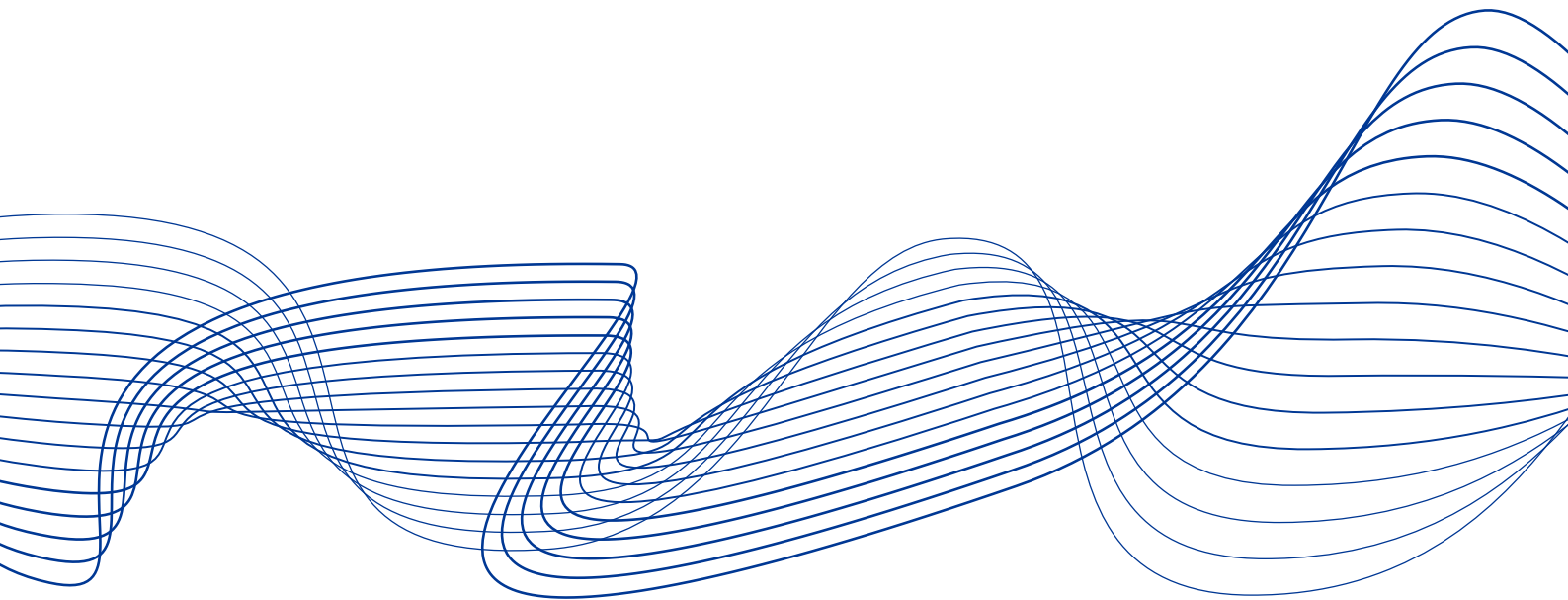


**Fiscal support and  
macroprudential policy -  
Lessons from the  
COVID-19 pandemic**



**ESRB**

European Systemic Risk Board

European System of Financial Supervision

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# 1 Introduction and key findings

**At the onset of the pandemic, the European Systemic Risk Board (ESRB) established a working group to analyse the effects of crisis-related fiscal measures and loan moratoria on the stability of the financial system.**<sup>1</sup> National macroprudential authorities have reported a wealth of quantitative and qualitative information on the support measures implemented in response to the coronavirus (COVID-19) pandemic. In February 2021 the ESRB published a report entitled “Financial stability implications of support measures to protect the real economy from the COVID-19 pandemic” that summarised the work of the ESRB working group. This report was followed in September 2021 by “Monitoring the financial stability implications of COVID-19 support measures”, a note analysing the data collected until Q1 2021.<sup>2</sup> The key finding of the work is that fiscal measures significantly contributed to the resilience of the financial system and ensured the continued provision of financial services – primarily a continued supply of credit. Fiscal measures helped to contain corporate insolvencies and prevent large-scale losses in the financial sector because they were targeted to the real economy and thereby indirectly ensured the resilience of the financial system to the pandemic shock.

**As the macroeconomic effects of the pandemic are levelling off and the associated measures are being phased out, the ESRB has decided to discontinue its pandemic-related data collection and monitoring work.** This note presents the analyses conducted after the publication of the previous note. The data presented covers the period leading up to Q2 2022 and comes from three different sources: Recommendation ESRB/2020/8, the European Banking Authority (EBA) Risk Dashboard, and the AnaCredit credit registry dataset.<sup>3</sup> More specifically, quantitative data – for example on the size, uptake and duration of the measures – have been collected in compliance with the Recommendation and combined with EBA Risk Dashboard and AnaCredit data. Moreover, qualitative data collected in compliance with the Recommendation are used to complement the quantitative input. The data are based on a questionnaire that gathered information on, for instance, the use of liquidity and solvency measures and, more recently, the restructuring of loans formerly under moratoria or currently under public guarantees.

**The key takeaways from this work are:**

- **The swift and ample fiscal support measures provided and sustained the liquidity and solvency of the real economy.** Since the start of the pandemic, ESRB Member States have announced fiscal support measures totalling almost 21% of the GDP of all ESRB Member States for 2019, with total uptake adding up to almost 10%. Liquidity measures have remained

<sup>1</sup> At the onset of the COVID-19 pandemic, the ESRB identified the monitoring of “financial stability implications of fiscal measures to protect the real economy in the context of the COVID-19 pandemic” as one of the five priority areas for the ESRB General Board. In Recommendation ESRB/2020/8 the ESRB asked national macroprudential authorities to (a) monitor the design features and uptake of measures as well as the implications for financial stability, and (b) report their findings to the ESRB.

<sup>2</sup> In the report “**Financial stability implications of support measures to protect the real economy from the COVID-19 pandemic**” (ESRB, February 2021) and the note “**Monitoring the financial stability implications of COVID-19 support measures**” (ESRB, September 2021), we complement the evidence submitted by national authorities under Recommendation ESRB/2020/8 with data shared by the EBA and data from the ECB’s AnaCredit credit registry.

<sup>3</sup> ESRB, “**Recommendation of the European Systemic Risk Board of 27 May 2020**”, Frankfurt am Main, May 2020.



the dominant form of fiscal support for non-financial corporations (NFCs) throughout the pandemic. However, ESRB Member States have shifted towards more targeted solvency support over time.

- **The amount of available fiscal support peaked in Q1 2021 and has since been decreasing.** Between Q4 2021 and Q2 2022, authorities further decreased the size of COVID-related support measures. Loan moratoria were almost fully phased out by Q4 2021, and a significant share of the remaining measures were set to expire in Q2 2022. Most notably, the application period for guaranteed loans was scheduled to end in Q2 2022 in most ESRB Member States. However, while many fiscal measures will no longer be available after Q2 2022, their economic implications will continue to be effective in the future.
- **The phasing out of fiscal support measures has not yet come with noticeable disruptions for the real economy.** ESRB Member States have thus far indicated little need for the restructuring of guaranteed loans or moratoria, and banks have not faced obstacles when restructuring loans if this was needed. Authorities modified loan restructuring processes to be able to deal with potential large-scale insolvencies as, in Q2 2022, over a third of ESRB Member States projected that the number of insolvencies will increase to moderately above pre-pandemic levels by the end of the year.
- **Active fiscal support during the pandemic weakened the link between economic and financial losses.** Changes in risk provisioning during the pandemic seem to have decoupled from real economic activity: while banks provision according to microeconomic risk assessments, the worsening macroeconomic outlook might not yet be fully reflected in banks' risk assessment. Across ESRB countries, risk provisioning is only loosely correlated with forecasts of macroeconomic growth. All stakeholders thus need to ensure that the financial sector is sufficiently resilient and does not take the type of fiscal support seen during the pandemic for granted going forward.
- **Authorities are using macroprudential tools to build up resilience amid heightened macroeconomic and systemic risks, while limiting the risks of procyclicality.** Countercyclical capital buffer (CCyB) levels across ESRB countries have increased, with most ESRB Member States reverting to pre-pandemic CCyB levels or tightening them further and over 40% considering CCyB-related policy action. Among borrower-based measures, 20% of ESRB Member States are considering action regarding loan-to-value (LTV) measures.
- **While ESRB work on COVID-related measures is being phased out, the lessons learnt from this project could be carried over to a monitoring of the impact of fiscal policies on macroprudential risks in other contexts,** like that of the measures taken in response to the ongoing energy crisis in several ESRB Member States.

This summary note is structured as follows: Section 1 outlines the evolution of pandemic-related fiscal support measures, their phasing out and continued importance (elements A to C above); Section 2 highlights how banks' risk provisioning might not yet fully reflect macroeconomic risks (element D); Section 3 discusses the current outlook for macroprudential measures among ESRB Member States (element E).



## 2 The evolution of COVID-related fiscal support measures

The data collection in compliance with Recommendation ESRB/2020/8 documents the characteristics and implementation of the measures between Q3 2020 and Q2 2022. This section presents quantitative and qualitative analysis of the size, uptake and duration of the measures as well as information on their targeting and the restructuring of the loans.

**Governments have provided substantial fiscal support to the economy over the course of the pandemic.**<sup>4</sup> At the end of June 2022 the total support made available since the start of the pandemic (excluding moratoria) was equivalent to 20.7% of ESRB Member States' GDP for 2019 (Chart 1, black bar). The overall uptake since the beginning of the pandemic amounts to 9.7% of the same GDP for 2019 (Chart 1, black bar), while the volume of loans under moratoria decreased from 5.5% of the GDP for 2019 in Q3 2020 to 0.4% in Q2 2022. By June 2022 the COVID-related moratoria were almost completely phased out.<sup>5</sup>

**The volume of active support measures (excluding moratoria) decreased in Q2 2022, in line with the trend that started in Q1 2021.** In Q2 2022 all active support measures combined amounted to 11.7% of ESRB Member States' GDP for 2019. The uptake of those active measures totalled 6.6% of the combined GDP for 2019, hence, at the current juncture, the announced size of all the measures is far from being exhausted. Governments have reduced the size of the available measures, in particular of public guarantees and direct grants, over the last two quarters. The size of public guarantees decreased from 8.5% of ESRB Member States GDP for 2019 in Q4 2021 to 8.0% in Q2 2022, while the size of direct grants decreased from 1.9% to 1.2%.

<sup>4</sup> Chart 1 presents a breakdown of the announced size and actual uptake of fiscal support measures in terms of ESRB Member States' GDP for 2019. It includes both expired and active measures to illustrate the overall amount of COVID-related fiscal support made available thus far.

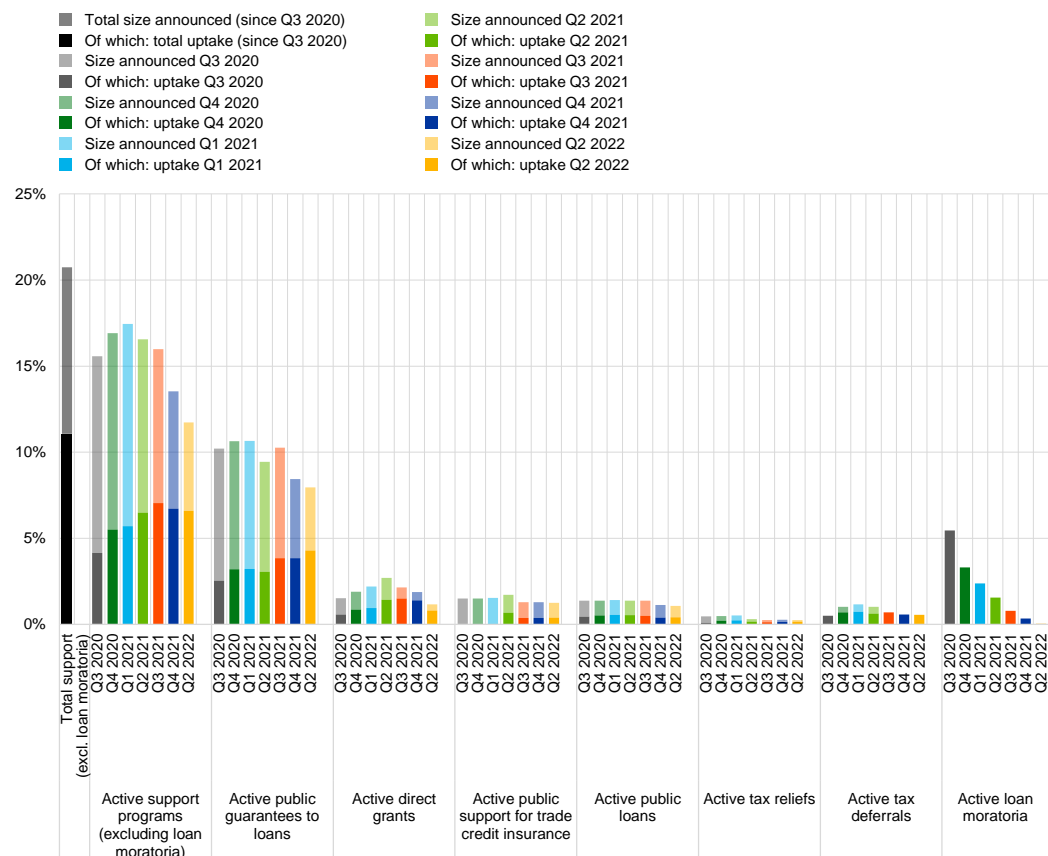
<sup>5</sup> For instance, in Hungary loan moratoria introduced during the COVID-19 pandemic will be in place until the end of 2022 for some small groups of vulnerable borrowers.



Chart 1

**Announced size and uptake of moratoria and fiscal programmes (active and expired measures) as of 30 June 2022**

(percentage of ESRB Member States' GDP for 2019)



Sources: Recommendation ESRB/2020/8 (reference date 30 June 2022) and ECB Statistical Data Warehouse (SDW).

Notes: Announced size refers to field 1.1.01; uptake refers to: (i) field 2.2.10 for public guarantees, public loans and direct grants; (ii) fields 2.12.10 or 2.13.10 for tax relief and tax deferrals; and (iii) field 2.14.10 for public support for credit insurance. Active moratoria are based on the reporting of field 2.5.10. 2019 GDP includes all ESRB Member States. Equity participation measures were only reported on a best-effort basis; for this reason, they are not included in the charts presented in this note. The chart is based on data for 30 ESRB Member States.

**Liquidity measures have consistently been the dominant form of the COVID-related support, but solvency support has increased over time.**

Liquidity measures – public guarantees and loans, tax deferrals and credit insurance support – accounted for 77% of the announced size and 76% of the uptake of active measures in Q2 2022, with solvency measures – direct grants and tax reliefs – accounting for the remainder. Public guarantees had the largest announced size, while direct grants consistently had the second-largest size between Q1 2021 and Q2 2022, i.e. the last quarter of reporting. While the announced size of direct grants was considerably smaller than that of public guarantees throughout the reporting period, it increased from 1.5% of ESRB Member States' GDP for 2019 in Q3 2020 to 2.7% in Q2 2021 and currently stands at 1.2%. The uptake of direct grants increased even more strongly in relative terms, from 0.6% in Q3 2020 to 1.5% in Q3

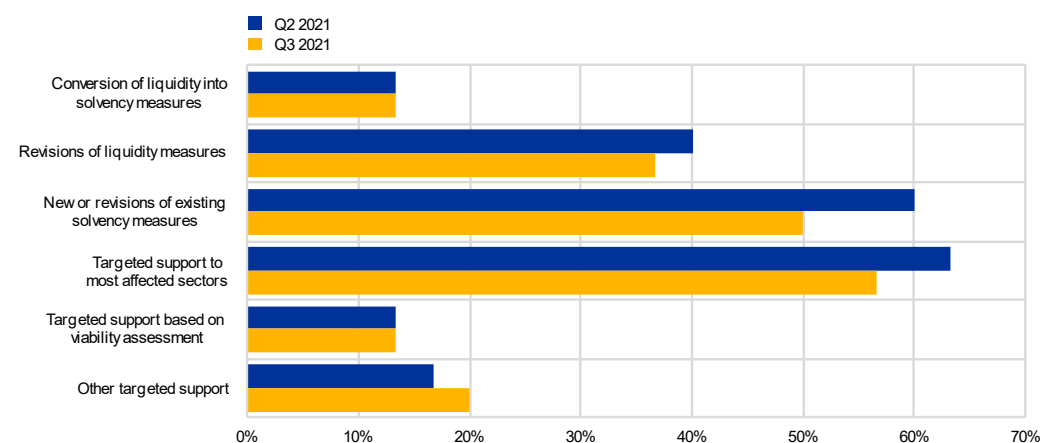


2021, before falling to 0.8% in Q2 2022. This variation in the size and uptake of direct grants likely reflects the higher demand for solvency support when the effects of the pandemic were weighing most heavily on firms' net worth.<sup>6</sup>

**A survey among ESRB Member States revealed that governments modified support measures to provide more targeted and more solvency support to NFCs.** In Q3 2021, 13% of ESRB Member States reported that they had converted liquidity into solvency measures, and 50% had amended or introduced new solvency measures (Chart 2). The support for NFCs also became more targeted. More than half of the reporting countries provided targeted support to the most affected sectors, and around 13% provided targeted support depending on the expected viability of firms. Both solvency-focused and more targeted measures helped to reduce the longer-run financial stability implications of the pandemic by providing support to more indebted, but fundamentally healthy, firms.

**Chart 2**  
**Amendments or introduction of new support measures aiming to provide more solvency and more targeted support to NFCs**

(Share of Member States reporting)



Source: Recommendation ESRB/2020/8 (reference dates Q2 and Q3 2021).

Note: The survey covers 30 ESRB Member States; respondents could indicate more than one option.

**Governments have adjusted the phasing out of support measures amid repeated COVID-19 waves and recent macroeconomic risks.** Most support measures were initially scheduled to expire in Q2 2021. As the pandemic has lasted longer than expected, the phasing out of the largest share of measures was extended to Q4 2021. Eventually, governments amended the expiration dates again and postponed the phasing out to Q2 2022 (Chart 3); most likely in view of the persistent pandemic-related supply bottlenecks, which were weighing down on businesses, and the recovery towards the end of 2021, as well as a worsening macroeconomic outlook. Most support

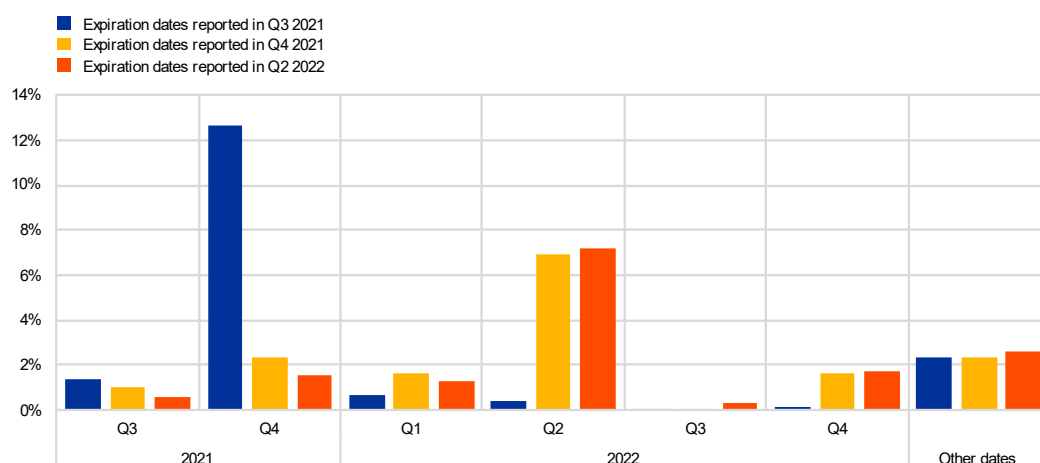
<sup>6</sup> As for the data collection in compliance with Recommendation ESRB/2020/8, equity participation measures were only reported on a best-effort basis; for this reason, the reporting on equity participation measures is not included in the charts and instead discussed in this note.



measures were then scheduled to expire in Q2 2022. However, Q2 2022 data suggest there will be further, albeit minor, extensions.

**Chart 3**  
**Breakdown of the expiration of measures over time**

(percentage of ESRB Member States' GDP for 2019)



Sources: Recommendation ESRB/2020/8 (reference date 30 June 2022) and ECB Statistical Data Warehouse.

Notes: Values reported as a percentage of all ESRB Member States' GDP for 2019. Measures included are moratoria, public guarantees, public loans, direct grants, tax deferrals, tax reliefs and public support for credit insurance (see field 1.0.11). "Other dates" include dates beyond 2022 and measures for which no expiration date is available. The chart is based on data for 30 ESRB Member States.

COVID-19 support measures will have an economic impact beyond their official expiration dates. A large share of public guarantees and public loans is due to be phased out in Q2 2022, which means that no new applications can be made for these programmes (Chart 4). However, these measures will continue to support the economy for a long time, as most of them only mature after five years (Chart 5). Similarly, direct grants and tax measures are being phased out gradually but will have an effect on the real economy for years to come. Finally, a significant share of the public support for credit insurance is not due to expire before the end of 2022. As for the moratoria, the expiration dates may not necessarily imply that borrowers must start repaying the principal immediately: loans can remain under loan-specific moratoria, or banks and borrowers can renegotiate loan terms.

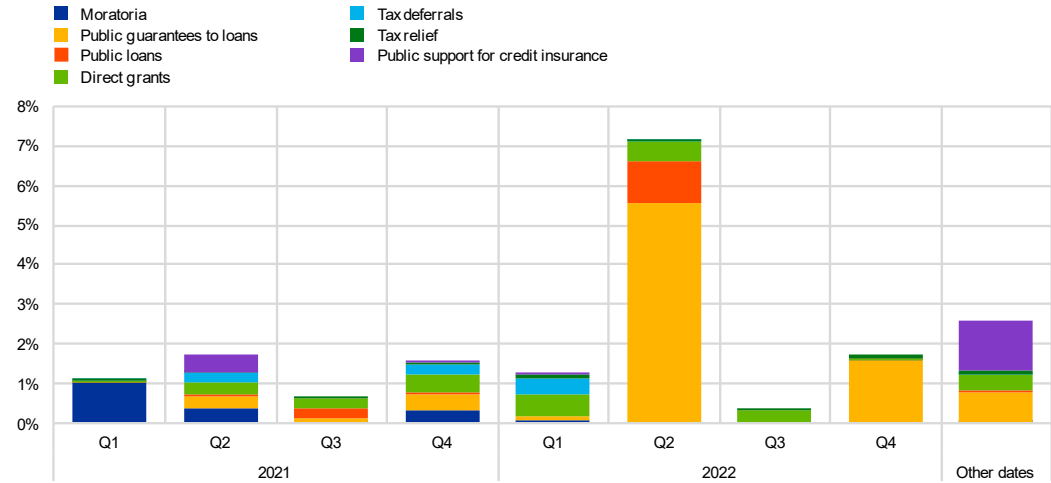




## Chart 4

### Breakdown of the expiration of measures (as of Q2 2022)

(percentage of ESRB Member States' GDP for 2019)



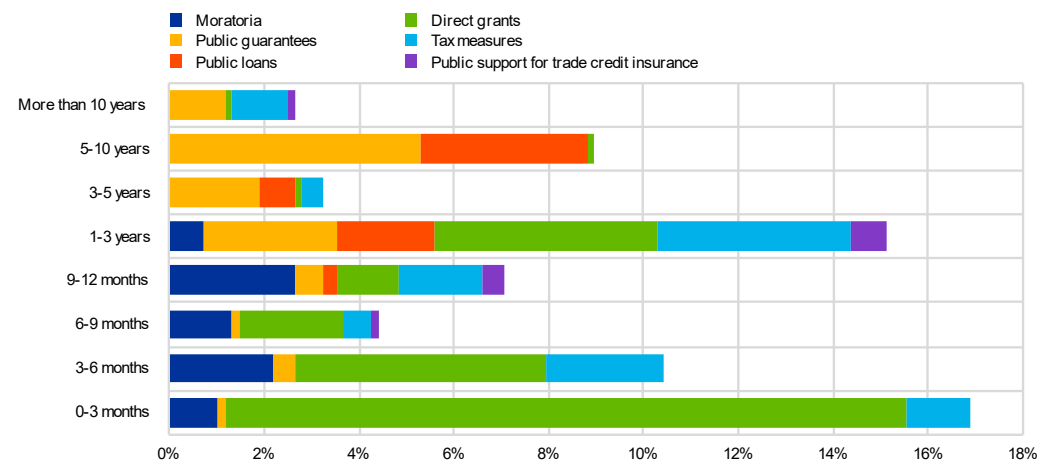
Sources: Recommendation ESRB/2020/8 (reference date 30 June 2022) and ECB Statistical Data Warehouse.

Notes: Values reported as a percentage of ESRB Member States' GDP for 2019. Amounts refer to the programme size announced by governments (field 1.1.01), except for moratoria, for which total volume accepted (field 2.2.10) was used. "Other dates" include dates beyond 2022 and measures for which no expiration date is available. The GDP for 2019 includes all the ESRB Member States. the chart is based on data for 30 ESRB Member States.

## Chart 5

### Expected maximum duration for beneficiary over measures

(percentage of all measures)



Source: Recommendation ESRB/2020/8 (reference date 30 June 2022).

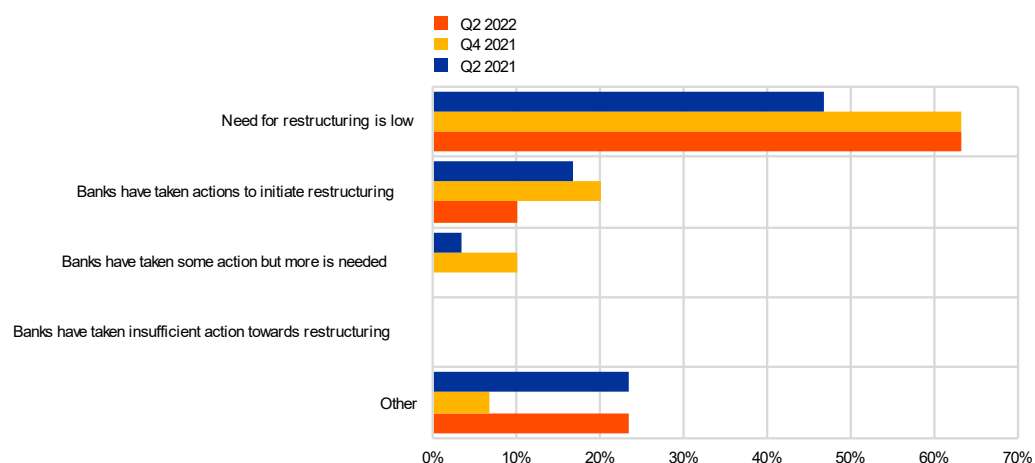
Notes: Shares may not add up to 100% due to missing responses (around 21% of measures overall – see field 1.2.08 "maximum duration for beneficiary"). The chart is based on data for 30 ESRB Member States.



**ESRB Member States have thus far indicated little need for the restructuring of guaranteed loans or moratoria.** While restructuring needs might be limited, as per the Q2 2022 reporting, this does not rule out a later surge in the restructuring of loans under public guarantees, especially as macroeconomic conditions are currently deteriorating. Compared with the previous quarters, the survey answers illustrate how banks are taking actions that are more appropriate. In Q2 2022 no countries indicated that more action was needed or that the action undertaken by banks was insufficient for either guaranteed loans (Chart 6) or loans under moratoria (Chart 7). In this context, the restructuring arrangements that have been used for the restructuring of publicly guaranteed loans mainly consist of term extensions, although countries also report using, for instance, interest-only periods, interest rate reductions, payment moratoria and partial debt forgiveness agreements. As regards the restructuring arrangements for loans currently or formerly under moratoria, most countries have resorted to using term extensions, while other countries mention using interest-only periods, grace periods and reduced instalments.

**Chart 6**  
**Restructuring of loans under public guarantees**

*(Percentage of respondents, over quarters)*



Source: Recommendation ESRB/2020/8, Template 3 (reference date 31 July 2022).

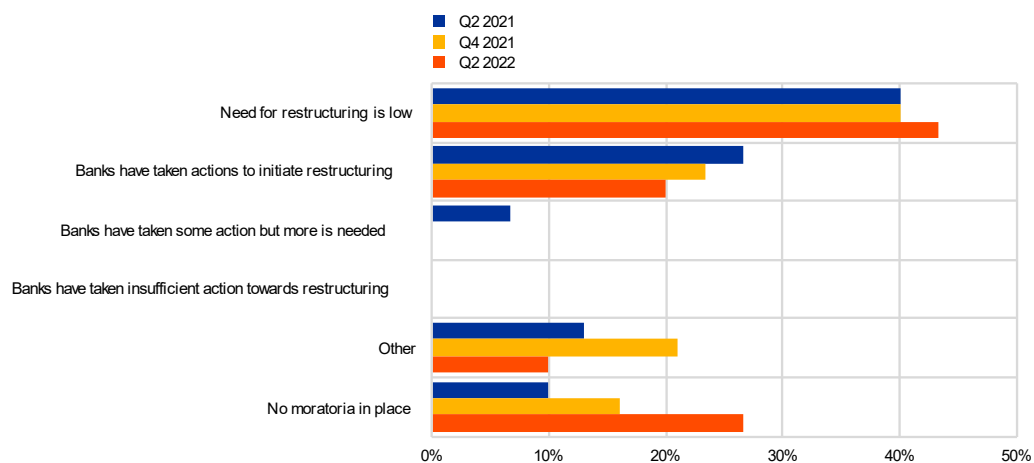
Notes: Percentage of ESRB Member States in response to the question "Regarding public guarantee schemes, have you seen banks taking actions to initiate the restructuring of loan terms with clients over the last two quarters?" "Other" includes responses indicating that, for example, no public guarantees are currently in place, no loans under public guarantees have needed restructuring thus far, or that there is a lack of data and knowledge on this issue. Quarterly shares may not add up to 100% due to missing responses. The survey covers 30 ESRB Member States.



## Chart 7

### Restructuring of loans under moratoria

(Percentage of respondents, over quarters)



Source: Recommendation ESRB/2020/8, Template 3 (reference date 31 July 2022).

Notes: Percentage of ESRB Member States in response to the question "Regarding loan moratoria schemes, have you seen banks taking actions to initiate the restructuring of loan terms with clients before moratoria expire over the last quarter?" "Other" includes responses indicating a lack of data and knowledge on this issue. Quarterly shares may not add up to 100% due to missing responses. The survey covers 30 ESRB Member States.

### Survey results suggest that ESRB Member States made changes to the loan restructuring processes to be able to deal with potential large-scale insolvencies.

Most changes have thus far concerned the increased use and effectiveness of informal out-of-court or hybrid workout frameworks. While most impediments to the efficient restructuring of loans were initially identified in relation to the capacity of the judiciary system, concerns in relation to this aspect have decreased over time and few countries eventually reported changes in this regard. This is likely owing to the changing expectations for the number of insolvencies: any downward adjustment in the expected number of insolvencies might have led ESRB countries to reconsider the sufficiency of the capacity of its judiciary system. The lack of informal out-of-court or hybrid workout frameworks and in-court restructuring options was a concern for a considerable share of the countries over time. Subsequently, they were addressed in an even higher number of cases through an increased use and effectiveness of informal out-of-court or hybrid workout frameworks (to a greater extent) and encouraged in-court restructuring options (to a lesser extent). Bridge financing and liquidity provision during restructuring was a potential concern for around a quarter of the countries over time but was not reported to have been the subject of changes in most cases.<sup>7</sup> Finally, the high share of other challenges reported points to the country-specific nature of the challenges and the strategies adopted to address them. These results are informative and help countries to prepare for potential challenges amid the heightened macroeconomic risks ahead.

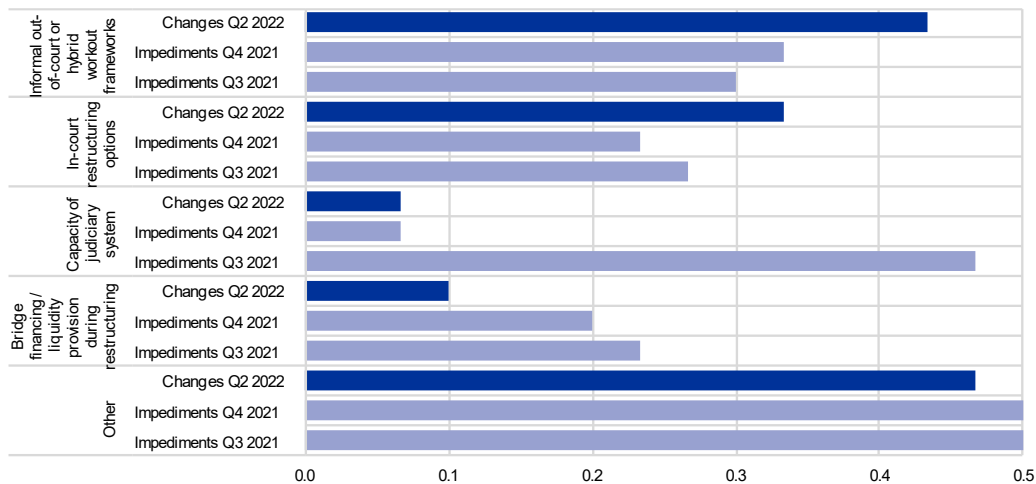
<sup>7</sup> The reported changes have happened against the backdrop of the transposition of the EU Restructuring Directive (Directive (EU) 2019/1023), which was adopted as part of the EU's programme to create a capital markets union and transposed into national law of the Member States by 17 July 2021. For more details, please see "[Directive \(EU\) 2019/1023 of the European Parliament and of the Council of 20 June 2019](#)".



Chart 8

**Impediments and improvements concerning the restructuring process, as reported by the ESRB Member States**

(percentage of respondents over quarters; multiple responses allowed)



Source: Recommendation ESRB/2020/8 Template 3 (reference date 31 July 2022).

Notes: Percentage of ESRB Member States in response to the question "What changes (e.g., judicial, procedural) has your country implemented to support the restructuring processes?" The question was aimed at capturing the judicial and procedural obstacles that impeded the loan restructuring process in Q3 and Q4 2021. It was also aimed at capturing the judicial and procedural changes implemented with respect to the loan restructuring process in Q2 2022. The survey covers 30 ESRB Member States.



### 3 The reflection of macroeconomic risks in banks' balance sheets

The following section discusses the effects that the extraordinary fiscal support had on credit markets and the asset quality of banks. Measures largely shielded the real economy from losses and prevented an initially feared wave of insolvencies in the first phase of the pandemic. This in turn avoided an increase in non-performing loans (NPLs) and thereby protected the financial sector from greater distress. Nevertheless, as credit demand surged in the more recent phase of the pandemic, corporate debt levels rose and asset quality concerns re-surfaced, especially for the hardest hit sectors.

**Supported by unprecedented liquidity support measures, corporate borrowing and indebtedness surged at the onset of the pandemic.** As demand for liquidity was high in the early phase, loan growth to NFCs increased significantly compared with before the pandemic (Chart 9). New loan growth in sectors subject to strong and medium effects peaked in April 2020 at around 110% and 60% year-on-year respectively, while lending to less affected sectors increased by almost 40%. Over the course of 2020 the need for liquidity stabilised for most sectors, and year-on-year new loan growth was mostly negative for a year after September 2021. This was likely a consequence of liquidity buffers that had built up during the first peak of the pandemic. New loan growth started to pick up again towards the end of 2021, yet mostly in sectors subject to only weak and medium effects. This could indicate that the challenges that lie ahead will be concentrated in different sectors – not in those affected by COVID-19 containment measures, like gastronomy, entertainment or tourism, but for instance in those heavily reliant on energy, like manufacturing or transport.

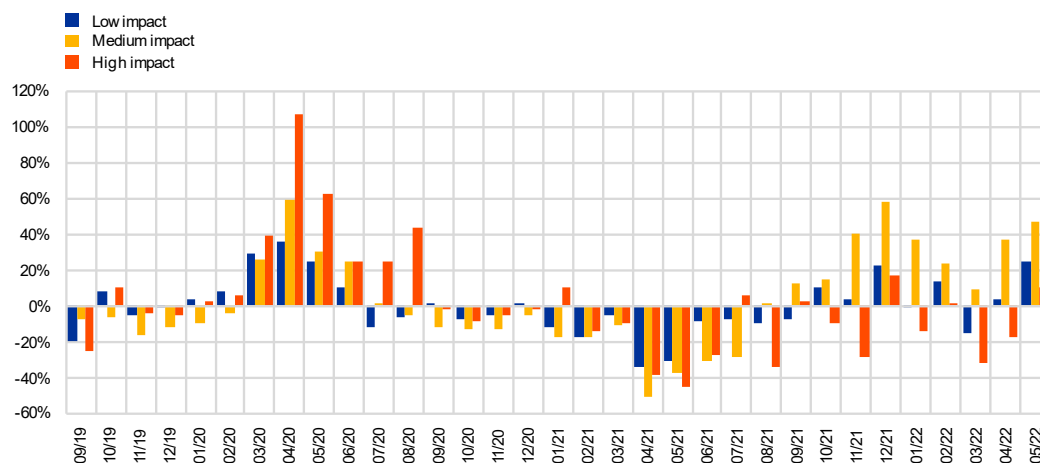
**The strong increase in corporate borrowing in 2020, and partly in 2021, led to a significantly higher ratio of gross corporate bank debt to firms' total assets (henceforth “gross bank debt ratio”).** For the sectors strongly affected by the pandemic, the gross bank debt ratio increased from around 32% to almost 40% over a one-year period across euro area countries (Chart 10). Also, for the sectors subject to only weak and medium effects, we see an increase of 3 to 4 percentage points compared with pre-pandemic levels. The levels then stabilised over the course of 2021. At the same time, firms substantially increased their cash positions by the end of 2020 (Chart 11). While the effect on net debt is therefore somewhat ambiguous, the picture painted of the quality of corporate credit in the next paragraph looks clearer.



Chart 9

**New NFC loan growth by exposure of sectors to the pandemic**

(September 2019 to May 2022)



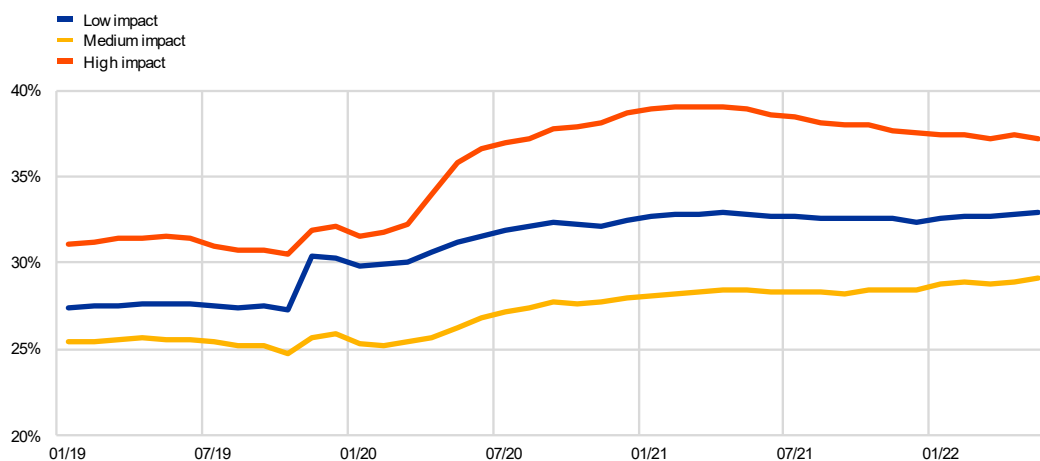
Sources: AnaCredit and ESRB calculations.

Notes: Year-on-year growth rates for new loans; monthly values for September 2019 to May 2022. "High impact sectors" are NACE sectors I, N, R and S (which include accommodation and food service activities and arts, entertainment and recreation activities). "Medium impact sectors" are NACE sectors C and H (which include manufacturing and transport). "Low impact sectors" are the remaining sectors. The chart depicts the 19 euro area countries.

Chart 10

**Gross corporate bank debt by exposure of sectors to the pandemic**

(January 2019 to May 2022)



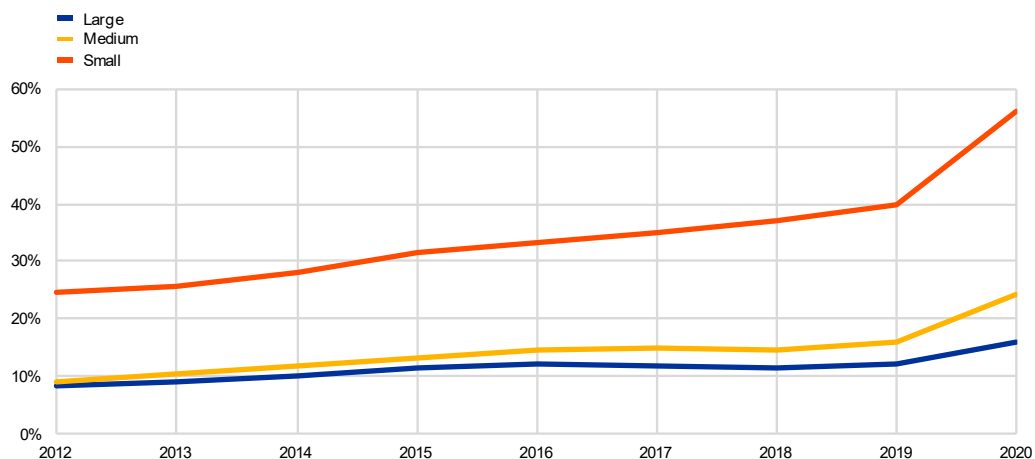
Sources: AnaCredit and ESRB calculations.

Notes: NFC gross bank debt ratio (sum of firms' outstanding gross bank debt divided by their total assets). Monthly values for January 2019 to March 2022. For impact categorisation, see the notes for Chart 9. The chart depicts the 19 euro area countries.



## Chart 11 Corporate cash over current liabilities

(median annual percentages, 2012 to 2020)



Sources: Orbis and ESRB calculations.

Notes: Ratio of cash and cash equivalents to current liabilities. The chart depicts the 19 euro area countries.

### Despite higher NFC indebtedness, the NPL ratio continued to decline throughout the pandemic.

This can be partially attributed to secondary market sell-offs of NPLs in several countries (in line with the European Commission’s “Action plan on tackling non-performing loans in the aftermath of the COVID-19 pandemic”)<sup>8</sup> and may paint an overly optimistic picture when more vulnerable sectors are concerned. NFC asset quality indicators show increasing credit risks in sectors strongly affected by the pandemic. These sectors are shown as dashed lines in Chart 12. The NPL ratio shows, however, a slight increase – the early-warning indicators on the International Financial Reporting Standard 9 (IFRS9) stage 2 and forborne loans<sup>9</sup> have been on the rise since the onset of the pandemic. At the same time, the increase in renegotiated loans was not as strong. This may be a sign that debt restructuring solutions are used to help viable but over-indebted borrowers, but not on a wide scale. Probabilities of default increased strongly between Q1 2020 and Q4 2021, especially in sectors that have suffered significantly from the pandemic (Chart 13).

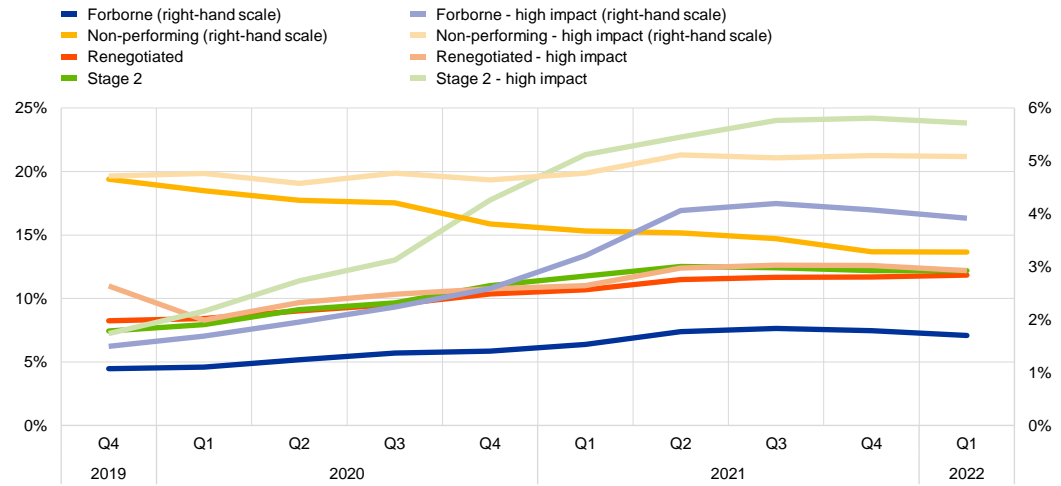
<sup>8</sup> See the European Commission’s “**Action plan: Tackling non-performing loans in the aftermath of the COVID-19 pandemic**”, Luxembourg, December 2020.

<sup>9</sup> In the context of the IFRS9, loans with credit risk that has increased significantly since initial recognition are classified as stage 2 loans.



## Chart 12 NFC credit quality indicators

(Share of total credit in per cent, Q4 2019 to Q1 2022, dashed lines show badly affected sectors)

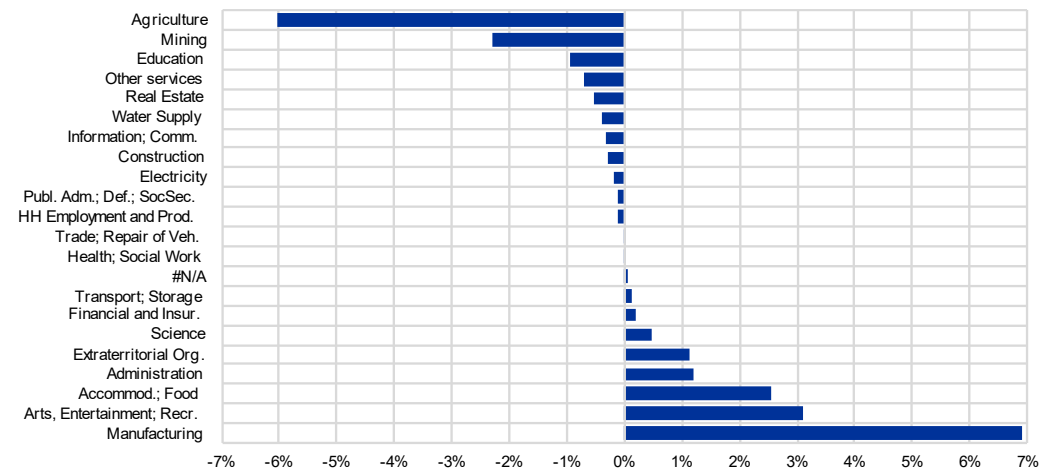


Sources: AnaCredit and ESRB calculations.

Notes: Credit in selected quality segment over total credit; for total loan portfolio (solid lines) and high impact sectors (transparent lines). Quarterly values for October 2019 to March 2022. For the impact categorisation, see notes to Chart 9. The chart depicts the 19 euro area countries.

## Chart 13 Changes in probabilities of default by sector

(in per cent, from Q1 2020 to Q4 2021)



Sources: AnaCredit and ESRB calculations.

Notes: Average probabilities of default across debtors per sector; banks with an internal risk-based approach only. The chart depicts the 19 euro area countries.

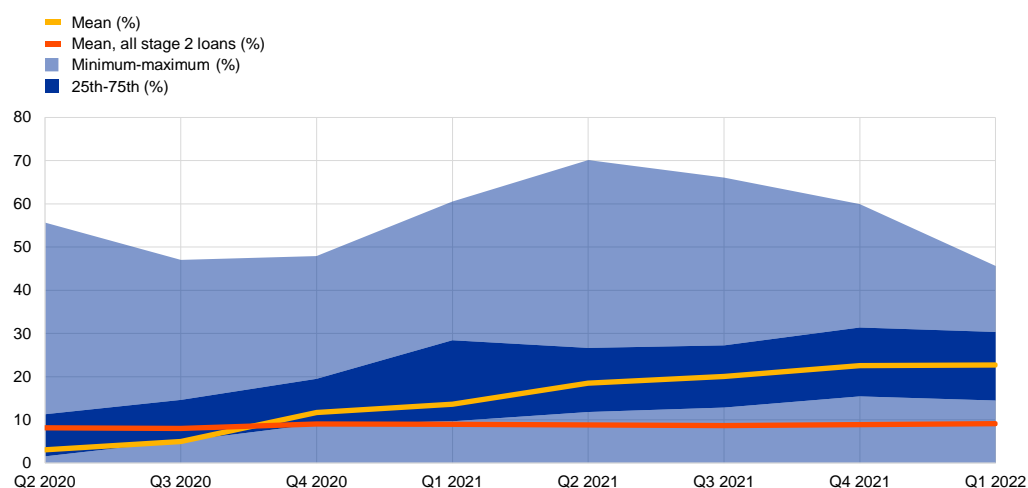




**Risk indicators are higher for loans subject to public support measures in many Member States.** Even though there certainly is heterogeneity across ESRB countries, for most Member States there has been a strong increase in the share as well as the absolute amount of stage 2 loans under public guarantees (Chart 14, yellow and dashed blue lines), while the average share of IFRS9 stage 2 loans (red line in the same chart) is clearly lower. Similarly, for a large majority of countries the NPL ratio is higher for guaranteed loans and loans with expired moratoria compared with the total loan portfolio (Chart 15, yellow and blue dots). The provisioning for supported loans, however, is substantially lower (Chart 15, red and green dots). For public guarantees, this might be appropriate – the default risk of the loan vanishes for the bank as the sovereign guarantees its face value. Moreover, the ex-ante evaluation process and the conditionality attached to loans with public guarantees may limit the credit risk even after the guarantees expires. In contrast, expired moratoria on a loan might signal the borrower’s vulnerabilities and should lead to more provisioning (i.e. higher coverage ratios for supported loans than for total loans, unlike what Chart 15 shows).

**Chart 14**  
**Stage 2 loans under public-guarantee schemes across EU countries**

(percentage of total loans, amount in EUR billions, Q2 2020 to Q1 2022)



Sources: EBA and ESRB calculations.

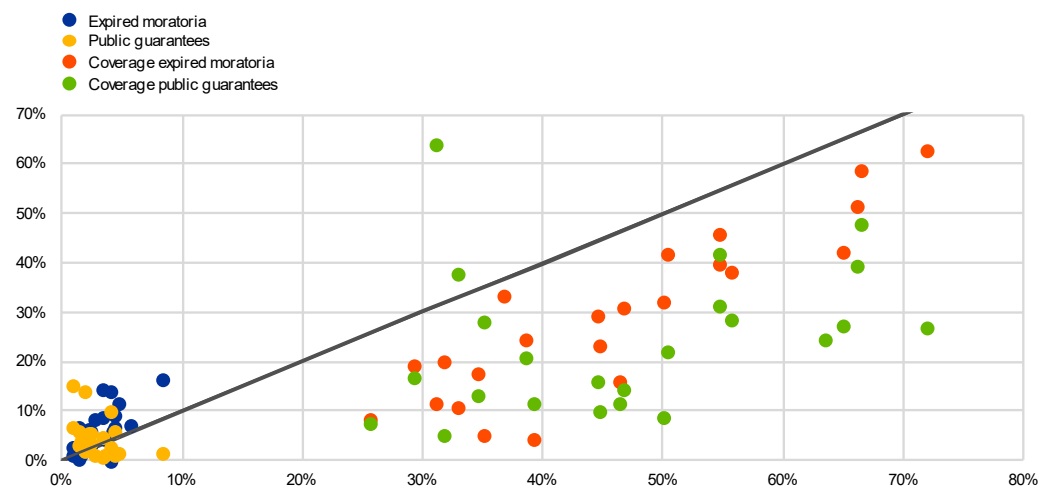
Notes: Share of stage 2 loans under public guarantees across the 27 EU countries; mean in total loan portfolio (red line) for comparison. The light blue area indicates the minimum and maximum share, the dark blue area the 25<sup>th</sup> and 75<sup>th</sup> percentiles, respectively.



Chart 15

**NPL ratios and NPL coverage ratios for supported (y-axis) and total loans (x-axis)**

(percentage, Q1 2022)



Sources: EBA Risk Dashboard (Q1 2022) and ESRB calculations.

Notes: NPL ratios and NPL coverage ratios for public guaranteed loans and loans under expired moratoria on y-axis; for total loan portfolio on x-axis. The chart is based on data for 30 ESRB Member States.

Despite the uncertain macroeconomic outlook, the Q2 2022 reporting illustrates that ESRB Member States expect insolvencies to rise only very moderately above pre-pandemic levels by the end of the year (Chart 16). The survey results illustrate that a third of ESRB Member States expect insolvencies to increase while remaining below or reaching pre-pandemic levels. Some 17% of the respondents do not expect changes in insolvencies over the course of 2022.<sup>10</sup> Moreover, with respect to Q4 2021, the reporting indicates a shift towards a moderate increase to above pre-pandemic levels. Fiscal support and loan moratoria have so far helped to contain corporate insolvencies and to prevent large-scale losses in the financial sector. At the current juncture, the outlook is characterised by a high level of uncertainty. The future evolution of insolvency rates also depends on the ability of firms to weather the currently deteriorating macroeconomic outlook.

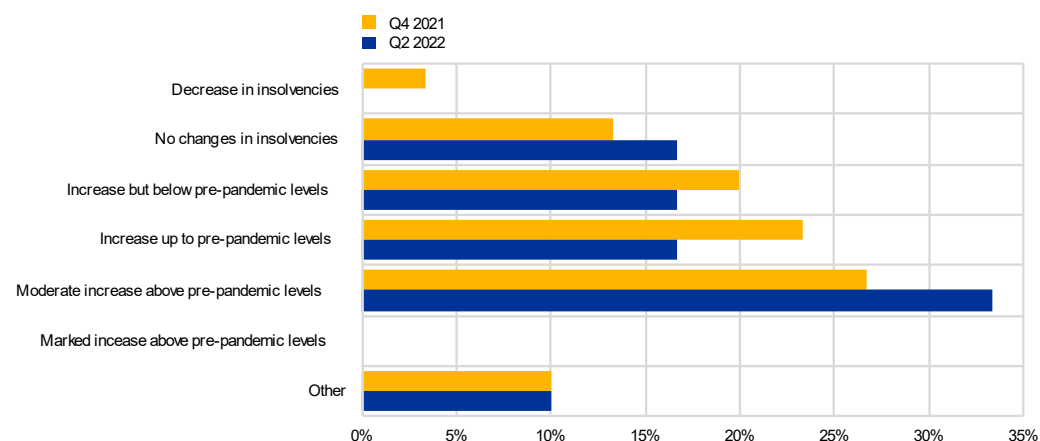
<sup>10</sup> Some of the countries picking “Other” indicate that, while they have no definite view on the extent of the change, they expect an increase in the number of insolvencies as measures are lifted and challenges resulting from the current global environment compound continuing COVID-related ones.



## Chart 16

### Expected changes in the number of insolvencies over the next two quarters

(Share of ESRB Member States reporting)



Source: Recommendation ESRB/2020/8 Template 3 (reference date 31 July 2022).

Notes: Percentage of ESRB Member States replying to the question "Do you expect a change in the number of insolvencies over the next two quarters?" The survey covers 30 ESRB Member States.

### Fiscal support has shielded banks' balance sheets from large-scale losses, despite the large contraction in real economic activity.

This weakened the link between economic and financial losses, and there is still a stable relationship between risk provisioning and asset quality. For instance, stage 2 loans have increased strongly since the onset of the pandemic in March 2020, as have corresponding provisions (Chart 17). However, bank capital decreased considerably at the start of the pandemic but has been kept stable ever since.<sup>11</sup> This indicates lower loss-absorbing capacity in the banking sector than before the pandemic. If higher-than-expected losses were to materialise, lower levels of capital could lead to binding balance sheet constraints. From a macroprudential perspective, this could indicate that the worsening macroeconomic environment is not yet fully reflected in banks' capital. Moreover, the long-lasting relationship between GDP growth and the development in insolvencies has broken down during the pandemic and is now almost inverted (Chart 18). The missing link between risk provisioning and both financial and economic vulnerabilities is, in part, a consequence of guaranteed loans that have reduced liquidity risks and firm insolvencies and thus the need for provisioning. Consequently, changes in risk provisioning during the pandemic seem to have been decoupled from real economic activity. In a cross-country sample, lower growth forecasts are not associated with higher stage 2 coverage ratios, showing a weak link between provisions and expected macroeconomic performance (Chart 19). This also holds true for ESRB Member States' GDP growth during the pandemic, as well as for more forward-looking GDP growth in 2023 (Chart 20).

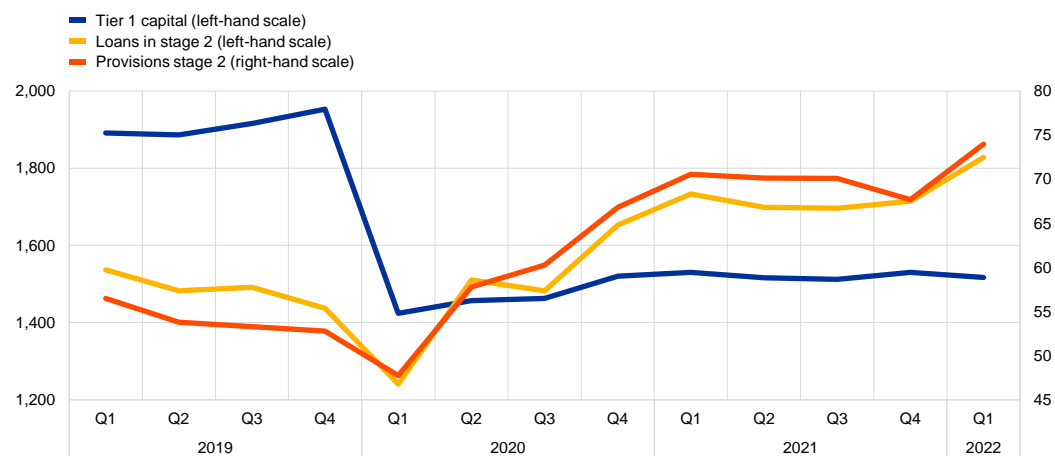
<sup>11</sup> Note that plotting the combined buffer requirement as divided by total risk exposure assets would show a very similar pattern: it rose relatively strongly before the pandemic to 3.7% and then dropped to 3.4% after the onset of COVID-19, where it remained until the end of the period covered (Q1 2022).



Chart 17

**Volume of capital and IFRS stage 2 loans**

(data in EUR billions)



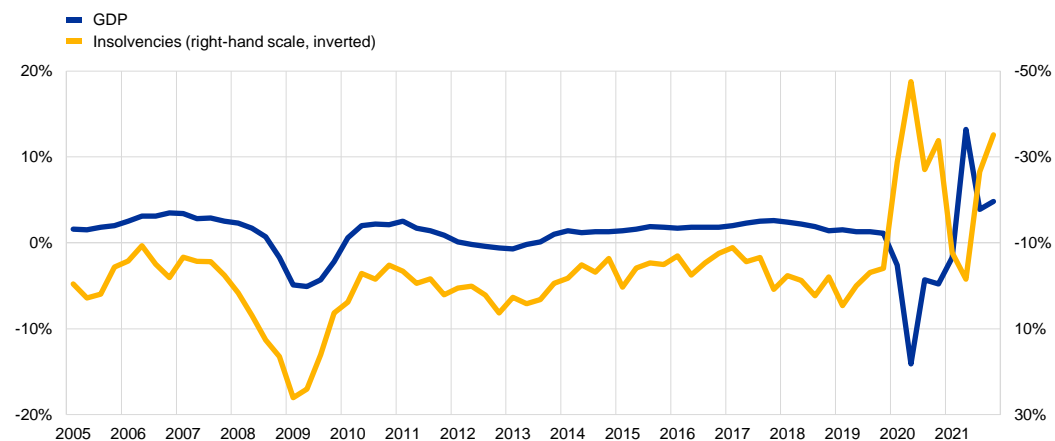
Sources: EBA Risk Dashboard (Q1 2022) and ESRB calculations.

Notes: Absolute amounts of stage 2 loans and Tier 1 capital (left-hand scale) and provisions for stage 2 loans (right-hand scale). Quarterly values for Q1 2019 to Q1 2022. All data in EUR billions. The chart is based on data for 30 ESRB Member States.

Chart 18

**Real GDP growth and insolvencies**

(in per cent)



Sources: Haver Analytics, Recommendation ESRB/2020/8, Trading Economics and ESRB Secretariat calculations.

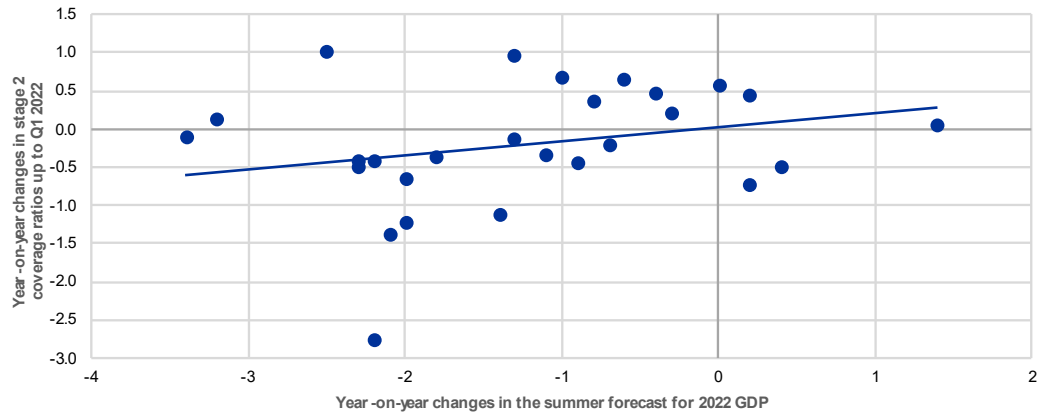
Notes: Insolvencies data primarily come from Haver Analytics; missing data points have been filled with data from Recommendation ESRB/2020/8 and Trading Economics. The chart is based on data for 30 ESRB Member countries.



Chart 19

**Changes in stage 2 coverage as a function of changes in the forecast for 2022 GDP across ESRB countries**

(percentage points)



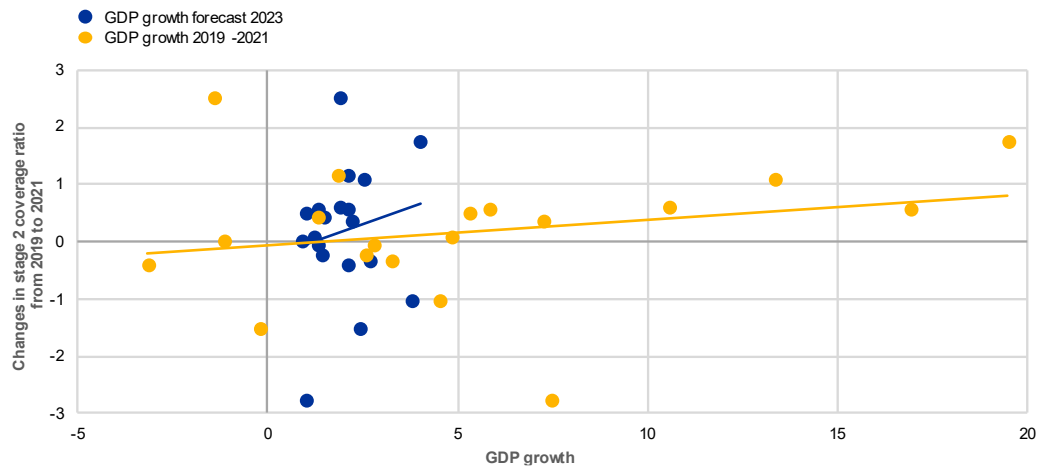
Sources: European Commission Economic Forecast (Summer 2021 and 2022), EBA Risk Dashboard (Q1 2022) and ESRB calculations.

Notes: Changes in GDP growth forecasts for 2022, according to the European Commission, from July 2021 to July 2022 (x-axis) and changes in stage 2 coverage ratios from Q1 2021 to Q1 2022 (y-axis). For 27 ESRB countries (no data for IS, LI and NO).

Chart 20

**Changes in stage 2 coverage as a function of GDP growth and growth forecasts across ESRB countries**

(percentage, x-axis; percentage points, y-axis)



Sources: European Commission Economic Forecast (Summer 2022), EBA Risk Dashboard (Q1 2022) and ESRB calculations.

Notes: GDP growth forecast for 2023 (blue dots) and GDP growth from 2019 to 2021 (yellow dots) on x-axis. Percentage point changes in coverage ratios for stage 2 loans from Q4 2019 to Q4 2021 on y-axis. The chart is based on data for 30 ESRB Member States.



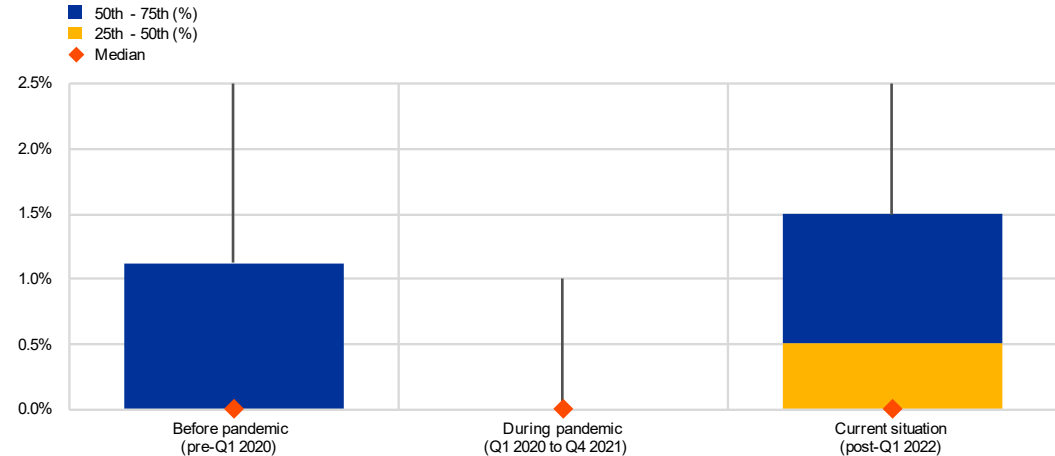
## 4 The role of macroprudential policy

**Against the backdrop of reduced COVID-related support and heightened macroeconomic and balance sheet risks, some countries have moved from crisis to prevention mode and are (re)activating core macroprudential policies.** As of Q2 2022 slightly over half of ESRB Member States have taken or plan to take macroprudential action, while the remaining countries do not plan to change their macroprudential stance; most of the action to be taken is expected to involve changes to CCyBs and LTVs. The median CCyB levels across ESRB countries have surpassed pre-pandemic levels, indicating that most ESRB Member States reverted to pre-pandemic CCyB levels or tightened their capital requirements even further (Chart 21). A gradual rebuilding of CCyB levels could be warranted to cushion the effects of a sudden deterioration of the macro-financial outlook and limit the risk of procyclicality in banks behaviour in such a scenario. At the same time, a (re)activation of buffers may turn out to be procyclical if buffers need to be rebuilt at a time of economic contraction. Chart 22 confirms the planned or announced tightening of macroprudential policy, as over 40% of ESRB Member States are considering CCyB-related policy action, while 20% will make adjustments to their LTV instruments.

Chart 21

### CCyB ratios' distributions over time

(CCyB ratios' distributions)



Source: ESRB.

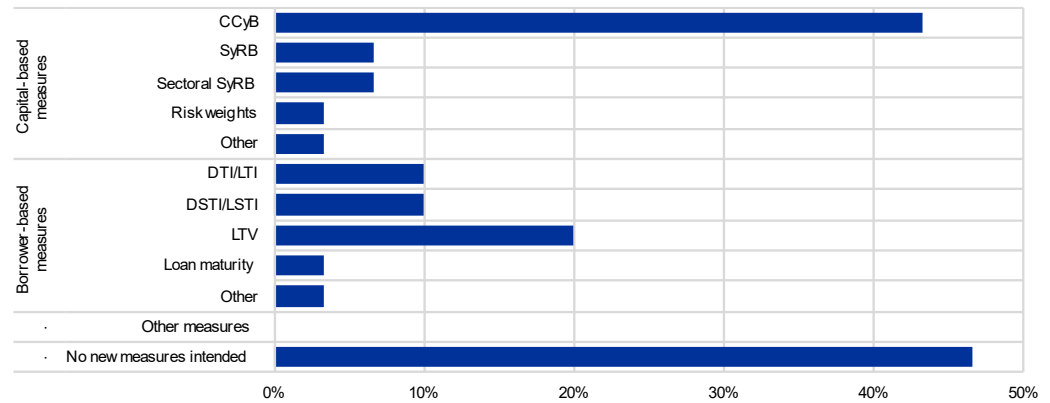
Notes: "Before pandemic" refers to the CCyB levels up to and including Q4 2019; "During pandemic" refers to the CCyB levels between Q1 2020 and Q4 2021; "Current situation" refers either to CCyB levels as of Q1 2022 or to an already announced future level, including positive neutral levels (Denmark, Ireland). Median values are equal to 0.00% in the "Before pandemic" period, 0.00% in the "During pandemic" period and 0.50% in the "Current situation" period. All values are in percentage points. The chart is based on data for 30 ESRB Member States.



Chart 22

**Announced or envisaged macroprudential policy changes, as reported by countries**

(percentage of respondents)



Source: Recommendation ESRB/2020/8 (reference date 30 June 2022). Notes: Percentage of ESRB Member States replying to the question “What macroprudential policy decisions are to be announced or are being considered in your jurisdiction?” In the capital-based measures category, SyRB stands for Systemic Risk Buffer; “Other” refers to ongoing reviews of macroprudential frameworks and plans to introduce macroprudential policy measures aimed at safeguarding the resilience of the property fund sector. In the borrower-based category, DTI stands for debt to income, LTI stands for loan to income, DSTI stands for debt service to income, LSTI stands for loan service to income; “Other” refers to ongoing reviews of macroprudential frameworks and plans to introduce macroprudential policy measures aimed at safeguarding the resilience of the property fund sector. The survey covers 30 ESRB Member States.



## 5 Takeaways

**Fiscal measures implemented during the pandemic have helped to prevent large-scale insolvencies and the closure of otherwise viable firms, thereby mitigating output losses. These measures have indirectly stabilised the financial system by shielding banks' balance sheets from the effects of COVID-19 restrictions.** This is because the support to the financial sector was provided indirectly through the targeting of the real economy and the provision of liquidity and solvency fiscal measures totalling 20.7% of ESRB Member States' GDP for 2019. Total uptake of these measures since the beginning of the pandemic amounted to 9.7% of the same GDP. In contrast, during the global financial crisis, support was targeted to financial institutions which would otherwise have been likely to fail.

**During the COVID-19 pandemic, there has been a shift from liquidity measures to solvency measures and from general support to targeted support.** While liquidity measures like public guarantees and loans have made up the bulk of fiscal support measures, there has been a marked increase in the size and uptake of solvency-enhancing measures like direct grants. Similarly, ESRB Member States have reported providing more targeted support over time to the most affected sectors or firms with attested viability. In view of the positive effects of this approach on the resilience of the financial system over the past years, going forward businesses should be categorised into the following categories for the targeting of support: (i) firms with viable business models that can raise funding privately; (ii) firms with sound business models that encounter difficulties when accessing private funding markets because of heightened debt levels and uncertainty related to the pandemic; and (iii) firms with business models that are clearly unviable. For firms with more structural problems, as in the last category, mechanisms for early debt restructuring and efficient insolvency procedures are needed.

**Fiscal support provided during the pandemic has implications for the assessment of future credit risks.** Owing to the extraordinary fiscal support, the contraction in the real economy did not fully translate into losses on banks' balance sheets. This may affect the reliability of banks' risk models, which are calibrated for the coming quarters or years using historical time series. It is difficult to gauge the extent to which macroeconomic risks related to the pandemic are being underestimated. As fiscal guarantees issued during the pandemic mature, risk weights are likely to increase, and the level of provisioning might turn out to be too low given the elevated corporate debt and high macroeconomic risks.

**As the current outlook is dominated by uncertainty, macroprudential authorities are using available macroprudential space to build up resilience amid heightened macroeconomic and systemic risks.** Where needed, the build-up of capital buffers should happen in a timely, non-procyclical manner. While this work remains agnostic with respect to the need to build up capital buffers at the country level, it illustrates recent and planned macroprudential action and acknowledges that macroprudential policy decisions should be made while considering each ESRB Member State's specific macro-financial outlook and banking sector conditions in order to limit the risk of procyclicality.





Finally, going forward, financial markets should not take government support for granted in the face of future negative shocks.<sup>12</sup> The macroeconomic outlook is deteriorating markedly. Given that global interest rates are higher now than at the peak of the pandemic, sovereigns might be less willing or able to replicate the large-scale fiscal support measures seen during the pandemic. Prudential authorities need to make sure that the resilience of the financial system is ensured even in the absence of strong fiscal policy responses, and that financial markets do not assume that policies will come to the rescue in the future. Nonetheless, should fiscal support be made available, the response to the COVID-19 pandemic shows the importance of defining clear objectives, targeting support and carefully monitoring and evaluating the effects of such measures.

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<sup>12</sup> In a **keynote speech at the Austrian Financial Market Authority** (Finanzmarktaufsicht – FMA) on 4 October 2022, the Chair of the Supervisory Board of the ECB, Andrea Enria, pointed out that “no two exogenous shocks are alike, which is why no specific monetary and fiscal support pattern can or should be taken for granted”.



# Annex

Table A1  
Announced size and actual uptake of moratoria and fiscal programmes as of 30 June 2022

	Q2 2022 (in EUR billions)		Q2 2022 (percentage of 2019 GDP)	
	Uptake	Announced size	Uptake	Announced size
Moratoria	6		0.04%	
Public guarantees	615	1,142	4.29%	7.95%
Public loans	59	154	0.41%	1.07%
Direct grants	116	168	0.81%	1.17%
Tax deferrals	79	n.a.	0.55%	n.a.
Tax relief	22	36	0.16%	0.25%
Public support for credit insurance	56	180	0.39%	1.25%
<b>Total fiscal measures</b>	<b>948</b>	<b>1,685</b>	<b>6.60%</b>	<b>11.70%</b>
<b>Total support (including loan moratoria)</b>	<b>954</b>		<b>6.60%</b>	

	Q4 2021 to Q2 2022 (quarterly changes in EUR billions)		Q4 2021 to Q2 2022 (quarterly percentage changes)	
	Uptake	Announced size	Uptake	Announced size
Moratoria	-43		-87.30%	
Public guarantees	63	-71	11.40%	-5.80%
Public loans	2	-8	4.40%	-4.70%
Direct grants	-84	-103	-41.80%	-38.00%
Tax deferrals	-3	n.a.	-4.00%	n.a.
Tax relief	2	-2	10.70%	-5.60%
Public support for credit insurance	1	-4	1.80%	-2.40%
<b>Total fiscal measures</b>	<b>-18</b>	<b>-260</b>	<b>-1.90%</b>	<b>-13.40%</b>
<b>Total support (including loan moratoria)</b>	<b>-61</b>		<b>-6.00%</b>	

Sources: Recommendation ESRB/2020/8 (reference date 30 June 2022) and ECB Statistical Data Warehouse.

Notes: "Announced size" refers to field 1.1.01. In a number of countries the size of tax deferrals is not pre-set; for these countries the "Announced size" of tax deferrals does not apply. "Uptake" refers to: (i) field 2.2.10 for public guarantees, public loans and direct grants; (ii) field 2.12.10 or 2.13.10 for tax relief and tax deferrals; and (iii) field 2.14.10 for public support for credit insurance. For moratoria uptake, amount outstanding (field 2.5.10) was considered when available, and in all other cases volume accepted (field 2.2.10) was considered for non-expired measures. 2019 GDP refers to the combined GDP of all the ESRB Member States for 2019.



Table A2

**Breakdown of the expiration of measures in 2021, 2022 and beyond***(percentage of 2019 GDP)*

Measure type	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Other dates
<b>Moratoria</b>	0.35%	0.02%	0.34%	0.05%	0.00%			0.01%
<b>Public guarantees</b>	0.34%	0.12%	0.38%	0.13%	5.58%		1.59%	0.78%
<b>Public loans</b>	0.03%	0.24%	0.06%		1.06%			0.01%
<b>Direct grants</b>	0.32%	0.24%	0.44%	0.56%	0.48%	0.31%	0.01%	0.41%
<b>Tax deferrals</b>	0.23%		0.28%	0.41%	0.01%			0.03%
<b>Tax relief</b>	0.01%		0.01%	0.09%	0.04%	0.00%	0.12%	0.09%
<b>Public support for credit insurance</b>	0.45%		0.03%					1.25%
<b>Total fiscal measures</b>	<b>1.38%</b>	<b>0.6%</b>	<b>1.20%</b>	<b>1.18%</b>	<b>7.17%</b>	<b>0.32%</b>	<b>1.73%</b>	<b>2.58%</b>
<b>Total support (including loan moratoria)</b>	<b>1.73%</b>	<b>0.61%</b>	<b>1.53%</b>	<b>1.24%</b>	<b>7.17%</b>	<b>0.32%</b>	<b>1.73%</b>	<b>2.59%</b>

Sources: Recommendation ESRB/2020/8 (reference date 30 June 2022) and ECB Statistical Data Warehouse.

Notes: Values reported as a percentage of the ESRB Member States' GDP for 2019, by measure; amounts refer to the programme size announced by the government (field 1.1.01), except for moratoria, for which total volume accepted (field 2.2.10) was used. "Other dates" include dates beyond 2021 and measures for which no expiration date is available. 2019 GDP refers to the combined GDP of all the ESRB Member States for 2019.



## References

Enria, Andrea, “**Better safe than sorry: banking supervision in the wake of exogenous shocks**”, keynote speech at the Austrian Financial Market Authority Supervisory Conference, Vienna, October 2022.

European Commission, “**European Economic Forecast – Spring 2021**”, Luxembourg, May 2021.

European Commission, “**European Economic Forecast – Spring 2022**”, Luxembourg, May 2022.

European Commission, “**Action plan: Tackling non-performing loans in the aftermath of the COVID-19 pandemic**”, Brussels, December 2020.

European Systemic Risk Board, “**Recommendation of the European Systemic Risk Board of 27 May 2020**”, Frankfurt am Main, May 2020.

European Systemic Risk Board, “**Financial stability implications of support measures to protect the real economy from the COVID-19 pandemic**”, Frankfurt am Main, February 2021.

European Systemic Risk Board, “**Prevention and management of a large number of corporate insolvencies**”, Frankfurt am Main, April 2021.

European Systemic Risk Board, “**Monitoring the financial stability implications of COVID-19 support measures**”, Frankfurt am Main, September 2021.



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