated basis, since the equity that has been invested in subsidiaries can be, and often is, further leveraged by external borrowings by such subsidiaries.\(^{366}\)

As already noted in Chapter I, it should be further clarified here that the computation of the double-leverage ratio should not be confused with the requirement for bank groups to hold a minimum amount of capital for their leverage exposure. The aim of this leverage ratio is not only to prevent excessive risk taking, but also to act as a safeguard regarding flaws in the different models/ways of calculating risk-weighted capital requirements. In line with the Basel framework, the CRR2 provision set out a binding LE ratio of 3% of the bank’s tier 1 capital (i.e. CET1 and AT1 capital).\(^{367}\) The calibration of the ratio is also expressed as a ratio of the bank’s tier 1 capital (nominator) and its total on- and off-balance sheet exposures (denominator).\(^{368}\)

As the intra-group exposures are eliminated by way of consolidation, there is no assessment of double leverage. In comparison, in the calculation of a double-leverage ratio the nominator is the CET1 capital in the subsidiaries, and the denominator is the total CET capital of the parent entity,\(^{369}\) which clarifies to what extent the external equity matches the downstreamed equity in the bank group subsidiaries.

Taking the example of the UK policies on supervision, the double-leverage framework can be included in potential amendments to the EU framework. It can be required as part of the information which bank groups need to include in their ICAAP submissions and which supervisors can take into account when making SREP assessments and setting Pillar 2 requirements. For the time being, not only does the EU framework not include such a ratio, nor do the more technical guidelines of the EBA provide for the assessment of the potential existence of double leverage. For example, neither the EBA Guidelines on the information that supervisory authorities should receive as part of the ICAAP,\(^{370}\) nor the EBA Guidelines aiming to harmonise supervisory practices regarding the way in which they conduct the SREP processes include such provisions.\(^{371}\)


\(^{367}\) CRR2, Article 92(1)(d).

\(^{368}\) CRR2, Article 429; under the relevant provisions G-SIBs are required to meet an additional leverage ratio buffer in the amount of 50% of the risk-based G-SIB capital buffer, see CRR2, Article 92(1a). The reason for including only CET1 and AT1 capital is that they are considered going-concern capital, whereas T2 is considered as gone-concern capital, see EBA Report on the leverage ratio requirements under Article 511 of the CRR, at p. 48, available at: https://eba.europa.eu/sites/default/files/documents/files/documents/10180/1360107/3889de6a-42d8-4bec-8cbb-ca7750085bb/eba-op-2016-13%20%20leverage%20ratio%20report%20.pdf?retry=1

\(^{369}\) Deloitte Financial Services UK blog 08/06/2018, Double Leverage, available at: https://blogs.deloitte.co.uk/financialservices/2018/06/-double-leverage.html


\(^{371}\) See EBA SREP Guidelines.
Similarly, in the context of resolution, the Pillar 2 MREL requirements can be enhanced to explicitly state a responsibility for banks to report its double-leverage ratio to the resolution authorities. In turn, resolution authorities should have a specific responsibility to pay attention to this ratio (either as a matter of internal policy, or as part of future amendments to the legislation).

It should be noted that a proposal for the calculation of a double-leverage ratio may be potentially redundant if it is not accompanied with consequences whenever it is determined that this ratio surpasses a certain threshold. One consequence may be for the supervisory and resolution authorities to be able to apply higher capital and other eligible requirements at group sub-consolidated and consolidated level if the threshold of 100% is surpassed. Such an additional requirement would need to take into account the composition of the capital and other eligible instruments held at different levels of the bank group. Alternatively, supervisory and resolution authorities could require the institution to reduce the double-leverage ratio more gradually, instead of imposing a strict requirement.

Speculating that market participants can themselves monitor any outstanding issues of double leverage, omitting the need for regulatory involvement, does not seem plausible. This is because calculating a double-leverage ratio with publicly available data may not be feasible. The reason is that the calculation of double-leverage public data can be unreliable and difficult due to the number of layers in the organisational structure. If double leverage exists at each level of (sub-)consolidation, one measure of double leverage may not be meaningful. Besides, different techniques and accounting standards can be used for the calculation of consolidated and non-consolidated entities in the bank group. Hence, reliance on publicly available information (including pursuant to Pillar 3 requirements) and creditors’ ability to exercise market discipline might not be very effective.

For these reasons, a more effective solution is to set out a clear responsibility for bank groups and responsible authorities, particularly when determining the level and composition of the capital and MREL/TLAC requirements, and, where relevant, to stipulate when they have the discretion to assess the eligibility of such instruments.

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4.2. Potential Counterargument

It is important to recognise the possible counterargument regarding the need to introduce a double-leverage ratio in the current supervisory and resolution framework. This is the argument that in a world where resolution frameworks allow not only the equity but also the debt of the parent entity to absorb losses, a double-leverage ratio may not be that relevant.373 This argument is qualified by the assumption that this would be the case in a perfect world where (i) equity and other debt eligible instruments effectively absorb losses flawlessly, if not equally, and (ii) there would be no home-host authorities issues.

However, the reality is a bit different. The assumption that there are no differences between equity and other debt instruments in terms of their loss-absorption capacity could at best be limited to the portion of the capital requirements.374 As noted in the critical reflection on the legislation, issues regarding the determination of quality may arise both due to differences in national insolvency laws (e.g. subordination) and in the determination of the tenor of the instruments.

Even if this is not the case, one should note that while equity and other debt instruments will absorb losses on a going-concern basis (e.g. in the EU pursuant to the WDC power), once those instruments are exhausted, further loss absorption can only take place by applying the bail-in tool to the liabilities further up in the balance sheet of the parent or subsidiary entity. In this context, it should also be noted that once the subsidiary losses have exhausted the internal TLAC/MREL requirements held by the resolution entity (namely the parent entity), the parent entity does not need to continue absorbing the subsidiary’s losses. This is because, it has limited liability, and logic suggests that in the absence of the limited liability, there will be no need to set any internal requirements.375

The above also plays a role when considering the interest of home-host authorities, as the home authorities will not expect the parent entity to absorb further losses beyond the internally set requirements. On the other hand, it might expose the parent’s creditors to losses beyond what they would have incurred in normal insolvency proceedings, leading to a NCWO breach. Besides, since resolution authorities normally have mandates to reduce the cost of resolution, they may seek to do so by decreasing the cost of failure for the entities under their jurisdiction.

Considering that both assumptions made above could be validly questioned, it follows that double leverage remains a risk to be reckoned with in the resolution framework.

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375 Even if this were the case, as in the case of Lehman Brothers, in today’s world it would materialise as insufficient external requirements that would cover the losses of the group.
5. Concluding Remarks

This chapter considered how the issue of double leverage is addressed in the EU resolution framework. It adopted a broader definition of ‘double leverage’, considering it as a problem of mismatches in the quality between externally issued and internally issued instruments at the parent entity and the subsidiaries of the bank group.

For the purpose of determining what is the portion of capital and other eligible instruments that banks need to issue externally (in order to be able to compare this to what is issued internally in the bank group), the chapter reviewed the process of consolidation of bank groups in the EU. It explained that, in principle, the consolidation process and the ‘deduction’ methods among the bank group entities have been used to avoid double counting of capital (i.e. at more than one level in the bank group). Notwithstanding the comprehensiveness of the approach, the chapter argued that:

(iv) the potential uncertainties regarding the perimeter of consolidation,
(v) the divergences in consolidation methods used, and
(vi) the multiple levels of assessment of the consolidated external and internal capital and other instruments held in subsidiaries or other bank group entities, often performed by different authorities,

raise doubts as to whether double counting and therefore double leverage issues have been adequately addressed across bank groups. To this end, the chapter explained that potential ‘double leverage’ issues will need to be considered not only at one level, i.e. external vs. internal, but potentially at a number of inner levels in the bank group. The assessment may be further complicated in areas where the perimeter of consolidated supervision does not ideally match the perimeter for determining resolution and non-resolution entities.

Further to the difficulties of assessing the perimeters and the levels at which double leverage needs to be considered, the chapter found that current legislation does not include specific provisions either for bank groups or for relevant authorities to make this assessment and consider the impact of differences in the eligibility of the instruments held at subsidiary, sub-consolidated and consolidated level in a bank group.

In particular, there is no view on whether such differences might impede a smooth application of write-down and conversion powers and the bail-in tool in stabilising and recapitalising a bank group. Therefore, the chapter suggested that, to avoid potential adverse effects and the existence of double leverage, it would be useful to complement the EU supervisory and resolution framework with the responsibility for both banks and regulators to duly take into account a double-leverage ratio at the relevant levels of the EU bank groups.
Chapter IV: Allocation of Resources and Capital Transferability in EU Bank Groups

Introduction

One of the points highlighted in Chapter I was that increased double leverage tightens the liquidity resources available at parent entity level. In turn, this may affect (i.e. restrain) the way in which the resources are allocated in the bank group. Not only does this increase the risk of failure of the parent entity, but it also restrains its ability to support ailing subsidiaries in financial distress. For this reason, it was suggested that another relevant point for the relative (in)stability of bank groups should be how it manages its internal resources, particularly ahead of and in financial distress.

Having capital that has been determined ex ante and MREL/TLAC requirements either at parent or subsidiary level might not be very helpful if part of the bank group is subject to liquidity shocks which can be remedied through group support so as to match the losses on the balance sheet of a specific entity and the group as whole. Therefore, how the bank group will be able to tackle the situation before resolution authorities consider applying more intrusive resolution powers is important for its stabilisation. How the bank group resources are allocated, and whether any room is left for flexibility once resolution has been triggered is equally relevant. This is because the prepositioned resources with the capital and other eligible liabilities requirements are simply estimations. As a result, some entities of the bank group may hold more resources than required, whereas others may hold insufficient resources. The actual balance will become known only close to or in resolution. Thus, it is worthwhile deliberating not only on the ex-ante allocation of the bank group’s resources, when a bank is in financial distress but does not meet the conditions for resolution, but also on the ex-post allocation, once resolution is triggered.

To this end, as noted in Chapter I, on an ex-ante basis, it is relevant how a parent entity decides to extend support to an ailing subsidiary. As observed by De Haas and Van Lelyveld, this is normally the case when the subsidiary is in idiosyncratic financial distress, but not when the parent entity or the whole bank group is in financial distress. In this latter context, it may even be feared that a subsidiary will be stripped of its assets in an attempt to save other parts of the group.

At the point where resolution is triggered, how the bank group will absorb the losses very much depends on where its capital and other loss-absorbing instruments are prepositioned. The default rule is that such allocation is rather inflexibly determined by the individual requirements for subsidiaries or non-resolution entities that apply in addition to the consolidated requirements for the parent entity of the bank group. Sure enough, this ‘double application’ of capital and TLAC/MREL resources is justified by the need to ensure an adequate allocation of the relevant instruments in the bank group. However, it can severely limit the ways in which the bank group can absorb losses across the group.
This chapter discusses how the regulatory framework regulates the allocation of the resources in the bank group both ahead of and in resolution. Regarding the ex-ante framework, i.e. when group or subsidiary resolution has not yet been triggered, the EU framework includes a mechanism for intra-group support that can be provided downstream, upstream, and cross-stream the entities of the bank group. When it comes to resolution, i.e. from an ex-post perspective, the international standards as designed by the FSB call for some ‘flexibility’ when applying the resolution-related requirement, namely TLAC and MREL. As elaborated further below, the FSB states that there is need for building up surplus resources and proposing alternative ways to meet the relevant requirements, including collateralised guarantees in lieu of prepositioning.

With respect to both the ex-ante and ex-post framework, the chapter argues that perhaps the EU regulatory framework lacks flexibility, inter alia, due to a lack of clarity regarding an effective alternative allocation mechanism other than prepositioning. This seems to be related to: (i) difficulties with the lack of harmonisation of underlying substantive laws, i.e. national corporate and insolvency laws, and a lack of fully understanding the potential impediments to the transfers they may cause; as well as (ii) a lack of clarity on how the ‘ex-ante’ and ‘ex-post’ frameworks should interact with one another.

The chapter is organised as follows. The first part discusses the intra-group support framework under the BRRD2, as an ex-ante mechanism that can facilitate the allocation of resources where needed in the bank group. The second part considers the ex-post framework, in particular its capacity or lack thereof to allow some flexibility and optionality as to how a bank group can absorb its resources in resolution. The third part comments on the interactions between the two frameworks. The final part concludes.

1. The Possibility of Ex-ante Intra-group Support

1.1. The Context of Intra-group Support

As explained in Chapter I, in addition to access to external funding, bank groups have access to internal funding provided by other entities in the bank group. In both normal times and times of financial distress, when funding from external markets is severely restrained, bank groups can rely on internal capital markets (ICM) to obtain capital and/or liquidity resources.\(^\text{376}\) In this respect, the integrated management of capital and liquidity brings efficiencies in the allocation of group resources.\(^\text{377}\) There are different internal funding


arrangements in bank groups, giving rise to intra-group exposures and claims, including intra-group loans that the parent entity extends to a subsidiary or one subsidiary provides to another subsidiary in the bank group. For example, beyond intra-group shareholdings, bank group entities establish, among each other, guarantees, collateral arrangements, liquidity back-up facilities or other commitments. While some of these commitments are intra-group funding arrangements during business as usual, others, such as guarantees and liquidity back-up facilities, are part of a smaller sub-set of intra-group transactions available in times of distress or unexpected loss and are referred to as intra-group support transactions.

In light of the recognised benefits of intra-group support as crisis management mechanism, the post-financial crisis reform aimed to develop rules on a cross-border intra-group support framework for banks groups that provision the transfer of assets in order to stabilise the group. The European Commission outlined a framework under which assets may be transferred within entities of cross-border bank group affiliates that are distressed but not close to being insolvent.

This intra-group support framework is laid down in the BRRD2. It aims to clarify the conditions under which funding may be provided between entities in a bank group. It is also expected to improve the stabilisation of the bank group. If the intra-group support framework proves workable, it will make it possible to omit the application of more intrusive resolution provisions, thus providing some flexibility for moving liquidity across the bank group. The next sections provide some more context and consider if indeed the intra-group framework as set out in the BRRD2 can provide room for flexibility.

1.2. Considerations Related to Group of Companies Law

Under national laws, the circumstances under which assets are allocated in groups of companies, especially in times of financial distress, are not always unambiguous. This effectively creates obstacles to intra-group support provisions. Usually the transfer of assets within a group of companies is preconditioned by the recognition of a group interest, which is treated differently under national laws. In this context, when it specifically comes to bank groups, the BRRD2 introduces an intra-group support framework which recognises

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379 Ibid. This is in comparison to other intra-group transfers, available in ‘business as usual’.
382 BRRD2, Recital 38.
383 ILEG (2016), at p. 15.
that individual bank group entities may act in the interest of the bank group as whole.\footnote{384} Thereby, one of the main achievements brought about by the Directive is recognition and harmonisation of the conditions governing group interest in the EU, although its application is limited to bank groups.\footnote{385} The BRRD2 specifies that each party (i.e. bank group entity) to the intra-group support agreement must act in its own best interests. However, the meaning of acting in its own interests is expanded to also mean any direct or any indirect benefit that the entity may accrue\footnote{386} from the recovery of the bank group as a whole, as well as consideration of potential risks of its destabilisation.\footnote{387}

Generally, the concept of recognition of group interest is part of the provisions of national company laws that deal with groups of companies.\footnote{388} Based on the principles of separate legal personality and limited liability, company law establishes that each company should act in the interest of its shareholders and creditors.\footnote{389} This is also the rule for subsidiaries operating as part of groups. However, since subsidiaries are often (partially or fully) owned and controlled by parent entities, they are not equivalent to stand-alone companies. Acting in the interest of the parent entity is simply acting in the interest of its (dominant or sole) shareholder.\footnote{390} Besides, the subsidiary also exploits some benefits of being a member of the group. Hence, in return, asking it to reciprocate in promoting the group interest is justifiable.\footnote{391}

A subsidiary acting in the interest of the parent entity or the group becomes problematic when the subsidiaries’ stakeholders (e.g. creditors, minority shareholders, and even local financial systems in the case of banks) are harmed by the actions conducted in the interest of the parent entity or the group. Those stakeholders can make provisions to protect themselves from possible harm. For example, creditors may include covenants in their loans, or (other minority) shareholders can insert provisions in the by-laws of the company.

In addition, to offset any negative consequences of intra-group transfers when group-wide policies and decisions are applied, national laws provide for a variety of measures. This can


\footnote{387} European Banking Authority (July 2015) Final Draft RTS specifying the conditions for group financial support under Article 23 of Directive 2014/59/EU, at p. 3.


\footnote{391} ECLE (2017), at p. 20.
include ex-ante approval procedures of transactions (e.g. as in related party transactions), in particular in groups of companies. Alternatively, recognition of group interest may be allowed if a set of rules or standards are met (as in the example of the Rozenblum doctrine in France). Besides ex-ante approval of transactions, some national laws provide that legal entities in the group may be entitled to ex-post indemnification for the losses they incurred by acting in the interest of the group (e.g. in Germany).

Since, thus far, in the EU no harmonisation of substantive laws has been achieved regarding the question of group interest and how transactions can be conducted for this purpose, the provisions in the BRRD2 are considered as an important achievement. This is because the Directive has harmonised the conditions under which intra-group transactions are allowed. However, it does so only for bank groups, not for other commercial entities, and therefore other provisions in substantive law continue to co-exist with those on banking regulation. Presently, there is no case law on the application of the BRRD2 intra-group support provisions in practice, and how they might interact with other provisions in national laws.

In principle, commentators have compared the approach in the BRRD2 with the French Rozenblum doctrine. This doctrine establishes the following general conditions under which intra-group support is permitted:

(i) the group relations should be based on common interest, i.e. on group-wide objectives;

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394 German Stock Corporation Act (Aktiengesetz), Articles 291-328, for an informal translation in English see Norton Rose Fulbright, German Stock Corporation Act (Aktiengesetz) English translation as at 10 May 2016; see further Klaus Hopt (2015) Groups of Companies - A Comparative Study on the Economics, Law and Regulation of Corporate Groups, ECGI WP 286/2015.


397 It should be highlighted that the BRRD2 requires Member States to remove any legal impediments to intra-group transactions (Article 19(4)). However, whether these provisions have indeed been transposed will become clear only in their application in practice. The removal of such ‘legal impediments’ requires not only a tedious identification of such provisions, but also changes to substantive national laws, which may not have been done in all cases and for all provisions.


399 IICLE (2016), at p. 17.
(ii) the group relations should be of a *reciprocal nature*;
(iii) the group relations should *not result in distortion in the balance of mutual obligations* of the respective group entities; and
(iv) the group relations should *not exceed the financial capacity of the group entity* that provides support.\(^{400}\)

In this regard, company law experts have criticised the Rozenblum doctrine for being relatively imprecise,\(^{401}\) and therefore potentially unsuitable for bank groups.\(^{402}\) The doctrine received specific critiques in this regard. First, under the doctrine, it is not clear how much negative influence a transferring entity may undergo when providing support, i.e. what is the limit beyond which this entity may no longer be required to transfer assets to the rest of the bank group.\(^{403}\) For this purpose, experts have suggested that the application of a ‘*solvency test*’ to the transferring entity could fix this imprecision. Second, the doctrine has been criticised for the lack of precision as to the amount and time of the reciprocal action (or consideration) that a transferring entity should receive.\(^{404}\) Before considering how the BRRD2 copes with some of these issues, the next part provides an explanation of the BRRD2 intra-group support framework so as to more easily navigate the discussion that follows.

### 1.3. Intra-group Support Agreements under the BRRD2

The BRRD2 establishes an intra-group financial support framework for parent entities and subsidiaries that are credit institutions and financial firms located in other Member States or third countries and that are covered by the consolidated supervision of the parent entity.\(^{405}\) The provisions on intra-group support do not refer to general intra-group financial arrangements in relation to the bank group’s centralised funding arrangements (i.e. during business as usual).\(^{406}\) Rather, a framework is established for intra-group support arrangements where at least one of the bank group entities meets the conditions for supervisory early intervention due to a rapidly deteriorating financial situation or (the prospect of) infringement of prudential regulatory requirements.\(^{407}\) In this respect, there is a

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\(^{402}\) Wymeersch (2007), at p. 5.

\(^{403}\) See ICLEG (2016), at p. 42.

\(^{404}\) ECLE (2017), at pp. 43-44.

\(^{405}\) BRRD2, Article 19(1); see for further comment Schilling (2016), at pp. 182-193; and Schelo (2015), at pp. 71-75.

\(^{406}\) BRRD2, Article 19(2).

\(^{407}\) Hence, when one of the parties to the agreement meets the conditions for early intervention, it receives group financial support in accordance with the BRRD2 provisions. This does not prevent the provision of group financial support on a case-by-case basis according to group policies, provided that this does not represent risks for the whole group. See BRRD2, Article 19(3)(a). The early intervention triggers are provided in BRRD2, Article 27(1).
difference between the intra-group guarantees that can be put in place to substitute regulatory requirements for eligible liabilities (triggered in a resolution, as explained in the next section), and the intra-group support agreements discussed here, which are applicable irrespective of the MREL/TLAC requirements.

Pursuant to the BRRD2, intra-group support agreements are activated when one of the bank group entities meets the conditions for ‘early intervention’; the agreement must have been concluded before any of the parties meets those conditions. The reason for this is to avoid possible creditor challenges, e.g. those related to prolonged suspect periods under insolvency law.

For the purpose of concluding an intra-group support agreement in the bank group, the parent entity needs to submit an application for review of the agreement to the consolidating competent authority. The consolidating (home) supervisor will then distribute the application to the supervisors of the subsidiaries that propose to be parties to the agreement, with a view to reaching a joint decision. The supervisors will authorise or prohibit the conclusion of the intra-group support arrangement after assessing whether it meets the conditions specified in the BRRD2.

In addition, the shareholders of all entities that are parties to the intra-group support agreement must approve the agreement. Furthermore, shareholders also need to authorise the management of the entity to make a decision related to providing or receiving financial support. Within bank groups where the parent entity holds the majority or entire shareholding of the subsidiary, or where the parent entity effectively controls the subsidiary participating in the intra-group support agreement, this decision will essentially rest with the management of the parent entity.

The BRRD2 takes a standards-based approach and specifies the conditions that intra-group agreements must meet. These conditions safeguard the interest of individual entities that

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409 BRRD2, Article 20(1).
410 BRRD2, Article 20(2).
411 BRRD2, Article 20(3) and (4). In absence of a joint decision the consolidating competent authority may make the decision on the application, set out in a report, including the reservations of other competent authorities. The other competent authorities may, within four months, refer the matter to the EBA, see BRRD2, Article 20(5)-(7).
412 BRRD2, Article 21(1).
413 BRRD2, Article 21(2) in relation to Article 24.
provide support in the bank group.\textsuperscript{415} The BRRD\textsuperscript{2} sets out the following conditions that intra-group support agreements have to meet in order to receive supervisory approval:\textsuperscript{416}

- The financial support that is provided pursuant to the intra-group agreement must \textit{significantly redress the financial difficulties of the receiving group entity};

- The financial support should have the objective of \textit{preserving or restoring the financial stability of the group as whole, or any of the group entities} and be in the interest of the providing entity;

- The group financial support agreement must specify the \textit{principles for the calculation of the consideration} for the transactions made under it;

- The financial support should be provided only when the management body of the providing entity at the time of the provision of the financial support has a \textit{reasonable prospect that the receiving entity will be able to repay the consideration};

- The financial support should \textit{not worsen the liquidity and solvency position} of the providing entity, or pose a threat to the financial stability of the Member State where the providing entity is located.\textsuperscript{417} To this end, the providing entity should \textit{not infringe the prudential capital and liquidity requirements, or any large exposure requirements}, unless the competent authorities supervising the providing entity, on an individual basis, authorise non-compliance with those provisions;

- And finally, the provision of financial support should \textit{not make the resolution of the providing entity less feasible and credible}.\textsuperscript{418}

If the intra-group support agreement does not meet these conditions, supervisors may prohibit the provision of the financial support.\textsuperscript{419} This means that the intra-group support agreement can be stopped from being executed even after it has been initially approved, if at the time when it has to be activated it does not meet the conditions set out in the BRRD\textsuperscript{2}.

\textsuperscript{415} European Banking Authority (July 2015) Final Draft RTS specifying the conditions for group financial support under Article 23 of Directive 2014/59/EU, at p. 7.

\textsuperscript{416} The fulfilment of the conditions should be assessed based on a description and projection of the capital and liquidity situation and the needs of the receiving entity. The receiving entity and the competent authority supervising the providing entity should make this assessment. In the assessment they need to consider the default risk of the receiving entity and the loss given default, including a comparison of the loss given defaults if support were and were not provided. See European Banking Authority (July 2015) Final Draft RTS specifying the conditions for group financial support under Article 23 of Directive 2014/59/EU, at p. 3.

\textsuperscript{417} BRRD\textsuperscript{2}, Article 23(1)(e) and (f).

\textsuperscript{418} BRRD\textsuperscript{2}, Article 23(1)(a)-(h).

\textsuperscript{419} BRRD\textsuperscript{2}, Article 25.
1.4. Discussion on the Effectiveness of Intra-Group Support Agreements

As noted earlier, the approach in the BRRD2 to intra-group support agreements is comparable to the standards-based approach of the French Rozenblum doctrine. However, compared to the doctrine, the conditions in the BRRD2 are more precise with regard to the reciprocity in the intra-group transactions. Therefore, it can be stated that it addresses some of the shortcomings identified by company law experts, for the purpose of their application in bank groups. In particular, the BRRD2 provisions introduce three relevant specifications.

First, the conditions in the Directive specifically require that the entity providing the support be entitled to consideration for providing the support. It requires that the intra-group support agreement should clearly specify the principle for calculation of the consideration of the transactions, and not simply refer to vague ‘quid pro quo’ reciprocity.

Second, the BRRD2 specifies that the provision of the financial support may not result in the entity providing the support for failing to comply with its prudential requirements. This represents a sort of ‘solvency’ test that sets the limits on the support which bank group entities may provide.\(^{420}\) Besides the quantitative limit related to capital requirements, the BRRD provides an additional limit by requiring that the financial support may not threaten the financial stability of the Member State where the entity that provides the support is incorporated.\(^{421}\)

Thus, it clear that the BRRD2 offers significant protection to the individual bank group entities and local financial systems where they operate when allowing transfers of funds for the purpose of stabilising the bank group as a whole. An additional safeguard in this context is the supervisory approval of the intra-group support agreements, which is supplementary to the approval required from the shareholders of the bank group entity that provides the support. In other words, the parent entity decision-making, which may unfavourably affect (e.g. peripheral) subsidiaries is bypassed in the said safeguards.

Finally, it is relevant that the BRRD2 sets out that if the above-mentioned conditions are not met, the transaction cannot take place. It is logical to have an ex-ante approval for the transactions, rather than another, ex-post remedy, such as indemnification.\(^{422}\) An ex-post indemnification in normal insolvency proceedings may cater for the interests of creditors but

\(^{420}\) Babis (2012), at p. 10.

\(^{421}\) 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, OJ L184/1, Article 35; and EBA, Guidelines on specifying the conditions for group financial support under Article 23 of Directive 2014/59/EU, paragraphs 9-11.

will do little in terms of stabilising a bank group. The reason is that, a transferring entity in a bank group cannot afford to infringe its capital requirements and jeopardise its own financial position when providing support, as this might threaten not only its creditors but also, potentially, the ability of that entity to provide critical functions. Thus, any ex-post indemnification is non-workable for bank groups. As a result, the BRRD2 uses ex-ante approval for authorising an intra-group transaction.

Although the framework appears robust, its effectiveness might be contentious. A number of reasons can be given. First, the BRRD2 does not make a distinction between controlling and controlled entities (i.e. parent and subsidiaries) when intra-group support needs to be provided. It states that financial support can be provided downstream, upstream and cross-stream in the bank group and that the parties to the transactions must act freely when entering into the agreement. Besides, the management body of the entity that provides the support needs to assess the prospect of repayment of the consideration by the entity that receives the support. This demonstrates the presumption that in the transaction all entities are independent. However, in reality this presumption is not valid for (integrated) bank groups, where the parent entity owns and/or controls subsidiaries. As a result, the decision to conclude intra-group support agreements is effectively a decision of the parent entity.

Of course, it can be validly objected that managers of subsidiaries normally have fiduciary duties preventing them from acting contrary to the interests of the subsidiary and its creditors. In practice, even remediation processes have formally been put in place to overcome disagreements between parent and subsidiary boards. Ultimately, the outcome of such processes is that directors of subsidiaries may choose to leave if no common solution is reached. Thus, it might be difficult for a subsidiary’s competent authority to assess whether the condition that the ‘entities must act freely when entering the agreement’ can be clearly met when in a bank group.

In addition, a major drawback is that an intra-group support agreement under the BRRD2 is effectively a voluntary private contractual framework, rather than a regulatory requirement. According to the BRRD2, the bank group entities may decide to conclude intra-group support agreements, but are not required to do so. Thus, the question is: if intra-group support agreements are in place between the bank group entities, why should the entities have to go through the cumbersome process of the BRRD2 to receive approval for them? Considering

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423 BRRD2, Article 19(5)(b). In this respect the European Commission asked if the provision of financial support should be allowed for a broader range of intra-group transactions, in particular with regard to the definition provided by United Nations Commission on International Trade Law (UNCITRAL): “trading between group members; channelling of profits upwards from the subsidiary to the parent; loans from one member to another to support continued trading by the borrowing member; asset transfers and guarantees between group members; payments by a company to a creditor of a related company; a guarantee or mortgage given by one group company to support a loan by an outside party to another group company; or a range of other transactions.” See DG Internal Market and Services Working Document, Technical details of a possible EU framework for bank recovery and resolution (C7), at p. 24.

424 BRRD2, Article 19(7)(a).


426 Michael Schilling (2016) Resolution and Insolvency of Banks and Financial Institutions, Oxford University Press (Oxford), at p. 191
that also ad hoc financial support can be arranged, there is no reason why a bank group should go through the trouble of having financial support agreements approved. Hence, it is not surprising that when examining group recovery plans of more than twenty of the largest EU bank groups in 2016, the European Banking Authority (EBA) reported that there were no intra-group support arrangements that complied with the BRRD conditions. This was the case even where the parent entity’s or the affiliate’s support was considered as the most dominant recovery plan option for subsidiaries among the relevant group recovery plans.\textsuperscript{427}

In this regard, it is also relevant that supervisors do not have powers to trigger the agreement. The BRRD2 simply stipulates that only the parties to the agreement (and not other third parties, including competent authorities) can decide to provide financial support. Although initially, when developing a crisis management framework, the European Commission considered the possibility for supervisors to request financial support pursuant to a financial support agreement,\textsuperscript{428} ultimately this option was not included.

To be fair, as noted by some authors\textsuperscript{429} the supervisory authorities can use the ‘early intervention’ powers provided for them in the BRRD2.\textsuperscript{430} For example, pursuant to these powers, supervisors may take a number of measures, including asking the management body to implement one or more recovery options and arrangements set out in the recovery plan, or to update the recovery plan entirely.\textsuperscript{431} The EBA report on recovery plan options found that roughly half of the examined group recovery plans in 2016 identified options available at subsidiary level, and those options almost always consisted of provision of support by the parent entity to the group subsidiaries.\textsuperscript{432} The question is: can the host supervisory authority require the parent entity to activate recovery options as set out in the group recovery plan, as a matter of early intervention?

If a host authority decides to take the early intervention measure of activating a recovery plan option, the first question is whether there is an individual subsidiary recovery plan or a group recovery plan.\textsuperscript{433} In the former case, it is clear that the host supervisory authority may undertake this action upon consultation with other supervisory authorities. In the latter case,
i.e. when there is a group recovery plan (but not an individual one), the prospect of specific recovery options for the subsidiary in the group recovery plan is contingent on the question whether the subsidiary is a material entity for the group or for the national jurisdiction in accordance with the EBA Recommendation on the coverage of entities in group recovery plan, and should therefore be included in the group recovery plan.\textsuperscript{434} As argued in Chapter V, the deliberation on what entities of the bank group are relevant for a national financial system may not always overlap with the bank’s considerations on what subsidiaries may be included in the group recovery plan. Besides, activation of the group recovery plan option may also require a joint decision between the consolidating home supervisor and the host supervisor.\textsuperscript{435}

The BRRD2 does not exclude the possibility for the supervisory authorities to require the bank to update the recovery plan entirely. However, given that the recovery planning process involves supervisory assessments requiring joint decisions between national competent authorities, the process may prove to be time-consuming.\textsuperscript{436} Whether the situation will allow for such a process in times when bank group entities meet conditions for early intervention might be uncertain. If the early intervention action becomes publicly known, it may affect the bank group entity’s creditworthiness, further increasing the pressure for more immediate action, due to the threat of a ‘self-fulfilling prophecy’.\textsuperscript{437}

Notwithstanding the issue described above, there is an additional conundrum with regard to the use of intra-group support as a recovery option that might be activated pursuant to supervisory early intervention powers. The discussion on intra-group support has revealed that intra-group support under the BRRD2 is a voluntary arrangement.\textsuperscript{438} This gives rise to two situations. The first is that the intra-group support arrangement for the bank group’s subsidiary does not comply with the BRRD2 provisions on intra-group support. The second situation is that the intra-group support arrangement does comply with the BRRD provisions. Both situations are challenging with respect to activation of the recovery option in the form of intra-group support by means of supervisory early intervention measures.

In the first situation, where the intra-group support arrangements do not comply with the BRRD2 provisions, the supervisory power to ask the bank to activate a recovery plan option concerning such intra-group support as part of the early intervention process, will depend on the legal nature of the intra-group support agreement between the parent and the subsidiary. In this respect, whether the recovery option for the subsidiary is described in the group recovery plan as a contractually binding agreement (e.g. a guarantee) or another non-binding

\textsuperscript{434} Provided that the bank followed the EBA Recommendation, and the national competent authority decided to comply with the Recommendation pursuant to the relevant provisions implementing it in their respective jurisdiction.

\textsuperscript{435} BRRD2, Article 30(4).

\textsuperscript{436} BRRD2, Articles 7 and 8.


arrangement (e.g. a letter of comfort),\textsuperscript{439} or a promise of future commitment, affects the usefulness of supervisory early intervention power.\textsuperscript{440}

In the second situation, where the intra-group support arrangement complies with the BRRD2 provisions, the supervisory power to ask the bank to activate a recovery plan option as part of the early intervention process might also be questionable. The reason is that, according to the BRRD2, it is only the parties to the intra-group agreement, and not other third parties (including supervisory authorities), that can activate the provision on financial support. Effectively, the supervisors of bank group subsidiaries may not be able to use the ‘early intervention’ measures related to the activation of a group recovery plan option.

Overall, the intra-group support framework in the BRRD2 promotes the harmonisation of group provisions in the EU for prudential purposes and establishes some safeguards for individual entities of the bank group when they provide support to other group entities in financial distress. This is important in order to allow a flexible allocation of resources, while curbing incentives for harmful allocation of bank group assets across the bank group. However, the voluntary nature of the framework and the lack of supervisory enforcement measures in this regard undermine the credibility of a parent entity supporting subsidiaries in the bank group when they are in financial distress, potentially motivating local supervisors to segregate assets among the bank group’s respective subsidiaries.


\textsuperscript{440} On the factual considerations the EBA report on recovery options indicated that none of the analysed banks had intra-group financial support agreements that complied with the intra-group provisions of the BRRD. While some bank groups have expressed the intention to comply with the BRRD intra-group support framework, this remains to be seen in future EBA reports and research.
2. The Possibility of Flexibility in the Allocation of Bank Group Resources Ex Post in Resolution

2.1. Relevance for Flexibility in the International Standards

As noted in the introduction, besides the ex-ante intra-group support framework that underpins the allocation of bank group resources, there is a set of provisions that regulate the allocation of bank group resources after the resolution event is triggered (i.e. on an ex-post basis). We refer here to two sub-sets of ex-post provisions. The first sub-set includes those provisions that allow the bank group to build up some ‘surplus’ or ‘unallocated’ resources that can be distributed once its prepositioned resources are exhausted. The second sub-set of provisions are those that allow the bank group to meet its capital and MREL/TLAC requirements with alternative requirements, such as guarantees. Both sets of provisions allow some flexibility and increased optionality as to how the bank group can absorb its losses once resolution has been triggered.

As both MREL and TLAC requirements consist of a capital portion and a non-capital portion, both supervisory and resolution provisions need to be considered. In this context, it is relevant that the international standards on both supervisory and resolution-related requirements provide some ‘flexibility’ to the strict requirements for ‘prepositioning of capital and other instruments’ in the bank group.

First, in terms of supervision of bank groups, the Basel III framework stipulates that the capital requirements should apply at the group consolidated level. The framework further sets out that it is essential to ensure that capital recognised in capital adequacy measures is adequately distributed amongst the legal entities of a bank group and that supervisory authorities test that individual banks are adequately capitalised on a stand-alone basis.\(^{441}\) The Basel III framework therefore does not specifically state that capital instruments should be prepositioned on the balance sheet of the individual entities of the bank group.\(^{442}\) This potentially leaves room for the jurisdictions that implement these standards to apply measures other than the prepositioning of resources at individual bank subsidiaries, as long as such measures ensure that the bank group resources are adequately allocated. In this sense, the Basel standards leave some ‘flexibility’ in terms of the ways in which an adequate allocation of the resources in the bank group can be ensured for the purpose of supervision.

In addition to the above, in the context of resolution, the Financial Stability Board’s internal TLAC standard sets out that:

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\(^{441}\) Basel Committee on Banking Supervision (June 2011, and as subsequently updated) Basel III: A global regulatory framework for more resilient banks and banking systems, sections 10.1 and 10.4.

“TLAC that is not distributed to material sub-groups in excess of that required to cover risks on the resolution entity’s solo balance sheet (‘surplus TLAC’) should be readily available to the resolution entity to recapitalise any direct or indirect subsidiary”.

The objective of holding such surplus or unallocated TLAC resources is to:

“provide a pool of readily available and fungible resources of the resolution entity that can be used in a flexible manner to address capital shortfalls at the level of (i) the resolution entity; (ii) material sub-groups (MSGs) beyond what can be covered by internal TLAC; or (iii) any other direct or indirect subsidiary in line with the resolution strategy.”

In this respect, it should be noted that the internal TLAC standards provide that material sub-group/subsidiary requirements can be scaled to 75%-90% of the requirement they would have been asked to meet if they had been subject to external TLAC requirements. The scaling of the internal TLAC requirements means that not all the resources for absorbing the losses of a particular material sub-group will be prepositioned at the sub-group or subsidiary level. In turn, this generates the possibility to create unallocated external loss absorbing capacity that can support ailing subsidiaries if the prepositioned internal loss absorbing capacity is insufficient.

The FSB TLAC standards include a set of safeguards that ensure unallocated resources can be distributed as needed in a resolution group. For example, the standards stipulate that the unallocated TLAC resources should be composed of assets that can be easily valued and that are likely to maintain a consistent value in market-wide stress. In other words, these would normally be highly liquid assets that can be easily transferred from one entity to another in the bank group.

Furthermore, the principles provide parameters that host authorities need to take into account when determining the level of scaling of internal TLAC resources, i.e. between 75% and 90%. In particular, host authorities are expected to take into consideration: (i) the risk profile of a material sub-group, (ii) the overall credibility and feasibility of the home authority’s resolution strategy, (iii) the comparability of the requirements imposed on other banks in the same jurisdiction and (iv) the availability of unallocated TLAC and whether it can be reliably and flexibly deployed to material sub-groups. Through assessment of these

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parameters by the host authorities at least 10%-25% of the prepositioning of internal TLAC resources in their local jurisdiction should be effectively replaced. The parameters seem to be careful in defining any specific approach, which may constrain the flexibility of the relevant authorities to agree on the allocation of resources. Nevertheless, any agreed mechanism (that alternatively would absorb the losses of the entities of the group) should be clear enough to prevent ring-fencing of the assets of the bank group in specific jurisdictions.

In addition to this, acknowledging that some internal TLAC resources need to be prepositioned (albeit scaled), the FSB provides that perhaps such prepositioning can be achieved by way of a ‘collateralised guarantee’ to meet the internal TLAC requirements. Such an arrangement may be accomplished by way of an agreement between home and host authorities, and provide that a collateralised guarantee meets a set of conditions, including:

(i) The guarantee should be provided in full amount as the internal TLAC it replaces.
(ii) The guarantee needs to be collateralised for the full guaranteed amount. The collateral should be clearly identified, and any disposal or substitute of such collateral should be subject to the consent of the host authority. In addition, the collateral should be based on resources from a list of eligible collateral, and any exceptions should be subject to the host authority’s consent.
(iii) Claims on the guarantee should not be possible before the write-down or conversion of the internal TLAC in the form of capital requirements.
(iv) The collateral should be unencumbered and not be used to back other security arrangements. For this purpose, host authorities may require the collateral to be held by a third-party custodian, and they are entitled to a periodic independent audit of the value of the collateral.
(v) The maturity of the collateral should be equal to that of external TLAC.
(vi) There are no material, legal or operational impediments to the transfer of collateral or the proceeds of its sale from the resolution entity to the relevant subsidiary (i.e. material sub-group). In this respect, host authorities assess the impediments to the transfer. Additionally, according to the standards, they may require the bank to provide a legal opinion or demonstrate in a satisfactory fashion that there are no legal impediments to the transfer of collateral.

The principles regarding collateralised guarantees are much more prescriptive than those for scaling and ‘unallocated’ resources. Perhaps the reason behind this is that the ‘collateralised

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447 In particular: (i) the guarantee is provided for at least the equivalent amount as the internal TLAC for which it substitutes; (ii) the collateral backing the guarantee is, following appropriately conservative haircuts, sufficient to cover fully the amount guaranteed; (iii) the guarantee does not limit or otherwise affect the loss-absorbency of the subsidiaries’ other capital instruments, such as minority interests, as required by Basel III; (iv) the collateral backing the guarantee is unencumbered and in particular is not used as collateral to back any other guarantee or security arrangement; (v) the collateral has an effective maturity that fulfils the same maturity condition as that for external TLAC; (vi) there are no legal, regulatory or operational barriers to the transfer of the collateral (or the proceeds of a sale of collateral) from the resolution entity to the relevant material sub-group, see FSB Principles on internal TLAC, Principle 9.

guarantees’ will need to replace a full or partial requirement for prepositioning (which will be higher than having only 10% -25% non-prepositioned resources).

The way in which the provisions on the capital and internal TLAC alternative allocation actions are included in the EU framework is presented in continuation. First, the misalignment between the international standards/principles and the EU framework is discussed. This is followed by a more general critique of the limits of building more flexibility in the allocation of bank group resources.

2.2. The EU Supervisory and Resolution Framework and Alternative Ways to Allocate Resources in the Bank Group

Given the convoluted framework, it is probably easiest to consider the relevant provisions in the EU on the basis of the matrix shown below. The matrix includes the capital and TLAC requirements in the CRR2 and those of the MREL requirements in the BRRD2. It sets out how the scaling provisions and collateralised guarantees in lieu of prepositioning instruments are allowed in the EU. In addition, it provides a supplementary option included in the EU framework, i.e. the possibility for capital and TLAC requirements to be fully waived.

<table>
<thead>
<tr>
<th></th>
<th>Individual capital requirement for subsidiaries</th>
<th>Internal TLAC requirement for material subsidiaries</th>
<th>Internal MREL requirement for non-resolution entities</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Scaling factor</td>
<td>No</td>
<td>90%</td>
</tr>
<tr>
<td>B</td>
<td>Collateralised guarantee&lt;sup&gt;450&lt;/sup&gt;</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>C</td>
<td>Waiver of requirements</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

<sup>449</sup> For a broader explanation of the interaction between the two see Ross Cranston, Emillos Avgouleas, Kristin van Zwieten and Theodor Van San (2018) Principles of Banking Law, Oxford University Press (Oxford, 3<sup>rd</sup> edn), at p. 27 ff.

This brief overview already suggests the possible difficulties as regards consistency, diminishing the effectiveness of the framework, as is explained and commented below.

2.2.1. The Possibility of Scaling Internal TLAC Resources

In order to discuss the possibility of creating surplus or ‘unallocated’ TLAC resources, the concept of scaling internal TLAC requirements is relevant, as it is a main precondition allowing the build-up of those resources. As presented in the second column of the matrix, the EU framework only permits the possibility to scale the internal TLAC requirement of material subsidiaries of non-EU G-SIBs. Unlike the international standards, which set a lower and an upper limit for scaling at 75% and 90% respectively, the CRR2 in the EU sets the scaling factor at 90% of what a material subsidiary should have held in the case of an external TLAC requirement.

Considering that the internal TLAC requirement is likely to be topped up with an internal MREL requirement (as a Pillar 2 requirement), the option for scaling is a rather restricted one. Namely, the legislation provides that TLAC requirements should be set at the amount of 18% of the risk-weighted assets (RWAs) of the entity or 6.75% of its leverage ratio exposure (LRE). In line with the CRR2 scaling factor of 90%, the internal TLAC requirement will then result in 16% RWAs and 6.075% LRE.

The Pillar 2 MREL requirements are then calculated as double the capital requirements for the subsidiary, also expressed as a percentage of the risk-weighted assets and the leverage exposure of the subsidiary. Thus, even under the optimistic assumption that the total capital requirements for the material subsidiary are 10% of its RWAs, the Pillar 2 MREL requirements will already raise the loss absorbency and recapitalisation amount which that subsidiary needs for 2%. Effectively, this increases the amount of prepositioned loss-absorbing instruments that the material subsidiary needs to hold, thus adversely affecting the amount of possible unallocated resources at the level of the parent/resolution entity.

For other non-resolution entities of EU GSIBs (material subsidiaries or not) or non-resolution entities of non-GSIBs, subject only to internal MREL (but not internal TLAC) requirements, such a scaling factor does not exist.

The reason why such strict limitations to the build-up of resources was adopted by the EU legislation are likely to go back to difficulties in the transfer of unallocated resources in a

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452 CRR2, Article 92a.
resolution event. The first challenge which the relevant authorities will need to solve is whether there are sufficient resources at the level of the parent entity. If it is assumed that this is the case, the next challenge to consider is: what will be the specific transfer mechanism? In particular, if it is a guarantee, what is the trigger of such a guarantee, what is the amount that is covered, and how is it ensured that the resources will be downstreamed to the relevant entity (e.g. in a situation where there is an ownership chain with multiple intermediate parent entities).\footnote{In comparison, see the US Agencies (namely the Board of Governors of the Federal Reserve System and the Federal Deposit Insurance Corporation - FDIC) Final Guidance for the 2019 and subsequent resolution plan submissions by the eight largest, complex US banking organisations, regarding the allocation of resources once the parent entity triggers a bankruptcy proceeding, available at: https://www.federalregister.gov/documents/2019/02/04/2019-00800/final-guidance-for-the-2019, at p. 56 ff.}

Moreover, while a resolution action is a process different from insolvency proceedings, it is subject to the ‘no creditor worse off’ safeguard. According to the NCWO, no creditors should bear more losses in insolvency proceedings.\footnote{See further Victor de Serière and Daphne van der Houwen (2016) ‘No Creditor Worse Off’ in Case of Bank Resolution: Food for Litigation? Journal of International Banking Law and Regulation, Issue 7, 2016, p. 376 , available at SSRN: https://ssrn.com/abstract=2856370 or http://dx.doi.org/10.2139/ssrn.2856370} Thus, when resolution authorities settle the above questions, they need to consider the prospect of creditors’ challenges. Such challenges could differ depending on what insolvency framework applies.

For example, most insolvency laws include provisions under which all transfers made in a ‘suspect’ period, i.e. the period before an entity receiving the support is in the vicinity of insolvency, can be challenged before an insolvency court and subsequently become void.\footnote{Sven Schelo (2015) Bank Recovery and Resolution, Kluwer Law International, Alphen aan den Rijn, at p. 72; for comparative notes on the topic see Kokorin (2020).} In related party transactions, particularly in ‘groups of companies’, such suspect periods are even prolonged to penalise any insider who might have had more information on the position of the relevant debtor in the group.

If a parent entity has distributed assets to the subsidiary beyond the prepositioned internal TLAC resources (which is the purpose of keeping this surplus) then its creditors may argue the following. If a transaction was made in the vicinity of its (hypothetical) insolvency, it will be considered as if it was made in a ‘suspect period’ (which is even longer for a group of companies). As such, this transaction should be considered ‘null’ or ‘void’, and the assets transferred to the subsidiary should be part of the parent’s insolvency estate. This may suggest that the hypothetical losses that creditors would have incurred in insolvency proceedings could have been lower. Such scenario could occur in particular if there is no ex-ante intra-group arrangement that would set out how the any available resources of the group would be allocated in event resolution is triggered.

Besides, the question regarding ‘unallocated’ resources in a resolution event is also not clarified in relation to its interaction with other parts of the supervisory and resolution framework. In this regard, as noted above, the FSB internal TLAC standards explain that the
surplus resources should be held as assets that can be easily valued and that are likely to maintain a consistent value in market-wide stress, i.e. as liquid assets. The standards clarify that such assets should be separate from any liquidity requirements that the bank group has to meet. This can include assets that the bank can hold to meet its liquidity coverage ratio, and the net stable funding ratio under supervision. However, more broadly, this may raise the question of what assets the bank already plans to use when triggering its recovery plan.\footnote{BRRD2 Article 5(6); with regard to the scenarios that need to be included in the recovery plan, pursuant to the mandate provided in BRRD Article 5(7), the European Banking Authority has issued Guidelines on the range of scenarios to be used in recovery plans (July 2014, EBA/GL/204/06); see further on the implementation of the requirement for scenarios in recovery plans European Banking Authority (December 2015), Comparative report on the approach taken on recovery plan scenarios}

Thus, at least for the time being, the question regarding the reallocation of the bank group’s surplus or unallocated resources in resolution is multifaceted, and experience may show all the different elements that can come at play.

2.2.2. Waivers of Capital and Internal MREL Requirements for Subsidiaries / Non-resolution Entities

Although the EU framework does not provide scaling of MREL or even TLAC resources, it offers the possibility for waiving certain requirements in supervision and resolution. As shown in column C in the above matrix, a waiver can be provided in the case of individual subsidiary/non-resolution entity capital and MREL requirements, in supervision and resolution, respectively. At first sight, the possibility of a complete waiver of requirements can seem to be offering even more flexibility than what is provided under the international standards. However, this is not the case.

As noted earlier, with regard to capital requirements, the default rule in the CRR2 is that such requirements apply at consolidated and individual bank subsidiary level. The waiver regarding individual capital requirements for bank subsidiaries and parent entities is the exception provided by the legislation.\footnote{CRR2, Article 7.} The relevant resolution authority can also waive the internal MREL requirements for a non-resolution entity. In order to coordinate the process between the subsidiary capital waiver and the internal MREL waiver, the provisions in the BRRD2 also establish that resolution authorities can waive internal MREL requirements only if the subsidiary (non-resolution entity) is waived from its capital requirements. There is a tacit expectation that the resolution authorities’ assessment of whether the bank (or resolution) group meets the stipulated conditions will be the same as that of the supervisory authorities.

Both the individual capital and internal MREL requirements can be waived only if the parent entity or the resolution entity (as the case might be) and the relevant subsidiary or non-
resolution entity are authorised and supervised in the same Member State. Given that this condition is included in the CRR2, this will, in principle, encompass both the capital and TLAC requirements. Taking into account that internal TLAC requirements apply only to material subsidiaries of non-EU G-SIBs, the possibility of a waiver is effectively non-existent for internal TLAC.

Allowing a bank subsidiary to be waived from its individual prudential requirements effectively means that, in a point in time, such a subsidiary may not hold all the necessary capital on its balance sheet. While this can be beneficial for the bank group as a whole or the parent entity in the process of the optimal allocation of resources of the group, as it frees up capital resources during business as usual, it can pose a threat to the survival of the subsidiary. Therefore, the granting of a waiver from individual capital requirements is subject to several conditions under the CRR to ensure that subsidiaries maintain a stable financial position. For both the subsidiary capital requirement and internal MREL requirement waiver, supervisory and resolution authorities need to assess if the parent undertaking conducts prudent management of the subsidiary and has declared, with the permission of the relevant authority, that it guarantees the commitments entered into by the subsidiary. To this end, both the CRR2 and BRRD2 provide a set conditions for waiving the subsidiary from capital and internal MREL requirements, discussed separately below.

2.2.3. The Possibility of Collateralised Guarantees

Finally, as presented in column B above, the EU framework, in line with the FSB principles, provides for the possibility of using ‘collateralised guarantees’ in lieu of prepositioning resources. However, the legislator has not allowed the use of collateralised guarantees to

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459 BRRD2, Article 45f(3)(4)(5); see also Maria Abascal and Javier Garcia (2016) Europe: TLAC implementation and MREL review, BBVA Research, 24 November 2016, at p. 5.


462 A notable difference is that these conditions need to be met by either a parent entity (e.g. in an SPE resolution strategy) or the resolution entity (e.g. in an MPE resolution strategy).

replace either capital or internal TLAC for material subsidiaries. Instead, collateralised guarantees are only available for the internal MREL requirements for EU non-resolution entities.

The BRRD2 stipulates that collateralised guarantees can be used as an alternative to the internal MREL requirements, provided that there is an agreement between the resolution authorities of the resolution entity and non-resolution entities. In line with what is set out in the FSB principles regarding the use of collateralised guarantees, the BRRD2 stipulates that such guarantees have to meet the following conditions:

- The guarantee must be provided for an amount equivalent to the MREL requirements it substitutes;
- It needs to be triggered at the point when the subsidiary is unable to pay its debts as they fall due, or when resolution authorities have made a determination to use the write-down and conversion power, whichever comes earlier;
- The guarantee is collateralised for at least 50% of its amount;
- The collateral meets the requirements under Article 197 of the CRR2, it is unencumbered and it is not used to back up other guarantees;
- The collateral has the same maturity as that of the eligible instruments provided for in the CRR2;
- There are no legal, regulatory or operational barriers to the transfer of the collateral from the resolution entity to the subsidiary, including in cases where resolution action is taken in respect of the resolution entity. For this purpose, the resolution authority might require a legal opinion from the resolution entity that will satisfactorily demonstrate that there are no such impediments.  

As with the capital and internal MREL waiver, the alternative available to a non-resolution entity to meet its internal MREL requirements by means of a collateralised guarantee is limited to the situation where the resolution entity and the non-resolution entity are authorised in the same Member State.

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464 BRRD2, Article 45f (5).
This section discusses the ‘waivers’ from the individual capital and internal MREL requirements, and the use of ‘collateralised guarantees’ in lieu of prepositioned MREL requirements by referring to them as ‘alternative requirements’. The most striking element of the provisions on the alternative requirements is their limited application to the bank group entities authorised in one Member State.

The application of the alternative requirements solely on Member State level would suggest that bank group subsidiaries within the EU are treated differently for the purpose of the allocation of capital. As a result, it can also raise doubts regarding the justifications for the limitations of one of the basic freedoms of the single market, i.e. the free movement of capital.

Admittedly, the principle of free movement of capital can be restricted due to the requisite measure to prevent infringements of national law and regulations, particularly in the field of prudential supervision of financial services (‘prudential carve-out’) or due to measures which are justified on the grounds of public policy and security. To this end, the European Court of Justice (ECJ) has stated that there may be overriding reasons related to the public interest, including protection of the national financial system, for allowing restrictions to the freedom of movement of capital.\textsuperscript{465} Such restrictions, however, should be subject to strict qualifications, e.g. including situations where the interest concerned is not already covered by EU harmonisation measures.\textsuperscript{466} As harmonised rules exist across EU legislation, specifically for the purpose of banking supervision and resolution, it is worthwhile considering any outstanding reasons for limiting the use of alternative actions for the allocation of bank groups’ resources on a cross-border basis.

In line with the above observation, it should be highlighted that, in its proposals for amending the CRR, the European Commission included the possibility of applying the capital waiver in the case of subsidiaries on a cross-border basis. The Commission acknowledged that this proposal might have fiscal consequences for host authorities. Therefore, it proposed an enhanced safeguard in the form of a collateralised guarantee between the parent and the subsidiary.\textsuperscript{467} The collateralised parent-subsidiary guarantee that the Commission inserted


in its proposal included features similar to the ‘collateralised guarantee’ set out by the FSB principles regarding internal TLAC instruments, namely for a capital waiver to be granted to a cross-border subsidiary the guarantee provided by the parent entity must meet the following conditions:

- It is provided for at least the amount of the individual capital requirements of the subsidiary;
- It is triggered if the subsidiary cannot meet its debts or other liabilities as they fall due or when the subsidiary has become subject to regulatory write-down or conversion powers in or outside of resolution;\(^{468}\)
- It is fully collateralised for at least 50% of the amount of the relevant requirement.\(^{469}\)

To support its proposal, Commission argued that the double application of the capital requirements prevented banks from managing their resources efficiently at the level of the group. Particularly, the Commission considered this a relevant point in view of the technological developments that increasingly facilitate the centralisation of capital and liquidity management in bank groups. Furthermore, the Commission considered that the establishment of the BU provided room for further exploiting the benefits of the single market.\(^{470}\) Especially the establishment of the SSM provided more centralised supervisory powers and decisions related to the supervision of EU bank groups operating in the Banking Union. Unfortunately, due to host authorities’ persistent objections that a cross-border waiver would undermine their ability to protect financial stability,\(^{471}\) the Council eventually decided to remove the proposed provisions on the specification of the parent-subsidiary guarantee for a waiver of capital on a cross-border basis from the CRR2.

If they had been adopted, the provisions on the collateralised parent-subsidiary guarantee for the capital requirements of a cross-border subsidiary would have complemented the collateralised MREL guarantee well, provided that the latter could also have been applied on a cross-border basis. The option to also be allowed on a cross-border basis in the EU is not so far-fetched. It was included in the initial proposal for amendment of the BRRD. In this proposal, the European Commission set out the possibility for subsidiaries to meet internal

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\(^{468}\) In line with Article 59(3) of Directive 2014/59/EU (BRRD), which sets out the circumstances when resolution authorities should exercise the write-down and conversion powers as part of a resolution.

\(^{469}\) The proposal for the amendment of the CRR, Article 7(2)(b)(iii), included that the financial collateral is provided according to a financial collateral arrangement as defined in point (a) of Article 2(1) of the Financial Collateral Directive (Directive 2002/47/EC). In addition, the collateral may not be encumbered or be used to back other transactions (Article 7(2)(b)(vi)). Furthermore, under Article 7(2)(b)(iv), the collateral should be governed by the law of the country where the head office of the subsidiary is situated, unless the competent authority of the subsidiary specifies otherwise. This is presumably in place to provide further certainty for the host authority.


MREL via a collateralised guarantee for bank group entities operating cross-border, i.e. outside the Member State where the parent entity is authorised and established, as well as for bank group entities in non-EU countries. However, this possibility was not maintained in the final BRRD2 text. In fact, as set out above, currently the BRRD2 includes the possibility for the internal MREL requirement to be fully or partially met by means of a collateralised guarantee only if the resolution entity and the non-resolution entity (subsidiary) are authorised in the same Member State.

At the same time, the individual capital waiver for subsidiaries (whether or not underpinned by an ‘uncollateralised’ or a collateralised guarantee) remains applicable to entities authorised in the same Member State. This is also the case with the MREL waiver. It remains unclear what the framework’s consistency is between allowing waivers (as potential non-collateralised agreements) for capital and MREL requirements and allowing collateralised guarantees only for MREL requirements. Most of all, it is not clear why such collateralised guarantees are not permitted on a cross-border basis in the EU.

In this context, it is useful to consider the safeguards that are included for the alternative requirements. Such safeguard should have provided sufficient comfort to EU Member State authorities in relation to their decision on allowing flexible alternative requirements to be applied on a cross-border basis in the EU. It should be highlighted that the alternative requirements (including for capital and MREL waivers, as well as for MREL ‘collateralised guarantees’) all include a common set of provisions under which alternative requirements may be allowed. These common conditions include:

(i) there should be no current or foreseen material practical or legal impediment to the prompt transfer of capital or repayment of liabilities by the subsidiary’s parent undertaking;

(ii) either the parent undertaking satisfies the competent/resolution authority (depending on whether it involves a capital or an MREL requirement) regarding the prudent management of the subsidiary and has declared, with the permission of the competent authority, that it guarantees the commitments entered into by the subsidiary, or the risks in the subsidiary are of negligible interest;

(iii) the risk evaluation, measurement and control procedures of the parent undertaking cover the subsidiary;

(iv) the parent undertaking holds more than 50% of the voting rights attached to shares in the capital of the subsidiary or has the right to appoint or remove a majority of the members of the management body of the subsidiary.


473 See CRR2 Article 7(2) in relation to Article 11(1); and BRRD2, Article 45f(3) and (4).

Conditions (ii) and (iii) are closely related to the process followed in the assessment, as they concern the internal capital management within the group and the authority’s evaluation. The fourth condition simply establishes perimeter of consolidation, ensuring that the parent entity has control over the subsidiary. In comparison to the rest of the conditions, condition (i) is more nuanced, as it requires consideration of possible impediments to the transfer. In this context, the next parts look into the process that authorities will need to follow, followed by possible criteria that could be considered as material practical and legal impediments to the transfer of capital or repayment of liabilities.

Regarding the process followed for the assessment, in particular, on determining the prudent management and risk control, measurement and procedures, it is not farfetched to assume that the relevant authorities find the information for such an assessment in the group’s internal capital adequacy assessment process (ICAAP) that is subject to the supervisory review and evaluation process (SREP) under the Pillar 2 supervisory framework for the assessment of allowing a capital waiver. For resolution authorities that assess whether to provide a waiver or a collateralised guarantee in lieu of MREL requirements, the process is likely to take place in the course of the resolvability assessment (and during the drafting of the resolution plans). The legislation does not explicitly refer to the ICAAP of banks, the SREP of the supervisory authority or the resolvability assessment, potentially suggesting that another analysis might be conducted. However, the wording in the conditions aligns with the wording used to describe the said process in the legislation. Therefore, it can be assumed that these are the venues where the assessment takes place.

Now, according to the provisions, all alternative measures for either the capital or MREL waiver, or for the MREL collateralised guarantee are at the discretion of the host authority. Provided that these alternative measures are only permitted at Member State level, it is very likely that the parent entity’s and the subsidiary’s relevant authorities overlap. However, in a hypothetical scenario where the alternative measures would be allowed in the EU on a cross-border basis, the decision by a subsidiary’s authority to allow or disallow alternative requirements would be considered in the following context.

In order for the subsidiary’s authority to allow a waiver, it would need to consider the ICAAP of the parent entity on a consolidated basis, and the SREP. For this purpose, it would need to be convinced that the home authority has adequately assessed whether the parent entity’s management over the subsidiary is prudent and whether the parent has established risk management, measurement and control systems that cover the subsidiary. Similarly, if alternative requirements were considered for the MREL requirements, the subsidiary’s/non-resolution entity’s authority would need to rely on the group’s resolvability assessment process. In particular, the host authority’s concern would be whether, pursuant to the process

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475 In relation to the internal capital adequacy process (ICAAP) and the supervisory review and evaluation process (SREP), as provided for in Title VII, Chapter 2 of the CRD5. The European Banking Authority reported in 2016 and that supervisory authorities diverge in the methodology of setting Pillar 2 requirements which are based on the SREP assessments. See European Banking Authority (July 2016), Report on the Convergence of Supervisory Practices, EBA-Op-2016-11.
led by the home authority, the parent entity holds sufficient funds at all times to cover the losses of the subsidiary that has been waived. Therefore, as a minimum the process requires a great deal of confidence in the expertise of the parent entity’s/resolution entity’s authority.

Within the Banking Union, such processes are consolidated in the supervisory and resolution planning work of the Single Supervisory Mechanism and the Single Resolution Board, respectively. At the EU level, both the SREP assessment of the group and the group resolvability assessment are subject to joint decisions of authorities in supervisory and resolution colleges.\textsuperscript{476} Besides, those decisions are based on harmonised provisions in the CRD5 and the BRRD2. Granted, that is minimum harmonisation. However, it could be sufficient to be included in the consideration of qualifying potential restrictions on the freedom of movement of capital.

It should also be highlighted that single authorities already exist in the Banking Union, i.e. the SSM and the SRB responsible for the supervision and resolution of large bank groups. The two authorities operate under their respective Regulations (SSMR and SRMR), and obviously conduct the relevant SREP or resolvability assessment under their own internal policies. Nevertheless, the possibility for these authorities to allow capital or internal MREL waivers on a cross-border basis has not been included in the EU legislative framework.

Given this level of harmonisation of the process, and taking into account the qualified application to the restrictions of the free movement of capital where there is no harmonisation of Union rules, as explained above, it is difficult to argue why cross-border application of alternative measures is not possible. It is true that the institutional harmonisation under the SSM and SRB would not apply to bank groups operating across the EU in countries not participating in the Banking Union. As a result, authorities of non-participating Member States might be less inclined to allow alternative measures.

Putting aside the process, condition (i) above, regarding the material or practical legal impediments to the prompt transfer of resources at the point of non-viability, seems to provide a more convincing argument for restraining the application of alternative actions for allocating bank group resources. In the hypothetical situation where alternative measures would be allowed on a cross-border basis in the EU, assessing such impediments could be difficult, as it would mean that the relevant authorities would need to consider the potential effects of contracts and provisions applicable in different jurisdictions.

\textsuperscript{476} CRD5, Article 116 and BRRD2, Article 88; the cooperation in the colleges is further specified in Commission Delegated Regulation (EU) 2016/98 of 16 October 2015 supplementing Directive 2013/36/EU of the European Parliament and of the Council with regard to regulatory technical standards for specifying the general conditions for the functioning of colleges of supervisors, OJ L 21, and 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, OJ L 184.
In this regard, it is worthwhile considering the set of material practical and legal impediments assessed by different national authorities when granting waivers or other alternative measures. Based on EBA data on supervisory disclosures, it appears that most supervisory authorities have not used the capital requirements waiver as provided in the CRR2. Nearly all authorities stated that such assessment is made on a ‘case by case basis at their discretion’. The majority mentioned using the ECB approach.\textsuperscript{477} According to the ECB, the material practical and legal impediments taken into consideration by the authority include the following:

- the shareholding and legal structure of the group does not hamper the transferability of own funds or repayment of liabilities;
- the formal decision-making process regarding the transfer of own funds between the parent undertaking and subsidiary ensures prompt transfers;
- the by-laws of the parent and of the subsidiaries, any shareholder’s agreement, or any other known agreements do not contain any provisions that may obstruct the transfer of own funds or repayment of liabilities by the parent undertaking;
- there have been no previous serious management difficulties or corporate governance issues which might have a negative impact on the prompt transfer of own funds or the repayment of liabilities;
- no third parties are able to exercise control over or prevent the prompt transfer of own funds or repayment of liabilities;
- the grant of a waiver has duly been taken into account in the recovery plan and, if any, the group financial support agreement;
- the waiver has no disproportionate negative effects on the resolution plan;
- the reporting of the solvency information on the group, which aims to provide a global view of how risks and own funds are distributed within the group, shows no discrepancy in this regard.\textsuperscript{478}

Different examples can be provided to interpret the above conditions in practice. For instance, one way in which the shareholding and legal structure of the group may hamper the transferability of capital or repayment of liabilities is if a parent entity does not hold 100% of the ownership in the subsidiary. As a result, there may be minority shareholders. Across the EU, as transactions with related parties may cause prejudice to companies and their shareholders, material related party transactions are subject to approval by the shareholders,


\textsuperscript{478} ECB (March 2016) Guide on options and discretions available in Union law, at p. 6. The Guidance was subsequently amended to take into account the ‘leverage ratio’ of the group, see Addendum to the ECB Guide on options and discretions available in Union law, August 2016.
including minority shareholders.\textsuperscript{479} It should be noted that such approval might interfere with the intra-group transfers both ex ante and ex post in the resolution.\textsuperscript{480}

Additionally, as set out in the above conditions, other shareholders’ (most likely minority shareholders’) and creditors’ rights (or other third party rights) provided in the by-laws of the companies and any outstanding provisions in agreements with third parties (such as covenants) need to be considered. However, beyond such provisions that have been negotiated in private arrangements, national company laws may include additional provisions that may hamper transactions within the group and that the relevant authorities will need to take into consideration.

In general, company law provisions can either block or delay the transfer of assets, and insolvency laws can rule transactions retroactively void, especially if they have been made intra-group and within a ‘suspect period’. Furthermore, the extent to which bank group entities can engage in transactions will be subject to the examination of the existence of provisions regarding a ‘group interest’. While a number of EU jurisdictions recognise groups of companies, not all clarify the rights of the companies belonging to a group. Unlike jurisdictions such as Germany and the Czech Republic, which have statutory provisions on ‘groups of companies’ and ‘domination agreements’, in France, the legislation does not recognise group interests. However, as discussed earlier, under the Rozenblum doctrine, a judge may take into consideration such interests when voiding a transfer that is executed in the group as a whole.

The above examples of what material practical and legal impediments may mean, suggest not only that there should be a significant flow of information between a home and a host authority (provided the bank group is not only based in the Banking Union), but that a host authority needs to have knowledge of the provisions applicable in the parent jurisdiction. It is not surprising that some authorities, even when making this assessment in their own jurisdiction, have required a ‘legal opinion’ from the bank as an additional criterion.\textsuperscript{481} Even if these assessments are conducted by the same authority, such as the ECB or SRB, one might even argue that unless there is further harmonisation of corporate law in the EU, in particular on intra-group transfers, there will be insufficient comfort for the relevant authorities to allow cross-border application of alternative arrangements.

To this day, the SRB has not published what material practical or legal impediments it may consider for providing an MREL waiver or a collateralised guarantee. From a resolution perspective, it might be suggested that, other than the possible restrictions in company law


\textsuperscript{480} Minority shareholders’ rights are harmonised in the EU, inter alia, via the ‘Take-over bid’ Directive. However, it should be noted that in an ex-post situation the BRRD provides that provisions of this Directive will not apply (see Article 119 on Directive 2004/25/EC). Regarding the harmonisation of EU company law see also https://www.europarl.europa.eu/ftu/pdf/en/FTU_2.1.11.pdf

\textsuperscript{481} See the reply from Malta in the EBA Supervisory disclosure supra n.476.
(such as ex-ante authorisations and decision-making), resolution authorities will need to scrutinise insolvency law provisions more closely, in particular since their actions will be compared to the NCWO principle under which no creditor should incur more losses than in insolvency proceedings.

With a view to the above, notwithstanding the institutional harmonisation of the assessment procedure, the larger problem for authorities making these assessments is likely to be the lack of harmonisation of substantive rules, including in corporate and insolvency law.

3. The Link between the Ex-ante and Ex-post Framework

The final two criteria listed in the previous section regarding the application of alternative measures, at least when it comes to granting individual capital waivers, concern the effect on the recovery and resolution of a bank group. We note that such criteria are included only in the ECB’s policy on granting individual capital requirements, and are not part of the relevant provisions in the CRR2 or the BRRD2. The criteria, however, raise an important question regarding the interaction between the ex-ante and ex-post framework for the allocation of intra-group resources and about allowing their more flexible allocation ahead of and in resolution. Specifically, when making the assessment for ex-ante intra-group support agreements or for the provision of waivers and collateral requirements in lieu of capital and MREL requirements, it will need to be clarified how all those resources will interact with one another. For example, one can imagine a situation where a bank group concludes intra-group support agreements for its subsidiaries as part of its recovery options for those entities. At the same time, it may have one or more subsidiaries waived from its MREL requirements. One of the conditions for waiving the MREL requirements is for the parent entity to guarantee the commitments entered into by the subsidiary; the resolution authority may require evidence for such guarantee. Now, how the intra-group support arrangement and the internal MREL waiver guarantee co-exist and what resources the bank group should hold are all elements that will need to be considered by both the supervisory and resolution authorities responsible for the group.

In this context and when specifically considering the possibility to add some optionality to the allocation of bank group resources, the propensity of the EU framework to opt for ex-ante solutions can be underlined. This is not only due to the onus that the framework puts on the ex-ante planning (including through intra-group agreements, as well as recovery planning and early intervention). It can also be observed in the scope of the bank group entities that is permitted within each framework. While the ex-ante framework based on intra-group

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482 See in this regard European Commission (November 2008) Commission Services’ Report on ‘Asset Transferability’

support agreements explicitly allows such support to be provided on a cross-border basis, even in third countries, the waiver and collateralised guarantee provisions are limited to application to entities authorised in the same Member State.

Besides, the BRRD2 makes an effort to harmonise the provisions on ‘group interest’, thereby providing authorities with a single set of conditions to be considered when making their assessments on intra-group support agreements. To further remove doubts about obstacles in national laws, the BRRD2 goes on to state that Member States shall remove any legal impediment in national law to intra-group financial support transactions.\(^{484}\)

This may be contrasted to the provisions regarding the ex-post framework, i.e. regarding the waiver and collateralised guarantees that will need to ensure that losses are absorbed across the bank group to the same extent as would have been the case had they been prepositioned resources. As explained above, this requires an assessment of the material practical and legal impediments, which can be a daunting task, especially if it needs to be considered on a cross-border basis where different national company and insolvency laws apply. This may potentially increase the risk of creditors’ challenges once the resolution process is completed.

The EU framework’s propensity to utilise ex-ante mechanisms to stabilise a bank group via intra-group support is not erroneous. However, this approach differs from that of the international standards under the FSB, where the emphasis is placed on the ex-post allocation of bank group resources (i.e. once resolution is triggered). This may subsequently complicate discussions in international fora about any surpluses or other alternative arrangements. However, it does not mean that the framework is incompatible. It rather puts the trigger for using the bank group’s resources before resolution is triggered.

\(^{484}\) BRRD2, Article 19(4).
4. Concluding Remarks

This chapter reviewed how the allocation of the bank group's resources is regulated prior to and after the triggering of a resolution event in the EU framework. In particular, it focused on the intra-group transactions that can take place in the said periods. Specifically, regarding the ex-ante framework, the chapter concentrated on the intra-group support framework in the BRRD2. It emphasised that this framework has made significant progress in recognising the importance of the group interest by harmonising the conditions under which intra-group transactions can take place, and therefore contributes to the flexible allocation and stabilisation of the bank group prior to resolution. Nevertheless, it was also stressed that the main drawback of the intra-group agreement provisions under the BRRD2 is that they are effectively non-binding, in the sense that bank groups do not need to conclude such agreements pursuant to the provisions set out in the BRRD2. Furthermore, even if such an agreement exists, it is very debatable whether the relevant supervisory authorities can ask a bank group entity to enforce it.

Unlike the ex-ante framework, the provisions that allow intra-group transactions to take place after resolution is triggered, i.e. cases where waivers and collateralised guarantees are allowed to replace the prepositioned resources at the subsidiary/non-resolution entity level, are rather restrictive. This is both because such provisions can only apply to bank group entities authorised in the same EU Member State and because the underlying assessments that relevant authorities need to make are not always straightforward. For example, the assessment of whether there are any material practical and legal impediments to the transfer of resources is made in relation to the applicable national company and insolvency laws. In the imaginary scenario where such waivers and collateralised guarantees are allowed on a cross-border basis, such an assessment could be even more difficult, as provisions in different legislation might need to be considered. Thus, the argument could be made that further harmonisation of the substantive provisions can significantly facilitate the assessment of whether any obstacles might emerge to the transfer of assets within the group once resolution is triggered. It would also allow resolution authorities to obtain more clarity on how to assess the NCWO principle and the risk of creditor challenge in resolution.

With regard to both frameworks, the chapter indicated that, clearly, EU legislation has opted to put the onus of building in flexibility regarding the allocation of bank group resources in the ex-ante stages. Such provisions do make sense given the lack of further harmonisation of company and insolvency laws, and considering the possible aim of avoiding creditor challenges as a result of resolution actions. This differs from the principles provided in the FSB international standards, where the emphasis is put on scaling and allocation of resources ex post, i.e. in a resolution event. As such, the discussions among authorities in the EU and other, non-EU jurisdictions that have implemented the FSB standards would face the challenge of finding a fine line between ex-ante and ex-post mechanisms in their respective frameworks if
and when they would like to allow some flexibility in the allocation of the resources of a bank group for the purpose of its stabilisation and resolution.
Chapter V: Outstanding Flaws in the Cooperation and Coordination Framework in Resolution

Introduction

This chapter indicates that notwithstanding the improvements in the EU and international cooperation and coordination framework, there are shortcomings in how the interests of all authorities involved in the process of resolution planning and execution are taken into consideration. This raises some doubts about how successful the post-financial crisis framework will be in preventing ring-fencing actions of national authorities and in leading to the piecemeal resolution of bank groups.

The chapter is organised as follows. The first part provides some background information and rationale for this chapter. The second part discusses the framework of cooperation among the authorities in the EU. This is followed by a discussion of the framework of cooperation with third countries (i.e. non-EU authorities under the EU framework). The fourth part provides a general comment in line with the literature and proposes a possible way forward to allow the alignment of interests of the different authorities in context of resolution. The final part concludes.

1. Background on Home and Host Authorities’ Interests

Besides being subject to the intra-firm issues discussed in the previous chapters related to double-leverage risks and provisions that affect the decisions on the allocation of bank group resources, a bank group is also subject to issues arising from its transnational presence. These are issues that concern the cooperation and coordination among national authorities responsible for supervising and resolving a bank group along the lines of the separate legal entities.  

A successful resolution action should normally result in preserving the economic functions and financial stability in the jurisdictions where the bank group operates. This normally demands cooperative solutions for the bank group as a whole, rather than piecemeal decisions and actions by all the authorities involved. As the financial crisis vividly

\[485\] As noted in Chapter I, since the 1970s the Basel Committee on Banking Supervision has dealt with the cooperation between national authorities and the distribution of regulatory responsibilities of home and host countries. This is referred to as the entity-based regulatory model, as opposed to the effect-based regulatory model. See Katharina Pistor (2010) Host’s Dilemma: Rethinking EU Banking Regulation in Light of the Global Crisis, ECGI Finance Working Paper No. 286/2010, Columbia Law & Economics Working Paper No. 378, at p. 3.

\[486\] During the financial crisis in 2007-09 there were many examples of national authorities taking actions in the national interest with adverse consequences for some groups of creditors and other financial systems. Notable examples include the failures of the Icelandic banks, Fortis and Lehman Brothers. See for case descriptions Seraina Neva Grunewald (2014) The Resolution of Cross-border Banking Crises in the European Union – A Legal Study from the Perspective of Burden Shaping, Kluwer Law International (Alphen aan den Rijn) p. 66 and p. 168; see also Dirk Schoenmaker (2013) Governance of International Banking, Oxford University Press (Oxford), at pp. 72-88.
demonstrated, piecemeal actions in times of financial distress lead to loss of enterprise value of bank groups and a heightened risk of disorderly disruptions in critical economic functions in the jurisdictions where bank groups operates.

The difficulty with the cooperation frameworks is that often national authorities have differing (if not conflicting) interests when making their decisions regarding the supervision and resolution of bank groups.\textsuperscript{487} For example, regarding the topics discussed earlier, i.e. double leverage and the allocation of resources ahead of and in resolution, the following potential conflicts may arise.

Naturally, a home authority’s interest will be to reduce the amount of double leverage as it may put the parent (resolution) entity in danger of failure and make it subject to resolution actions. In comparison, a host authority might feel more comfortable to set higher requirements at local subsidiary level, especially if it does not have confidence that the consolidated requirements at parent entity level will be sufficient to support all entities in times of financial distress. The increase in requirements at subsidiary level would mean that they need to be matched with increased consolidated requirements at the parent entity level (to avoid double counting). This might prove costly for the parent entity and suggests that the parent entity will effectively bear increased losses of foreign subsidiaries outside the jurisdiction of the home authority. This will change the extent of the burden to be shared among the jurisdictions of the home and host authorities.

For example, a host authority might worry that if the losses of the subsidiary exceed the internal MREL/TLAC capacity, the excess losses will have to be absorbed directly at the subsidiary level (e.g. via application of the bail-in tool further up in the balance sheet). This is because the parent entity will not be obliged to absorb losses beyond what it has invested in the subsidiary as capital or TLAC/MREL. This is a direct consequence of the limited liability of the legal entities in the bank group. In the counterfactual, i.e. “[i]f the support offered by the resolution entity to its subsidiaries was unlimited and unconditional, introducing an internal TLAC [/MREL] mechanism would be redundant. Indeed, there would then be no doubt that losses would be absorbed at the resolution entity level. However, resolution groups are composed of separate legal entities, with limited liability and generally different creditors.”\textsuperscript{488}

Anticipating such outcomes, host authorities may aim to set stricter requirements at the individual subsidiary level.


Besides, host authorities may have a tendency to set the local requirements as equity capital (i.e. CET1) requirements, being the highest quality of capital, which ensures that the losses of the subsidiary can be absorbed by simply writing off the equity held by the parent entity. However, as noted elsewhere in this dissertation, the level of equity downstreamed to the subsidiary affects the double leverage in the group as a whole.

Similarly, in terms of the mechanism for the allocation of bank group resources, host authorities are more comfortable with prepositioning resources at the local subsidiary level instead of allowing capital and MREL/TLAC requirements to be waived or met with collateralised guarantees. In contrast, home authorities likely prefer solutions that provide more optionality as to how the bank group could allocate its resources dynamically in times of financial distress. This will not only allow the bank group to hold more resources at the parent entity level (i.e. in the home country jurisdiction), but it will also be likely less costly for the financing of the bank group as a whole. In this respect, the interest of the bank group and how it allocates its resources are probably aligned with the interests of the home authority. This is because they aim to support the entities that are most vital to the survival of the parent entity and the bank group. While there is nothing wrong with that, a corollary is the risk of omitting peripheral entities that are considered systemic and/or relevant for the financial stability and economy in some host jurisdictions but that are not necessarily vital to the survival of the bank group.

To mitigate the above differences and any other differences in the context of resolution planning and execution, a common solution is often to negotiate these matters in various EU and international fora. However, as this chapter will show, while substantial progress has been made in the EU, mainly by establishing single authorities for banking supervision and resolution in the Banking Union, i.e. the SSM and SRB, the possibility to divert to piecemeal solutions in times of financial distress may still be open.

The chapter underlines two reasons for this. One is that the EU framework is not always clear what set of provisions will ensure that the interest of all authorities are taken into consideration. Another reason is that both frameworks of cooperation among authorities in the EU and the framework concerning international authorities include provisions that are tilted towards the benefit of the home authority. This may lead some host authorities (especially those responsible for entities on the bank group’s periphery) to potentially take defensive actions if, in the course of the cooperation, there was no room to voice their concerns about the financial stability in their respective country.

To explain these positions, the chapter first discusses the cooperation among the resolution authorities in the EU and then turns to the provisions regarding the cooperation of the EU authorities with third countries (i.e. non-EU countries).

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2. Cross-border Cooperation and Coordination in the EU

2.1. The Objectives of Cross-border Cooperation and Coordination in the EU

The BRRD2 sets out twelve general principles for cooperation when decisions are to be made and actions are to be taken in a resolution event that involves more than one Member State. In general, those principles stipulate that the decision-making should aim to keep resolution costs as low as possible, while ensuring that an action is taken in a timely manner. Moreover, the supervisory, resolution and other relevant authorities are expected to ensure that decisions are made and actions are taken in a coordinated and efficient way.

Importantly, the principles establish that *due consideration should be given to the interests* of the Member States where the parent entity, the subsidiaries or significant branches are established. In particular, the impact of the decisions or (in)action should be assessed with regard to the impact on the financial stability, fiscal resources, resolution fund, deposit guarantee scheme, or investor compensation scheme in those Member States. Additionally, in terms of potential conflicting interests, the BRRD2 states that due consideration should be given to the objectives of balancing the interests in the various Member States involved. In particular, it is expected that Member States avoid unfairly prejudicing or unfairly protecting their interests, as well as unfair burden sharing. As a minimum, the BRRD2 provides obligations to consult the authorities on the elements of the proposed decision or action that may have an effect on the parent entity, subsidiary or a significant branch, or an impact on the stability of the Member State where those entities are established.

Normally, the resolution authorities are expected to follow the resolution plan (and with that, the defined resolution strategy) unless the resolution objectives can be achieved more effectively by other actions that are not provided in the resolution plan. In this context, it is recognised that transparency and coordinated and cooperative actions are most likely ways to achieve the result that lowers the cost of resolution.

Based on the principles summarised above, the resolution authorities need to achieve the following objectives:

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490 BRRD2, Article 87; regarding resolution objectives and how authorities are likely to react in different scenarios see the discussion between Gustav Sjöberg (2014) Banking Special Resolution Regimes as a Governance Tool, and Christos Hadjiemanuli (2014) Special Resolution Regimes for Banking Institutions: Objectives and Limitations, in Wolf-Georg Ringe and Peter Huber (eds.) When Should a Bank Enter Resolution?: Bail-outs, the Euro and Regulation, Hart Publishing (Oxford), pp. 177-208.

491 The following is considered when identifying a branch as significant?: (i) whether the market share of the branch in terms of deposits exceeds 2% in the host Member State; (ii) the likely impact of a suspension or closure of the operations of the institution on systemic liquidity and the payment, clearing and settlement systems in the host Member State; (iii) the size and the importance of the branch in terms of number of clients within the context of the banking or financial system of the host Member State, see Article 51 CRDS. See further EBA Guidelines on supervision of significant branches EBA/GL/2017/14.
(i) to ensure the continuity of critical functions;  
(ii) to avoid significant adverse effects on the financial system, including preventing contagion and maintaining market discipline;  
(iii) to protect public funds by minimising reliance on extraordinary public support;  
(iv) to protect covered depositors and covered investors;  
(v) to protect client funds and client assets.  

Of the five resolution objectives, two are connected to the aim of preserving financial stability, namely ensuring continuity of critical functions and avoiding adverse effects on the financial system. Such delineation of objectives is relevant in view of the provisions under which resolution authorities can opt to use their discretion not to continue with an agreed approach regarding a group resolution if they deem there is a threat to the financial stability in the relevant Member State. For example, in an event where the group or a subsidiary meets the conditions for resolution, a resolution authority can decide to disagree with the group resolution scheme proposed by the group-level resolution authority and take independent actions for reasons of financial stability. Therefore, if a resolution authority does not consider that the concerns about financial stability are duly taken into consideration, it may exercise its discretion. 

Such outcome may be a result of the sequence of events preceding the decision on resolution, including the course of resolution planning, the resolvability assessment, and the setting of MREL requirements. In other words, an authority reaching a decision (not) to cooperate will follow the continuum of the resolution planning process and the cooperation, or lack thereof, in the course of that process. Therefore, the resolution planning process is dependent on whether and how all authorities have been consulted, and how confident those authorities feel to proceed with a certain course of action (without resorting to ring-fencing activities). The next section considers the arrangement of cooperation among the EU authorities, and the reasons why some authorities may remain unconvinced that their interests are duly taken into account. 

### 2.2. Cooperation in the Banking Union

Already in Chapter II, it was noted that following the financial crisis, the EU framework moved to enhanced cooperation mechanisms through the establishment of single supervisory and resolution authorities, i.e. the SSM and SRB respectively, for large banks in the Banking Union. The Banking Union consists of the EU Member States that have the euro as their currency.
(Eurozone). Member States outside the BU (i.e. the non-participating Member States) may opt to participate under close cooperation arrangements.\footnote{Council Regulation (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions, OJ L 287/63 (SSM Regulation), Article 7; although, as Singh shows, there are differences between the participants in the BU that are part of the Eurozone, and non-Eurozone Member States that opted in the BU via close cooperation agreements. See Dalvinder Singh (2020) European Cross Border Banking and Banking Supervision, Oxford University Press (Oxford, 1st edn)}

Within the SSM, the European Central Bank (ECB) and the national competent authorities (NCA) share the supervisory responsibility for banks in the Eurozone.\footnote{European Central Bank, Guide to Banking Supervision (September 2014), p. 8.} The division of responsibility is made on the basis of the significance of the banks according to prescribed criteria. The ECB is responsible for direct supervision of significant banks,\footnote{Such supervision takes place in cooperation with NCAs within Joint Supervisory Teams (JSTs).} whereas the NCA supervise less significant banks. If necessary, the ECB may decide to exercise direct supervision over some banks. A bank is considered significant if: (i) the total value of the bank assets exceeds €30 billion or – unless the total value of its assets is below €5 billion – exceeds 20% of national GDP; (ii) the bank is one of the three most significant credit institutions established in a Member State; (iii) the bank is a recipient of direct assistance from the European Stability Mechanism; or (iv) the total value of its assets exceeds €5 billion and the ratio of its cross-border assets/liabilities in more than one other participating Member State to its total assets/liabilities is above 20%.\footnote{SSM Regulation, Article 6(4).}

Under the Single Resolution Mechanism (SRM),\footnote{See European Commission (24 November 2015) Updated version of first memo published on 15/04/2014 – Banking Union: restoring financial stability in the Eurozone, available at: http://europa.eu/rapid/press-release_MEMO-15-6164_en.htm?locale=en.} the Single Resolution Board (SRB) centralises the decision-making power regarding the resolution of bank groups in the Eurozone.\footnote{In this respect, see Regulation (EU) No 806/2014 of the European Parliament and of the Council of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund and amending Regulation (EU) No 1093/2010, OJ L 225/1} The SRM’s scope is equivalent to that of the SSM,\footnote{Regulation (EU) No 806/2014 of the European Parliament and of the Council of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund and amending Regulation (EU) No 1093/2010, OJ L 225/1 (SRMR), Article 2.} with competencies divided between the SRB and national resolution authorities (NRAs). However, the SRB has jurisdiction over all cross-border groups, whereby the parent entity and at least one subsidiary bank are located in different Member States of the BU (i.e. irrespective of the significance).\footnote{SRMR, Article 7(2)(b); see the SRB’s list of other cross-border groups, available at: https://srb.europa.eu/sites/srb/site/files/cross_border_groups_01_nov_2020_0.pdf}

The centralisation of the powers of the supervisory and resolution authorities in single institutions, operating under their respective regulations, should overcome any difficulties related to home-host country cooperation and in the consistency in the approach used. It also
obliterates the need for joint decisions among the relevant authorities and prevents possible conflicts.

Nonetheless, once national authorities outside the BU are involved, the cooperation is still conducted in supervisory and resolution colleges, where decisions on supervisory reviews, resolution planning and execution are made jointly, and where conflicts may continue to exist as to how EU law is transposed in the respective jurisdictions. It is however worthwhile noting that almost a third of the EU Member States do not participate in the Banking Union, including: Bulgaria, Denmark, Croatia, Poland, Romania, Sweden, the Czech Republic and Hungary.\(^{503}\) Only two of these countries, namely Bulgaria and Croatia have opted to conclude close cooperation agreements.\(^{504}\) In such a constellation, the authorities of the non-participating countries are often the host authorities of subsidiaries and significant branches in the EU. The SSM and SRB act as home supervisory and resolution authorities. Cooperation between them takes place in supervisory and resolution colleges, which is discussed next.

2.3. Cooperation in Resolution Colleges

The cooperation and coordination for resolution planning and in a resolution event for bank groups in which resolution authorities of more than one EU Member State are involved take place in a resolution college.\(^{505}\) Resolution colleges are bank-specific fora, where the resolution authorities negotiate and reach joint decisions on the bank group resolution plan, the group’s resolvability and the level of MREL resources that the parent entity and its subsidiaries are required to hold. In the event of resolution, the resolution college is where home and host authorities in the EU decide whether and what resolution action should be undertaken with respect to the bank group and any of its subsidiaries.\(^{506}\) For this reason it is of great significance for the cooperation and coordination how resolution colleges are organised, who takes part, and what is the quality and extent of information shared, which might help authorities to make informed decisions.

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503 See for a discussion on the decision to join the Banking Union Svend E. Hougaard Jensen and Dirk Schoenmaker (2020) Should Denmark and Sweden Join the Banking Union? Policy Contribution 2020/13, Bruegel.


505 BRRD2, Articles 88 and 89; see further 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 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, OJ L 184 (COM DR 2016/1075), Articles 50-60; see for further comment on the effectiveness of consistency of resolution authorities decisions and actions Nikoletta Kleftouri (2017) European Union Bank Resolution Framework: Can the Objective of Financial Stability Ensure Consistency in Resolution Authorities’ Decisions? ERA Forum (2017) 18(2): 263–27.

506 See BRRD2, Articles 91 and 92.
The way in which the resolution college is organised suggests that a lot of discretion is vested in the group-level resolution authority, i.e. the home authority as opposed to any of the host authorities. In particular, the home authority decides how frequently and what information it will disseminate to the participants (members and observers) in the college. Furthermore, the legislation sets out that the frequency for resolution college meetings is at least annually, and normally this is the case in practice. Nevertheless, the group-level resolution authority may organise other meetings with authorities, especially when a dialogue among certain participating authorities is required. In these interactions, the group-level resolution authority is responsible for circulating all the relevant documents in advance of the meeting. This means that it drafts or has control over all the documents circulated in the college, starting with the agenda points, to the formal joint decision documents, the written arrangements and procedures for the functioning of the college, and the meeting minutes.

In this setting, one can easily imagine that the group-level resolution authority (i.e. the home authority) primarily wants to put its own interests first, which is an intuitive conduct in the given situation. However, this may potentially lead to a lack of due consideration of the concerns of the other authorities involved. Normally, the meetings will be organised in a way that represents the interests of the home and a few of the host authorities that are systemic for the group. As a result, host authorities of more peripheral entities might wonder whether their concerns have been addressed, particularly if they do not receive more granular information on how the resolution process is envisaged to be operationalised and how it will take into account the financial stability concerns they may have. The peril of the cooperation breaking down is that it will result in a potential uncoordinated triggering of resolution or insolvency actions, in a ring-fencing of assets that the group might have relied on, and in the invoking of reputational contagion concerns. It therefore remains crucial to ensure that the interests of all authorities are noted in the course of resolution planning and when decisions on the resolution scheme are made.

Whether this is always the case is doubtful. While it is not possible to review and analyse actual resolution plans and resolution college meetings, potential concerns of authorities can be observed in the more nuanced reviews of the reports. For example, this includes the discussion of the level of detail and the extent to which entities are covered in the bank recovery and resolution plans, authorities’ consideration of what is a systemically important entity in their own jurisdiction and what they consider as a critical function that may lead to adverse effects on the financial stability in their jurisdiction. As explained below, often there is a discrepancy between what the home and host authorities might consider as systemically important. This potential discrepancy in combination with a cooperation framework that is

507 COM DR 2016/1075, Article 56.
508 COM DR 2016/1075, Article 56(5).
509 COM DR 2016/1075, Articles 54 and 55.
510 COM DR 2016/1075, Article 56(6).
skewed to the interests of the home authority leads to possibilities that other authorities use their discretion on the basis of ‘protecting financial stability’, even if this might lead to suboptimal outcomes for the resolution of the bank group as a whole.

As discussed in the next three sections, the EU framework does not display consistency in what different authorities may deem relevant to be included in the recovery and resolution planning process, when determining the systemic relevance of the different entities and when deciding whether an entity provides critical functions or not. This potentially makes it debatable how different authorities arrive at their decisions in the process of recovery and resolution planning, and in the execution of resolution actions (when they may deviate from the original arrangements on the grounds of protecting financial stability). The three situations are presented below.

2.4. Coverage of Entities in Recovery and Resolution Planning

According to the applicable provisions, the group-level resolution authority, normally the home resolution authority, drafts the group resolution plan, in consultation with the host authorities of the subsidiaries and significant branches in the bank group. Therefore, the home authority has a prominent role in determining the scope and level of detail regarding the entities covered in the group resolution plan. Under the BRRD2, group resolution plans should normally identify measures for the parent entity, the subsidiaries established in the EU, financial and mixed financial holding companies in the EU, and even subsidiaries established outside the EU.\(^{511}\) While the list of entities to be included in the resolution plan is comprehensive, the level of detail provided in the group resolution plan for all these entities might not always be to the satisfaction of all the authorities involved in the resolution planning process.

To this end, it is relevant how the home authority approaches the drafting of the group resolution plan. As a starting point in drafting the resolution plan, the resolution authority takes the group recovery plan provided by the bank group.\(^ {512}\) Therefore, the coverage of entities and the level of detail included in such plans play an important role in the drafting of the group resolution plan and its granularity regarding how individual subsidiaries are taken into account. As resolution plans in the EU do not include public sections, it is difficult to judge the extent to which they cover the entities in the bank group. Nevertheless, a parallel


observation can be made about the deficiencies of group recovery plans that serve as a basis for the group resolution plan. In this regard, the European Banking Authority’s report on the group recovery plans of EU banks from 2016 found that group recovery plans mainly took the parent entity perspective, which insufficiently considered the relevant recovery planning elements for individual subsidiaries. As a result, the joint decision between supervisory home and host authorities on the group recovery plans have not been reached in almost half of the supervisory colleges of the largest banks\(^5\) in the EU in 2016.\(^6\) The reasons for the lack of consensus were, inter alia, the material deficiencies in the group recovery plans related to the coverage of entities in the bank group.\(^7\)

The findings above are detailed, notwithstanding the specific provisions in Commission Delegated Regulation 2016/1075, which stipulates that the coverage of entities should be included in the group recovery plan, providing that the following entities should be included:

(i) entities that substantially contribute to the profit of the entity or entities covered by the recovery plan or to their funding; or
(ii) entities that hold an important share of the group assets, liabilities or capital; or
(iii) entities that perform key commercial activities; or
(iv) entities that centrally perform key operational, risk or administrative functions; or
(v) entities that bear substantial risks that could, in a worst-case scenario, jeopardise the viability of the institution or group; or
(vi) entities that could not be disposed of or liquidated without likely triggering a major risk for the institution or group as a whole; or
(vii) entities that are important for the financial stability of at least one of the Member States in which they have their registered offices or operate.\(^8\)

Note that only the last condition refers to the concerns that EU Member State authorities may have about the operations of the bank group’s entities. The remaining parameters mainly concern the relevance of the entities from the perspective of the bank group, and by logical implication its home authority.

Subsequently, in 2017 the EBA issued Recommendations on the coverage of entities in group recovery plans (EBA Recommendations).\(^9\) The said Recommendations distinguish between entities that are material for the banking group (‘group relevant entities’), entities that are material for Member States’ financial systems and local economy (‘locally relevant entities’),

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5\(^{13}\) Referred to as ‘closely monitored colleges’, see European Banking Authority (EBA), Report on the functioning of supervisory colleges in 2016, 22 March 2017.
5\(^{15}\) Ibid.
5\(^{16}\) COM DR 2016/1075, Article 7(2).
5\(^{17}\) European Banking Authority (November 2017) Recommendations on the coverage of entities in a group recovery plan, EBA/Rec/2017/02.
and non-material entities (i.e. entities that are not relevant for the bank group or Member States’ economy).\textsuperscript{518} Group relevant entities are designated with reference to the Commission Delegated Regulation on recovery and resolution planning.\textsuperscript{519} In comparison, the definition for locally relevant entities stipulated that those are entities that perform critical functions for the economy and the financial system of one or more Member States.\textsuperscript{520} Effectively, the latter provision aligns the basis on which Member States could argue that their financial stability is threatened by reference to the potential threat to critical functions.

In terms of compliance with the above provisions on the coverage, pursuant to the Treaty on the Functioning of the European Union (TFEU), EU recommendations are generally non-binding legal acts,\textsuperscript{521} since national competent authorities may either ‘comply or explain’.\textsuperscript{522} The table on compliance with the recommendation shows that not all authorities intend to comply with it and follow the recommendation for group recovery plan (presumably in their internal policies). For example, the Polish authority explicitly stated that the EBA recommendation did not give enough consideration to the necessity to protect the stability of host countries’ financial markets.

By implication, one may argue that the corresponding resolution plans for bank groups may analogously echo the deficiencies of the group recovery plans and lack the details on all the entities in the bank group that a host authority may deem important for its financial stability. This argument could be backed with the circumstantial evidence based on the findings of the European Court of Auditors regarding the SRB, where it was indicated that in the resolution plans information on financing in resolution was not detailed for branches and subsidiaries located in Member States outside the Banking Union.\textsuperscript{523} Such a finding can indicate the potential difficulties of cooperation between authorities located across the EU. In particular, it highlights the discrepancy between what home and host authorities deem relevant for the protection of financial stability, and what is a balanced view on taking the interest of all authorities involved into account.

\textsuperscript{518} European Banking Authority (November 2017) Recommendations on the coverage of entities in a group recovery plan, EBA/Rec/2017/02., paragraph 16.
\textsuperscript{519} In relation to COM DR 2016/1075, Article 7(2)(a)-(e).
\textsuperscript{520} European Banking Authority (November 2017) Recommendations on the coverage of entities in a group recovery plan, EBA/Rec/2017/02., paragraph 18.
\textsuperscript{521} Consolidated version of the Treaty on the Functioning of the European Union (TFEU), Article 288; formerly the Treaty establishing the European Economic Community (TEC), Article 249.
2.5. Coverage of Entities and Macro-prudential Buffers

The differences in views on what is of systemic importance could perhaps be even more prominently noted in the coverage of entities: (i) under the supervision of the ECB (SSM), and (ii) ‘other systemically important institutions’ (‘O-SIIs’) as determined by national authorities.\(^{524}\)

In this regard, as noted above, significant institutions within the remit of the ECB (and SRB) are those that have a total value of assets that exceeds EUR 30 billion or where those assets exceed 20% of the GDP of the Member State where they are established. Additionally, on notification by the national competent supervisory authority, the ECB can make a decision on an institution’s significant relevance for the domestic economy.\(^{525}\) Further to the scope defined in the SSM Regulation regarding significant institutions within the remit of the SSM, the SRB also covers other cross-border banks.

These criteria are however narrower than those used by national authorities to determine O-SIIs in their jurisdictions. Namely, under the provisions in the CRD5, national competent authorities determine O-SIIs for the purpose of setting macro-prudential capital buffers as part of the capital requirements for banks.\(^{526}\) The EBA Guidelines further specify the criteria for making this assessment,\(^{527}\) including the parameters of the bank size, its importance for the economy of the relevant Member State or for the Union, the substitutability of the bank group’s functions; its complexity, i.e. cross-border activity; as well as the interconnectedness of the bank group or (sub-) group with the financial system.\(^{528}\) In this regard, it is worthwhile noting that, as with the Recommendations of the EBA, Member States can comply, or explain their non-compliance with the EBA Guidelines, and that a number of Member States are not compliant with the Guidelines regarding the O-SII assessment criteria. In particular, some national authorities of smaller Member States consider other factors for assessing the systemic relevance of institutions under their jurisdiction.\(^{529}\)

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\(^{524}\) See Singh (2020) at p. 53.

\(^{525}\) SSM Regulation, OJ L 287, Article 6(4).

\(^{526}\) CRD 5, Article 131(3).

\(^{527}\) European Banking Authority (December 2014), Guidelines on the criteria to determine the conditions of application of Article 131(3) of Directive2013/36/EU (CRD) in relation to the assessment of other systemically important institutions (O-SIIs), EBA/GL/2014/10; see further European Banking Authority (EBA), Other Systemically Important Institutions notified to the EBA 2015, available at: https://www.eba.europa.eu/-/eba-discloses-first-list-of-o-siis-in-the-

\(^{528}\) Ibid, at p. 8; the criteria defined by the EBA are in line with the Basel framework for the identification of Domestic Systemically Important institutions. See Basel Committee on Banking Supervision (October 2012) A framework for dealing with domestic systemically important banks, , available at: https://www.bis.org/publ/bcbs233.pdf

\(^{529}\) See the reply from Malta and Slovenia in the EBA Compliance Table – Guidelines based on information supplied by them, the following competent authorities comply or intend to comply with: EBA Guidelines EBA/GL/2014/10 on criteria for the assessment of O-SIIs, published on 16th December 2014, EBA/GL/2014/10 Appendix 1, available at: https://eba.europa.eu/sites/default/documents/files/documents/10180/930752/1162d5db-043c-4a2a-a942-ca107d6b1a34/eba%20gl%202014%2010-compliance%20table-guidelines%20on%20criteria%20for%20the%20assessment%20of%20o-siis.pdf
In view of the above, it is clear that there is no coherent manner in which the EU authorities involved can form a uniform view regarding what may be considered as systemically important. Adding to this is also the possibility to refer to ‘locally important entities’ as those providing critical functions. The difficulty of such a process, as explained next, is that the discussion on how to identify ‘critical functions’ is ongoing and that multiple interpretations may be possible.

The preliminary observation is that systemic relevance can be debated on several bases, and therefore the question should be asked whether a group-wide resolution planning process or event takes into account the financial stability concerns of all authorities.

2.6. Discretion and Financial Stability Concerns

As noted earlier, one way for a resolution authority to consider the effects on the relevant Member State’s financial stability is to assess the need to preserve the provision of critical functions. Critical functions are defined as activities, services or operations the discontinuance of which is likely in one or more Member States to lead to the disruption of services that are essential to the real economy or to disrupt financial stability. In a first step, the bank group conducts a self-assessment of the critical functions, including them in its recovery plan. In a second step, the resolution authority, in the course of resolution planning, confirms the critical functions. The identification and confirmation of what is in fact a critical function, and any differences in interpretation, may determine what actions will be taken in the course of the resolution event. In the context of cooperation, it may leave a broad scope for negotiation and opting for non-cooperation arrangements.

The assessment of the bank group’s critical functions is made in the course of resolution planning; however, it is also undertaken prior to the decision to put a bank group into resolution, namely when resolution authorities consider whether the resolution action is conducted in a public interest (i.e. the public interest assessment).

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530 By comparison, the legislation stipulates that core business lines are those business lines and associated services that provide material sources of revenue, profit or franchise value for a regulated entity or for a bank group. See BRRD2, Article 2(1)(35) and (36).
531 BRRD2, Annex A, point (7).
532 See Commission Delegated Regulation (EU) 2016/778 of 2 February 2016 supplementing Directive 2014/59/EU of the European Parliament and of the Council with regard to the circumstances and conditions under which the payment of extraordinary ex post contributions may be partially or entirely deferred, and on the criteria for the determination of the activities, services and operations with regard to critical functions, and for the determination of the business lines and associated services with regard to core business lines, OJ L 131/41, Recital (7); in this context, it is useful to note that, according to the SRB, the starting point for resolution planning is the (group) recovery plan, see SRB (2016) Introduction to Resolution Planning, p. 21.
533 Note that in the cases of Banco Popular Español (7 June 2017) on the one hand and Veneto Banca (23 June 2017) and Banca Popolare di Vicenza (23 June 2017) on the other hand the presence and absence of critical functions played a role in the determination of whether a resolution action should be taken in the public interest, as opposed to liquidation.
With regard to the determination of critical functions, in 2015, the EBA observed substantial variations in the process across bank groups in terms of the overall approach to their identification.\(^{534}\) According to the EBA, this was the result of, inter alia, differences in interpretation of the definition of ‘critical function’, including the meaning of ‘function’, ‘activities’, ‘services’, ‘operations’, ‘real economy’, ‘discontinuance’ and ‘substitutability’. Subsequently, in 2016, the European Commission issued a binding Delegated Regulation aiming to clarify the definition of critical functions.\(^{535}\) However, this Delegated Regulation did not clarify all the items listed above.

By the end of 2017, an analysis requested by the European Parliament’s Committee on Economic and Monetary Affairs demonstrated that the definition and methodology of assessing critical functions across the EU Member States was still not applied in the same way.\(^{536}\) In particular, in order for resolution authorities to assess if there is a critical function, they conduct impact and supply side (i.e. substitutability) analyses. The impact analysis assesses whether a disruption in the function will have a low, medium or high impact on the financial market or the real economy. In the supply analysis, it is assessed whether the function can be substituted within a reasonable period of time.\(^{537}\) Both analyses are largely based on expert judgments regarding factors such as market share\(^{538}\) (in the impact analysis) or obstacles and time needed for substitution.\(^{539}\) In addition, banks are allowed to use best estimates and all the reported figures are tied to other accounting reports.\(^{540}\) As a result, there is ample room for discussing whether there is a critical function in a particular Member State and if it might be the effect on financial stability.

The purpose of setting out the above room for interpretation is not to argue that legislation should introduce mechanic thresholds for the determination of critical functions. As De Groen explains, differences in assessment are necessary, since whether a function is substitutable can depend on the markets in different Member States. Besides, the criticality of a function

\(^{534}\) European Banking Authority (March 2015), Comparative report on the approach to determining critical functions and core business lines in recovery plans.

\(^{535}\) Commission Delegated Regulation (EU) 2016/778 of 2 February 2016 supplementing Directive 2014/59/EU of the European Parliament and of the Council with regard to the circumstances and conditions under which the payment of extraordinary ex post contributions may be partially or entirely deferred, and on the criteria for the determination of the activities, services and operations with regard to critical functions, and for the determination of the business lines and associated services with regard to core business lines, OJ L 131/41.

\(^{536}\) Willem Pieter de Groen (2017) The Provision of Critical Functions at Global, National or Regional Level, Is there a need for further legal/regulatory clarification if liquidation is the default option for failing banks?, In-Depth Analysis Requested by the ECON Committee, European Parliament


\(^{538}\) Note that this can be defined as a regional, national, EU or global market. When a regional market is identified, the impact on this market then needs to be assessed by considering the larger national market.


\(^{540}\) De Groen (2017), at p. 11.
might change over time relative to the economic and financial conditions.\footnote{De Groen (2017), at p. 13.} Introducing mechanic thresholds would clearly impede the much needed flexibility that a decision under stress conditions may require given the uncertainty of the situation that caused the stress. However, at the same time, this flexibility should not be used for unfairly prejudicing or unfairly protecting self-interests in the decision-making, as noted in the principles for cooperation.

Therefore, a preferred solution would be one of a softer nature, in the form of harmonisation of reporting requirements, as well as reports on best practices, which could result in better informed decision-making and actions taken in the event of resolution. More importantly, such information should be analysed in resolution colleges, where resolution authorities can compare their methods and views, which would facilitate mutual understanding when cooperative solutions need to be found.

For the time being, what could be considered systemically relevant by different authorities, and how this is reflected in mutual discussions in resolution colleges and in group resolution plans, is based on a piecemeal framework, potentially serving separate authorities’ self-interests ahead of and in resolution. How to possibly tackle this misalignment is considered in section 4 below. Before that, to provide a more holistic view, the EU framework for cooperation with third-country authorities is considered.

3. Cross-border Cooperation and Coordination with Third Countries (International Perspective)

3.1. The Basis of the International Framework for Cooperation, and Ongoing Progress

The above dynamics in home-host cooperation, whereby the interests of the host may not be fully or sufficiently taken into account, leading to a potential lack of cooperation ahead of and in resolution, can also be seen at international level. In the context of cooperation among the EU Member States, the fora are clearly set out, with resolution colleges and Banking Union institutions. The issues that mainly arise in these situations seem to be lack of coherence in the framework regarding the systemic relevance of institutions and, to some extent, the bias towards the interests of home countries. In the international context, there seems to be more ambiguity due to the different multilateral and bilateral cooperation arrangements, where it is not certain what level of information is shared among the authorities concerned. In particular, a recent study by the Bank for International Settlements (BIS) demonstrates that the progress in the cooperation between home and host authorities is limited, especially
where the authorities are responsible for bank group entities that are only locally systemic for the host jurisdiction, but not for the bank group itself.\textsuperscript{542}

To explain the limitations in cooperation it is worthwhile noting that, following the financial crisis,\textsuperscript{543} in the broader international framework, the Financial Stability Board created several provisions for effective cooperation between home and host authorities. In particular, the FSB Key Attributes of Effective Resolution Regimes for Financial Institutions stipulate, inter alia, that home and host authorities need to establish Crisis Management Groups (CMGs) for G-SIBs backed by institution-specific cross-border cooperation arrangements (CoAGs), thus establishing processes for cooperation and information sharing.\textsuperscript{544} In addition, for G-SIBs, according to the FSB, home authorities of other banks with cross-border operations that are subject to resolution should also maintain cross-border coordinating fora.

In order to establish a balance between efficiency and inclusiveness, the FSB limited participation in the CMGs to those authorities of bank groups that are considered material to the resolution. The materiality assessment of the entities and relevant authorities is connected to the exercise concerning the identification of material sub-groups to which internal TLAC requirements are applied. This includes entities that hold a proportion of the risk-weighted assets, total operating income, and leverage exposure of the G-SIB. An additional criterion is that an entity has been identified by the CMG as material to the exercise of the firm’s critical functions.\textsuperscript{545}

Note that with regard to the identification of the materiality of the entity in relation to critical functions, reference is made to the determination by the CMG. It is not left to the sole discretion of the host authority. To this end, a home authority with access to group-level information may provide evidence to the host authority that a sub-group does not meet the conditions for materiality (including regarding the provision of critical functions). While the host authority may provide evidence to the contrary, ultimately the decision will be taken in consultation between the home and host authorities.\textsuperscript{546}

In this respect, it is also worthwhile underlining that the criteria for the determination of material sub-groups are only used indicatively. It does not suggest that if an entity or sub-groups meets the criteria, its authority will automatically be included in the CMG composition.


\textsuperscript{544} FSB Key Attributes 8 and 9.

\textsuperscript{545} See FSB Guiding Principles on the Internal Total Loss-absorbing Capacity of G-SIBs (‘Internal TLAC’), Guiding Principle 1; in relation to Section 17 of the FSB Principles on Loss-absorbing and Recapitalisation Capacity of G-SIBs in Resolution, Total Loss-absorbing Capacity (TLAC) Term Sheet (9 November 2015).

\textsuperscript{546} FSB Guiding Principles on the Internal Total Loss-absorbing Capacity of G-SIBs (‘Internal TLAC’), Principle 1.
The CMG composition is rather flexible and may include a range of criteria used by the home authority.\textsuperscript{547}

In addition, the FSB Key Attributes note that there should be close cooperation with authorities in other jurisdictions where firms have a systemic presence. To this end, the FSB issued guidance on the cooperation between home and non-CMG host authorities (hereinafter non-CMG Guidance).\textsuperscript{548} The non-CMG Guidance includes the process and criteria for identifying non-CMG jurisdictions where a G-SIB has a systemic presence. In terms of the process, both the home and host authorities take measures to make the assessment.

The non-CMG Guidance sets out that the home authority should generally accept the assessment by the host authority, although in case of divergence between the assessments, both authorities should review the criteria and factual basis used. Amongst the criteria for assessing systemic presence, the non-CMG Guidance includes the presence of critical functions, the size of the bank group’s operations relative to the host jurisdiction’s market, interconnectedness with other market participants, substitutability, and complexity of the information. Nevertheless, often home authorities do not use an even approach to identify the jurisdictions where G-SIBs have a local systemic presence.\textsuperscript{549}

In this context, the alternative cooperative arrangements to the CMGs for cases where a G-SIB or other systemically important bank has operations that are of systemic relevance to host authorities include bilateral and multilateral cooperative arrangements, as well as discussions and information sharing on resolution as part of supervisory cooperative arrangements (e.g. supervisory colleges). The difficulty according to the BIS survey is that normally there is a gap in these cooperative arrangements since resolution-specific multilateral arrangements are not always put in place.\textsuperscript{550} For example, in some cases multilateral cooperation arrangements include multilateral fora in the form of regional sub-groups. These sub-groups include participation of the main CMG members and key host authorities that are not members of G-SIBs. However, in other cases the available fora for cooperation are adapted supervisory framework arrangements, where the information that is shared is not always resolution specific.

As regards the lack of multilateral cooperation arrangements, issues of confidentiality or equivalence provisions may restrict a host authority’s ability to share information received from a home authority in the alternative forum. For example, the BIS reports that a significant number of non-CMG host authorities do not receive granular information or only information

\begin{footnotesize}
\textsuperscript{547} Baudino et al. (2020), paragraph 22, p. 11.
\textsuperscript{548} FSB Guidance on Cooperation and Information Sharing with Host Authorities of Jurisdictions where a G-SIFI Has a Systemic Presence That Are Not Represented on its CMG (3 November 2015); in relation to this see also FSB Key Attributes 8.1, 11.8 and 9.1 (iii) stating that there should be close cooperation with non-CMG host jurisdictions, whose authorities should have access to recovery and resolution plans and information which may affect those jurisdictions.
\textsuperscript{549} Baudino et al. (2020), paragraph 23.
\textsuperscript{550} Baudino et al., paragraph 30, p. 14.
\end{footnotesize}
that is publicly available. To this end, the information received by host authorities (including Hong Kong, New Zealand, Uruguay, Malaysia, etc.) differs relative to the fora in which they are involved. This is relevant because the nature of the cooperation arrangement and of the information shared determines the willingness of host authorities to cooperate. To this end, it is particularly concerning that a significant number of host authorities (normally those outside the CMG composition) reported that they would not support the resolution strategy of the home authority, as they were not convinced that this would protect financial stability in their jurisdictions.

To see how the FSB principles, and the different cooperation frameworks either in CMG or non-CMG arrangements, operate in the EU, the next section reviews the applicable provisions on international cooperation in the BRRD2.

### 3.2. Third-country Cooperation Arrangements under the EU Framework

In view of the above background, beyond the regional cooperation among EU authorities in resolution colleges, as described above, the EU framework lays down the basis of cooperation with third-country authorities. It establishes the possible arrangements under which bilateral and multilateral cooperation can take place between EU resolution authorities and authorities of third countries, irrespective of whether this is commenced within or outside the composition of a CMG.

These arrangements can be based both on legally binding agreements and on Memoranda of Understanding (MoU), as described in the next section. Additionally, the specific fora for discussion concern the possible involvement of third-country authorities in the regional resolution colleges. Under Title VI of the BRRD2, cooperation is organised via both international agreements and Memoranda of Understanding (MoUs). The European Commission may propose to the Council of the EU to negotiate provisions for international agreements regarding the means of cooperation between the resolution authorities and the relevant third-country authorities. Until such agreements are concluded, the BRRD2 provides that the European Banking Authority may conclude non-binding framework cooperation agreements with third countries. Additionally, the BRRD2 stipulates that both supervisory and resolution authorities can conclude non-binding cooperation agreements in line with the EBA framework with relevant third-country authorities. In this respect, it

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551 Baudino et al., paragraph 64, p. 27.
552 Baudino et al., paragraphs 67-69, p. 28, in relation to paragraphs 83-84, p. 33.
553 BRRD2, Article 93.
554 BRRD2, Article 97(1).
555 BRRD2, Article 97(4); for example, the EBA has concluded a framework cooperation agreement with the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, the U.S. Securities and Exchange Commission, and the New York State Department of Financial Services (collectively, "U.S. Authorities"), see
should be clarified that, within the Banking Union, the SRB represents the national resolution authorities of Member States participating in the Banking Union in the cooperation agreements both with third countries and with other, non-participating EU Member States. The international agreements and the non-binding cooperation frameworks are additional to membership of the CMGs whereby the CoAGs that are concluded are institution specific.

Until international agreements are put in place, the cooperation with third countries’ authorities in all available fora is based on non-binding cooperation agreements, which may have limited efficacy in coordinating the resolution of internationally active bank groups, as was the experience in the financial crisis. Besides, the BRRD2 expressly provides that until an international agreement is reached, Member States can refuse to recognise a third-country resolution action if, inter alia, those actions have an adverse effect on the financial stability of the Member States, or have material fiscal implications for a Member State. Such discretion for EU Member States allows to potentially limit their commitments under the relevant cooperation agreements.

In this respect, it should also be clarified that the cooperation agreements concluded, for example, by the SRB do not contain a commitment to formal cooperation in resolution. To be fair, there is a recognition that the legal duties and objectives of the authorities pursue common goals, including maximising recoveries, minimising losses and minimising moral hazard. Moreover, it is even more important that most of the cooperation agreements include a due consideration of what impact a resolution action may have on the financial stability in other countries.

In particular, the due consideration of the impact on the financial stability of other countries is also included in the cooperation agreements with the authorities of third-country entities that are considered both systemic and more peripheral for the bank group. This includes cooperation agreements with Canada, the US, Japan, Brazil, Mexico, Serbia and Albania.

As Singh points out, this is especially relevant for third countries such as the accession countries to the EU (e.g. Serbia, Albania), which have high exposures to EU-based bank groups. The high exposure of the banking sector of the said third countries, and the relative immateriality of the entities in these countries for the rest of the bank group, may indicate a misalignment of interests between the home and host authorities. The reason is that, the home authority (which in most of these cases will be the SRB) and the host authority (normally

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556 SRMR, Article 32(1) and (4); in this respect, the SRB concluded cooperation agreements with a number of authorities, see [https://srb.europa.eu/en/content/cooperation](https://srb.europa.eu/en/content/cooperation)


located in the accession country with high exposures to the rest of the bank group based in the EU) may have different incentives to cooperate. In this situation, it is likely that the home authority will engage merely in pro-forma exchanges. Consequently, the host authority will err to make use of its discretion, and aim to protect local financial stability by protecting the subsidiary in its own jurisdiction without taking into account the impact on the group as whole.

3.3. The Third-country Cooperation Forum under the EU Framework

The resolution college forum, discussed in the specific context of the cooperation of EU resolution authorities above, can also serve as a (multilateral) forum for cooperation with third-country authorities. Third-country authorities can normally participate as observers (i.e. not being members with voting rights for decisions of the college). In addition, under the EU framework, they may be invited to the resolution college forum if an EU parent entity has a subsidiary or a significant branch in a third country.\textsuperscript{559} In cases where the parent entity is established in a third country and has subsidiaries or significant branches in more than two EU Member States, the framework calls for the establishment of a European Resolution College (ERC).\textsuperscript{560} As in the resolution college, the third-country resolution authority of the parent entity can be invited to the ERC as an observer.\textsuperscript{561}

In this sense, the resolution college can be considered as one of the international multilateral fora where cooperation can take place. However, one can easily imagine that the EU authority has more incentives to cooperate with the authority of a third country where e.g. a parent entity is incorporated (such as in the case of the ERC) than with the host authority of a third country where a subsidiary is established that does not pose a systemic risk to the rest of the bank group in the EU.\textsuperscript{562} It is here where it becomes relevant that participation in the resolution colleges is mainly subject to the discretion of the EU resolution authority. While the resolution authority has the obligation to identify the participants in the college, if an observer wants to be involved, it needs to send a request for participation to the group-level resolution authority in the EU, which is organising the resolution college of the ERC.\textsuperscript{563} Upon

\textsuperscript{559} BRRD2, Article 88(3) in relation to Article 98.
\textsuperscript{560} BRRD2, Article 89.
\textsuperscript{561} ERCs are expected to function as regular resolution colleges as established for bank groups with parent entities in the EU (see Article 89(2) of the BRRD2). However, a number of questions are left open by this Article, e.g. what joint decisions can the authorities in this forum make if the relationship of the EU subsidiaries with the ultimate parent entity in the third country follows a different ownership chain (which, at a minimum, complicates the logic of having MREL and TLAC decisions made for those entities). Such a situation should be clarified with the CRDS provisions, according to which the activity of third-country bank groups will require the establishment of EU-based intermediate parent undertakings.
\textsuperscript{563} See Article 52(1) of COM DR 2016/1075.
this initiative, the EU resolution authority will decide if an invitation is extended and what will be the conditions for cooperation.\footnote{Article 52(2) and (3) of COM DR 2016/1075.}

These provisions leave little room for negotiation, tilting the balance of compromise to the advantage of the EU resolution authority, and which the observer may perceive as a ‘take-it-or-leave-it’ offer for participation in the forum. Besides, in order to participate in resolution colleges, third-country authorities need to meet confidentiality requirements.\footnote{BRRD2, Article 98.} In this context, for some third-country observers, the EU resolution authority may give priority to assessment of the confidentiality provisions in the law of the third country, if the cooperation with that particular observer is more important to the EU authority.

Moreover, as noted earlier, the information that is shared in the resolution college is also subject to the discretion of the group resolution authority in the EU, with members and observers not receiving the same level of information. As Singh indicates, while members of the college will be expected to be informed and take part in the decision-making process, the information that will be shared with the observers can include only general conclusions on the resolution planning exercise and resolvability assessment of a given bank group.\footnote{See Singh (2020), p. 130.} It may be the case that the observers contribute to the discussion relevant for the development of the resolution plans and resolvability assessment, while they may not see the final plan and assessment made at the level of the EU.

In line with the findings in the international context, this lack of reciprocity in the information that is shared for the operationalisation of the resolution actions may lead to some authorities in the multilateral framework departing from the cooperation arrangements and the (group) strategy.

### 4. Concluding Remarks

The framework as defined with regard to the cooperation within the EU authorities and between the EU authorities and third-country authorities includes some common principles which are provided for in the legislation or in the cooperation agreements respectively. Among these are the principles of efficiency and preserving value, as well as having due consideration of how actions may affect the financial stability in other EU Member States and third countries. The extent to which these principles can be adhered to will depend on the quality of the cooperation.

In turn, such cooperation depends on the extent to which home and host authorities have a mutual interest in participating in it. Often, the home and host authorities will not have
reciprocal interests. In fact, as pointed out before, it might be the case that more peripheral entities have a higher risk exposure to the bank group, although they themselves are not material for its survival.

To try to fix this misalignment, Singh argues that it is crucial to provide legitimacy to the cooperation and coordination arrangements, notwithstanding the unequal materiality of the entity. To this end, it might be useful to establish a more consistent framework, e.g. by recognising the systemic significance of entities in line with host authorities’ O-SII determination (Singh) and by streamlining the views on what local entities provide critical functions. Such views can then be reflected in the recovery and resolution planning process, particularly in the participation in EU and other international cooperation arrangements, while practice may establish the level and content of information shared in the quest of building mutual trust.

The above suggestion should not be read as a call for resorting to more detailed provisions. These could make the process more rigid and potentially impractical in events where a flexible and dynamic response is required. In fact, with regard to the cooperation among the EU authorities (including on the coverage and systemic importance of entities that provide critical functions), it is not a lack of provisions that is the problem. There is an abundance of such provisions. The difficulty is the coherence in what a bank identifies as relevant entities, in what is determined as significant institutions in the EU, and in what entities are considered to have critical functions.

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Chapter VI: Summary and Conclusion

1. Summary of the Research Question and Approach

More than ten years after the financial crisis that started in September 2007, the topic of how to resolve large financial institutions (called bank groups throughout the dissertation) has remained prominent. In particular, the mechanics of operationalising resolution regimes, as a hallmark reform across international financial regulation in the post-financial crisis era, are still under review. The dissertation joined the discussion on the assessment of the effectiveness of the resolution regimes from the perspective of solving the problem of the complexity of large bank groups and making them safe to fail as opposed to ‘too big to fail’.

In particular, the dissertation focused on the provisions that affect bank groups’ funding which could define their loss-absorbing and recapitalisation capacity at the individual entities level and at the level of the group as a whole. The effects on bank group funding are primarily noticeable as a result of the implementation of the WDC power and the bail-in tool. The implementation of both of these resolution actions require banks to hold certain types of liabilities that can ensure that banks will be able to absorb the losses of their failure. In the EU framework, this has been achieved by introducing the TLAC requirements for G-SIBs and the MREL requirements for all banks in the EU.

The corporate complexity of bank group structures has been complicating the way in which resolution powers such as the WDC power and the bail-in tool can be used in a resolution event. The problem of the ‘complexity of bank groups’ is not a novel one. It is usually defined as a problem that consists of two elements, i.e. bank groups (i) consist of multiple legal entities, which (ii) are operating across different jurisdictions under the remit of different authorities that are responsible for safeguarding national financial stability. While the latter element has been discussed more extensively, in particular the issue of international cooperation or lack thereof, the first element, i.e. the multiple entities in a group structure, has less frequently been a topic of discussion. Thus far, Herring and Carmassi have provided the most extensive study on the corporate complexity of bank groups and their operations via an extensive number of legal entities.

In line with the said study, and in order to develop its own approach, the dissertation started from the questions: (i) why do banks organise with multiple legal entities? And (ii) can this make them less stable? By reviewing these questions in the first chapter, the dissertation developed a perspective through which to consider the appropriateness and effectiveness of the current EU resolution framework (by using the WDC power and the bail-in resolution tool).

In this regard, Chapter I explained that the most common reasons for bank groups to organise as an assembly of numerous legal entities are banking regulation and tax. However, the dissertation indicated that while regulation and tax play a role in the design of the legal structure of bank groups, they cannot on their own explain the existence of hundreds or thousands of legal entities across a number of jurisdictions. With respect to ‘tax’, the
dissertation argued that this reason equally applies to both banks and other commercial groups of companies. Yet, in practice, bank groups organise with double the number of legal entities compared to commercial groups of a similar market size. Besides, neither the tax nor the bank regulation rationale justify why bank groups operate with more than one (or two, in the case of ring-fencing of banks’ activities) legal entity(-ies) in the same jurisdiction.

Thus, it was suggested that the conceptual explanations as offered in the literature might better explain the reasons for bank groups to organise their operations in multiple legal entities. In particular, Herring and Carmassi argued that, apart from tax and regulation, bank groups make their own decisions on the level of corporate separateness (i.e. the number of legal entities they decide to operate with). The aim of such corporate separateness is to mitigate information asymmetries among the different stakeholders in the bank group. In the context of risk-taking in the banking sector, these are the information asymmetries that arise between the shareholders and the creditors of the firm. This is related to shareholders’ propensity to shift the risk of the business to the creditors, as they benefit from the upside during business as usual, but bear only a limited downside in bearing the losses of the firm in the event of failure. As a result, shareholders have an incentive to supplement less risky assets with riskier assets, thus increasing their gains in the normal course of business. The corporate separateness allows creditors to better monitor the bank group’s assets, e.g. by isolating them in non-risky and risky subsidiaries. Thus, they will be able to better price the debt of the firm relative to the risk-taking activities prompted by the shareholders’ incentive; or decide whether they will borrow to such a firm at all.

By looking at the legal structure of bank groups, which, as for any commercial group of companies, is underpinned by corporate and contract law, Chapter I underlined that, besides the information asymmetry argument, there is a legal argument why bank groups will organise as an assembly of multiple legal entities. Namely, while it is correct to observe that information asymmetries can be mitigated by corporate separateness, having separate legal entities is not indispensable since creditors can always ask a debtor to hold its accounts separately.

The ‘legal argument’ emphasises the role of the ‘entity shield’ established by corporate law. The entity shield is relevant since it segregates the assets of the firm from those of its shareholders, thus putting those assets out of reach of shareholders’ personal creditors. This is useful mainly because it provides the external creditors of the firm with a claim on a specific pool of assets, thereby ensuring that they can enforce this claim in the event of a failure. In essence, unlike the ‘information asymmetry’ argument, which emphasises the prominence of the monitoring capabilities of external creditors, the ‘legal argument’ highlights the relevance of their ability to enforce their claims in a group structure.

The dissertation pointed out that while these findings are quite relevant, their explanatory powers are limited when considering the different bank group funding structures, since they concern the effects on the external creditors of bank groups.

In this context, it should be noted that in bank groups with integrated centralised funding models (such as the ‘big bank’ and ‘holding company’), it is the parent entity that raises debt
from external creditors and downstreams it to the legal entities. Sure enough, those external creditors will be interested to know the composition of the assets of the bank group, which can be divided into risky and non-risky subsidiaries. However, as noted before, the external creditors may not need such a division to monitor the assets of the bank group. In other words, there may potentially be other means to allow those creditors to monitor the bank group’s assets (e.g. included in contractual provisions).

From the perspective of enforcing their claims, the external creditors in an integrated funding model will only have claim on the assets of the parent entity. However, the situation will be different if the bank group has adopted a disintegrated funding model, where the subsidiaries need to raise their own funding. In that situation, both the information asymmetry argument and the legal argument make much more sense. In this context, it should be noted that most bank groups operate via centralised funding models. Even in cases where they do not, there are effectively clusters of sub-groups (in the same group) that raise funding in different national and regional markets, which is then internally downstreamed to the entities in the same sub-group.

Given these observations, the dissertation considered that it is relevant to examine why bank groups organise with multiple entities, particularly in centralised funding models. The hypothesis laid out in Chapter I was that bank groups choose the group structure in order to manage their highly leveraged business models. For this purpose, the group structure allows banks to utilise a double-leverage structure. Such structures are useful as they allow capital to be raised externally by the parent entity and to be leveraged once at its own level and another time at the level of the subsidiary. They are more prominent since they enable the parent entity to raise less expensive debt and downstream it as more expensive equity to the subsidiaries.

At the first level, the assets isolated with the entity shield of the parent entity ensure the investment of the external creditors. At the second level, the assets isolated with the subsidiary ensure the investment of the parent entity. At both levels, the firm may decide on a mix of its debt and equity financing. The mixtures at both levels may not match. And the parent entity may have a propensity to invest in the equity of the subsidiary. If the parent entity invests as creditor it will get a fixed return on the assets of the subsidiary. If however, it invests equity, it will get a volatile, albeit potentially higher return. The latter may be more preferable, as it ultimately allows the shareholders of the parent entity to extract more profit from the subsidiaries in the group.

To this end, it was noted that the tendency of the shareholders towards risk-taking and shifting is underpinned by the principle of their limited liability. Notwithstanding the potential adverse effects of risk-taking, limited liability has been recognised as a useful concept to promote investments and growth. However, this refers to the limited liability of the external shareholders of the entities in the bank group. The same justification may not be equally applicable to the limited liability of the parent entity towards its subsidiaries, particularly since it both own and control those subsidiaries (and therefore will have a good understanding of the riskiness of the assets). Nonetheless, limited liability has been sustained as a default rule, also in the banking sector.
The justification has been that such a principle can prevent financial contagion within the group. However, this view has been challenged in practice, where bank groups have wilfully renounced their limited liability towards their subsidiaries (as in the case of Lehman Brothers). This may suggest that the parent’s ‘limited liability’ towards the subsidiary entities is not crucial for the design of a bank group.

Nevertheless, as the dissertation proposes, it is a useful legal mechanism, especially for banks as private legal entities that have their own liquidity constraints and are severally exposed to liquidity risk. By sustaining (normally by statute) or relinquishing (by contract) this ‘internal limited liability’ bank groups can more flexibly manage their own private liquidity constraints. In simpler terms, bank groups can decide what entities in the bank group they will support, particularly in financial distress.

In this context, the dissertation highlighted the ‘support’ effect of the internal capital market (ICM) in the bank group, through which capital is allocated within the bank group. Besides the ownership structure in the bank group, the ICM is constructed by the number of financial and operational contracts that ensure asset transferability across the bank group. Unlike the contractual relationships in the external capital market, the internal capital market’s functions are essentially subject to the fiat of the parent entity. As such, they avoid the transactions costs that may otherwise arise in external capital markets when negotiating the relevant contracts (including those that may arise from information asymmetries). Besides having the benefit of mitigating information asymmetries, internal capital markets allow allocation of bank group resources where needed in the group. Therefore, they support the way in which a bank group can manage its own liquidity constraints, as well as those of the individual entities in the bank group.

The decisions of the parent entity on how to allocate the bank group’s resources depend on factors such as profitability and interconnectedness. According to studies in the finance literature, bank groups are more likely to support entities that are crucial for the survival of the group. Such conduct is not erroneous, although a problem may arise if the more ‘peripheral’ entities in the bank group perform critical economic functions in the jurisdictions where they are authorised and incorporated.

In such cases, these entities would be of concern of the national authorities of the jurisdiction where the peripheral entities of the bank group operate, as they are responsible for maintaining the financial stability in that country. Thus, it is relevant for these authorities of more ‘peripheral’ entities how it is ensured, in an orderly fashion, that those activities will not be disrupted. At this point, it becomes relevant what interaction there is between the authorities of peripheral countries and the authorities of the parent entity and other material entities in the bank group. In absence of cooperation, there is the risk that authorities, especially those that do not believe their concerns are taken into account, will resort to ring-fencing practices either ahead of or in a resolution event. This might stand in the way of a bank group-wide solution and impair the functioning of the ICM in its potential role in stabilising a bank group.
Based on the insights highlighted above, the dissertation set out to assess the effectiveness of the EU resolution framework (including, where relevant, the supervisory framework) in addressing the issues of bank groups. In particular, the dissertation identified the following three main areas for assessment:

- How is double leverage taken into consideration in the resolution regime based on the WDC power and bail-in tool?
- How the resolution regimes underpin the allocation of bank group resources, especially ahead of and in resolution?
- Does the internal cooperation facilitate group-wide solutions by taking into account the interests of all countries involved?

The conclusions concerning the answers to these questions are provided in the sections below.

2. Conclusions on Double Leverage and the Resolution Framework

Chapter III reviewed how the double-leverage problem is addressed in the EU supervisory and resolution framework, in particular how the combination of MREL/TLAC instruments at the consolidated parent entity level matches the levels set in the subsidiaries in bank groups. In this regard, the chapter adopted a broader definition of ‘double leverage’, considering it as a problem of mismatches in quality between externally issued and internally issued instruments at the parent entity and the subsidiaries of the bank group.

To begin with, in order to determine the quantity of capital and other eligible instruments that banks need to issue externally (so as to be able to compare this with what is issued internally in the bank group), the chapter reviewed the process of consolidation of bank groups in the EU. The chapter explained that, in principle, the consolidation process and the ‘deduction’ methods of capital among bank group entities have been used to avoid double counting of capital (i.e. at more than one level in the bank group). The consolidation and deduction requirements have also been extended to the resolution requirements concerning other eligible instruments. Notwithstanding the comprehensiveness of the approach, the chapter highlighted that:

(i) the potential uncertainties regarding the perimeter of consolidation,
(ii) the divergences in the consolidation methods used, and
(iii) the multiple levels of assessment of the consolidated external and internal capital and other instruments held in subsidiaries or other bank group entities, often performed by different authorities,

may raise doubts as to whether double-counting and double-leverage issues have indeed been mitigated. To this end, the chapter pointed out that potential ‘double gearing or leverage’ issues will need to be considered, not only at the dual parent-subsidiary level, but also potentially at a few inner levels in the bank group (e.g. parent, intermediate parent and subsidiary levels).
Further to the difficulties of assessing the perimeters and the levels of double leverage, the chapter explained that the legislation does not include outright provisions on assessing the double leverage, either in EU supervision or in the resolution framework for capital and other eligible instruments, respectively. While these might be implicitly assessed pursuant to the process of setting Pillar 2 requirements in supervision, there are no such considerations in the context of the resolution framework.

In particular, the chapter argued that the Pillar I supervisory requirements determine the composition for the bank group entities, at both consolidated and individual entity level. Given that this is a minimum requirement regarding the quality of the bank capital, it does not prevent the bank from holding capital in instruments of higher quality, either at consolidated or individual entity level. Hence, it may be the case that a parent entity downstreams only CET1 capital in a subsidiary, while issuing capital of lesser quality externally.

Under the Pillar 2 supervisory requirements, resolution authorities have even more flexibility regarding the level and composition of capital since it involves more judgment-based requirements. Therefore, this flexibility can potentially serve as a basis to address double-leverage issues when setting the consolidated Pillar 2 requirements for the bank group, in a way that takes into account the individual requirements set at the level of the bank group subsidiaries. However, supervisory authorities may decide that such requirements can only be met with CET1 capital at individual entity level. Unless this matches with a similar requirement at the consolidated group level, there may be a potential for increased double leverage.

The situation gets even more convoluted if other additional requirements that can be set for bank group entities are considered. These are the macro-prudential buffers mentioned in Chapter II, namely the counterbalancing and countercyclical buffers. Furthermore, if a subsidiary is determined as systemically important by its national authority, it will be subject to the relevant financial stability buffers (i.e. O-SII buffers). Whether these additional requirements will be considered in the discussion between home and host authorities regarding double leverage is questionable. As discussed in Chapter V, often home consolidating authorities do not have the same perception as host authorities regarding which subsidiaries are relevant for financial stability.

When it comes to the provisions for the other eligible instruments, other than specifying the eligibility of those instruments, the legislation does not include specific rules tackling double leverage. Unlike the supervisory framework, when double-leverage issues may potentially be considered as part of the determination of the Pillar 2 MREL requirements, similar

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568 On the composition of Pillar 2 requirements, see EBA SREP Guidelines, paragraph 348: "Competent authorities should set a composition requirement for the additional own funds requirements ... of at least 56% Common Equity Tier 1 (CET1) and at least 75% Tier 1 (T1)." Supervisory authorities are allowed to apply stricter requirements. The banks in the ECB’s remit are asked to meet its Pillar 2 requirements with CET1 capital, see European Parliament, In-Depth Analysis, April 2020, Banking Union: The ECB’s disclosure of Pillar 2 capital requirements, available at: https://www.europarl.europa.eu/RegData/etudes/IDAN/2020/645724/IPOL_IDA(2020)645724_EN.pdf and ECB,
adjustments may be possible for the resolution-related requirements. As noted earlier, the legislation stipulates that adjustments in the MREL can be made in the case of MREL determination for an MPE group (including to avoid double counting). However, there is no mention of the quality of the instruments that need to be used to meet the requirements at resolution and non-resolution entity levels. More generally, beyond this consideration of MPE groups, adjustments to MREL serve purposes other than addressing any potential double-leverage concerns.

As pointed out, double-leverage issues seem to emerge in the context of the specific provisions related to the eligibility of the instruments. For example, when assessing if the eligible instruments are adequately ‘subordinated’, resolution authorities need to assess if the subordination of the instrument might infringe the NCWO principle. This principle is assessed on the basis of the ranking of creditors in the national insolvency law of the Member State where the legal entity is resolved. As concluded by both the EBA and the SRB, in absence of a harmonised regime for insolvency law governing banks, the outcome of the NCWO assessment will differ across a cross-border resolution group. As a result, there will be differences in how much and what instruments will be available to absorb the bank losses, depending on the insolvency law of the countries where the bank group entities are located. In this regard, the risk of double leverage provides an additional argument for further harmonising insolvency laws governing banks.

Furthermore, the risk of creating double leverage can also be associated with the permission regimes that affect the maturity of the relevant instruments. The reasons are twofold. First, if different authorities apply the permission regime at resolution group and non-resolution entity level, there may be differences in internal methodology and outcomes of the assessment. Moreover, these authorities are not necessarily obliged to cooperate in resolving double-leverage issues. A second reason is that the applicable permission regimes require that the instruments which are allowed to be redeemed before their maturity date be replaced with capital or eligible instruments of equal or higher quality. In practice, this can result in a parent bank downstreaming the highest quality of regulatory capital (CET1) to subsidiaries, which may not necessarily match with the issuances to external investors.

Based on these observations, Chapter III concluded that the effectiveness of the application of WDC-based or bail-in-based resolutions to EU bank groups might be undermined due to

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571 See the mismatches in the internal and external TLAC, as reported by the Basel Committee on Banking Supervision (November 2015) TLAC Quantitative Impact Study Report, November 2015, available at: https://www.bis.org/bcbs/publ/d341.pdf
potential persistence of double-leverage issues, normally resulting in insufficiency of resources held at group level.

For this reason, the chapter indicated that, comparatively, other legislation, such as in the UK, has taken steps to address potential double-leverage concerns at both supervisory and resolution framework level. While for capital instruments the UK authorities have included a quantitative measurement for double leverage, for other eligible instruments they have only provided that banks should consider potential mismatches in externally and internally issued instruments. While quantitative requirements might be too restrictive, it may be useful if the EU framework would also include the identification of double leverage, if only as a matter of discussion between the authorities and banks, as well as among the authorities at the different levels of the bank group structure.

3. Conclusions on the Allocation of Bank Group Resources and the Resolution Framework

The presence of increased double leverage tightens the liquidity resources available at the parent entity level. In turn, this may restrain the amount of resources available to be allocated where needed in the bank group. Hence, not only does double leverage increase the risk of failure of the parent entity (due to potential payment and maturity mismatches), but it also restrains the parent entity’s ability to support ailing subsidiaries in financial distress.

For this reason, it was suggested that another relevant point for the relative (in)stability of a bank group is how it manages its internal resources, particularly ahead of and in financial distress. In other words, how can the internal capital market be used to stabilise the group ahead of and in financial distress and ensure that there are sufficient resources in resolution. Chapter IV reviewed this issue.

Chapter IV explained that having ex-ante determined capital and MREL/TLAC requirements at either parent or subsidiary level might not be very helpful if the losses of the bank group do not materialise to the extent anticipated with those requirements. In other words, there may be bank group entities with both surplus and shortfalls of capital and other loss-absorbing instruments. It was highlighted that it is relevant for the bank group to hold fungible resources which can be distributed ahead of or in resolution when it becomes more apparent where such losses have occurred and in what amount. In this context, the chapter reviewed the provisions applicable in the supervisory and resolution framework that regulate the allocation of bank group resources (namely the ICM) close to or in resolution, i.e. on ex-ante and ex-post basis.

Regarding the ex-ante framework, namely when group or subsidiary resolution has not yet been triggered, the EU framework includes a mechanism of intra-group support that can be provided downstream, upstream and cross-stream the entities of the bank group. It was highlighted that when it comes to resolution, i.e. on an ex-post basis, the international standards as designed by the FSB call for some ‘flexibility’ when applying the resolution-
related requirement, i.e. TLAC and MREL. In particular, the FSB stressed that there is a need for building up surplus (i.e. unallocated) resources, as part of its scaling propositions and proposed alternative ways to meet the relevant requirements, including by using collateralised guarantees in lieu of prepositioning requirements.

With respect to both the ex-ante and ex-post framework, the chapter argued that the lack of flexibility in the EU regulatory framework is due to, inter alia, a lack of clarity regarding an effective alternative allocation mechanism, other than prepositioning. This seems to be related to: (i) difficulties arising from the lack of harmonisation of underlying substantive laws, i.e. national corporate and insolvency laws, in particular in relation to provisions regarding the transfer of resources in group of companies; as well as to (ii) lack of clarity as to how the ex-ante and ex-post framework should interact with one another.

Regarding the ex-ante framework, applicable in going-concern scenarios when the bank meets the conditions for early intervention by the supervisory authorities, the chapter focused on intra-group agreements under the BRRD2. It emphasised that this framework has made significant progress in recognising the importance of the group interest by harmonising the conditions under which intra-group transactions can take place. It therefore contributes to the flexible allocation of resources and the stabilisation of the bank group ahead of resolution. Nevertheless, it was also stressed that the main drawback of intra-group agreement provisions under the BRRD2 is that they are effectively non-binding. Bank groups do not need to conclude these agreements pursuant to the provisions set out in the BRRD2. Additionally, even if such agreements exist and are approved by the relevant authorities, it is very debatable if the relevant supervisory authorities can ask a bank group entity to enforce them (e.g. by using their early intervention powers).

In addition, Chapter IV considered what intra-group transactions can take place after resolution is triggered. These are cases where waivers and collateralised guarantees are allowed by the resolution authorities in lieu of prepositioning of resources at the subsidiary/non-resolution entity level. It was emphasised that such transactions are highly limited in the EU framework, mainly because the relevant provisions are only allowed to apply to the bank group entities that are authorised in the same EU Member State. However, as the discussion showed, the restrictive application might be a result of the potentially cumbersome assessments that relevant authorities will need to make when examining whether there are no material practical and legal impediments to the transfer of resources, and they can allow alternative means to prepositioning of resources. Potentially, this may be a feasible assessment at the level of one Member State. However, in a hypothetical scenario where a bank provides waivers and collateralised guarantees in order to meet the relevant capital or MREL requirements, as applicable, across Member states, the analysis might be difficult, as provisions of different national company and insolvency laws will apply. In particular, from the perspective of insolvency law, the resolution authorities will need to have an understanding of the risks that may arise from the transfer of assets when taking into account that ‘no creditor should be worse off than in insolvency proceedings’. Thus, one
might argue that further harmonisation of the substantive provisions can significantly facilitate the assessment should any obstacles emerge to the transfer of assets within the group once resolution is triggered.

As regards both frameworks, Chapter IV indicated that EU legislation has clearly opted to place the onus of building in flexibility for the allocation of bank group resources in the ex-ante stages. Such provisions make sense given the lack of further harmonisation of company and insolvency laws, and the possible aim to avoid creditor challenges resulting from a resolution action. This differs from the principles provided in the FSB’s international standards, where the emphasis is put on scaling and allocation of resources ex post, i.e. in a resolution event. As such, the discussions among authorities in the EU and other, non-EU jurisdictions that have implemented the FSB standards, will face the challenge of striking a delicate balance between the ex-ante and ex-post mechanisms in their respective frameworks if and when some flexibility is to be allowed in the allocation of the resources of the bank group for the purpose of its stabilisation and resolution.


Chapter V turned to the issue of cooperation and coordination among national authorities responsible for supervising and resolving a bank group. It considered the relevant cooperation frameworks established in the post-financial crisis period among the EU authorities, as well as the international cooperation as provided for in the EU resolution framework.

It was explained that the difficulty with the cooperation frameworks is that often national authorities have differing (if not conflicting) interests when making decisions about supervision and resolution of bank groups. This is also the case when issues are considered such as double leverage and allocation of resources ahead of and in resolution of the bank group. It was highlighted that, in both instances, the relevant authorities will seek to fulfil their mandate of protecting financial stability in the local markets in the jurisdictions where the bank group operates and minimise the burden of losses materialising in the event of a failure.

To mitigate any potential differences and in context of recovery and resolution planning and execution, common solutions are often negotiated in various EU and international fora. However, as shown in Chapter V, while substantial progress has been made in the EU, mainly due to the establishment of single authorities for banking supervision and resolution in the Banking Union, i.e. the SSM and SRB, the possibility to divert to piecemeal solutions at the time of financial distress may still be open.

The chapter highlighted two reasons for this. First, the EU framework is not always clear about what set of provisions will ensure that the interests of all authorities are taken into consideration. Secondly, both frameworks of cooperation among the authorities in the EU and the framework concerning international authorities include provisions that tilt towards
the benefit of the home authority. This may lead some host authorities (especially those responsible for entities on the periphery of the bank group) to potentially take defensive actions if in the course of the cooperation there has not been room to voice their concerns about the financial stability in their respective country.

The chapter concurred with the findings and recommendations of Singh, who argued that it is crucial to provide legitimacy to the cooperation and coordination arrangements by establishing a more consistent framework. For example, this may entail recognising the systemic significance of entities in line with the O-SII determinations by host authorities and streamlining the views on what local entities provide critical functions. Such views may then be reflected in the process of recovery and resolution planning and in the provisions that regulate participation in EU and other international cooperation arrangements.

The above suggestion should not be read as a call for resorting to more detailed provisions. These could make the process more rigid and potentially impractical in an event where a flexible and dynamic response is required. In fact, with regard to the cooperation among the EU authorities it is not lack of provisions that is the issue, there is actually a profusion of such provisions. The problem is the internal consistency of those provisions. Such consistency would provide clarity as to what relevant entities and authorities need to be included in the cooperation framework based on the effects that a bank group failure may have on the local systems.

Thus, a potential alternative is to assess or consider the outcome that has been achieved in view of the ex-ante principles for cooperation set out in the legislation as well as in the relevant cooperation agreements (or even the international standards). This calls for the introduction of accountability not only for the due process but also for the outcome that may be produced. On a broader scale this calls for more principle-based regulation. The difficulty would be how to enforce such accountability in practice at both EU and international level. This consideration, however, might deserve research of its own.

5. Final Remarks

Overall, when considering the complexity and (in)stability of bank groups in relation to the post-financial crisis reform, particularly the effectiveness of the write-down and conversion power and the bail-in tool, the dissertation underlined the following three points.

While the supervisory and resolution framework has resulted in significant improvements in post-financial crisis reform, there is still more to consider on how to balance the external and internal financing of the bank group. This may not be limited to the simple definition of double leverage and the extent of external debt and internal equity. Regarding resolution, it would include a wider assessment of the quality of instruments that are raised externally at the parent bank level and downstreamed internally, and possible mismatches that can occur at the different levels.
Moreover, the dissertation states that the ways in which bank group resources can be allocated ahead of and in resolution certainly need further elaboration. Harmonisation of EU corporate and insolvency laws would definitely facilitate this process.

Finally, in terms of the international presence of bank groups, the cooperation framework might have progressed with the establishment of the single institutions in the Banking Union. However, challenges still remain in both the EU and international context. It would be useful to streamline the legislation on what authorities should participate in the discussion to ensure a more balanced approach that takes into account all the relevant concerns of the authorities and their respective jurisdictions regarding the systemic impact of bank group operations.
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