ECB SIGNIFICANT-BANK RISK PROFILE AND COVID-19 CRISIS CONTAINMENT

WHAT APPROACH IN THE TRANSITIONING PHASE?

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Abstract*

The COVID-19 pandemic has caused an unprecedented degree of public and private intervention to avert a social, economic and financial crisis. EU member states, and especially participating member states of the European Banking Union (EBU), introduced a broad set of measures, including public guarantees, moratoria and amendments to the European Commission State Aid framework, to contain the negative effects of the pandemic on the economy. The EU suspended its fiscal rules and the European Central Bank increased its monetary operations. The paper uses an empirical analysis to review the impact of public support on the Single Supervisory Mechanism (SSM) banks and the acutely exposed participating EBU member states because of their significant increase in government debt levels. We argue that the containment of the crisis creates a major uncertainty, namely a possible insolvency lag once the benefits of the public support subside and insolvencies start to materialise. This uncertainty is associated with non-financial corporates, the safety and soundness of the SSM significant banks and sovereign debt sustainability, forming a new ‘doom loop’. We suggest the design of a ‘transition phase’ as a mechanism of accountability to improve the understanding of those uncertainties to ensure financial stability.

Keywords: COVID-19, Crisis Containment, Public Guarantees, State Aid, European Bank Risk Taking, European Banking Union, Single Supervisory Mechanism, Corporate Insolvency, Transition Strategy

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1. Introduction

The outbreak of coronavirus disease in 2019 (hereinafter COVID-19) forced EU member states and the European Central Bank (ECB) to implement extraordinary measures to contain the impact of the pandemic on the real economy. The banking sector supported corporates’ and households’ liquidity needs mainly via targeted lending and moratoria. The ECB employed a wide range of measures, including targeted refinancing operations and other monetary and supervisory policies. This unprecedented degree of intervention was necessary because the introduction of lockdown measures for individuals and the closure of significant swathes of the economy put both retail and commercial sectors under severe strains. As of January 2022, most lockdown measures have been removed, but some of the public and private support packages will remain in place for the foreseeable future. Furthermore, the targeted monetary lending to the Single Supervisory Mechanism (SSM) banks is continuous, with the current...
The regulatory response to the financial crisis should be considered see Charles Goodhart, devoid of moral hazard, a discussion on such a risk is outside the scope of this paper. On the ‘timing’ of when moral hazard moratoria and public guarantees in the EU banking sector’, November 2020, Thematic Note EBA/Rep/2020/31, 6. While not https://apps.who.int/iris/bitstream/handle/10665/332467/WHO-EURO-2020-690-40425-54211-discussion-paper, 22 February 2022 https://www.fsb.org/wp-content/uploads/P220222.pdf. may be either self-employed or sole proprietors; see FSB, ‘Approaches to debt overhang issues of non-financial corporates’, Elgar 2017) 24–64. Moreover, our paper makes significant reference to SMEs (small and medium-sized enterprises), which excellent comparative analysis by Gerard McCormack, Andrew Keay and Sarah Brown, European Insolvency Law (Edward Elgar 2009) 93–94. The European response to the COVID-19 pandemic is still in a phase of ‘crisis containment’ through three principal means: PGs, moratoria and the targeted longer-term refinancing operations (TLTRO III). Member states have also injected a considerable amount of liquidity in non-financial companies (NFC) via direct loans and other capital and liquidity support measures. These have been approved under a new temporary state aid framework enacted to acknowledge the existence of a serious disturbance in the economy. The culmination of this support is the ‘incubation’ of corporations and households in the ‘zone of insolvency’; if insolvency were to crystallise, this could have serious repercussions for the safety and soundness of some SSM significant banks in the medium to long term.4


7 ESRB, ‘Recommendation of the European Systemic Risk Board of 27 May 2020 on monitoring the financial stability implications of debt moratoria, and public guarantee schemes and other measures of a fiscal nature taken to protect the real economy in response to the COVID-19 pandemic’ (ESRB/2020/8) https://www.esrb.europa.eu/pub/pdf/recommendations/esrb.recommendation200608_on_monitoring_financial_implications_of_fiscal_support_measures_in_response_to_the_COVID-19_pandemic_3-c745d54b59.en.pdf. Fiscal measures have also been implemented, but these are outside the scope of this research proposal. In addition to PGs and moratoria, macro prudential authorities have released capital buffers and regulators have adopted a flexible approach to their Pillar 2 guidance. ‘In addition, central banks expanded their liquidity programmes, such as the European Central Bank’s targeted longer-term refinancing operations (TLTRO) III and the pandemic emergency purchase programme (PEPP).’ See EBA, ‘First evidence on the use of moratoria and public guarantees in the EU banking sector’, November 2020, Thematic Note EBA/Rep/2020/31, 6. While not devoid of moral hazard, a discussion on such a risk is outside the scope of this paper. On the ‘timing’ of when moral hazard should be considered see Charles Goodhart, The Regulatory Response to the Financial Crisis (Edward Elgar 2009) 93–94.


9 The ‘zone of insolvency’ is used here to explain how corporate insolvency is a legal discretionary judgment that may well involve different stakeholders and include a point when there is a filing for bankruptcy and/or simply a point when cash-flow or balance-sheet insolvency crystallises. The ‘zone of insolvency’ equally refers to the point when decisions need to be made to minimise the impact of insolvency on respective creditors and allow a restructuring or liquidation of the corporation to take place to ensure some form of corporate rescue. For an examination of the different meanings and broad trigger points see the excellent comparative analysis by Gerard McCormack, Andrew Keay and Sarah Brown, European Insolvency Law (Edward Elgar 2017) 24–64. Moreover, our paper makes significant reference to SMEs (small and medium-sized enterprises), which may be either self-employed or sole proprietors; see FSB, ‘Approaches to debt overhang issues of non-financial corporates’, discussion paper, 22 February 2022 https://www.fsb.org/wp-content/uploads/P220222.pdf.

10 For example, the ECB indicated in February 2022 that there is a concern about ‘excess build-up of non-performing loans (NPLs) on banks’ balance sheets’, and although banks’ risk profiles have ‘not deteriorated significantly overall’, supervisors
The specificities of the COVID-19 crisis are its exogenous nature, its simultaneous impact on the global and EU economies (in terms of demand, supply and distribution channels) and its geopolitical consequences. According to Danielsson and Shin, ‘endogenous risk refers to the risk from shocks that are generated and amplified within the system’, while ‘exogenous risk … refers to shocks that arrive from outside the system’.\(^\text{11}\) While the global financial crisis (GFC) was considered a typical crisis endogenous to the banking system, from the very start of the COVID-19 shock it was recognised that it has the potential to cause an exogenous banking crisis.\(^\text{12}\)

Not only is the COVID-19 shock exogenous to the banking and financial sector, but it is exogenous to the economy as well. The World Bank identified three factors that distinguish the COVID-19 crisis from other crises: it has been an exogenous event even from the perspective of economic policy, for it did not arise from macroeconomic imbalances (as was the case with many previous crises); it has affected both firms and households – hence impacting on both supply and demand; and it has hit most countries and sectors simultaneously.\(^\text{13}\) To explain the specificities of this shock, we conducted desk and empirical research of the containment measures and bank risk respectively. We have formulated a set of bank indicators to assess the stress the COVID-19 pandemic placed on EU banks.

We are of the view that valuable lessons can be drawn from studying the effects of such a shock on the EU banking system. The scale of public intervention gives rise to significant uncertainties associated with bank credit risk, leading to concerns about a potential EU sovereign-bank doom loop.\(^\text{14}\) The possibility for the creation of a ‘doom loop’, as Isabel Schnabel, member of the ECB Executive Board, explains, is prevalent: the corporate sector ‘has become more dependent on the domestic sovereign’s fiscal support’ and its withdrawal ‘could trigger corporate defaults’ and ‘a rapid rise in NPLs’.\(^\text{15}\) As Schnabel goes on to explain, ‘the interlinkages between banks, sovereigns and corporates, which were crucial for stabilising the economic and financial situation during the pandemic, could turn into a vicious circle, giving rise to destabilising feedback loops’.\(^\text{16}\)

We reflect on the use of such public support, and suggest that a transition strategy is necessary


\(^{15}\) Ibid.

\(^{16}\) Ibid.
to better manage the effects of public support for the purposes of understanding their implications for bank risk taking. We advocate the need for a ‘transition phase’ as a lens of political accountability to better understand the implications of the explicit and implicit public support coming to an end. We argue transitioning is an important part of maintaining financial stability and is explicitly included in the International Association of Deposit Insurers (IADI) Core Principles, Principle 8(10) and the Basel Core Principles on Banking Supervision, Principle 18. We therefore suggest a wider interpretation of transitioning for maintaining financial stability and safeguarding fair competition. We argue that the international core principles should be widened to apply to the management of explicit and implicit PGs and use of public funds for the purposes of containing exogenous and endogenous shocks in general, in an attempt to improve our understanding of protecting financial stability with the aim of minimising moral hazard risk.

Against this backdrop, we show a significant uncertainty remains for banks with the potential risk associated with ‘zombie’ firms, and possibly households, once the support measures are removed and inability to service debts starts to materialise. As with most financial crises, while there is a primary catalyst, there are invariably secondary events and policy failings that tend to culminate in the crisis. While a banking crisis has not materialised, the exploration of a transition phase will help in determining an appropriate policy action. It will also assist with understanding how the exogenous shock (the COVID-19 pandemic) has been contained, and if endogenous risks that existed prior to the COVID-19 crisis within the banking system may resurface.

The remainder of this paper is organised as follows. Section 2 explains our methodology and the main findings of the empirical research; section 3 explores the rationale of crisis containment; sections 4 and 5 analyse the use of PGs and moratoria respectively; section 6 analyses corporate insolvency and recoveries; section 7 explains the Temporary Framework on State Aid and its impact on banks’ lending behaviour; section 8 looks at the monetary policy measures enacted by the ECB in response to the crisis; section 9 investigates our suggestion of a need to design a transition phase as a mechanism of accountability which includes a plan for an orderly exit from the containment phase; section 10 summarises the COVID-19 stress test; section 11 sets out the policy approach to the transition phase; and section 12 concludes.

17 We appreciate the transition strategy normally focuses on implicit and explicit deposit guarantees in the IADI Core Principles for Effective Deposit Insurance. International Association of Deposit Insurers (IADI), IADI Core Principles for Effective Deposit Insurance Systems, November 2014 https://www.iadi.org/en/assets/File/Core%20Principles/cprevised2014nov.pdf. In Principle 18 of the Basel Principles for Effective Banking Supervision reference is also made to guarantees as a possible risk mitigant for problem assets, etc. Basel Committee on Banking Supervision, ‘Core principles for effective banking supervision’, September 2012 https://www.bis.org/publ/bcbs230.pdf. However, we would argue that the international core principle should be widened to apply to the management of explicit and implicit public guarantees and funds in general in an attempt to improve our understanding of systemic protection and safeguard financial stability, which aim to minimise moral hazard risk.


2. Methodology

Our empirical research analysed the initial implications of the COVID-19 crisis on the EU banking system: it examined the changes in EU banks’ prudential conditions under a ‘real-life stress test’ with a single severe scenario applied throughout the EU.

The scope was limited to the SSM significant banks covered by the ECB’s direct prudential supervision. The analysis covered 114 significant entities established in 19 participating member states, which indirectly covered 954 entities (parents and subsidiaries) across 21 participating member states, as shown in Table 1.

Table 1: Distribution of the SSM significant parent entities and subsidiaries across participating member states

<table>
<thead>
<tr>
<th>Parents</th>
<th>Assets (billions EUR)</th>
<th>Subsidiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT Austria</td>
<td>€ 633.00</td>
<td>68 1 4</td>
</tr>
<tr>
<td>BE Belgium</td>
<td>€ 632.72</td>
<td>4 1 2</td>
</tr>
<tr>
<td>BG Bulgaria</td>
<td>€ 22.88</td>
<td>1</td>
</tr>
<tr>
<td>CY Cyprus</td>
<td>€ 42.69</td>
<td>1</td>
</tr>
<tr>
<td>DE Germany</td>
<td>€ 4,453.26</td>
<td>22 1</td>
</tr>
<tr>
<td>EE Estonia</td>
<td>€ 36.67</td>
<td>1</td>
</tr>
<tr>
<td>ES Spain</td>
<td>€ 3,539.49</td>
<td>2</td>
</tr>
<tr>
<td>FI Finland</td>
<td>€ 728.21</td>
<td>139</td>
</tr>
<tr>
<td>FR France</td>
<td>€ 8,640.62</td>
<td>1 4</td>
</tr>
<tr>
<td>GR Greece</td>
<td>€ 286.27</td>
<td>1 3</td>
</tr>
<tr>
<td>HR Croatia</td>
<td>€ 0</td>
<td>0</td>
</tr>
<tr>
<td>IE Ireland</td>
<td>€ 543.70</td>
<td>6</td>
</tr>
<tr>
<td>IT Italy</td>
<td>€ 2,706.60</td>
<td>2</td>
</tr>
<tr>
<td>LT Lithuania</td>
<td>€ 27.90</td>
<td>1</td>
</tr>
<tr>
<td>LU Luxembourg</td>
<td>€ 293.22</td>
<td>1</td>
</tr>
<tr>
<td>LV Latvia</td>
<td>€ 16.57</td>
<td>3</td>
</tr>
<tr>
<td>MT Malta</td>
<td>€ 23.81</td>
<td>1</td>
</tr>
<tr>
<td>NL The Netherlands</td>
<td>€ 2,446.04</td>
<td>1 3</td>
</tr>
<tr>
<td>PT Portugal</td>
<td>€ 229.99</td>
<td>1</td>
</tr>
<tr>
<td>SI Slovenia</td>
<td>€ 33.66</td>
<td>1</td>
</tr>
<tr>
<td>SK Slovakia</td>
<td>€ 0</td>
<td>0</td>
</tr>
</tbody>
</table>

| Total | 114 | € 25,237.30 | 73 11 4 4 38 0 37 140 199 3 7 9 239 0 28 0 3 13 16 7 9 954 |

The period considered stable for the purpose of this research spanned five years, from 2015 to 2019, when the initial Basel III reforms were implemented and no major economic disruption occurred. The COVID-19 stress data included the year 2020.

Our data came from several sources: Orbis BankFocus, the Banker Database, European Banking Authority (EBA) transparency exercises, EBA stress test exercises, ECB banking statistics, banks’ financial statements and Pillar 3 reports, and some other reliable sources.

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20 ECB SSM, ‘List of supervised entities (as of 1 July 2021)’, 9 August 2021


22 The continuation of this research will extend the dataset to cover 2021 data.


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The choice of the variables was, in part, limited by the available data sources at the granular bank level (e.g. regarding the potential effects of International Financial Reporting Standards – IFRS 9).

We decided to build composite indicators that reflect the changes in key areas affected by the observed shock. This approach aims to ‘summarise complex, multi-dimensional realities with a view to supporting decision makers’ but taking into account the necessity for a transparent methodology to avoid ‘simplistic policy conclusions’. Composite indicators have been emphasised as a promising approach to analysing multidimensional topics such as those related to COVID-19.

Four areas have been shown to be most critical in their reaction to exogenous shock, and therefore we decided to construct composite change indicators for:

- activity
- credit risk
- solvency
- profitability.

For each of the key four areas, five variables (shown in Table 2) were chosen based on their importance and comprehensiveness, but also substitutability in the case of missing data or questionable data quality.

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31 For example, equity-to-assets ratio and leverage ratio.
Table 2: Changes in 20 variables and composite indicators for four areas

<table>
<thead>
<tr>
<th>Areas</th>
<th>Variables</th>
<th>Changes</th>
<th>Composite indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Activity</td>
<td>1.1 Total leverage exposure</td>
<td>1.1.1 Change in 2020 vs year 2019</td>
<td>Activity change indicator (combined %Δ)</td>
</tr>
<tr>
<td></td>
<td>1.2 Total assets</td>
<td>1.2.1 Change in 2020 vs year 2019</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.3 Total earning assets</td>
<td>1.3.1 Change in 2020 vs year 2019</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.4 Gross loans to customers</td>
<td>1.4.1 Change in 2020 vs year 2019</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.5 Total RWA</td>
<td>1.5.1 Change in 2020 vs year 2019</td>
<td></td>
</tr>
<tr>
<td>2. Credit risk</td>
<td>2.1 Credit risk RWA</td>
<td>2.1.1 Change in 2020 vs year 2019</td>
<td>Credit risk change indicator (combined %Δ)</td>
</tr>
<tr>
<td></td>
<td>2.2 NPLs</td>
<td>2.2.1 Change in 2020 vs year 2019</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.3 Net loan impairment</td>
<td>2.3.1 Change in 2020 vs year 2019</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.4. Loan loss reserves</td>
<td>2.4.1 Change in 2020 vs year 2019</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.5 NPL ratio</td>
<td>2.5.1 Change in 2020 vs year 2019</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.5.2 Change in 2020 vs period 2015-2018</td>
<td></td>
</tr>
<tr>
<td>3. Solvency</td>
<td>3.1 Tier 1 capital</td>
<td>3.1.1 Change in 2020 vs year 2019</td>
<td>Solvency change indicator (combined %Δ)</td>
</tr>
<tr>
<td></td>
<td>3.2 Total equity</td>
<td>3.2.1 Change in 2020 vs year 2019</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.3 Tier 1 ratio</td>
<td>3.3.1 Change in 2020 vs year 2019</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.4 Leverage ratio</td>
<td>3.4.1 Change in 2020 vs year 2019</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.5 Equity to assets ratio</td>
<td>3.5.1 Change in 2020 vs year 2019</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.5.2 Change in 2020 vs period 2015-2018</td>
<td></td>
</tr>
<tr>
<td>4. Profitability</td>
<td>4.1 Pre-impairment operating profit</td>
<td>4.1.1 Change in 2020 vs year 2019</td>
<td>Profitability change indicator (combined %Δ)</td>
</tr>
<tr>
<td></td>
<td>4.2 Operating profit</td>
<td>4.2.1 Change in 2020 vs year 2019</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.3 Profit before taxes</td>
<td>4.3.1 Change in 2020 vs year 2019</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.4 ROA</td>
<td>4.4.1 Change in 2020 vs year 2019</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.5 ROE</td>
<td>4.5.1 Change in 2020 vs year 2019</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.5.2 Change in 2020 vs period 2015-2018</td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors' concept.

Our granular analysis provided data for the 2015–2020 period for all the observed variables, calculated individual changes and constructed indicators at the level of each significant bank entity.33 There should have been in total 4,560 datapoints showing individual changes (114 banks x four key areas for which composite indicators are constructed x five variables for each

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32 Risk-weighted assets (RWA), non-performing loans (NPLs), return on assets (ROA), return on equity (ROE).
33 Please note that to facilitate comparative analysis we also included legal entity identifier codes as used by the ECB and the EBA if there was a difference.
area x two relative changes calculated for each variable); however, there were 164 missing datapoints, which is 3.60% of the total number of individual changes.

Firstly, the six-year time series for the 20 variables were analysed for each of the 114 banks. Then two relative percentage changes resulting from the shock in 2020 were calculated for each of the 20 variables for each bank – for each bank, each variable’s change in 2020 was analysed so that it included relative percentage changes for 2020 in comparison to the year 2019, and 2020 in comparison to the period 2015–2018. Both the changes in variables were equally weighted, thus taking into consideration the entire pre-COVID stable period but effectively giving higher importance to the most recent stable year.  The methodology limited a single change to the minimum −500% and the maximum +500% (winsorisation), to avoid the outliers skewing the indicators. In a total of 4,396 datapoints, we applied a |500%| change limit in 149 cases, which is 3.39% of the number of individual changes with available data.

Secondly, the four composite indicators were constructed for each bank as an equally weighted average of ten individual changes in five variables used for each composite indicator. This means that a 10% weight was assigned to each individual change for the purpose of calculating one composite indicator at the bank level. However, if there were missing datapoints the weights were adjusted (increased), and thus a missing datapoint in the formula was not treated as zero but was disregarded in both the numerator and the denominator. As shown in Annex 1, we calculated relative changes when any data for the period were available, and adjusted the formula according to the available number of data. This avoided skewing the results due to missing data, hence (considering the previously mentioned substitutability, complementarity and comprehensiveness as applied criteria when choosing variables) a missing datapoint does not mean that a whole aspect of a particular key area is unrepresented, and therefore does not significantly distort the composite indicator.

Thirdly, the four composite indicators are constructed for each of 19 member states where significant entities are established and for the whole SSM. Indicators calculated at the individual bank level are aggregated in a way that reflects the importance of each bank, hence the individual bank composite indicators are weighted by this bank’s asset size at the end of 2020. The country sheets are given for the EU/SSM and 19 member states in Annex 3. Considering that not all changes in individual countries could have a similar potential impact on the SSM and the Banking Union, we have approximated their importance with their corresponding asset size of the banks in the particular member state. Annex 4 provides an overview of composite indicators reflecting changes in key areas in 19 member states, with indicated aggregate bank asset size for each member state.

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34 We believe this approach takes sufficiently into account the whole stable period in a comprehensive and understandable way and is applicable uniformly across the whole sample, which allows for comparability and aggregation. The complexity that would be potentially be introduced by varying risk weights depending on the year (e.g. lower for earlier years) or a trend analysis would not be fit for this purpose.
35 For example, in the case of loan loss provisions/reserves with a low basis in the stable period, any larger increase in 2020 could lead to a disproportionately high relative percentage change, or even to infinity if the basis was zero.
36 Please note that for some significant entities with a business model predominantly focused on investment banking and private asset management, we deliberately chose to disregard changes related to some credit risk variables because the data were not reliable, a small basis led to large relative changes, and there was dramatic post-Brexit growth in balance sheets. We did not want to exclude such entities from the sample, because that would not give us a complete picture of the SSM stress, but we applied the appropriate components to them. For more detail please consult Annex 1 with individual bank sheets for each of the 114 entities that show, at the bank level, charts with movements in all the variables during the period 2015–2020; relative changes in each variable 2020/2019 and 2020/2015–2018 with an indication of −500% floor and +500% ceiling, grouped in charts according to their association with a particular composite indicator; and four composite indicators at the individual entity level. Since not all changes in individual entities could have the same potential impact on the SSM and the Banking Union, we have approximated their relevance by using their corresponding asset size of the banks in the particular member state. Annex 2 provides an overview of composite indicators reflecting changes in key areas in the 114 banks, with an indication of the asset size of each bank. Thirdly, the four composite indicators are constructed for each of 19 member states where significant entities are established and for the whole SSM. Indicators calculated at the individual bank level are aggregated in a way that reflects the importance of each bank, hence the individual bank composite indicators are weighted by this bank’s asset size at the end of 2020. The country sheets are given for the EU/SSM and 19 member states in Annex 3. Considering that not all changes in individual countries could have a similar potential impact on the SSM and the Banking Union, we have approximated their importance with their corresponding asset size of the banks in the particular member state. Annex 4 provides an overview of composite indicators reflecting changes in key areas in 19 member states, with indicated aggregate bank asset size for each member state.
3. Policy approach to the COVID-19 crisis

Unsurprisingly, the COVID-19 pandemic found states largely unprepared to deal with its appearance and consequences. Once the magnitude of the shock had been assessed, governments tried to contain the crisis.

A containment phase is the use of extraordinary tools and techniques of last resort to deal with an unexpected systemic crisis that cannot be managed using tools designed for an idiosyncratic crisis in normal times. As Honohan and Laeven explain, crises ‘often emerge unexpectedly, evolve with breakneck speed, and threaten to strangle a large part of national economic activity unless promptly and decisively addressed’.37 Gelpern argues that a containment phase consists of a number of decisions that go against pre-crisis norms of rule of law by introducing responses that are either wholesale, case-by-case and/or consist of interventions in the restructuring process and distribution of losses between stakeholders.38 While responses to financial crises tend to focus on lowering counterparty risk, in this crisis the states and the banking system have been asked to increase lending to ensure sufficient levels of credit in the real economy.

The primary response during the COVID-19 crisis has been, from a financial perspective, to ensure the continuity of economic activity, the servicing of personal and corporate debt, and the use of moratoria to suspend the payments of debt for a period of time.

The crisis-containment phase attempts to limit the economic and social costs of a crisis through exceptional public interventions.39 The asymmetry of information and the urgency of the crisis require, by definition, an immediate response with relatively limited overall knowledge and understanding of the underlying problems, particularly on the side of the external parties.

The COVID-19-generated crisis bears no resemblance to ‘traditional’ financial crises, hence the shaping of its containment phase has only partly derived from past financial crises. For the first time, the EU has suspended its Stability and Growth Pact rules aimed at limiting member states’ budgetary deficits and public debts.40 States have intervened in support of household spending and economic activities via direct and social transfers (such as furlough measures, support to the self-employed and other employment-related measures). One could argue that these lowered the risk of an economic, social and financial crisis.

Moral hazard has always played a significant part in the policy debates during traditional financial crises.41 During the COVID-19 crisis the consideration of moral hazard appeared to

39 Honohan and Laeven, note 37.
41 Goodhart, note 7, 93–94.
be limited, probably because the response had to be immediate and the main receivers of support were not banking institutions.\textsuperscript{42}

Irrespective of addressees and circumstances, public intervention carries both positive and negative externalities. As explained by Wyplosz, in the COVID-19 case the level of overindebtedness in the real economy is likely to increase, which could result in higher leverage on banks’ balance sheets.\textsuperscript{43} Equally, Wyplosz notes an increment in government debt as a consequence of such intervention. We show that member states which are already overindebted could experience additional financial difficulties if the recovery is not sufficient to ensure the public support is repaid.

The combination of these factors brings to the fore significant risks to sovereign solvency. This in turn could have detrimental effects on market confidence if the containment measures are considered unsustainable and lacking credibility, as was the case with Ireland’s explicit two-year blanket guarantee to protect depositors.\textsuperscript{44} The market did not have confidence in Ireland’s ability to sustain the commitment. This latter was premised on reports that banks met capital requirements, which turned out to be ‘inaccurate information’.\textsuperscript{45}

In view of such experience, the European response to the COVID-19 crisis was possibly designed to avoid the risk of creating a negative market sentiment of insufficient action to contain the crisis. For instance, in the Italian case Bonatti and Fracasso explain that the immediate concern was whether Italy had the fiscal capacity to contain the crisis and the markets had confidence in the country’s ability to absorb such exposures fiscally.\textsuperscript{46} The response by the markets to the European package of COVID-19 measures, and the political will expressed by the then German Chancellor Angela Merkel among others, duly calmed the markets regarding the potential threat of an Italian default, because Italy had the backing of the European Union as a whole. The dawning of an Italian default, as explained, is something ‘no European Member State would have wanted regardless of their own fiscal discipline’.\textsuperscript{47}

The following responses we explore during the containment phase at the state and banking system levels, we argue, cause their own degree of uncertainty as well. In view of this we look at the different responses to draw out some of the uncertainty they create.

\textsuperscript{43}Wyplosz, ibid., 27.
\textsuperscript{45}Ibid., 12.
\textsuperscript{47}Ibid.
4. Public guarantees

The use of public guarantees (PGs) during financial crises is the option of choice when market and other private sector mechanisms are unable to contain a crisis.\(^{48}\) As Christine Cumming of the Federal Reserve Bank of New York explains, ‘guarantees … are about protection against failure to meet financial obligations, that is against default and insolvency’.\(^{49}\) The contingent nature of the guarantee means that the guarantor does not need to offer any financial support up front. As David Mayes explains, ‘guarantees are designed not to be drawn down, but simply to underwrite tail risks’.\(^{50}\) The tail risk is a pre-defined event that results in the loss crystallising, and so requires the guarantor to cover the loss. In this respect guarantees may not provide 100% coverage, but require the beneficiary to take part in some form of risk sharing.\(^{51}\)

Guarantees come in two primary forms: explicit and implicit. Schich and Kim argue that it is more beneficial to use explicit guarantees because they have more defined terms and can be withdrawn more efficiently.\(^{52}\) Explicit guarantees are normally designed with a transparent cost structure which minimises the moral hazard risk.\(^{53}\) The implicit guarantee, on the other hand, is the opposite to its explicit counterpart. The implicit guarantee is vague and has no clearly defined terms of reference, and the costs of such guarantees are not predictable and so increase the risk of moral hazard.

It can be argued that the current containment phase has elements of an implicit guarantee to the European Banking Union (EBU) system. The ECB issued a statement on the scope of the explicit PG: ‘To this end, the ECB has introduced supervisory flexibility regarding the treatment of non-performing loans (NPLs), in particular to allow banks to fully benefit from guarantees and moratoriums put in place by public authorities to tackle the current distress.’\(^{54}\) The ECB is arguably providing implicit protection to the banks as well, thereby extending the commitment. The reference to ‘fully benefit’ could be interpreted widely and so is beyond the remit of the explicit guarantee. Schich and Kim raise a note of caution when widening explicit guarantees implicitly due to the difficulty of costing implicit guarantees.\(^{55}\)

The potential uncertainty created by implicit guarantees needs to be understood from a state, corporate and bank perspective – especially when the ECB statement appears to contradict the position taken at the European Commission level and the use of state aid to the NFC sector.\(^{56}\) The support provided to the NFC sector, either directly or indirectly, assists the viability of the banking system as well.


\(^{49}\) Ibid.


\(^{51}\) Ibid., 125.


\(^{53}\) Ibid., 225.


\(^{55}\) Schich and Kim, note 52, 225.

\(^{56}\) See section 7 of this paper, ‘European state aid’.
5. Moratoria

The temporary suspension of debt repayments was another important tool in responding to the COVID-19 pandemic. The moratoria extended to the servicing of personal, household and corporate debts. COVID-19-related payment suspensions were of two types: legislative and private. While a legislative moratorium finds its legal basis in national law (usually introduced *ad hoc*), the latter is a third genus in that it derives its force from a national banking industry body’s recommendation. The immediate benefits of debt suspension minimise disruption to the real economy and households by reducing foreclosures, but the medium- to long-term impact on banks still remains to be determined.

Moratoria allow for a temporary suspension of payments by the ailing debtor, with a prohibition (stay) on creditors starting legal proceedings to recover a debt or activate *ipso facto* clauses. Normally, moratoria can be voluntary, by application of law or as a consequence of a judicial order; and the type, duration, timing and scope of moratoria varied widely across EU member states. However, the take-up of such payment breaks benefited both the parties agreeing to the suspension of payments and the banks, for the individual or corporate credit score was not adversely affected and nor did it result in the reclassification of the loan as non-performing.

The EBA and the European Systemic Risk Board (ESRB) issued guidelines and recommendations to enhance the consistency of approaches by moratoria introduced in the respective member states.

The latest version of the EBA Guidelines confirmed the main thrust of the April 2020 Guidelines – avoid triggering a forbearance or distress classification when certain criteria are met – but restricts further the favourable regulatory treatment to a maximum period of payment suspension (a nine-month extension from the original date) and the introduction of a duty to communicate to supervisors the plan for assessing the debtor’s probability of default on payment. The ESRB instead recommended national macroprudential authorities to monitor and assess the financial stability implications of moratoria and report their assessments to the

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59 Current moratoria design is uneven across member states: they may offer a broad stay on debts or cover specific types of debt, they may be subjected to different durations and may have non-uniform selection criteria. However, the regimes all seem to converge on two aspects: the large size of the participating banking industry and the lack of PGs accompanying the stay. See ibid.
61 An *ipso facto* clause allows the termination of an agreement merely because an insolvency-related event has arisen.
63 It is important to note the EBA Guidelines equate to soft law, and member states have discretion in adopting them. It is a requirement that member states provide reasons for not complying.
65 Ibid.
ESRB. The vast majority of member states complied with the period of suspension of debt repayments.

The November 2021 joint risk monitoring report by the European Commission, ECB and Single Resolution Board notes that most of the moratoria measures adopted have been phased out by member states. However, in some states, such as Germany, Italy and Portugal, loan moratoria were extended to the end of 2021. In the case of Italy, borrowers were required to apply for an extension. In other instances, like Greece, the phase-out is staggered, with the exception of those in place for the hospitality sector. In Belgium the take-up of the moratoria was very small, whereas in Hungary the moratoria ‘created’ additional liquidity of almost HUF2 billion in the real economy, so contributing significantly to averting a liquidity crunch.

The EBA introduced guidelines in 2020 to improve information on loan exposures benefiting from public guarantees and moratoria. The level of exposure at the individual bank level will require careful monitoring by supervisory authorities to gauge how banks manage credit risk and the extent to which exposures are deteriorating in the short to medium term.

The immediate impact on banks of the moratoria was a temporary loss of income on these loans in the form of interest and/or capital repayments, depending on the arrangements introduced by the member state and the banks. Moreover, the time lag between the take-up of such support measures and their ending means that the ability to service loans may materialise some time after the expiration of the support if the recovery is not sustainable. This suggests that a deterioration in asset quality on banks’ balance sheets against income may not be apparent until some time later.

6. Corporate insolvency – Recovery rate and time of recovery

The introduction of those extraordinary measures to contain the crisis was obviously necessary to assist the economic recovery, and this public support significantly reduced the number of

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69 EBA, ‘Final report: Guidelines on reporting and disclosure of exposures subject to measures applied in response to the COVID-19 crisis’, 2 June 2020 https://www.eba.europa.eu/sites/default/documents/files/document_library/Publications/Guidelines/2020/884434/EBA%20Guidelines%20on%20COVID%20-19%20measures%20reporting%20and%20disclosure.pdf. ‘The Guidelines expect: (1) reporting requirements to monitor the use of payment moratoria and the evolution of the credit quality of the exposures subject to such moratoria in accordance with the GL on moratoria, (2) disclosure requirements for the exposures subject to the payment moratoria in accordance with the GL on moratoria, (3) reporting requirements for the new loans subject to specific public guarantees set up to mitigate the effects of the COVID-19 crisis, (4) disclosure requirements for the new loans subject to the specific public guarantees set up to mitigate the effects of COVID-19 crisis, and (5) reporting requirements on other forbearance measures applied in response to COVID-19 crisis.’

corporate bankruptcies by 30% at the EU level between 2020 and 2021.\textsuperscript{71} And despite the lifting of parts of the public support, a reduction in the number of bankruptcies is still visible in comparison to 2019. In view of this, we conclude that the number of bankruptcies prior to the pandemic is in line with our 2015–2019 stable period, and during the stress period in 2020 the number of bankruptcies is significantly reduced. Thus the stress of the number of bankruptcies reverting back to the stable period or even to the higher levels after the European bank and sovereign debt crisis is not likely to show on bank balance sheets until sometime in the near future. The ECB Supervisory Review and Evaluation Process (SREP) 2021 shows that concerns are starting to materialise regarding credit risk.\textsuperscript{72}

According to Carpinelli et al., the lack of transparency in banks’ risk-taking during the containment phase has ensured financial stability, and public assistance has ‘camouflaged’ the risk exposure of banks to the real economy and households.\textsuperscript{73} However, they equally warn of a lack of information about the banking sector, which if reversed suddenly could have a negative impact on financial stability. In their view, greater disclosure of banking exposures during this period is needed to avoid a scenario of contagion risk.

It is equally important to appreciate the challenges that are likely to arise if the credit quality of those exposures deteriorates to the point of non-performance, and attempts are made by banks to recover losses as a result of defaults materialising. Becker et al. raise the issue of increasing corporate debt levels and the need for debt restructuring in the next 24–28 months, which they see as a significant challenge because of inefficient corporate insolvency regimes.\textsuperscript{74}

The expiration of the moratoria arrangements is likely to produce a new batch of NPLs. Indeed, in its latest report Fitch anticipates a significant amount of NPLs materialising as Stage 2 and Stage 3 loans.\textsuperscript{75} NPLs are not likely to surface in countries that have extended their moratoria arrangements, such as Germany, Italy and Portugal, until some time in the future.

The work undertaken by the EBA on bank loan recovery shows us some of the obstacles that are likely to be experienced in tackling the forthcoming NPL problem.\textsuperscript{76} The EBA indicates the importance of law reform to improve the rates of recovery, which we review in section 11 on transition.

In this paper we look at the rate of recovery for the SME and corporate sectors in Italy, France,

\begin{itemize}
\item \textsuperscript{72} ECB, note 10.
\end{itemize}
Spain, Portugal and Greece. We show the differences in comparison to the EU average to provide a snapshot of the challenges ahead in light of the differences in recovery rates. The findings are important, because they show the inefficiency of the local insolvency laws in unlocking trapped liquidity and so contributing to a recovery in the real economy.

The EBA finds that the primary obstacles to an efficient recovery are the lack of options for out-of-court settlement; the absence of long moratoria suspending the enforcement of collateral; how proactive creditor committees are in enforcing their rights; and the existence of collective insolvency proceedings and/or debtors’ future positive or negative cash flow.77 The existence of such obstacles or lack of such measures affects the amount recovered and the time it takes to recover on default loans. EBA research on the factors that can impact on bank recoveries provides us with more details about the challenges for member states and their banks to recover from the potential defaults in the SME and corporate loan sectors. It also points to different legal cultures influencing the efficiency of different legal systems in providing timely resolution of NPLs.

To this end, the first indicator used is the gross recovery rate, calculated as gross recovery amount by notional amount outstanding at the time of default. In this respect the member state below the EU average is Greece, while the remaining states show a positively higher recovery rate above the EU average. Spain scores the highest in each sector.

Table 3: Gross recovery rate

<table>
<thead>
<tr>
<th>Member state</th>
<th>SMEs</th>
<th>Corporates</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>34.4</td>
<td>35.6</td>
</tr>
<tr>
<td>Greece</td>
<td>5.0</td>
<td>10.9</td>
</tr>
<tr>
<td>Italy</td>
<td>25.8</td>
<td>32.3</td>
</tr>
<tr>
<td>Portugal</td>
<td>42.9</td>
<td>35.0</td>
</tr>
<tr>
<td>Spain</td>
<td>66.3</td>
<td>42.2</td>
</tr>
<tr>
<td>EU average</td>
<td>33.8</td>
<td>40.0</td>
</tr>
</tbody>
</table>

Source: EBA

The time taken to recover the notional amount outstanding at the time of default in the SME and corporate sectors indicates how long it can potentially take for any reduction in recoveries from large-scale NPLs. The EU average is shown to be approximately the same for SMEs and corporates. The countries of most concern are Italy and Spain, where it can take significantly longer. The length of time for recovery can have a detrimental impact on the value of collateral.

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77 Ibid.
78 Ibid., 23–25.
<table>
<thead>
<tr>
<th>Time for recovery</th>
<th>SMEs</th>
<th>Corporates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Member state</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>3.7</td>
<td>5.0</td>
</tr>
<tr>
<td>Greece</td>
<td>1.5</td>
<td>1.3</td>
</tr>
<tr>
<td>Italy</td>
<td>6.4</td>
<td>5.3</td>
</tr>
<tr>
<td>Portugal</td>
<td>3.3</td>
<td>3.1</td>
</tr>
<tr>
<td>Spain</td>
<td>4.0</td>
<td>7.0</td>
</tr>
<tr>
<td>EU average</td>
<td>3.3</td>
<td>3.4</td>
</tr>
</tbody>
</table>

*Source: EBA*

The EBA research looks at the efficiency of dealing with recoveries of various NPLs, and shows the need to evaluate insolvency regimes during the proposed transition phase. The stark realities of poorly designed insolvency regimes are evident in the case of Ireland after the GFC and the miniscule number of insolvency cases actually concluded despite the large number of NPLs. This caused in part a recovery lag, due to significant amounts of liquidity locked up as a result of inefficiency.\(^{80}\)

However, in respect of COVID-19 the delay in bankruptcy processes due to the closure of courts, for instance, may have given firms time to see through the crisis and avoid formal insolvency liquidation proceedings. Didier et al. make a similar point, arguing that the ‘hibernation’ period and state assistance reduced the number of bankruptcies and kept corporations intact, thereby reducing negative impacts on wider corporate stakeholders.\(^{81}\) It is arguable, on the other hand, that inefficient insolvency liquidation regimes ‘after the recovery’ can potentially lead to negative effects on corporate stakeholders and unnecessary break-up of stakeholder relationships if corporations are not incentivised to adopt rehabilitation or other rescue measures. It remains to be seen whether the 2019 preventive structuring framework directive,\(^{82}\) explored later in the paper, will provide the relief banks (as primary creditors) need to overcome the stress of this crisis.

### 7. European state aid – Temporary framework for state aid and its impact on banks’ lending behaviour

In March 2020 the European Commission adopted a temporary framework for state aid to ease conditions under which EU member states can grant aid to corporates.\(^{83}\) The Commission argued that member states’ supporting measures are compatible with the state aid regime, as they have been implemented to remedy a serious disturbance in the economy in line with

\(^{79}\) Ibid., 39–41.


Article 107(3)(b) Treaty on the Functioning of the European Union 2012 (TFEU). As of 30 September 2021, ‘the Commission has taken more than 650 decisions in all Member States, including based on the Temporary Framework, to enable necessary and proportionate support worth more than in total €3 trillion to companies affected by the coronavirus outbreak’.

The temporary framework has been amended multiple times and extended to 30 June 2022. In the words of the Commission, the extension is necessary to ‘enable a coordinated phase-out of the level of support in light of the observed economic recovery. That phase-out has to be seen in light of the heterogeneity of the recovery, with specific sectors and regions in different Member States still lagging behind others.’

The framework covers several different areas of financial assistance: direct grants, selective tax advantages and advance payments; state guarantees for loans taken by companies from banks; subsidised public loans to companies; safeguards for banks that channel state aid to the real economy; short-term export credit insurance; support for coronavirus-related research and development (R&D); support for the construction and upscaling of testing facilities; support for the production of products relevant to tackle the coronavirus outbreak in the form of direct grants, tax advantages, repayable advances and no-loss guarantees; targeted support in the form of deferral of tax payments and/or suspensions of social security contributions for those sectors, regions or types of companies that are hit the hardest by the outbreak; targeted support in the form of wage subsidies for employees; targeted recapitalisation aid to NFCs if no other appropriate solution is available; and support for uncovered fixed costs for companies facing a decline in turnover during the eligible period of at least 30% compared to the same period of 2019 in the context of the coronavirus outbreak.

Some measures enable member states to incentivise the financial sector to provide support to the real economy and especially to SMEs, which have traditionally been viewed more sympathetically in comparison to their large counterparts for state aid decisions. For instance, as part of the prolongation of the temporary framework, the Commission introduced a new measure to increase access to other sources of funding for SMEs, with a view to strengthening their solvency. Specifically, until 31 December 2023 member states can grant guarantees to private intermediaries that provide equity financing to SMEs, including start-ups and small

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mid-caps. However, this in turn can only contribute to an increased exposure to SMEs’ insolvency risk at both private and sovereign levels, thus reinforcing the possibility of a doom-loop scenario, as discussed above.

The explicit guarantees provided to the wider sector cover the costs of support to NFCs, but do not extend to providing liquidity and/or insolvency support to banks. The Commission is clearly stating that the support is not directed towards the viability, liquidity or solvency of the banking system, as was the case during the GFC; rather, banks are simply conduits for the distribution of support and member states’ assistance is provided to the real economy.

The Commission explains this hard stance by referring to alternative techniques of liquidity support for banks, such as precautionary recapitalisation, impaired asset measures and central bank liquidity assistance, which may fall within the accepted limits of state aid because of the economic disruption that is sought to be remedied. This notwithstanding, one of the amendments to the temporary framework explains that if banks require public financial assistance, it would not trigger the failure or likely failure of the bank under the EU Bank Recovery and Resolution Directive regime.

However, it should be noted that access to these forms of ad hoc liquidity support is burdensome for banks and subject to a range of constraints which make their use a last resort.

Interestingly, the Commission has recently approved two national measures which are directly aimed at supporting either the solvency and lending capacity (Portugal) or the orderly liquidation (Italy) of certain banks. Portugal injected €250 million into the capital of Banco

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91 Ibid., 1.
93 See, for instance, the Commission’s words in describing the content of measures related to safeguards of banks: ‘Some Member States plan to build on banks’ existing lending capacities, and use them as a channel for support to businesses – in particular to small and medium-sized companies. The Framework makes clear that such aid is considered as direct aid to the banks’ customers, not to the banks themselves, and gives guidance on how to ensure minimal distortion of competition between banks.’ [https://ec.europa.eu/commission/presscorner/detail/en/ip_20_496](https://ec.europa.eu/commission/presscorner/detail/en/ip_20_496).
94 A form of support to the banking sector within the state aid framework is the provision excluding the granting of state aid under Art 107(2)(b) (aid granted to compensate direct damages caused to banks by the COVID-19 outbreak) as constituting extraordinary public financial support for ‘failing or likely to fail’ (FOLF) purposes. This aid is also excluded from the application of the state aid regime.
95 Para 62 of the Banking Communication clarifies that emergency liquidity assistance provided by central banks does not constitute state aid only if some conditions are met: (a) the credit institution is temporarily illiquid but solvent, and the facility is fully secured by collateral...; (c) the central bank charges a penal interest rate...; (d) the measure is taken at the central bank’s own initiative, and in particular is not backed by any counter-guarantee of the state’. See Communication from the Commission on the application from 1 August 2013 of state aid rules to support measures in favour of banks in the context of the financial crisis (‘Banking Communication’), in OJ (2013/C 216/01). On this matter see also C Russo and R Lastra, ‘The financing of bank resolution: Who should provide the required liquidity?’, in-depth analysis for ECON Committee of the EU Parliament, June 2018. [https://www.europarl.europa.eu/RegData/etudes/IDAN/2018/624420/IPOL_IDA(2018)624420_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDAN/2018/624420/IPOL_IDA(2018)624420_EN.pdf).
96 For an analysis of possible support to the financial sector and the implicit support included in the temporary framework see Phedon Nicolaides, ‘The corona virus can infect banks too: The applicability of the EU banking and state aid regimes’, 2020 European State Aid Law Quarterly 29 (2020) 29-38.
Portugues de Fomento (BPF) as part of its national strategy to recover from the economic and social damages of the pandemic.\textsuperscript{99} BPF\textsuperscript{100} is a private-public development bank that specialises in financing SMEs and innovative and green/social projects as well as national and local investment projects. The capital injection will ‘enable BPF to increase financing – particularly for SMEs affected by the coronavirus pandemic – mostly through the granting of public guarantees in close collaboration with commercial banks active in Portugal’.\textsuperscript{101}

The Italian measure allows the state to support the liquidation under national insolvency proceedings of distressed small banks (with total assets up to €5 billion) through a sale of those banks’ assets and liabilities. This is a prolongation of a previously approved scheme,\textsuperscript{102} which was due to end on 20 November 2021 and has now been extended to 20 November 2022. Specifically, the state can support the sale of an eligible bank via tax credits; a state guarantee – unconditional, irrevocable and free of charge – on the assets and liabilities of the eligible bank that are transferred to the buyer; and the provision of cash to the buyer as a last resort.\textsuperscript{103}

The prolongation of a similar scheme has been approved for Polish cooperative and small commercial banks five times.\textsuperscript{104}

As discussed in this paper, to sustain the health of the financial sector and in recognition of the increase risk of NPLs, the Commission planned to ‘(i) further develop secondary markets for distressed assets, which would allow NPLs to be moved off the banks’ balance sheets while ensuring adequate protection for debtors; and (ii) reform the insolvency and debt recovery frameworks, ensuring an appropriate balance of interests between creditors and debtors’.\textsuperscript{105}

These measures indicate that the Commission is extremely aware of the risk of fast deterioration of banks’ balance sheets, which may lead to insolvency. The measures in turn are an example of an implicit guarantee. It is also unsurprising that the Commission is consulting on the need to amend the state aid framework included in the Banking Communication of 2013.\textsuperscript{106}

As mentioned, the range of measures allowed under the framework is broad and complex. In some cases, ceilings are established. For instance, in the case of direct grants, equity injections,
tax advantages and advance payments can be ‘up to €225,000 to a company active in the primary agricultural sector, €270,000 to a company active in the fishery and aquaculture sector and €1.8 million to a company active in all other sectors to address its urgent liquidity needs. Member States can also give, up to the nominal value of €1.8 million per company zero-interest loans or guarantees on loans covering 100% of the risk, except in the primary agriculture sector and in the fishery and aquaculture sector, where the limits of €225,000 and €270,000 per company respectively, apply.’ Loan guarantees can cover up to 90% of risk on loans.

In the case of guarantees on loans and subsidised interest rates, the Commission considers such loans to be compatible with state aid provided they fall within the minimum set limits for SMEs and large enterprises. The credit risk margins are set according to the loan duration up to six years, at a staggered margin of 25 basis points, 50 basis points and 100 basis points for the longer loans. The size of the loans needs to be either double the wage bill, or 25% of turnover or based on self-certification of a beneficiary’s liquidity needs.

At member state level, governments have implemented general ‘umbrella’ schemes applicable to all companies irrespective of size and sector (with the exception of the financial sector) as well as _ad hoc_ measures for specific sectors, for firms operating in certain geographic areas and for the self-employed. Some schemes have the immediate aim of covering working capital loans or other investment needs of firms, to allow them to continue operations. General schemes may also ‘ring-fence’ part of their budget allocation to SMEs.

Countries have also extended aid to individual companies. For instance, Air France received €11 billion in aid overall, which include €4 billion for the recapitalisation of the holding company (through a capital injection by the state and conversion of a previously granted state loan into a hybrid instrument), a state guarantee on loans and a shareholder loan totalling €7 billion to provide urgent liquidity to the company. Air France is planning to raise capital to repay the aid.

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107 European Commission, ‘State aid: Commission approves €31.9 billion Italian scheme to support companies affected by the coronavirus outbreak’, press release, 15 October 2021

108 See European Competition Commission, ‘Summary of case practice on modulation under point 25(b) of the Temporary Framework’

109 The duration of the guarantee is limited to a maximum six years and the public guarantee does not exceed:

i. 90% of the loan principal where losses are sustained proportionally and under same conditions, by the credit institution and the State; or

ii. 35% of the loan principal, where losses are first attributed to the State and only then to the credit institutions (i.e. a first-loss guarantee); and

iii. in both of the above cases, when the size of the loan decreases over time, for instance because the loan starts to be reimbursed, the guaranteed amount has to decrease proportionally’.

110 European Commission, note 88.

111 European Commission, ‘State aid: Commission approves French plans to provide €7 billion in urgent liquidity support to Air France’, press release, 4 May 2020

112 Bloomberg UK, ‘Air France-KLM prepares $4.5 billion fund raise to repay bailout’, 17 February 2022

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When still in operation, Alitalia received approximately €352.685 million in direct grants from Italy to compensate the company for damages suffered on certain routes during the government-imposed travel bans. \(^{113}\)

The aid received under umbrella schemes, sectoral support and compensation for direct damages suffered by individual companies do not normally come with any strings attached. In the case of liquidity or other supporting measure to individual companies, conditions are generally attached, including provisions related to the need for the state to be remunerated appropriately upon exit.

Alongside more ‘traditional’ sectors hit hard by the pandemic (tourism, transport, art and culture, agriculture, fisheries, hospitality and entertainment), some countries (Portugal \(^{114}\) and France \(^{115}\)) also decided to support the credit insurance sector specifically. This ensured that credit insurance coverage remained available to companies to avert sudden requests to switch to advance payments, which would exacerbate the liquidity position of firms.

Eligible companies are those which were not experiencing financial stress before 31 December 2019. However, a few schemes exceptionally apply to firms in financial distress, subject to strict conditions. Interestingly, in at least one case (Greece) a scheme covers both performing loans and NPLs of certain companies (micro and small/medium COVID-19-stricken\(^{116}\) undertakings). The measure provides direct grants to subsidise loan payments of eligible firms, and ‘the State support will cover a percentage of the monthly loan instalments of the eligible beneficiaries’ debts, for a period of eight months (the “Subsidisation period”). Eligible to the measure are all bank loans relating to the beneficiary’s business activity, provided those debts existed on 31 December 2020.\(^{117}\) Some schemes are co-funded by other EU funds, such as the European Structural and Investment Funds, the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund.


State aid: Commission approves €12.835 million Italian aid measure to compensate Alitalia for further damages suffered due to coronavirus outbreak, 12 May 2021.


State aid: Commission approves €73 million of Italian support to compensate Alitalia for further damages suffered due to coronavirus outbreak, 29 December 2020.


\(^{117}\) Ibid.
In a plan expected to ‘mobilise more than 300bln of liquidity support’, the French Public Investment Bank (Bpifrance) is in charge of providing state guarantees to commercial loans and credit lines of small enterprises. That same scheme also ‘provide[s] State guarantees to banks on portfolios of new loans for all types of companies. This is direct aid to the companies that will enable banks to quickly provide liquidity to any company that needs it.’

Umbrella schemes were widely amended by member states in 2021. While usually the amendments related to extending a scheme’s duration in line with the temporary framework’s validity, states also tweaked the relevant provisions to include most favourable terms. For instance, they have increased the type of aid offered; extended eligibility criteria for participating companies; further diluted repayment instalments; and increased the maturity date of the aids. This last measure mimics debt-restructuring features when applied to state loans. Only in a very limited number of cases did scheme amendments include a reduction in the amount of guarantee offered (below the 90% allowed by the framework) or a contraction in the original aid ceilings. The implications of these measures for banks’ incentives to manage the relationship with those participating companies are factored into decision-making by the Commission. The Commission emphasises that public guarantees are not directly attempting to improve the viability of banks by strengthening their liquidity or solvency position, but there is recognition that such support could still give rise to indirect advantages to banks which do need to be monitored.

The Commission does not articulate how the distorting effects of state aid are expected to be reduced, and, as mentioned, general schemes do not have conditions attached to the aid. Member states have to report to the Commission on an annual basis. Motta and Peitz suggest conditions should be introduced to ensure consistency. They suggest the criteria for such aid need to be more stringent and prevent its use for ‘managerial remuneration’, ‘dividends’ and ‘mergers and acquisitions’, but they include a requirement for restructuring to reduce the distorting effects of the aid in the market. They also propose a tapered approach to any equity-based support packages to dilute the existing shareholder interest in the company in question.

The ‘soft’ tone of the communication indicates the severity of the crisis and the need to set aside the concern about moral hazard risk that support to potentially non-viable undertakings could create. As argued in this paper, such matters should be part of a coherent transition strategy where debt restructuring and matters related to the rehabilitation and rescue of corporations and SMEs are the focus of policymakers.

122 Ibid., 75.
In the current phase the onus is shifted on to the banks and bank supervisors to decide how best to assess debtors’ viability. This will require an understanding of the differences among the NFCs supported and an appreciation of their ability to access finance. A study by the OECD primarily focuses on those NFCs that have the potential to access equity finance. However, it is silent on the SME sector, which is heavily reliant on commercial banking loans. Schich and Kim show that in previous crises SMEs were likely to be neglected when credit rationing is occurring, in view of them being prone to failure. This is not the case during this crisis.

The size of the SME sector in some member states, like Italy and Greece, is disproportionately larger than in others. Overall, the SME sector plays a crucial role in the economy of the European Union, as it accounts for almost 67% of employment. Conversely, the banking sector accounts for 77% of SME sector financing. In its report, the EBA notes that the SME segment had the highest percentage of loans under moratoria. Given the size of such potential negative exposures in some member states, it is important to think about developing guidance to assist decisions on those cases during the transition phase.

One of the challenges with SMEs is the difficulty in predicting their risk of default, as it is not a homogeneous sector. In view of this, Andrikopoulos and Khorasgami argue that banks need to devise their own hybrid models according to various criteria, including splitting SMEs into micro, medium size and large. With this classification, banks can tailor their risk exposure and ensure that risk assessment is appropriate and proportionate to determine their future capital and lending levels. Contrary to what happens with large listed SMEs, in the case of (micro) unlisted SMEs banks have comparatively limited market information to predict the default risk which should inform their decision-making. Combining balance sheet information with market information assists banks with improving the predictability of SMEs’ default risks.

Finally, the staggered expiration of public guarantees is important, but it equally exposes the risk of ‘evergreening’ loans. During this crisis the rollover of distressed debt is necessary, but it is unlikely to continue in the long term due to policy concerns about creating a risk of moral hazard. As Gobbi et al. explain, ‘banks would prefer not to roll over the debt if the expected return from continuing the client relationship without guarantees is lower than the expected recovery value of the loan’. This is because the guarantee underpins the collateral value of the asset, and once the guarantee is removed the collateral value is likely to fall.

In the transition phase we advocate for EU authorities to develop guidance to ensure consistent

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124 Schich and Kim, note 52.
126 EBA, note 64, 12.
128 Ibid.
129 FSB, note 9, 8.
practice across member states for the treatment of such risks.

8. Monetary policy measures

An expansionary monetary policy has been a characteristic of all the major economies since the GFC. The euro area’s consolidated statement components have also increased significantly during that period. As indicated, the role of the ECB during the pandemic has been wide-reaching, with a variety of monetary policy tools used to contain the crisis in the euro area and participating member states, and to provide vital financial assistance to sustain the real economy during periods of inactivity. The depth and complexity of the ECB assistance are beyond the scope of this paper; here we focus on its support to the real economy through the Longer Term Refinancing Operations (LTRO) programme and its replacement Targeted Longer Term Refinancing Operations (TLTRO III). Collectively, these are a set of incentives which have in significant part replaced private market financing of credit with public financing of credit to the real economy, reaching 9% of the total assets of euro-area banks on aggregate. It is debatable whether such financing reduces bank market discipline to manage moral hazard risks to those they are lending to.

Our focus is on direct monetary policy activities intended to offer specific support to the economy, similarly to public guarantees and moratoria. Accordingly, we consider that such measures mainly correspond to the TLTRO III programme, although we could also mention the ECB’s Pandemic Emergency Purchase programme.

Generally, TLTROs are Eurosystem operations that provide financing by offering banks long-term funding at attractive conditions to stimulate bank lending to the real economy. These targeted operations work in such a way that the amounts and interest rates that banks can borrow depend on their placements to the real non-financial sector. The programmes were initially introduced after the GFC to preserve long-term favourable bank lending in the euro area, with the aim of promoting bank credit to the non-financial sector. A first series of TLTROs was announced on 5 June 2014, a second series (TLTRO II) on 10 March 2016.

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137 Decision ECB/2019/22 of 22 July 2019 amending Decision ECB/2016/10 introduces a change to the notification period for voluntary early repayments of amounts borrowed under TLTRO II.
and a third series (TLTRO III) on 7 March 2019.138

The ECB Governing Council announced the LTRO and the phasing in of TLTRO III early in March 2020 in response to the crisis. In practice, TLTRO III consists of a series of ten targeted LTROs, each with a maturity of three years, starting in September 2019 and continuing at a quarterly frequency. Borrowing rates in these operations can be as low as 50 basis points below the average interest rate on the deposit facility over the period from 24 June 2020 to 23 June 2022, and as low as the average interest rate on the deposit facility during the rest of the life of the respective TLTRO III.

138 Consolidated version of Decision ECB/2019/21
As implied by the borrowing amounts shown in Figure 1, the terms of the funding are far more generous than previous auctions for such funding, with softer collateral terms as well. The Governing Council extended the terms of such refinancing until June 2022, but also encouraged participating banks to improve lending to all sectors of the economy (including households). It also increased the amount participating banks could borrow to 50–55% of their stock of eligible loans and put in place new lending performance targets. The special interest rate offered to the banks is minus 50 basis points of the average deposit rate applied in the Eurosystem, which at the time was 0%.

The demand for such low-cost funding did not always attract the interest expected and so has not led to the levels of lending anticipated by the ECB, despite the very low interest rates. In part, this is due to the level of existing debt in the real economy. While demand for loans increased significantly after the GFC, it had been slowly declining since 2017. As a result of such low take-up of credit financing, the expected growth outlook also remained low.

However, the pandemic saw a hairpin turn in the relevant funding when in June 2020 banks received a staggering €1.31 trillion from the ECB through TLTRO III, with allotments for September and December 2021 being significant. These funds are expected to be paid back

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140 Financial Times, ‘ECB’s lending operations fail to ignite bank lending’, 10 April 2019.
142 ECB, ‘ECB prolongs support via targeted lending operations for banks that lend to the real economy’, 10 December 2020
when they mature at various points in 2023, with €1.3 trillion maturing by the second quarter of 2023. According to Euromoney, ‘European banks had borrowed €1.75 trillion from the ECB. That will have to be repaid or refinanced, while there is no guarantee that the ECB will roll over these programmes.’\textsuperscript{143} It is argued that while banks have seen record levels of deposits, they have still resorted to such financing because of the incentives offered. According to Euromoney, ‘Autonomous Research estimates a boost of anywhere between €5 billion to €13 billion to bank earnings from this subsidy, equivalent to about 12% of 2019 profits. It suggests that further TLTRO easing could add 7.5% to annual profits through to 2022.’\textsuperscript{144}

The levels of borrowing shown in Figure 1 are line with our stable period from 2015 to 2019 and the stress period of 2020, which are explored in more detail below. They equally suggest the possibility that such access to funding camouflages the balance sheet position of EBU banks, whether directly or indirectly, by providing a stable level of funding to the real economy.

9. COVID-19 initial impact – Key research findings

We agree that the COVID-19 crisis is an exogenous shock to the banking system, and therefore a clear analysis of impact due to this stress is needed. We also believe that in a turbulent geopolitical and economic environment with probable additional exogenous shocks, understanding the aspects and scope of the effects of the shock might be more critical than focusing on short/medium-term forecasting. Considering the effects of COVID-related information on financial markets\textsuperscript{145} – including general information diffusion about economic expectations and government interventions – caution and reliability are of utmost importance. From a quantitative standpoint, at the time of writing this meant that our analysis had shown severe effects, while the prevailing public sentiment was optimistic based on limited data covering two quarters. From the current standpoint, the second exogenous shock has materialised even before full recovery has been made from the first one.

The four composite indicators for activity, credit risk, solvency and profitability constructed at the level of banks and aggregated to member states and the EU/SSM aim to help understand the specifics of this situation by providing data to inform policy decisions.

Fortunately, trends in the stable period preceding the COVID-19 crisis have led to improvements in crucial areas after the GFC. This is largely due to implementation of the initial Basel III reforms coupled with the weakening of the bank–sovereign doom loop upon the establishment of the European Banking Union and the general economic recovery.\textsuperscript{146} Thus euro-area banks entered the ‘COVID-19 stress’ with solid solvency and liquidity positions.

Furthermore, because governments, central banks and supervisory interventions have mitigated the COVID-19 stress, potential adverse effects on banks have not yet been fully observed. This

\textsuperscript{143} Euromoney, ibid.
\textsuperscript{144} Ibid.
has been confirmed by EU authorities. For example, in August 2021 the ECB published data as of end-March 2021 showing that total assets of EU banks increased by 4.99%, the NPL ratio fell by 0.16 percentage points over the previous year, average return on equity was 1.87% and the Common Equity Tier 1 (CET1) ratio was 15.68%. Similar trends continued, and as of end-June 2021 the total assets of EU banks increased by 2.90%, NPL ratio dropped by 0.19 percentage points year on year to 2.32% over the same period, return on equity was 3.62% and the CET1 ratio remained at 15.75%.

9.1 EU/SSM level: Findings

Figure 2: EU/SSM – Four composite indicators (asset-weighted Δ% for individual banks)

Sources: Orbis Bank Focus, The Banker database, EBA transparency and stress test exercises, banks’ financial statements and Pillar 3 reports, and authors’ calculations and estimates.

Our findings for the EU/SSM level, in Annex 3, focus on the stress impact in 2020. The composite indicator for ‘activity’ has increased by 15.35%, primarily due to an increase in total assets (24.32%). The ‘credit risk’ indicator has grown by 33.44%, and the net loan impairment charges increased by 145.29%. The ‘solvency’ indicator shows that capital adequacy remained at pre-COVID-crisis levels, but taking into account the longer stable period (i.e. post-GFC recovery) and observing it from two perspectives led to an increase in the composite indicator of 8.01%.

The most challenging area for EU banks is profitability, and our composite indicator shows a decrease of 33.04%. It should be noted that the pre-impairment operating profit component increased by 18.97%, but due to significant provisioning all other components decreased – profit before and after taxes, return on assets (ROA) and return on equity (ROE). This was

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149 Although we are following the forecasts and estimates by the ECB and EBA, the goal of our empirical research is to contribute by providing an independent, comprehensive, reliable, uniform and comparable analysis of COVID-19 stress.
addressed in the EBA’s risk dashboard,\textsuperscript{150} indicating that in Q2 2021 EU banks benefited from the economic recovery and profitability stabilised, mostly due to lower impairment costs. However, the EBA pointed out that ROE still decreased to 7.4% in Q2 2021 from 7.7% in the previous quarter.

To put each country in the EU-wide SSM context, the size of that member state’s significant banks’ assets should be considered. For example, the assets of the significant French banks (i.e. under direct ECB supervision) reach approximately €9 trillion, while the assets of Portuguese banks under ECB supervision amount to around €200 billion. An outline of all countries is provided in Figure 3 and Annex 4.

**Figure 3: EU/SSM – Four composite indicators per member state (asset-weighted Δ% for individual banks) and member state bank assets**

Sources: *Orbis Bank Focus, The Banker database, EBA transparency and stress test exercises, banks’ financial statements and Pillar 3 reports, authors’ calculations and estimates.*

Considering the pre-existing conditions in the respective banking sectors and public finances, as well as the impact of the COVID-19 crisis, we decided to analyse further a subsample of five countries deemed to be most prone to the impact of COVID-19 stress: Greece, France, Spain, Italy and Portugal.

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9.2 Subsample: Greece findings

Figure 4: Greece – Four composite indicators (asset-weighted Δ% for individual banks)

Sources: Orbis Bank Focus, The Banker database, EBA transparency and stress test exercises, banks’ financial statements and Pillar 3 reports, authors’ calculations and estimates.

Our sample covers four banks established in Greece with total assets of €286.27 billion, which represents 1.13% of the total assets of 114 significant entities directly supervised by the ECB (see Annex 1 for individual banks’ sheets and Annex 2 for individual banks’ composite indexes in relation to their asset size).

The most important observation for this subsample relates to a 66.45% increase in net loan impairment, leading to decreases in all ‘profitability’ components except pre-impairment operating profit. This is in line with EU-level changes, but the relative decrease in profitability is larger for Greece (–73.09%). Additionally, the ‘solvency’ indicator has worsened for Greek banks (–10.78%), which was not the case at the EU level, where the majority of the banks even managed to improve their capital adequacy slightly.

Newly originated loans and advances subject to public guarantee schemes, as of end-2020, and extended by the four significant banks in Greece covered by our research (see Table 5), amounted to €4.56 billion, which was 2.73% of total gross loans to customers at that date. The majority of funds were granted to the corporate sector, 40% of which went to large corporates and 60% to SMEs.

Table 5: Greece – Newly originated loans and advances subject to public guarantee schemes in 2020

<table>
<thead>
<tr>
<th></th>
<th>€</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households</td>
<td>49,654,000</td>
<td>1.09%</td>
</tr>
<tr>
<td>Non-financial corporations</td>
<td>4,511,081,000</td>
<td>98.91%</td>
</tr>
<tr>
<td>Large corporates</td>
<td>1,773,974,000</td>
<td>39.32%</td>
</tr>
<tr>
<td>SMEs</td>
<td>2,737,107,000</td>
<td>60.68%</td>
</tr>
<tr>
<td>Total</td>
<td>4,560,735,000</td>
<td></td>
</tr>
</tbody>
</table>

% of Gross loans to customers (as of end-2020) 2.73%

Sources: ECB supervisory banking statistics, authors’ calculations and estimates.
The composition of loans and advances, according to 2020 data covering the four significant SSM banks in Greece (see Table 6), can lead to an indirect conclusion that the share of central bank and government loans is about 2.62%.

Table 6: Greece – Composition of loans and advances

<table>
<thead>
<tr>
<th></th>
<th>Confidential</th>
<th>n/a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central banks</td>
<td>[confidential]</td>
<td>[n/a]</td>
</tr>
<tr>
<td>Governments</td>
<td>[confidential]</td>
<td>[n/a]</td>
</tr>
<tr>
<td>Financial sector</td>
<td>€ 18,910,000,000</td>
<td>13.11%</td>
</tr>
<tr>
<td>Corporates</td>
<td>€ 73,120,000,000</td>
<td>50.71%</td>
</tr>
<tr>
<td>Households</td>
<td>€ 48,380,000,000</td>
<td>33.55%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>€ 144,190,000,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Source: ECB supervisory banking statistics.*

General government debt in Greece (see Figure 5) increased from 181% of GDP to 206% in the initial year of the COVID-19 crisis. This is particularly worrying due to the already high debt level – more than double that of the euro area on average.

Figure 5: Greece – Government debt as percentage of GDP

*Source: Eurostat.*
9.3 Subsample: Spain findings

Figure 6: Spain – Four composite indicators (asset-weighted Δ% for individual banks)

Sources: Orbis Bank Focus, The Banker database, EBA transparency and stress test exercises, banks’ financial statements and Pillar 3 reports, authors’ calculations and estimates.

Our sample covers 11 banks established in Spain with total assets of €3,359.49 billion, which represents 14.02% of the total assets of 114 significant entities directly supervised by the ECB (see Annex 1 for individual banks’ sheets and Annex 2 for individual banks’ composite indexes in relation to their asset size).

The ‘activity’ indicator remained close to zero, as did ‘credit risk’, but there was a 95.80% increase in net loan impairment. The most significant change is a decrease in all major ‘profitability’ variables, leading to –80.97% negative change in this composite indicator. Newly originated loans and advances subject to public guarantee schemes, as of end-2020 and extended by the 11 significant banks in Spain covered by our research, amounted to €86.30 billion, which was 4.89% of total gross loans to customers at that date. The majority of funds were granted to the corporate sector, 30% of which went to large corporates and 70% to SMEs.

Table 7: Spain – Newly originated loans and advances subject to public guarantee schemes in 2020

<table>
<thead>
<tr>
<th>Segment</th>
<th>Amount</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households</td>
<td>€ 5,675,278,618</td>
<td>6.17%</td>
</tr>
<tr>
<td>Non-financial corps</td>
<td>€ 86,302,485,743</td>
<td>93.83%</td>
</tr>
<tr>
<td>Large corporates</td>
<td>€ 24,001,249,459</td>
<td>27.81%</td>
</tr>
<tr>
<td>SMEs</td>
<td>€ 62,301,236,284</td>
<td>72.19%</td>
</tr>
<tr>
<td>Total</td>
<td>€ 91,977,764,361</td>
<td>4.89%</td>
</tr>
</tbody>
</table>

Sources: ECB supervisory banking statistics, authors’ calculations and estimates.

According to 2020 data covering the 11 significant SSM banks in Spain (see Table 8), the share of loans and advances extended to government is 4.48%.
General government debt in Spain (see Figure 7) increased from 96% of GDP to 120% in the initial year of the COVID-19 crisis. This is not particularly worrying due to the relatively medium level, but the increase has been quite sharp.

Figure 7: Spain – Government debt as percentage of GDP

![Graph showing government debt as percentage of GDP from 2011 to 2020. The graph indicates a steady increase from 96% in 2011 to 120% in 2020.](source: Eurostat)

9.4 Subsample: France findings

Figure 8: France – Four composite indicators (asset-weighted Δ% for individual banks)

![Graph showing four composite indicators for France from 2011 to 2020.](source: Orbis Bank Focus, The Banker database, EBA transparency and stress test exercises, banks’ financial statements and Pillar 3 reports, authors’ calculations and estimates)
Our sample covers 11 banks established in France with assets of €8,640.62 billion, which represents 34.24% of the total assets of 114 significant entities and makes France the participating member state with the largest share of banking assets under the ECB’s direct supervision (see Annex 1 for individual banks’ sheets and Annex 2 for individual banks’ composite indexes in relation to their asset size).

Our analysis shows that in 2020 French banks managed to increase the composite ‘activity’ indicator (+14.46%) while improving their ‘solvency’ indicator (9.81%). However, they also went through a drastic relative increase in net loan loss provisions (130.62%). A fall in most of the variables in ‘profitability’ led to a –12.36% decrease in this composite indicator.

Newly originated loans and advances subject to public guarantee schemes, as of end-2020 and extended by the 11 significant banks in France covered by our research, amounted to €121.13 billion, which was 4.46% of total gross loans to customers at that date. The majority of funds were granted to the corporate sector, with approximately the same shares to large corporates and SMEs.

### Table 9: France – Newly originated loans and advances subject to public guarantee schemes in 2020

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount (€)</th>
<th>Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households</td>
<td>6,379,684,466</td>
<td>5.27%</td>
</tr>
<tr>
<td>Non-financial corporations</td>
<td>114,752,223,867</td>
<td>94.73%</td>
</tr>
<tr>
<td>Large corporates</td>
<td>51,800,645,720</td>
<td>45.14%</td>
</tr>
<tr>
<td>SMEs</td>
<td>62,951,578,147</td>
<td>54.86%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>121,131,908,333</strong></td>
<td>4.46%</td>
</tr>
</tbody>
</table>

Sources: ECB supervisory banking statistics, authors’ calculations and estimates.

According to 2020 data covering the 11 significant SSM banks in France, the share of loans and advances extended to government is 7.86%.

### Table 10: France – Composition of loans and advances

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount (€)</th>
<th>Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central banks</td>
<td>52,410,000,000</td>
<td>1.04%</td>
</tr>
<tr>
<td>Governments</td>
<td>395,070,000,000</td>
<td>7.86%</td>
</tr>
<tr>
<td>Financial sector</td>
<td>965,210,000,000</td>
<td>19.20%</td>
</tr>
<tr>
<td>Corporates</td>
<td>1,704,130,000,000</td>
<td>33.90%</td>
</tr>
<tr>
<td>Households</td>
<td>1,909,680,000,000</td>
<td>37.99%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5,026,500,000,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: ECB supervisory banking statistics.

General government debt in France (see Figure 9) increased from 98% of GDP to 115% in the initial year of the COVID-19 crisis, showing a speedy one-year increase.
9.5 Subsample: Italy findings

Our sample covers 11 banks established in Italy with total assets of €2,706.60 billion, which represents a 10.72% share in the total assets of 114 significant entities (see Annex 1 for individual banks’ sheets and Annex 2 for individual banks’ composite indexes in relation to their asset size).

Italian banks increased their ‘activity’ (+20.38%) and improved ‘solvency’ (+15.90%). However, they had a drastic decrease in the composite ‘profitability’ indicator (−87.23%). Newly originated loans and advances subject to public guarantee schemes, as of end-2020 and extended by the 11 significant banks in Italy covered by our research, amounted to €83 billion, which was 5.19% of total gross loans to customers at that date. The majority of funds were granted to the corporate sector, of which 34% went to large corporates and 66% to SMEs.
Table 11: Italy – Newly originated loans and advances subject to public guarantee schemes in 2020

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households</td>
<td>€ 8,114,761,438</td>
<td>9.78%</td>
</tr>
<tr>
<td>Non-financial corporations</td>
<td>€ 74,883,457,199</td>
<td>90.22%</td>
</tr>
<tr>
<td>Large corporates</td>
<td>€ 25,503,161,344</td>
<td>34.06%</td>
</tr>
<tr>
<td>SMEs</td>
<td>€ 49,380,295,855</td>
<td>65.94%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>€ 82,998,218,637</strong></td>
<td></td>
</tr>
</tbody>
</table>

Sources: ECB supervisory banking statistics, authors’ calculations and estimates.

According to 2020 data covering the 11 significant SSM banks in Italy, the share of loans and advances extended to government is 3.44%.

Table 12: Italy – Composition of loans and advances

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central banks</td>
<td>€ 21,080,000,000</td>
<td>1.39%</td>
</tr>
<tr>
<td>Governments</td>
<td>€ 52,160,000,000</td>
<td>3.44%</td>
</tr>
<tr>
<td>Financial sector</td>
<td>€ 212,170,000,000</td>
<td>13.99%</td>
</tr>
<tr>
<td>Corporates</td>
<td>€ 705,880,000,000</td>
<td>46.56%</td>
</tr>
<tr>
<td>Households</td>
<td>€ 524,840,000,000</td>
<td>34.62%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>€ 1,516,140,000,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: ECB supervisory banking statistics.

General government debt in Italy (see Figure 11) increased from 134% of GDP to 156% in the initial year of the COVID-19 crisis, showing a rapid one-year increase.

Figure 11: Italy – Government debt as a percentage of GDP

Source: Eurostat.
9.6 Subsample: Portugal findings

Figure 12: Portugal – Four composite indicators (asset-weighted Δ% for individual banks)

Sources: Orbis Bank Focus, The Banker database, EBA transparency and stress test exercises, banks’ financial statements and Pillar 3 reports, authors’ calculations and estimates.

Our sample covers three banks established in Portugal with total assets of €229.99 billion, which represents 0.91% of the total assets of 114 significant entities directly supervised by the ECB (see Annex 1 for individual banks’ sheets and Annex 2 for individual banks’ composite indexes in relation to their asset size).

The most important observation for this subsample is that, despite increased provision costs (+75.21%), there is a significant increase in the composite ‘profitability’ indicator and all of its components (+37.08%). This should be understood in the context of a methodology that shows relative changes, and in this case there was a low base due to earlier losses; it therefore reflects not only the most recent year-to-year change but also the weighted impact of change in comparison to the whole five-year period.151

Newly originated loans and advances subject to public guarantee schemes, as of end-2020 and extended by the three significant banks in Portugal covered by our research, amounted to €4.56 billion, which was 4.37% of total gross loans to customers at that date. The majority of funds were granted to the corporate sector, and over 90% of that went to SMEs.

151 An important aspect in explaining this ‘phenomenon’ is that losses in the preceding period created a low base. Please refer to Annex 1 to see concrete examples and interpret the aggregate results, bearing in mind the actual context.
Table 13: Portugal – Newly originated loans and advances subject to public guarantee schemes in 2020

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
<th>% of Gross loans to customers (as of end-2020)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households</td>
<td>€ 24,612,952</td>
<td>0.54%</td>
</tr>
<tr>
<td>Non-financial corporations</td>
<td>€ 4,537,635,236</td>
<td>99.46%</td>
</tr>
<tr>
<td>Large corporates</td>
<td>€ 424,722,146</td>
<td>9.36%</td>
</tr>
<tr>
<td>SMEs</td>
<td>€ 4,112,913,089</td>
<td>90.64%</td>
</tr>
<tr>
<td>Total</td>
<td>€ 4,562,248,188</td>
<td>4.37%</td>
</tr>
</tbody>
</table>

Sources: ECB supervisory banking statistics, authors’ calculations and estimates.

According to 2020 data covering the three significant SSM banks in Portugal, the share of loans and advances extended to government is 3.24%.

Table 14: Portugal – Composition of loans and advances

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
<th>% of Gross loans to customers (as of end-2020)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central banks [confidential]</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Governments</td>
<td>€ 4,120,000,000</td>
<td>3.24%</td>
</tr>
<tr>
<td>Financial sector [confidential]</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Corporates</td>
<td>€ 45,010,000,000</td>
<td>35.40%</td>
</tr>
<tr>
<td>Households</td>
<td>€ 72,630,000,000</td>
<td>57.12%</td>
</tr>
<tr>
<td>Total</td>
<td>€ 127,160,000,000</td>
<td>4.37%</td>
</tr>
</tbody>
</table>

Source: ECB supervisory banking statistics.

General government debt in Portugal (see Figure 13) increased from 117% of GDP to 135% in the initial year of the COVID-19 crisis, showing a very fast one-year increase.

Figure 13: Portugal – Government debt as a percentage of GDP

Source: Eurostat.

10. COVID-19 initial stress impact – Summary and conclusions

Our COVID-19 stress research confirmed that the focus of the problem lies outside the financial industry,152 and it is essential to rely on a comprehensive but relatively conservative analysis and continuously monitor external developments concerning health, the economy and geopolitics.

Overall, our composite indicators show a remaining increase in ‘activity’, a drastic increase in the NPL component and provisioning in ‘credit risk’, an overall still slightly improving ‘solvency’ and a problematic drop in ‘profitability’. There are discrepancies among countries, and we have looked at some specific developments in five potentially most exposed countries: Greece, Spain, France, Italy and Portugal.

The newly originated exposures subject to PGs should be seen in the context of increasing government debt, as shown for all five countries in the subsample. This confirms the likely formation of the sort of sovereign-bank ‘doom loop’ that was one of the characteristics of the GFC (and the European sovereign debt crisis). The ECB promptly warned about a similar doom loop materialising.153

Moreover, banks should not disregard the other challenges that already lie ahead of the banking sector and society. In her keynote speech on COVID-19’s impact on the financial industry, Claudia Buch stressed that ‘the financial sector will face new potential risks going forward’, specifically climate change and climate policy, higher private and public sector debt, and international political risks that could spill over into the financial sector.154 Additionally, the interaction of the pandemic and climate-related shocks is already having a material effect on financial markets,155 and there are moves towards including climate risks in the Basel framework.156

On the regulatory front, even before the COVID-19 crisis the European banks were warning of the potential adverse impact of the finalised Basel III package, mainly because of the new output floor.157 The Basel Committee on Banking Supervision (BCBS) had postponed the initial implementation deadline from 2022 to 2023. However, according to the proposal (CRR3/CRD6158) published by the European Commission, EU implementation would be further delayed until 2025. This contradicts an open letter published by the ECB and EBA,159 as well as an interview given by the BCBS secretary general160 – all advocating timely implementation in accordance with the international agreement. Based on 2021 estimates, just to maintain the minimum capital requirements EU banks would have a €27 billion capital shortfall.161 In our opinion, the Commission’s proposal may be interpreted as political

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awareness about a need for a longer transition period in light of the COVID-19 crisis and pre-existing conditions (especially in regard to profitability), as well as high reliance on banks in the economy.

11. The policy approach to the transition phase – A forward-looking approach

The need to set up a ‘transitional phase’ is a traditional policy concern linked to the existence of PGs introduced to contain a financial crisis and ensure the protection of depositors.\textsuperscript{162} For instance, the IADI and other deposit insurance authorities have debated the form that exit strategies can take when removing explicit guarantees extended during a crisis, as part of IADI Core Principle 8(10) for Effective Deposit Insurance.\textsuperscript{163} As noted earlier, we suggest a wider application of a transition strategy to apply to public support mechanisms during the containment phase of a crisis, whether that is exogenous or endogenous to the banking system. The examination of crisis management in the Basel Core Principles should equally require consideration of public support mechanisms in dealing with either exogenous or endogenous shocks to the banking system, to enable supervisory authorities to improve their understanding of the implications of such shocks and the use of support mechanisms for banks to ensure continuity of credit and financial stability.

The use of public support mechanisms to contain a crisis does not imply a loss of democratic accountability.\textsuperscript{164} States are not in a position to act in a way that sets aside public accountability of decision-making during such shocks. The significant use of public funds requires political scrutiny to ensure fiscal discipline and debt sustainability. However, the acute nature of such an exogenous or endogenous shock means accountability as we know it is limited, with political and public resources shifted to crisis management. As Engler et al. point out: ‘High uncertainty caused by COVID-19 pushes [states] towards adopting measures that, during normal times, contradict fundamental democratic principles.’\textsuperscript{165} The lessons-learnt process is critical for democratic accountability, but the timing of it is politically contentious. The public interest concern of managing the crisis overshadows normal engagement and consultation.\textsuperscript{166} The transition phase is a process of unpicking the implications of the containment phase. Equally important is the response takes a holistic approach, which means coordination and cooperation between the Official Safety Net Players during the transition phase.\textsuperscript{167}

\textsuperscript{162} IADI, ‘Transitioning from a blanket guarantee or extended coverage to a limited coverage system’, March 2012; note by the staffs of the IADI and the International Monetary Fund, ‘Update on unwinding temporary deposit insurance arrangements’, June 2010.


https://read.oecd-ilibrary.org/finance-and-investment/developing-a-framework-for-effective-financial-crisis-management_fmt-2011-5k9cswn0h042#page1
In view of this, we argue that the process of political and regulatory scrutiny is an important component of the transition stage despite the level of uncertainty that remains and the potential need for additional public resources that could further erode fiscal capacity. This is particularly because crises can morph in different directions. As explain by Arjen Boin et al in their analysis of crisis management and in particular ‘fast-burning crisis’ which are ‘like bolts from the blue: they come and go quickly’\(^{168}\) akin to COVID-19 possibly: other events soon take the place of a crisis.\(^{169}\) Nonetheless, the transition phase is an opportunity to correct and reassess the next steps, and ultimately reposition the central tenet of market rules as well as the ‘rule of law’ and ‘democratic accountability’ in its rightful place.\(^{170}\)

Equally, the transition phase can start a review of the risk of moral hazard as a result of the public support measures and the potential to minimise it. A significant responsibility thus lies with the official safety-net players to ensure better accountability of the impact of public measures on, inter alia, bank credit risk: they must improve the understanding of any insolvency risk of SSM banks firstly at the precautionary recapitalisation stage, and secondly at the stage when a bank is ‘failing’ or ‘likely to fail’, leading to resolution or national insolvency. The difficulty of evaluating the potential size of losses and the need for private or public assistance is problematic, as we briefly explained earlier.

The International Monetary Fund (IMF) advocated in 2020 at the height of the COVID-19 crisis a transition phase in the way states deal with the levels of corporate insolvencies envisaged after the crisis subsided.\(^{171}\) In phase two of its transition period, the IMF suggested introducing ‘temporary’ techniques to improve corporate insolvency regimes and the processes of debt enforcement to ‘flatten the curve’ of insolvencies. This is primarily premised on the ability of states to distinguish between the ‘good, the bad and the ugly’ of corporate entities as a result of their debt burdens and the ability to work through their problems. In the IMF’s view, states should not look at restructuring ‘zombie enterprises’ that cannot generate enough income to service the interest on their debt.\(^{172}\) In this respect, it argues that the stage two of the transition phase is to identify the scale of the problem and support those corporations that are still viable; in stage three the focus should be on introducing permanent corporate rehabilitation and rescue processes and debt enforcement techniques to minimise the threat of a debt overhang in some states materialising. The aim is to enable creditors to unlock trapped liquidity and access finance on commercial terms, which means demonstrating their ability to service their debt; it will equally enable banks to access private finance for the real economy based on commercial rather than public terms.

The European insolvency regime in 2019 introduced significant reforms to improve the


\(^{169}\) Ibid., 104.


\(^{172}\) Ibid., 3–4.
techniques to restructure corporations and SMEs. The 2019 EU Directive recommends bespoke restructuring plans to streamline the insolvency process. If the envisaged SME failures materialise, the sheer number of professional services needed may not be available at any one time. The 2019 Directive does provide some flexibility on this matter by not making the appointment of insolvency practitioners mandatory in all circumstances. However, the lack of their technical expertise could undermine the quality of the restructuring plan and the negotiation with creditor classes to get their support and pass through the administrative authority or courts. This would be quite critical if courts are required to confirm the plan. It may be necessary for a member state to set up bespoke arrangements to streamline this process and improve the success rate of restructuring plans.

Research undertaken by Dubovec and Owada on the use of PG schemes indicates an important monitoring role for the potential public agency managing the scheme(s). Monitoring can take place for sector-specific facilities provided the public agency has the appropriate skills to assess firms, primarily SMEs, and the possibility of ensuring finance to those that are likely to survive as commercial enterprises. In view of this we suggest an active role for such public agencies to assist in the process of assessing SME viability and their restructuring plans, to avoid funding those that are deemed to be unproductive enterprises.

The introduction of early-warning systems to detect insolvency problems is an important part of the 2019 Directive. It suggests attention is placed on the non-payment of taxes or social security contributions as an early signal of insolvency. However, a moratorium on the payment of such contributions has been a prevalent feature during the containment phase of this crisis, so these early-warning signs may not be available.

The 2019 Directive does introduce some of the necessary tools to ensure orderly restructuring of corporate insolvencies. The Directive was to be transposed by mid-2021, with the possibility of extending this for a year. Some member states, such as Italy, have chosen this option. In view of this, the benefits of the Directive are not likely to be seen for some time. Moreover, the minimum harmonisation the Directive provides is likely to lead to different interpretation of its provisions. A critical aspect is the timing of the restructuring before technical insolvency. Member states may adopt different time frames.

The policy debate covers the timing of the removal of PGs, too. It is contested whether it should be a gradual or a fast-track approach. Both are considered to have pros and cons, with the former risking increasing moral hazard and the latter risking destabilising a fragile rebuilding of confidence. In this respect Financial Stability Forum’s (FSF), Working Group on Deposit Insurance, advises against the adoption of a time limit and suggests the design of conditions to be met upon the removal of such measures. Specifically, the discussion paper suggested that ‘Realistic timing, clear deliverables and an adequate tracking process are essential elements for


As mentioned, the crisis containment measures have ‘camouflaged’ bank risk taking. To give an example, the use of moratoria has enabled banks to minimise disclosure in compliance with IFRS 9. In view of this, markets have limited information to make informed decisions about overall banks’ risk exposure. The joint report of the European Commission, ECB and Single Resolution Board explained how in 2021 a number of indicators such as NPLs and capital positions remain relatively stable in Q2 2021 because of the introduction of containment measures.

The process of monitoring the changes in the tail risk is critical, to ensure that potential future losses can be mitigated and provisions set aside while the banks are able to do so. The risk some banks face is the negative impact from the removal of the guarantees and the need to increase loan-loss provisioning, which would lead to a deterioration of their capital ratios. At the very time banks are expected to offset losses, they will also want to improve their capital positions. Both decisions will likely affect the level of credit they can commit to the economy.

The ability of banks to raise capital will equally be challenged in light of their reduction in both income generation and profits from their business. This risk can negatively impact banks’ balance sheets, and in view of it materialising Acharya and Steffen suggested a liquidity stress test of banks in the early period of the crisis, to determine the extent to which banks could be ‘liquidity insurers’ to the real economy. Their concern relates to the ability of banks to absorb potential losses from such risky exposures and the impact on a bank’s compliance with regulatory capital ratio requirements. Stress testing was not immediately advocated by policymakers during the containment phase.

The Austrian experience suggests that making provisions in anticipation of expected default loans at Stage 2 classification would enable banks to cover a larger amount of potential losses than not provisioning for such a worst-case scenario. At Stage 2 the asset is considered underperforming, rather than performing in Stage 1, so there is an increase in credit risk that needs to be reflected in the balance sheet. A comparison with other European member states suggests that provisioning against expected loan default at Stage 2 rather than against performing loans at Stage 1 is a more accurate estimator of the size of the cushion needed for future losses. The conclusion drawn by the Austrian central bank – that ‘banks already frontloaded a significant part of provisions in 2020 will relieve some of the burden on their 2021 balance sheets’ – appears to have materialised in 2021, as we show. This raises

177 European Commission Services, ECB and Single Resolution Board, note 68.
178 Ibid.
179 OECD, note 123, 22.
180 Ibid., 24.
181 Viral Acharya and Sascha Steffen, “‘Stress tests’ for banks as liquidity insurers in a time of COVID”, 22 March 2020, Vox EU CEPR Policy Portal (voxeu.org).
183 Ibid., 84.
concerns about when such credit risks will surface on these balance sheets. We argue it is still premature for banks to start reducing their provisions against Stage 2 exposures now the COVID-19 pandemic has subsided, thereby artificially increasing profits.

The ECB risk-based and forward-looking approach to supervision has played a significant role during the containment phase. The supervisory interventions have enabled banks to provide much-needed financial services to the real economy. The reforms to capital and liquidity requirements introduced after the GFC (and indeed the postponement of the timing on implementation) have assisted in smoothing out the shortfall.\textsuperscript{184} As noted in section 9 and 10, an examination of other indicators of risk and how risks could potentially materialise in the future shows that there are concerns which could undermine the viability of banks.

In principle, the time limit attached to guarantees can signal a clear ending of the measure. However, unless authorities in charge of the phasing-out have a clear understanding of the potentially negative impact of exit on banks’ balance sheets, the mere existence of a time limit does not make the exit strategy credible. As explained by Walker and Hoontrakul, a lack of attention to a transitioning strategy ‘could be a potentially dangerous proposition leading to increased bank fragility, “capital flight” and a fertile ground for moral hazard and other agency problems’. The same authors argue that a transitioning strategy is multidimensional, as it needs to take into account all relevant stakeholders.\textsuperscript{185} While their focus is on the removal of blanket guarantees and the adoption of explicit deposit insurance, concerns about how to move from containment to normal market expectation are also important.

The Banking Union’s experience of dealing with banks that are considered solvent but in need of precautionary recapitalisation and/or emergency liquidity assistance has been relatively poor in view of the challenges associated with understanding the extent of the problems on banks’ balance sheets. Bodellini et al. first articulated the need for temporary suspension of the trigger for the requirements for temporary assistance.\textsuperscript{186} The fear at the time was a wave of bank failures due to a proliferation of NPLs.

The introduction of the public support analysed above and additional measures relating to supervisory measures and accounting requirements relating to IFRS 9 reduced the need for the suspension of the EU Bank Recovery and Resolution Directive rules, but this may well be necessary in the future once issues about bank balance sheets surface and banks find it difficult


to raise capital from the private sector. The European experience of banks in such a position of needing recapitalisation so far suggests that banks and the supervisory assessment appear to underestimate the size of the NPL problems in the balance sheet, and so the level of recapitalisation does not achieve its goal of stabilising the bank’s viability. In view of this, the transition phase needs to be robust in its approach to identifying the extent of exposures and the challenges of restructuring NFC borrowers at a time when they may be able to service such debt rather than when it is too late.

In view of those problems at the state and bank levels, the potential risk of a doom loop materialising needs to be considered during the transition phase. This is particularly the case given that supervisory authorities are only just getting an understanding of the extent of the credit risk exposures at the bank balance sheet level, as per SREP 2021. While PGs do not always pose a threat of a sovereign default, there is always a possibility they could be included in any potential restructuring. In their international study on credit guarantees for the SME sector, Dubovec and Owada highlight the importance of working out the guaranteed rate in advance relative to local circumstances. They also highlight that one of the consequences of setting a low coverage rate of 50% or below is to reduce the incentives for banks to participate in such schemes.

We suggest the continuation of PGs in some form, especially for the SME sector given the size of this sector in the European Union. However, the research we have reviewed would suggest there are benefits of stress testing changes to the coverage level of PGs to gauge the potential response of banks to their reduction. Equally important is stress testing of SSM significant banks’ ability to repay TLTROIII funding. We appreciate that exposures still remain uncertain and the size of those exposures may not be material to trigger bank failures, let alone a sovereign default. In view of this, significant work needs to be done at the recovery planning stages to ensure sustainability of business models.

We suggest that legal, regulatory, supervisory, institutional and political matters are explored in a transition phase.

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188 SREP 2021, note 10.
190 Dubovec and Owada, note 174.
192 These are based on the FDIC’s best practices on transitioning, as discussed above.
| Legal | • Develop incentives to motivate SME restructuring and distinct pre-pack insolvency arrangements. Consider the costs and benefits of debt relief for the SME and retail consumer sectors, and the implications thereof for member states’ fiscal capacity.  
• Improve insolvency practices relating to the recovery rate and time of recovery in member states. |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory</td>
<td>• The ECB and EBA develop guidance and practices to ensure consistency of practice among participating member states based on principles of proportionality – being mindful that smaller banks are likely to be more exposed to high-risk SME sectors. Use a tailored approach to individual sectors rather than a one-size-fits-all approach.</td>
</tr>
</tbody>
</table>
| Supervisory | • Improve understanding of PGs and moratoria and bank and beneficiary behaviours to minimise potential moral hazard risks at the entity and sector levels, but avoid the chances of an insolvency lag.  
• Introduce a stress test which includes scenarios that modify the guaranteed coverage level and how it changes banks’ response to managing guaranteed exposures. This could also improve understanding of sovereign exposure and banks’ fiscal capacity to absorb materialisation of contingent liabilities.  
• Align supervision of riskiness of banks in the transition and resolution phases, and monitor the quality of the increased credit risk on banks’ balance sheets.  
• Create guidance for banks to improve oversight and management of SME and corporate exposures to manage these exposures in a separate bad-bank division or subsidiary. Develop new supervisory guidance on the movement of loans from the different stages based on an impact assessment of the viability of the bank.  
• Develop conduct-of-business rules to ensure banks are treating SMEs, corporates and retail consumers fairly during the restructuring phase and not abusing their position by forcing them into liquidation because their exposures are state guaranteed.  
• Oversee provisioning at the bank level to ensure consistent and sufficient provisioning for medium-term credit risks deteriorating.  
• Monitor future profitability and income of banks overall, and those exposed to COVID-19 guarantee sectors and benefiting from moratoria.  
• Assess impact of a debt relief programme on banks’ balance sheets and viability.  
• Assess concentration of risk within the banking sector and overreliance on commercial banking in the SME and corporate sectors.  
• Closely monitor merger activities between banks to avoid a situation of a good bank and bad bank merging to create a big bad bank because the due diligence has been overoptimistic in its valuations and poorly completed. |
| Institutional | • Include disclosure of COVID-19 exposures in Pillar 3 reports to desensitise market response. |
| Political | • Assess costs and benefits of reducing the level of overindebtedness and explore the possibility of a debt relief |
programme for both SMEs and households rather than simply increase the debt burden to kick-start the recovery in the sector protected by the guarantees.\footnote{Spoon, note 80, 74.}

- Consider tapering the PGs as and when exposure reduces (income increases) rather than ending the guarantees at an arbitrary point, to minimise moral hazard risk and give banks more of an obligation to monitor exposures more closely.
- Use an effective communication strategy to manage the public and market reactions to the lifting of the PGs and moratoria rules.
12. Concluding remarks

The impact of the COVID-19 pandemic is becoming less severe, but the measures enacted in the containment phase can still lead to material liquidity and insolvency risks in the financial and corporate sectors. This paper explores the pandemic from a crisis management perspective by looking at the policy implications of using explicit PGs and changes to moratoria rules. These measures certainly worked, and ensured continuity of the economy. Banks played a significant part in this containment phase to ensure the financing of the economy. However, the negative impact of these policies in the form of NPLs have not entirely shown up on the balance sheets of banks.

Several indicators used and published by banks and regulators show that the banking system has been relatively stable in recent quarters, and their projections show no particular concerns. However, considering its purpose, scope and methodology, our empirical research contributes a different perspective. It is evident from our composite change indicators that the COVID-19 stress had a severe impact on major key areas in the largest EU banks, and has additionally emphasised the persistent problem of EU bank profitability. Furthermore, the current EU and global environment offers a vast array of potential exogenous shocks similar in their impact to the recent pandemic. Hence we believe that overreliance on optimistic forecasts in such turbulent times may not be the most prudent option, and would like to propose a more cautious and phased approach based on reliable and comprehensive data.

In view of the looming risks associated with the lifting of PGs, moratoria and other forms of public support, we propose a transition phase. The risks that have been ‘camouflaged’ in the containment phase can be better understood and managed as adjustments with normal market conditions. Thus the policies adopted in the transition phase may reduce the insolvency risk of those banks heavily exposed to NPLs.

As such, the transition phase aims at ensuring orderly management of banks’ credit and other risks. Informed by our empirical research, the policy recommendations that we propose for inclusion in the transition phase span a number of areas. We argue that these recommendations would go a considerable way to ensuring an orderly exit from the containment phase.
13. List of annexes

Annex 1: Individual bank sheets (variables, movements and changes, composite indicators)

Annex 2: Bank overview (variables and change indicators) with implied relevance of their individual ‘shock responses’ to the Banking Union according to their individual asset size

Annex 3: EU/SSM and member state country sheets

Annex 4: Member states’ overview (variables and change indicators) with implied relevance of their individual ‘shock responses’ to the Banking Union according to their aggregate banks’ asset size