

# COVID-19 support measures

Extending, amending and ending

6 April 2021



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## Executive summary

A speedy, sizeable and sweeping policy response has been key to limiting the economic fallout of the COVID-19 shock. Public authorities implemented an unprecedented package of fiscal and monetary measures in response to the shock, helping to mitigate the adverse effects of the shock on the real economy and the financial system. Regulatory flexibility intended to sustain the supply of financing to the real economy complemented these measures. Fiscal, monetary and regulatory measures have supported each other.

The core of the global financial system has been resilient, but stress in some key funding markets required large-scale interventions. While the core of the financial system – including major banks and financial infrastructures -- entered the crisis more resilient than in the run-up to the global financial crisis, the COVID-19 shock led to severe liquidity stress in the system. The stress in key funding markets highlighted financial vulnerabilities, in particular in non-bank financial intermediation, and prompted unprecedented central bank intervention.

In view of the current situation, most of the COVID-19 support measures remain in place, and their withdrawal is typically not imminent. In many jurisdictions, the public health situation has trended worse in the last few months than was expected six months ago, and the outlook is highly uncertain. Nevertheless, policymakers need to form their views on whether, when and how to extend, amend or unwind their support measures. When developing or unwinding policy, national authorities will often be guided by considerations beyond financial stability. These are not the subject of this report.

Withdrawal of support measures before the macroeconomic outlook has stabilised could be associated with significant immediate risks to financial stability. It could produce adverse procyclical effects, permanently reducing economic growth potential through unnecessary insolvencies and unemployment, and affecting banks' balance sheets through increases in non-performing loans. It could also risk a sudden adjustment in asset prices and an increase in borrowing costs. Moreover, it could create negative international spillovers, which are likely to be more material in adverse scenarios with cliff effects.

At the same time, financial stability risks may gradually build if support measures remain in place for too long. Extending support measures for too long risks distorting resource allocation and asset prices, increasing moral hazard, postponing necessary structural adjustment in the economy and draining fiscal resources. A weakening of the economy's growth potential would tend to increase financial vulnerabilities over time through deteriorating credit quality. Moreover, the longer support measures last, the greater the concerns about debt overhang, which depresses investment and growth. The FSB is now analysing issues relating to debt overhang.

Nevertheless, most authorities currently believe that the costs of premature withdrawal of support could be more significant than maintaining support for too long. Although their circumstances differ widely, policymakers are wrestling with similar dilemmas as they consider whether to extend, amend or end support measures. These dilemmas become more acute as the pandemic persists. Policymakers share common objectives: to avoid large falls in output and employment, cliff effects and scarring, a worsening of banks' asset quality and a credit crunch, while allowing the economy to adjust to structural changes and preserving policy headroom.

Authorities have a number of options for managing these trade-offs. Authorities may follow a flexible, state-contingent approach, adjusting and withdrawing gradually, by:

- Ensuring that measures are targeted. At the beginning of the pandemic public authorities provided broad and large-scale support. As authorities learn how sectors, households and firms are affected by the pandemic, support measures can increasingly be targeted.
- Requiring beneficiaries to opt in. Doing so may help to ensure that support goes only to those who need it, and it also elicits information on the financial health of the beneficiary.
- Making the terms on which support is provided progressively less generous. For example, for loan guarantee schemes, authorities may gradually increase the cost of the guarantee and lower the proportion guaranteed.
- Sequencing the withdrawal of support measures. For instance, operational relief has often been allowed to expire as firms have adjusted to new operational arrangements, but many jurisdictions have committed to accommodative monetary policy for years.

Clear, consistent and timely communication about policy intentions can help the economy adjust to changes in policy. Such communication can help reduce the costs associated with withdrawal of support, not least by reducing the risk of surprises and abrupt adjustments in financial markets. By the same token, communication missteps could have adverse consequences. In light of pronounced uncertainty, authorities could issue guidance on the conditions under which support measures would be adjusted or phased out, for example by explaining how they will approach their decision-making and which factors they will consider.

A resilient and well-functioning financial system is a precondition for smooth adjustment. As public support is phased out, the ability of banks and non-bank financial institutions to bear risks and provide financing will be critical, not least because many viable but highly indebted firms will need to deleverage and boost their equity. Banks need to monitor the financial health of their borrowers as support measures such as debt moratoria are extended, and to provision appropriately for impaired loans. Supervisors need to continue to find the right balance of flexibility and sound credit risk management. Ensuring that capital markets continue to function in an open and orderly manner will facilitate raising equity and support transparency.

Further work is needed to understand the risk of harmful cross-border and cross-sector spillovers, including possible feedback loops, and options to mitigate the risk. Simulations and stress testing are proving to be useful analytical tools. High-frequency data relating to health, economic activity and mobility offer opportunities to mitigate uncertainty. As some advanced economies begin to recover and begin to unwind support measures, this may present challenges for emerging markets and developing economies, including through capital outflows.

FSB members have committed to coordinate on the unwinding of COVID-19 support measures and the FSB will continue to support international coordination. FSB members will periodically discuss approaches to adjusting and unwinding support measures in order to share elements of effective practices and to facilitate a return to alignment with global standards in order to minimise the risk of harmful market fragmentation.

## 1. Introduction

The evolving nature of the COVID-19 pandemic and the associated economic effects require continued measures to support financial resilience and ensure a sustained flow of financing to the real economy. Heightened economic uncertainty and elevated risks to financial stability reinforce the case for close international cooperation to help maintain global financial stability, keep markets open and preserve the financial system's capacity to finance growth. Any adjustment to support measures should be carefully evaluated, and support should be withdrawn gradually in order to avert domestic and cross-border cliff effects.

In April 2020 the G20 finance ministers and central bank governors committed to follow the five principles set out in the FSB's report on COVID-19. They reiterated their commitment to share information on a timely basis to assess and address financial stability risks from COVID-19, and to coordinate on the unwinding of the temporary measures.<sup>1</sup> Against this background, the Presidency of the G20 asked the FSB to report to the G20 finance ministers and governors in April 2021 on policy considerations relating to the unwinding of support measures.

This report considers the extension, amendment and expiration of support measures through the lens of financial stability and the capacity of the financial system to finance growth. When developing or adjusting policy, national authorities will often be guided by considerations beyond financial stability, which are not the subject of this report. The report discusses the extent to which measures have been unwound so far and discusses the matters to which policymakers should have regard when considering whether to extend, amend or end their economic and financial support measures. Its purpose is to assist G20 members and other policymakers by providing a benchmark and by drawing attention to practices in FSB member jurisdictions.

## 2. The economic and policy context

Speedy, sizeable and sweeping policy responses have limited the economic fallout of the COVID-19 shock. The COVID-19 pandemic represents an unprecedented peacetime shock to the global economy. Large-scale fiscal and monetary stimulus has provided support to private households and corporates, supporting aggregate demand and supply amidst the pandemic and the associated containment measures.

The core of the global financial system has been resilient, demonstrating the benefits brought by the reforms after the global financial crisis of 2008, but stress in key funding markets required large-scale interventions. While the core of the financial system – including major banks and financial infrastructures -- entered the crisis more resilient, the COVID-19 shock led initially to severe liquidity stress in some parts of the financial system. The stress in key funding markets highlighted financial vulnerabilities, in particular in some parts of the non-bank financial intermediation sector, and prompted unprecedented central bank intervention.

Distinguishing between four stylised phases can aid discussion of policy responses. These four states of the world, which are shown in Table 1, are characterised by a sharp rise in uncertainty

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<sup>1</sup> See [G20 Finance Ministers and Central Bank Governors Meeting, Communiqué \(15 April 2020\)](#)

and surging demand for liquidity (a “dash for cash”) in phase 1; a fall in economic activity due to the pandemic and containment measures in phase 2; pronounced uncertainty about the evolution of the pandemic and economic prospects in phase 3 (potentially including periods of recovery and setbacks); and a sustained recovery in economic activity as the pandemic recedes in phase 4.

Policy measures have different objectives in each phase. In the first phase, policies typically aim to stabilise markets and restore confidence in the financial system. The second and third phases aim to mitigate losses incurred due to falls in economic activity and stabilise the real economy.<sup>2</sup> The fourth phase aims to restore balance in the real economy as it transitions to normality.

**Table 1: stylised representation of pandemic phases and common policy measures**

Phase	Characteristics	Objectives	Action for real economy	Action targeting financial system
Phase 1	Strong adverse shock to expectations, ‘dash for cash’	Stabilise financial markets, restore confidence	(Communication) Automatic stabilisers	Provide ample liquidity to the financial system
Phase 2	Initial reduction in economic activity due to pandemic and to measures to contain it.	Stabilise real economy and mitigate losses due to pandemic and containment measures	Broad liquidity and solvency support measures	Facilitate liquidity and supply of finance to real economy. Mitigate consequences of temporary payment problems. Prudential flexibility.
Phase 3	Effects of the pandemic are lasting longer than initially expected, high uncertainty about the future evolution of the pandemic.		Targeted support / fine-tuning of measures	Facilitate liquidity and supply of finance to real economy while avoiding over-indebtedness. Encourage active credit risk monitoring.
Phase 4	Economic activity picks up. Transition to post-pandemic economy	Allow for a return to balance in real economy	Phasing out of support measures. Transition support. Debt workout /restructuring and orderly market exit mechanisms.	Avoid credit crunch, manage NPLs. (Manage second-round effects on financial institutions).

Consistent with these objectives, policies in the first phase mainly provided liquidity support to the financial system ensured that financial markets remained open. Policies for the real economy in this phase included reassurance to firms and households, drawing their attention to automatic stabilisers and implementing support measures to bridge liquidity gaps. Central banks established new liquidity facilities and provided ample liquidity support. Some also expanded the

<sup>2</sup> ESRB (2021) differentiates between a containment phase and a recovery phase. IMF (2020a) describes three phases: great lockdown, gradual reopening under uncertainty, and pandemic under control.



scope of collateral that they would accept. The US Federal Reserve established US dollar swap and repo arrangements with certain other central banks and the ECB established euro swap facilities. These have been extended until September 2021<sup>3</sup> and March 2022, respectively. Public authorities adopted operational relief measures to enable remote corporate governance, as well as operational relief on conduct of business and investor protection.<sup>4</sup> Measures to support market functioning were widespread. They included prohibitions on short-selling, enhanced position reporting, temporary limits on trading to limit aggregate volumes, and circuit breakers. Ensuring that capital markets continued to function in an open and orderly manner provided the real economy with continued access to funding and the ability to hedge risks.<sup>5</sup>

In the second phase, authorities focused on containing output losses during the initial downturn. They introduced broad-brush support to households and firms, while automatic stabilisers such as unemployment insurance began to kick in. Measures enabling banks to maintain lending to the real economy were also central during this phase. The majority of FSB jurisdictions introduced state-guaranteed loan schemes and loan moratoria, many of which are still in place. Prudential and accounting relief measures were also introduced, using the flexibility built into international standards. Restrictions and recommendations on capital distribution and bonuses were imposed on banks and insurers in some jurisdictions.

In the third phase, authorities have begun to fine-tune support measures. They have started to place more emphasis on avoiding over-indebtedness in borrowers who have benefited from liquidity support and begun to target those sectors that were hit the hardest, such as tourism. While many jurisdictions continue to provide broad access to grants and wage subsidies, direct lending schemes and corporate relief, some indicate that they plan to unwind support gradually once health restrictions allow. Measures to support bank lending have typically remained in place, while restrictions on capital distribution have been withdrawn or fine-tuned.

In the last phase, measures aim to support the transition to the post-pandemic economy and facilitate debt restructuring and the orderly exit of unviable firms.<sup>6</sup> Policies managing second-round effects via financial institutions complement these measures, with aim of avoiding a credit crunch and managing the effects of credit risk deterioration, e.g. potential surges in non-performing loans (NPLs).

The discussion in the following sections focuses on the policy considerations that arise during phases 3 and 4. The objectives in these phases include avoiding large troughs in output and employment, cliff effects and scarring, as well as a potential credit crunch, while allowing the economy to adjust to different patterns of demand, some of which will have permanently changed. The risks in these phases include high debt levels, and – to the extent that the evolution

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<sup>3</sup> The extension is related to the nine temporary US dollar liquidity swap lines, rather than the five standing swap lines with the Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank, and the Swiss National Bank.

<sup>4</sup> See Annex 1 for more detail about jurisdictions' extension and unwinding decisions.

<sup>5</sup> See also IOSCO (2020).

<sup>6</sup> See also Blanchard, Philippon and Pisani-Ferry (2020), suggesting a flexible, state-contingent policy mix for the post-lock down phases and stressing in particular the value of temporary wage subsidies and streamlined debt restructuring procedures for SMEs with excessive legacy debt.

of the pandemic and economic performance diverge across economies – procyclical cross-border spillovers.

The conditions that jurisdictions face in these phases vary widely. Waves of new infections and changes in economic activity are not synchronised, even in neighbouring countries. Policy headroom, health and infrastructure capacity, the structure and resilience of the economy and financial system, welfare systems<sup>7</sup> and private-sector debt vary widely. The appropriate policy mix will therefore differ across jurisdictions. Emerging market and developing economies (EMDEs) typically have less room for manoeuvre. The degree of support is markedly lower in EMDEs, and the policy mix is somewhat different. Support amounts to 5.5% of GDP in EMDEs and 20% in advanced economies (AEs).<sup>8</sup> Fiscal constraints are on average tighter, countercyclical frameworks are typically less developed and operational challenges appear to have been greater in EMDEs.

### 3. Support measures and how they work

#### 3.1. Transmission mechanisms

This section analyses the effects of the measures that jurisdictions have adopted in response to the COVID-19 shock, in order to illuminate what might happen when measures are unwound.

While central banks have provided plentiful liquidity to financial markets, fiscal and prudential authorities have adopted two broad types of measure to support livelihoods:

- measures directly in favour of the real economy, mostly of a fiscal nature; and
- measures of a prudential nature, aiming to ensure that banks and insurers supply critical services to the real economy and to preserve financial stability.

The support measures have been transmitted to non-financial firms and households through the following main channels:

- **Payment moratoria and tax deferrals** have supported the liquidity position of households and firms by allowing them to refrain temporarily from servicing debt or paying taxes or social security contributions. Once borrowers have to resume servicing their debt in full, non-performing loans might increase, which could reduce bank profitability and, in the long term, affect the solvency of banks.
- **Public guarantee schemes** have ensured continued access to external finance for firms. This has been particularly important for SMEs and the self-employed.<sup>9</sup> Unwinding

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<sup>7</sup> See also Aberola et al. (2020) on the differences in fiscal space between advanced economies and emerging market economies as well as the importance of the strength of social safety nets and 'automatic stabilisers'. See also Blanchard and Summers (2020) on the role of 'semi-automatic stabilisers' to reduce unemployment slumps and their design crucially depending on other discretionary policies.

<sup>8</sup> IMF (2020) *World Economic Outlook*, October.

<sup>9</sup> See ESRB (2021) at page 19.

these measures would remove a cheap funding option for eligible targets, which could increase insolvencies.

- **Public guarantee schemes for trade credit insurance** have supported exporting firms and an uninterrupted flow of funds in supply chains. Withdrawing this measure would imply that trade credit insurance companies underwrite solely on the basis of the credit risk of the buyer, with potential negative spill-overs on importing countries, as well as on domestic exporters.
- **Short-time work schemes** have both helped firms to meet staff expenses despite lower turnover and preserved a large part of households' income. Prohibitions of layoffs for economic reasons and freezing of insolvency procedures have also sustained aggregate demand. Without these schemes, firms would adjust their demand for labour by laying off workers, increasing unemployment and reducing households' income.
- **Direct grants, tax relief and equity injections** have helped the recipients, mostly firms, to maintain liquidity, contain indebtedness and improve solvency, and in the case of wage grants to secure the jobs of affected workers. Grants are often directly linked to the imposition of restrictions on economic activity. Their premature withdrawal would correspondingly reduce the liquidity and income of recipients and could again lead to a rise in insolvencies.
- **Measures to facilitate the continued and orderly operation of capital markets** (such as temporary limits on trading) enabled corporates to raise funding through debt and equity issues as well as initial public offerings. Indeed, there were record levels of issuance in many markets.<sup>10</sup> Many such support measures have now been withdrawn or allowed to lapse.

Prudential measures have been intended to free up bank capital in order to absorb losses and support the flow of credit to the real economy. Measures included encouraging banks to use their capital and liquidity buffers to maintain the flow of credit. A number of jurisdictions released or reduced the countercyclical capital buffer (CCyB). A few others temporarily reduced other types of capital buffer, such as the systemic risk buffer or the capital conservation buffer. Authorities have also provided operational relief, as well as some technical clarifications to ensure that banks properly reflect the risk-reduction effect of COVID-19 measures in their capital ratios. Many authorities introduced restrictions to the distribution of capital and variable remuneration. These prudential measures have helped banks absorb the initial shock and reduced the risk of a sharp downward correction in the value of their credit portfolios. Withdrawing these prudential measures would, in effect, result in higher capital requirements for banks. In a severely adverse scenario, this could encourage banks to deleverage, resulting in a credit crunch after all.<sup>11</sup>

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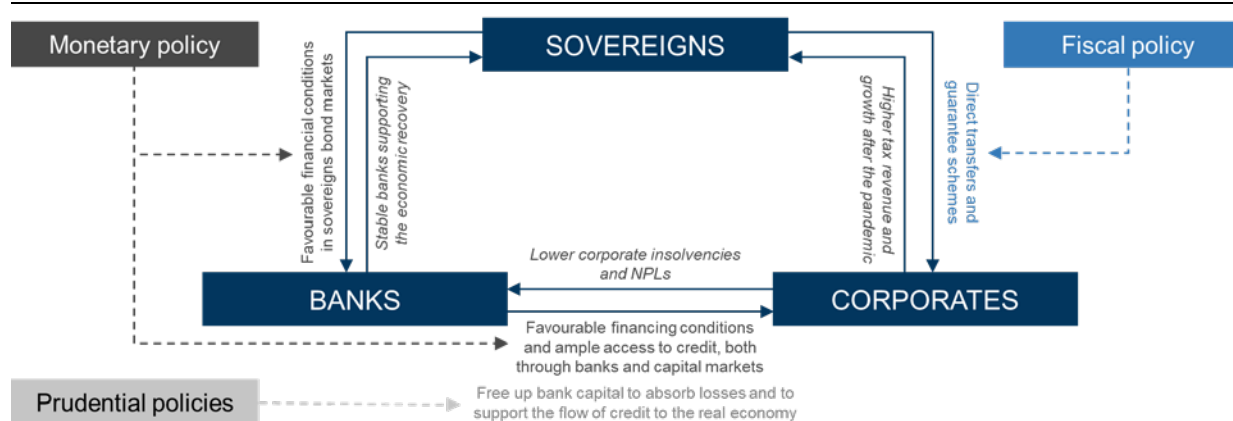
<sup>10</sup> See for example S&P Global Ratings (2020).

<sup>11</sup> See, for example, Aiyar et al. (2021).

## 3.2. How measures interact

The support measures complement one another, as illustrated in Figure 1. Broad-based measures to support households and firms secured a continuous flow of credit, which supported economic activity and protected financial stability. Monetary policy complemented these measures by providing ample liquidity and ensuring favourable financing conditions, while prudential authorities adopted supervisory relief measures in order to preserve the flow of lending. Together, these measures helped prevent an abrupt contraction of credit and a wave of corporate defaults, and protected banks' profitability and balance sheets.<sup>12</sup>

**A virtuous circle between sovereigns, banks and corporates** Figure 1



Source: FSB, based on Schnabel (2021)

Fiscal, monetary and regulatory measures are therefore complementary (ECB, 2020b). The interactions between these types of measure should therefore be taken into account in the phasing out process, and any withdrawal of measures should therefore be coordinated within each jurisdiction.<sup>13</sup> The main interactions between the prudential measures and the other support measures are the following:

- Monetary policy measures helped to mitigate illiquidity and volatility spikes in the financial system, thus ensuring the smooth functioning of financial markets and access to funding, which in turn allows lenders to finance the real economy. This policy complements the efforts of fiscal authorities to contain the effects of the shock.
- Fiscal authorities introduced measures such as direct support to households and firms, tax deferrals, state guarantees, short-time work schemes and payment moratoria, which have helped borrowers to meet their liquidity needs. Technical clarifications by prudential authorities aimed to ensure that the risk-reducing effect of COVID-19 measures is properly taken into account – e.g. using sovereign risk weights for state-guaranteed loans or following guidance on the prudential classification of forborne exposures.<sup>14</sup>

<sup>12</sup> Schnabel (2021)

<sup>13</sup> Kongsamut et al. (2021).

<sup>14</sup> In some cases there are direct links between the prudential treatment and the application period of fiscal measures.

- Measures adopted by regulators and supervisors aim to ensure that banks continue to lend to the real economy. Where possible, authorities released the countercyclical capital buffer (CCyB) to free lending capacity. Regulators also encouraged banks to use their capital and liquidity buffers. Restrictions in capital distributions supported the capital generation capacity of banks and hence, their ability to lend. This complements the efforts of fiscal and monetary authorities to sustain demand.
- Some prudential measures were specifically intended to complement monetary policy measures, namely the exclusion of central bank reserves from the denominator of the leverage ratio. This exclusion seeks to reinforce the transmission channel of monetary policy. Additionally, authorities mitigated the application of pro-cyclical and purely mechanistic provisioning rules, while maintaining general prudential supervisory standards.
- Prudential, fiscal and monetary measures also helped corporates to raise funding through capital markets by increasing investor confidence and reducing perceived market and credit risk.

## 4. Policy considerations

### 4.1. Duration of measures and timing of withdrawal

For many support measures, authorities need to take a decision on whether to extend, amend or unwind them. Measures may be withdrawn when the policy objectives are judged to have been met, or when the costs of policies outweigh their benefits or more efficient policy options emerge. For example, the original expiry dates for debt moratoria have typically passed, and in most cases the moratoria have been extended. By contrast, much of the operational relief has been allowed to lapse. Unwinding here means either taking a positive decision to end a support measure or allowing an expiry date to pass with no action. Some measures are intrinsically one-off or self-limiting; for example, a payment to households may be one-off.

Decisions must be taken under an unprecedented degree of uncertainty. This hinders the use of traditional quantitative risk management tools, which rely on probability distributions of outcomes and severity drawn from the past. Nonetheless, many jurisdictions have found ways to use scenarios, stress tests, and simulations to inform policy decisions, as discussed in Box 1 below.<sup>15</sup>

There are risks in unwinding policy measures too early and risks in unwinding too late. When assessing such risks, the following factors should be considered:

- **Efficiency of support measures.** Extending support measures may prolong inefficiencies. Support measures were initially designed and implemented at great speed, with the intention of reaching all who needed help. Inevitably, therefore, some

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<sup>15</sup> See the attempt by Bodenstein, Cuba-Borda, Faris and Goernemann (2021) to forecast economic outcomes under uncertainty, and also Locarno and Zizza (2020).

support may have gone to firms that did not need it and some to non-viable firms that will eventually fail anyway.<sup>16</sup>

- **Hysteresis effects.** The costs of unwinding support before the macroeconomic outlook has stabilised could be significant.<sup>17,18</sup> Irreversible losses might be incurred in absence of adequate support,<sup>19</sup> including permanent effects on beliefs that in turn affect future economic outcomes.<sup>20</sup> Removing the safety net for firms before their income sources are sufficiently restored could trigger the inefficient bankruptcy of intrinsically sound businesses. The value inherent in such firms could be irremediably lost, with a permanent reduction in the growth potential of the economy. However, unduly delayed removal of support could also give rise to irreversible costs. For example, protracted access to moratoria or credit guarantees entails the risk of zombification<sup>21</sup> and could inhibit structural change motivated by the pandemic.<sup>22</sup> Some studies suggest that short-time work schemes may decrease the allocative efficiency of the economy when used on a large scale for an extended duration (ECB, 2020c).
  
- **Effects on confidence and market volatility.** Uncertainty means that insurance has value. The risk of further waves of pandemic may increase the value of keeping support measures in place and preserving options. There are increasing pockets of vulnerabilities such as stretched asset valuations. The sudden or unexpected withdrawal of support measures could trigger market volatility and sudden asset price adjustments. When withdrawing a support measure there is also danger of sending a misleading signal to the public, which may draw general inferences from the withdrawal of a specific measure.
  
- **Costs of resuscitating a measure.** Some decisions are less costly to reverse than others. The process of reintroducing measures may be costly or time-consuming, requiring legislative processes or sunk operational costs. Policies for which the restarting costs are likely to be relatively high include fiscal measures such as state-guaranteed loans and direct transfers. If a policy is unwound only to be reimposed later, the economy will have forgone certain benefits that may not be recoverable. For example, if loan moratoria are lifted and later reimposed, the cost of any insolvencies occurring during the intervening period could be irreversible. On the other hand, support measures in capital markets and regulatory guidance may be quickly resuscitated if needed.

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<sup>16</sup> Gourinchas et al. (2020) find evidence that broad-based direct transfer policies would significantly misallocate resources, with the bulk of the support going to firms that do not need it because they would survive anyway, and a smaller fraction going to firms that would fail anyway.

<sup>17</sup> See, for example, IMF (2021b), at page 3; IMF WEO (2020) at page 70, IMF GFSR (2020) at page 8; OECD (2020c and 2021); ECB (2020b); Visco, I., (2021) speech at the 27th Congress of ASSIOM FOREX, 6 February; Yellen, J., (2021) Letter from the Secretary of the US Treasury to the G20, February.

<sup>18</sup> Evidence from financial markets substantiates this view, as cross-country evidence suggests that markets react negatively to premature withdrawals (i.e. withdrawals at a time when the daily COVID-19 cases are high relative to their historical average), probably reflecting concerns about the impact of withdrawal of support on the prospects for economic recovery: see Chan-Lau and Zhao (2020).

<sup>19</sup> Jordà, Singh and Taylor (2020).

<sup>20</sup> Kozłowski, Veldkamp and Venkateswaran (2020) show that a potential source of such a long-lived change is a persistent change in the perceived probability of an extremely negative shock. The impact of such belief changes on future economic outcomes in the US is found to be significantly higher than the estimates of the short-run losses in output.

<sup>21</sup> That is, a proliferation of firms that have persistent problems meeting their interest obligations.

<sup>22</sup> Zhao (2020).

#### 4.1.1. *Risk of withdrawing too early given the state of the economy*

The risks of withdrawing too early, if they crystallise, would be observed relatively quickly. There are two main risks. The first is the risk of an adverse market reaction: loss of liquidity and a sharp asset price adjustment causing losses to financial institutions. The second is the risk of undermining economic recovery, increasing the losses borne by the financial sector.

Premature withdrawal of support measures that maintain liquidity and solvency (phases 2 and 3) could have procyclical effects, dampening economic recovery. It could give rise to cliff effects: a sharp, downward spiral, leading to widespread credit constraints, a large number of insolvencies and a significant rise in unemployment. These costs are higher, the larger the share of viable firms that are financially or liquidity constrained.<sup>23</sup> This spiral could be self-reinforcing in the presence of macroeconomic feedback effects, and the loss of physical and human capital could have permanent, scarring effects on the economy. This could increase the aggregate economic costs of adjustment when compared with smoother paths of adjustment.

The early withdrawal of measures intended to support households and firms would be likely to be followed by an increase in insolvencies and unemployment. As explained in Section 3, a large number of measures are intended to support households and firms – either directly (e.g. wage subsidies) or indirectly (e.g. measures that support demand). If these support measures are withdrawn too early or targeted imprecisely, many firms' liquidity and solvency positions would worsen and insolvencies would rise (see Box 1). Capacity constraints in the judicial system and inefficient restructuring procedures could lead to congestion externalities that amplify the effects of a wave of bankruptcies. Such an increase in insolvencies would be expected to be followed, with a lag, by an increase in unemployment.<sup>24</sup>

Uncertainty about how the structure of the economy will change implies that policymakers should keep their options open and be cautious about pursuing rapid debt foreclosure. The extent to which observed changes in supply and demand are permanent or temporary is not yet known.<sup>25</sup> This may create difficulties for lenders, who need to monitor borrowers' viability, and increase uncertainty for policymakers over the future path of bad debt.

Spikes in insolvencies and unemployment can have permanent effects. The unnecessary failure of otherwise viable<sup>26</sup> firms due to a premature withdrawal of support would reduce capital formation and labour productivity. It could also increase unemployment, destroy the social capital embodied in the relationship between employee and employer,<sup>27</sup> and make it harder for laid-off workers to find new jobs.<sup>28</sup> All this would weigh on employment and growth.<sup>29</sup>

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<sup>23</sup> The G30 (2020).

<sup>24</sup> See Banerjee et al. (2020).

<sup>25</sup> See, for example, Ettliger and Hensley (2021).

<sup>26</sup> Blanchard, Philippon and Pisani-Ferry (2020) define a viable firm as one whose present value of its profits exceeds its recovery value. A firm is solvent if the present value of its profits exceeds its debt.

<sup>27</sup> This underlies employment support measures such as Germany's Kurzarbeit policy (a short-time work scheme), and the US Paycheck Protection Program.

<sup>28</sup> Blanchard, Philippon and Pisani-Ferry (2020).

<sup>29</sup> See also Wyplosz (2021) on the implications of hysteresis for fiscal policy.

Variation in the characteristics of beneficiaries may be another reason to withdraw support later rather than earlier. The main targets of financial support policies have been SMEs,<sup>30</sup> which may be less able than larger firms to exploit a recovery in international demand. A decision to withdraw based only on the average economic situation across firms could be unduly hasty for those firms that have most needed assistance.

Early withdrawal of market liquidity support measures could give rise to destabilising confidence effects. The benefits of liquidity support mechanisms need not end once they are no longer being used. They provide a form of insurance that may help reassure market participants in the face of further shocks associated with the pandemic. Withdrawing them could heighten the probability of financial instability, including another episode of illiquidity as observed in March 2020, and reversion of asset prices.<sup>31</sup> Such a shock would affect banks, insurers and non-bank financial institutions. Several jurisdictions have chosen to keep their liquidity support mechanisms in place, for instance in Australia, the euro area, India and Singapore, while the US Federal Reserve has started to withdraw some of its facilities as uptake has declined to low levels.

All of these effects would feed back to the financial system, in both the short and long term, through a decline in asset quality and business activity. Premature withdrawal of support measures would lead to a deterioration in asset quality and increases in non-performing loans and loan impairments, and potentially also to a depletion of bank capital. In central scenarios, the financial system in most jurisdictions is resilient to such losses.<sup>32</sup> But in adverse scenarios, losses are higher and capital more depleted, which could lead to a tightening of credit conditions and a credit crunch, with spillover effects across sectors and borders.<sup>33</sup> A resilient financial system is key to smooth adjustment as support measures are phased out.

Prematurely withdrawing temporary measures designed to support bank lending could lead to an unintended tightening of bank lending. The adverse effects of the pandemic include increased borrower default risk,<sup>34</sup> and there is some evidence that banks are starting to tighten lending standards as a result.<sup>35</sup> While it may benefit an individual bank to restrict lending, similar action by all banks could reduce the supply of credit, depress the economy and raise the rate of defaults in a self-defeating spiral.<sup>36</sup> That is why public authorities have encouraged banks to use their capital buffers to maintain lending and stated that supervisors will give banks enough time to rebuild their buffers, taking account of economic, market and bank-specific conditions.<sup>37</sup>

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<sup>30</sup> See the International Monetary Fund's policy tracker, *Policy Responses to Covid-19*.

<sup>31</sup> Note, though, that it is relatively easy to reintroduce liquidity support if this is observed.

<sup>32</sup> See, for example, Bank of England (2020), Board of Governors of the Federal Reserve (2020), ECB (2020b), IMF (2020a), Aiyar et al. (2021). That said, while the global banking system is well capitalised overall, there is a weak tail of banks, and some banking systems may experience capital shortfalls in an adverse scenario. In those cases, supervisors should consider taking action now in order to strengthen banks' solvency ratios. To the extent possible monetary policy and fiscal policy should remain supportive, so as to minimise procyclical concerns.

<sup>33</sup> See, for example, Aiyar et al. (2021).

<sup>34</sup> See, for example, Banca d'Italia (2020).

<sup>35</sup> ECB (2020).

<sup>36</sup> Bank of England (2020), ECB (2020)

<sup>37</sup> See, for example, Basel Committee on Banking Supervision (2020a, 2020b).



### Box 1: Preliminary quantitative assessments of the unwinding of COVID-19 support measures

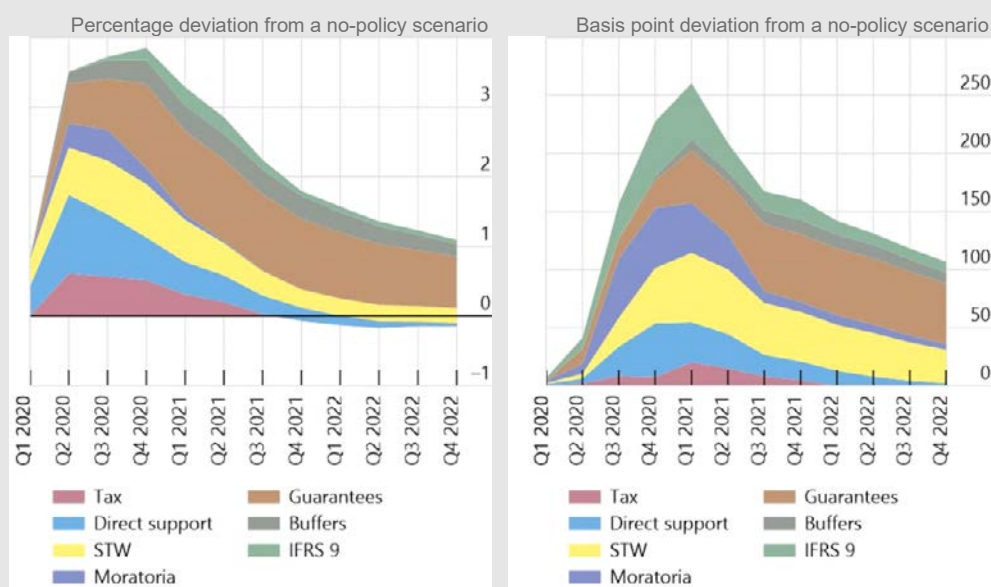
Quantitative assessments of the impact of the withdrawal of COVID-19 support measures are still rather limited in number. However, simulations that estimate the effect of support measures on economic activity and on banks' solvency can also be used to estimate the effect of withdrawal of support measures. Such simulations indicate the potential for cliff effects if important support measures are withdrawn at the same time. The estimates are, of course, subject to considerable uncertainty and the results vary across jurisdictions. Simulations for the euro area integrating micro-level estimations into a macro model<sup>38</sup> suggest that the phase-out originally planned for end 2020 and 2021 would have given rise to cliff effects (see Charts A).<sup>39</sup> The latter would have been mainly driven by the originally planned withdrawal of direct grants, short-time working schemes and loan moratoria, together with the (at that time still foreseen) ending of the preferential supervisory treatment of loan moratoria; most of these measures were initially planned to end by or in Q4 2020 or early 2021. The integrated approach of these simulations captures variation across firms, households and banks, while allowing for interaction across sectors at the macro level including second-round and feedback effects.

#### Withdrawing measures simultaneously may induce cliff effects in policy support

Chart A

Impact of policy support on the real GDP level of the five largest euro-area countries

Impact of policy support impact on banks' CET1 ratios in the five largest euro area countries



Sources: Rancoita et al. (2020) with corporate, household and banking modules based on micro data from Bureau van Dijk – Orbis database, the Eurosystem Household Finance and Consumption Survey (HFCS) and Financial Reporting Framework (FINREP)/Common Reporting Framework (COREP), and ECB calculations. GDP: gross domestic product. CET1: common equity Tier 1 capital. Notes: “IFRS 9” refers to the impact of the add-back due to the amendments to the transitional arrangements of IFRS 9; “Buffers” refers to the relaxation of the requirements regarding the Pillar 2 guidance, Pillar 2 requirement, countercyclical capital buffer and systemic risk buffer; and “STW” refers to short-time working schemes. The five largest euro area countries are France, Germany, Italy, the Netherlands and Spain. The policy assumptions underlying these simulations consider policy decisions up to 14 October 2020 and are otherwise based on the September 2020 ECB staff macroeconomic projections.

The simulations suggest that the simultaneous ending of measures could generate cliff effects in households' and firms' incomes, with knock-on effects on economic activity. For the five largest euro area countries, such cliff-edge effects were projected to reduce the measures' supportive impact on real gross domestic product (GDP) on average by around 2% (Chart A, left panel). The main sources of cliff effects were reductions in short-time working schemes, direct grants and tax support, which have sustained income and thus expenditure for households and firms. However, the importance of each

varies substantially across these five countries. The simulations also suggest that such cliff effects would be most pronounced in countries relying more on debt moratoria, direct support and tax deferrals.

An abrupt reduction in support to the real economy could adversely affect banks' balance sheets, capital and lending capacities. Large parts of euro area banks' loan books are currently subject to debt moratoria or public guarantees, and withdrawal of such schemes could increase default risk and reduce banks' ability to lend. Apart from the indirect impact of a reduction in short-time working schemes, direct grants and tax support, the ending of debt moratoria and the potential default on assets subject to the amended IFRS 9 transitional arrangements<sup>40</sup> are estimated to contribute the most to the projected decline in support to banks' CET1 ratios in these countries (Chart A, right panel).

**Table A: Share of Japanese firms facing cash shortages, by industry (in %)**

	Large firms	SMEs
All industries	0.5	20.5
Basic materials manufacturing	0.8	22.1
Processing and assembly manufacturing	0.4	16.4
Construction	0.8	15.3
Real estate	0.0	8.2
Wholesale	0.0	16.3
Retail	1.7	19.5
Transportation and communications	0.6	12.7
Food, accommodation, and consumer services	0.8	53.6
Other nonmanufacturing	0.0	23.5

Source: Bank of Japan, October 2020 *FSR*. Simulation results for fiscal year 2020.

Simulations at the firm and household level can capture variation and shed light on the distribution of withdrawal effects. SMEs and firms in more affected industries are particularly exposed to an unwinding of policy support. Simulations at the firm level suggest pronounced cash shortages for sectors most exposed to the impact of the pandemic, and particularly for SMEs (see Table A for Japan). Likewise, in the US, SMEs have been substantially more affected by the effects of COVID-19 than other firms.<sup>41</sup> Initial estimates for European countries by the OECD in May 2020 suggested that a sizeable share of European firms would have run out of cash without any policy intervention during the first months of containment measures.<sup>42</sup> Simulations for Italy suggest that policy support measures provided

<sup>38</sup> See Rancoita et al. (2020) for a detailed description of the approach.

<sup>39</sup> The policy assumptions underlying these simulations consider policy decisions up to 14 October 2020. While many measures have been extended with the second lock-down, similar cliff edge effects may be expected for their eventual phase-out if conducted in an abrupt and simultaneous manner.

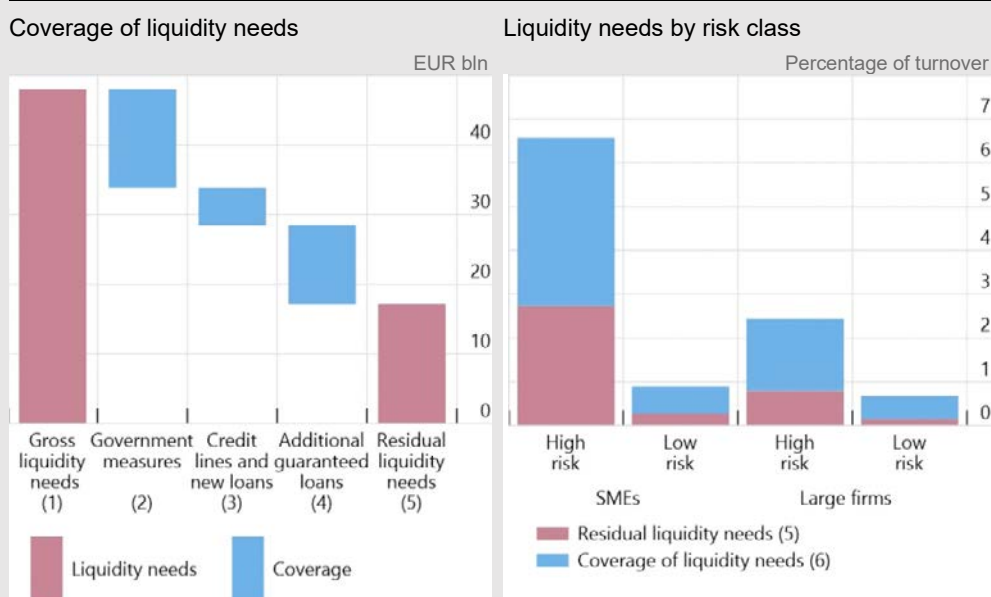
<sup>40</sup> These cliff effects would have been further amplified by the application of the amended IFRS9 transitional arrangements in the form of capital add-backs for the provisions, as the newly impaired exposures would not have benefited any more from this mitigating policy

<sup>41</sup> See Board of Governors of the Federal Reserve (2020), at page 27, or Chetty et al. (2020).

<sup>42</sup> According to these estimates, 20% of the firms would have run out of liquidity after one month, 30% after two months and 38% after three months. They further suggested that after two months, government interventions would decrease the share of firms running out of liquidity from 30% to 10% compared to the non-policy scenario (see OECD (2020)).

significant liquidity relief for firms for the period July-December 2020, especially SMEs (see Chart B).<sup>43</sup> By averting or postponing insolvencies, such support measures indirectly also contain unemployment.<sup>44</sup>

**Liquidity needs of Italian firms in the period July-December 2020** **Chart B**



Notes: Estimate of liquidity needs based on a sample of about 730,000 limited companies.

Source: Bank of Italy, November 2020 FSR. Staff simulations based on data from Cerved Group, the Central Credit Register, the Central Guarantee Fund and SACE.

Vulnerable households have been particularly affected by the pandemic and would likewise be disproportionately hit by a policy withdrawal. A detailed assessment of households' liquidity needs suggests that financially vulnerable households, with lower income and higher indebtedness, have been more adversely affected by the crisis.<sup>45</sup> At the same time, they benefited more from policy support measures such as short-time working schemes,<sup>46</sup> direct payments and loan moratoria. Detailed assessments based on moratoria data for Spain suggest that more vulnerable households (those with lower income, worse credit records, higher debt-to-income ratios, higher mortgage debt service rates), are those most likely to obtain a moratorium on their mortgage payments (see chart C, left panel).<sup>47,48</sup>

<sup>43</sup> Similarly, for Spain, simulations by Blanco et al. (2020) suggest that firms' liquidity needs might have exceeded €230 billion between April and December, three quarters of which are estimated to have been covered by public loan guarantee schemes. For a granular assessment focused on SMEs for several European countries as well as Japan and Korea, see Gourinchas et al. (2020).

<sup>44</sup> See Banerjee et al. (2020) for an in-depth discussion. However, for the US, both Chetty et al. (2020) and Granja et al. (2020) find that the Paycheck Protection Program loans to smaller firms had only limited effects on employment.

<sup>45</sup> See Zabai (2020) for a global cross country overview on household finances in the context of the pandemic. In a study using granular real-time data, Chetty et al. (2020) show that, in the US, high-wage employees were exposed to a "V-shaped" recession of a few weeks, while low-wage employees were subject to much more extensive job losses that lasted for several months. For the euro area, the decline in employment was strongest for temporary employees, young people and workers with lower levels of education (see Anderton et al. (2020)).

<sup>46</sup> In April 2020, when the stringency of lockdown measures in most euro area countries first peaked, 15% of all employees in Germany, 34% in France, 30% in Italy and 21% in Spain were on short-time work. For further estimates on the share of employment in job retention schemes see Anderton et al. (2020).

<sup>47</sup> The x-axis of Chart C, left panel, represents the quintiles of the distribution of the ratio Total Bank Debt/Average Income in Spain. In each quintile, the chart shows mortgages subject to moratoria as a percentage of total household mortgages in that quintile: the two bars represent the first quintile of the average income distribution and the fifth quintile of debt servicing (blue bars) and the fifth quintile of income distribution and the first quintile of debt servicing (red bars). If the differences between households in the first and fifth quintiles of the distribution are measured in terms of bank debt-to-average income at end-2019, the probability of having a moratorium increases by 5.8 percentage points for the most indebted households.

<sup>48</sup> Microsimulation of households' vulnerability for Italy suggest that without mortgage moratoria, the share of vulnerable households would have been 0.2% and 0.1% higher at the end of 2020 and 2021, respectively, against the background of an overall low rate of new non-performing loans to households of 0.95% in December 2019 (see Ciocchetta et al. (2021)).

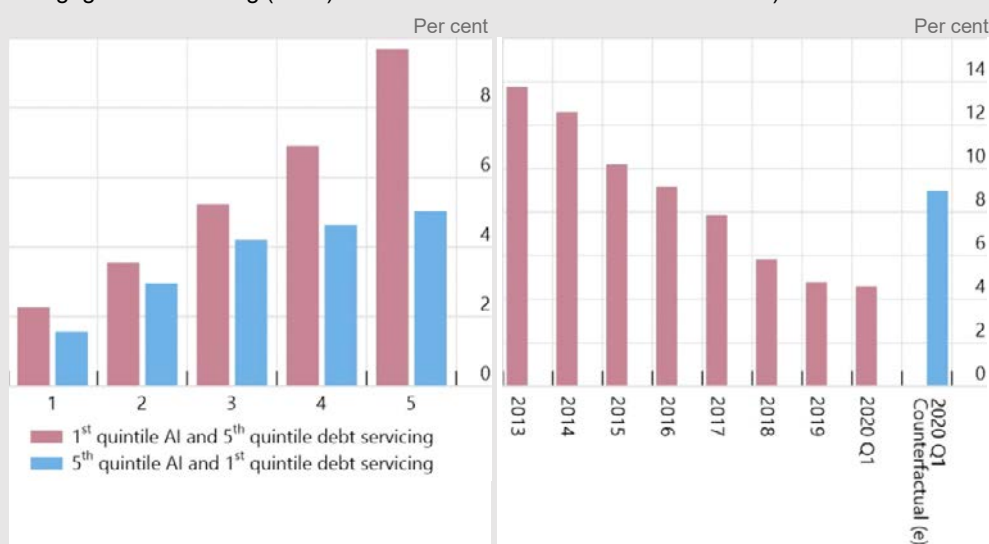
Furthermore, if a counterfactual exercise were to be carried out under an extreme hypothesis, i.e. that all loans covered by the moratoria would have defaulted, the non-performing ratio of business loans in Spain would have practically doubled, to almost 9% (see Chart C, right panel). More generally, the phase-out of pandemic-related support to households is likely to increase the strains on vulnerable households and may significantly worsen their credit quality, again affecting lenders across the financial system.<sup>49</sup>

### Spanish mortgages and credit subject to debt moratoria

Graph C

Mortgages subject to moratoria by quintiles of TBD/AI ratio, average household income and mortgage debt servicing (2019)

Ratio of non-performing credit to the resident private sector (2013-2020 data and counterfactual in Q1 2020)



Source: Banco de España, November 2020 Financial Stability Report, Box 1.2. Note: TBD/AI ratio is the ratio of total bank debt in 2019 to average household income.

Stress testing at the bank level, incorporating different recovery paths and scenarios of policy withdrawal, allows for sensitivity analyses, which are particularly useful in times of elevated uncertainty. They can account for the heterogeneity of banks' balance sheets and business models when assessing the direct impact of policy measures on banks and the indirect impact of policy measures on their borrowers. While they focus on the resilience of banking systems, they can also shed light on the direct and indirect effects of policy withdrawal, given the crucial role of bank lending in economic recovery. Stress testing may also help to assess the policy trade-offs regarding the staging of support policies.

#### 4.1.2. Costs of withdrawing too late given the state of the economy

The costs of maintaining support for too long may be less visible, but they accumulate. If the costs of withdrawal are highly visible and the costs of extension are not, authorities may come under political pressure to extend. Support measures inevitably have side-effects. Problems that are likely to worsen over time include excessive private-sector indebtedness, excessive exposure of financial institutions to credit risk due to poor-quality credit risk assessment, moral hazard and excessive risk-taking, and deteriorating fiscal positions. All of these may also generate losses for the financial system at a later stage.<sup>50</sup>

<sup>49</sup> For the US see also Board of Governors of the Federal Reserve (2020), at page 28.

<sup>50</sup> See IMF (2020) Chapter 1.

Support measures could get in the way of the necessary economic adjustment. Some sectors have been far more affected than others, including contact-intensive service sectors and tourism. Some of the change in demand is likely to be permanent: the pandemic is likely to accelerate digital transformation, for example. Travel and tourism patterns may be permanently affected, as may supply chains. Such a reallocation is expected to be larger the longer the pandemic lasts.<sup>51</sup> Job retention schemes have helped to mitigate a shock to employment in the short term; support to firms and regulatory flexibility have pushed the number of insolvencies to levels below normal.<sup>52</sup> But keeping support measures in place for too long could get in the way of the reallocation of workers across sectors.<sup>53</sup>

Support measures may adversely affect credit risk management and the allocation of credit.

- Banks that benefit from state guarantees have less incentive to screen and monitor loans.
- Debt moratoria may also make it harder for lenders to judge the financial health of their borrowers, to distinguish insolvent but viable firms (which need additional equity and/or debt restructuring) from insolvent and unviable ones (which need to be closed). The longer support measures are extended, the higher the probability of unexpected non-performing loans, foreclosures and bankruptcies when they are withdrawn.
- Similar comments apply to loan classification and provisioning. Several jurisdictions have allowed for relaxation of loan classification criteria. Other measures included forbidding access to credit bureau information; suspending NPL classification for restructured exposures; and suspending days past due counting for risk classification purposes. While these measures were necessary to avert credit constraints that could have compounded the shock to the real economy, long periods of relaxed risk classification criteria may lead to an increase in unrecognised credit risk. Uncertainty about whether bank's balance sheets accurately reflect the quality of their loan books would risks dampening confidence in the financial system and increasing banks' funding costs. Many supervisory authorities are therefore encouraging banks not to relax credit risk assessment, to provision promptly against loan impairment, and to take prompt recovery action on unviable and insolvent borrowers.<sup>54</sup>

Credit support may lead to excessive leverage and debt overhang.<sup>55</sup> High corporate indebtedness was already a concern before the outbreak of COVID-19. Rapid and large cash-

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<sup>51</sup> See ECB (2020c).

<sup>52</sup> According to Banerjee et al (2020) the expected wave of business failures has yet to materialise. The authors argue that "the natural renewal process where new, dynamic firms displace those who exited takes two to three years, leaving a protracted period of lacklustre activity.

<sup>53</sup> For labour market support policies, see European Commission (2021b).

<sup>54</sup> Kongsamut et al. (2021) argue, inter alia, that supervisors should strictly enforce rules requiring banks to gradually record provisions when it appears that loans are deteriorating or impaired, instead of waiting for the end of the moratorium, and that deferring loan loss provisions should be discouraged, especially because international standards already provide flexibility. See also World Bank (2020b) along similar lines.

<sup>55</sup> For a seminal discussion see Myers (1977), to which Kalemli-Özcan et al. (2019) and Philippon (2010) refer. Debt overhang distorts the future funding decisions of shareholders and managers: it reduces the incentives for firms to raise money for new investments with positive net present value, because the proceeds from these new investments would mostly service the debt held by existing creditors instead of paying out to shareholders or new debt holders.

flow support has increased debt levels, especially in the hardest-hit sectors, while insolvencies have typically been lower than normal over the last year.<sup>56</sup> Such credit support is warranted in the context of an exogenous shock, such as the one produced by the pandemic, but it may also have kept unviable firms artificially alive and led to an increase in the number of zombie firms.<sup>57</sup> Zombie firms – firms that have persistent problems meeting their interest obligations – distort competition by taking resources (including funding) from viable ones. They depress investment, productivity growth and growth overall.<sup>58</sup> They may also take on too much risk, since downside risk can be shifted to creditors while the upside is kept. The FSB is now analysing the financial stability issues relating to debt overhang.

The problem of debt overhang will be exacerbated if banks are weak. Weak banks have incentives to roll over loans to zombie firms, since they cannot afford to recognise the loan impairments.<sup>59</sup> With low interest rates, it is easier to extend and pretend.<sup>60</sup>

Support measures may induce moral hazard, causing investors to underestimate market risk. Furthermore, especially if liquidity support has previously been provided during stress, market participants may infer that liquidity support will always be provided, and thus misprice market liquidity risk.<sup>61</sup> A build-up of financial vulnerability would then be inevitable. A number of authorities are increasingly concerned about whether support measures are distorting prices of risky assets. For example, Korean authorities are considering unwinding certain support measures in view of the side effects such as asset bubbles and speculative investments, and delays in corporate restructurings. Some measures have already been unwound, as market participants returned to market-based financing.

Finally, extending fiscal measures may contribute to a deterioration in the government's fiscal position.<sup>62</sup> Several EMDEs, in particular, entered the COVID-19 crisis in a weak fiscal situation, which left them with narrower fiscal policy space.<sup>63</sup> Furthermore, the great majority of buyers of EMDE sovereign debt have been domestic banks, which exacerbates the bank-sovereign nexus.<sup>64</sup>

## 4.2. Managing the trade-offs

Risks to the real economy and to financial stability stemming from withdrawing support measures may be reduced through a gradual approach. There are a number of such approaches, which

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<sup>56</sup> See Giacomelli, et al. (2021). The G30 (2020) argues that there has been “an excessive focus on credit provision, which risks overburdening firms with debt”.

<sup>57</sup> Caballero et al. (2008) find that sectors dominated by zombie firms exhibit more depressed job creation and destruction, and lower productivity.

<sup>58</sup> Adalet McGowan, Andrews and Millot (2017).

<sup>59</sup> Peek and Rosengren (2005).

<sup>60</sup> Laeven, Schepens and Schnabel (2020).

<sup>61</sup> See FSB (2020c), at page 40.

<sup>62</sup> In its *Fiscal Monitor* of January 2021, the IMF projected that global public debt will reach 98 percent of GDP at the end of 2020, compared with 84 percent for the same date based on projections in the October 2019 *Fiscal Monitor*. Average overall fiscal deficits as a share of GDP in 2020 are projected at –13.3% for advanced economies, –10.3% for emerging market and middle-income economies, and –5.7% for low-income developing countries.

<sup>63</sup> For further discussion see Alberola et al (2020).

<sup>64</sup> IMF (2020a).

are not mutually exclusive. One is to narrow the scope of support measures; another is to require beneficiaries to opt into a support scheme; another is to tighten the terms upon which support is provided; a fourth is to sequence withdrawal over time.

The scope of support measures can be progressively narrowed so that support is targeted to those who need it most. Section 4.1 described inefficiencies associated with broad support. Targeting support could improve the efficiency of measures, facilitate the adjustment of the economy and economise on costs to public authorities. A year ago, the effects of the pandemic on business sectors were highly uncertain. Now, though, much more is known of the effects,<sup>65</sup> and while the pandemic continues, support can be increasingly targeted to viable firms in those sectors most afflicted.<sup>66</sup> For example, in August 2020, Italian debt moratoria were extended to January 2021, but the moratoria were extended further, to March 2021, for some loans to firms in the tourism sector. In the final phase of the pandemic this support will need to be shifted towards firms that are viable in the post-pandemic economy.

If beneficiaries have to opt in, support may be targeted to those who need it, and the decision to request support itself conveys information. In Spain, under the public guarantees scheme on loans to SMEs and the self-employed, the maturity of the loans, of the guarantees and of the grace period can be extended at the request of the beneficiary, allowing for self-selection of companies requiring liquidity. In Korea, SMEs with existing loans or guarantees from banks that are facing a repayment date within six months have been enabled to apply for consecutive six-month extensions and postponements of principal repayment.

Support measures can also be designed so that they reveal information about the beneficiary. Adjusting support measures with a view to gathering information about the state of the beneficiaries may also help reduce uncertainty about the state of the economy, assisting subsequent policy decisions. The Monetary Authority of Singapore has worked with banks to require a partial resumption of principal repayment for loans under moratorium (for example, the principal repayment moratorium was lowered from 100% to 80% for SME loans). The payment of principal reduces debt accumulation by borrowers, and their repayment behaviour gives banks information about the viability of borrowers.<sup>67</sup>

The terms on which support is provided can be made progressively less generous, so that fewer households and firms opt in. For example, for loan guarantee schemes, measures could be increasingly targeted by gradually increasing the cost of guarantee or lowering the proportion guaranteed. Targeting specific sectors could be politically challenging in some jurisdictions; basing support on transparent and quantitative criteria (e.g. realised loss of revenues) can mitigate political challenges. But other jurisdictions are now targeting support towards the hardest-hit sectors, such as tourism, aviation and contact-intensive services. Wage subsidy

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<sup>65</sup> See, for example Mojon, Rees and Schmieder (2021), and the OECD weekly tracker, available at <https://www.oecd.org/coronavirus/en/#data>.

<sup>66</sup> The G30 (2020) argues that “not all struggling firms should receive public support. Resources should not be wasted on companies that are ultimately doomed to failure or which do not need public support.”

<sup>67</sup> Hanson, Stein, Sunderam and Zwick (2020) suggest a way to design policy to allow for low-cost withdrawal building in opportunities to learn. By extending limited tranches of credit to firms of uncertain viability using “staged” funding, similarly to the approach that venture capitalists take with start-up firms, policymakers can withdraw with limited cost if the firm still fails to prosper.

schemes can also be gradually unwound, in order to increase incentives to workers in hard-hit sectors to respond to reduced labour demand and seek jobs in other sectors.<sup>68</sup>

Different measures may be needed in different phases of the pandemic. Liquidity support was needed at the outset, when lockdowns restricted economic activity. Corporate leverage has increased and solvency support is now becoming more relevant.<sup>69</sup> Further capital relief or recapitalisation could be needed if financial institutions suffer heavy losses.<sup>70</sup> Some measures may need to be extended in order to mitigate the consequences of the withdrawal of other measures. The policy mix will need to change from liquidity to solvency support, restructuring, and facilitating exit as markets normalise and uncertainty about firms' viability is resolved (see Box 1). Facilitating restructuring to prevent unnecessary exit and establishing efficient insolvency frameworks will spur the transition to the post-pandemic economy.<sup>71</sup> In turn, unemployment support and social safety net measures may need to extend beyond the point at which support for firms is withdrawn.<sup>72</sup>

### 4.3. Approaches to withdrawing measures

There are three main approaches to withdrawing measures. The first approach entails fixing an end date. The second commits not to end the measures before a certain date, but expressly reserves the option to extend. Both methods bear the risk of repeated extension, given the persistence of the pandemic, but in the second case this possibility is foreseen from the start, which may preserve policy credibility better. For an example of the first type, credit moratoria and short-time working schemes were initially introduced for a limited period in the expectation of a V-shaped recession; however, the persistence of the pandemic led to renewals of the measures into 2021. As for the second type, the ECB, when encouraging banks to use their capital buffers to support lending, announced that compliance with Pillar 2 Guidance and the combined buffer requirement will not be required any earlier than at the end of 2022.

The third approach considers health and economic conditions rather than time as the key determinant of the exit decision; that is, it is state-dependent. This reflects the nature of this crisis, which has typically seen restrictions imposed on economic activity in multiple waves that have been impossible to predict. In this approach, the key factors relevant to decisions about timing would be the evolution of the pandemic; the stringency of restrictions on economic activity

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<sup>68</sup> When doing so, authorities are likely to consider other measures to support the movement of workers across sectors, such as re-skilling programmes.

<sup>69</sup> The G30 (2020) puts it bluntly: "some liquidity support is still needed, but the crucial issue now is solvency." Ebeke et al. (2021) estimate the impacts of liquidity and solvency tools in Europe and find that the while public support filled 60% of European firms' increased liquidity needs, it has covered only 30% of the rise in equity gaps. They estimate that 2-3% percent of GDP will be needed to close the equity gap. Demmou et al. (2020) also forecast an increase in firms that cannot meet their debt payments, and a resulting fall in investment. Among their policy recommendations are several intended to boost corporate equity, such as debt-equity swaps, tax allowances for equity, and widening access to equity market for smaller firms.

<sup>70</sup> The G30 (2020).

<sup>71</sup> World Bank (2020b), for example, argues that governments can prepare for recovery by creating enabling environments to restructure debt and firms including strengthening insolvency and resolution and legal frameworks for corporate and consumer debt restructuring, and out-of-court conciliation and resolution measures.

<sup>72</sup> Beck et al. (2021) argue that the withdrawal of bank support measures should be sequenced: borrower relief measures such as debt moratoria should be phased out first; followed by lifting the relaxation of loan classification and provisioning policies; and then capital relief initiatives can be ended. Kongsamut et al. (2021) also argue that withdrawal of support should be sequenced. For example, regulatory measures that are not compatible with international standards should be reversed, while restrictions on capital distributions should continue to apply on grounds of prudence so long as uncertainty remains high.



and mobility; and economic activity itself. For instance, the loan guarantee scheme in Spain has been adapted in line with economic developments and firms' liquidity needs. Likewise, support measures can be linked to the declaration of a public health emergency, as in the case of Argentina.<sup>73</sup> Such an assessment would have to be carried out according to developments in each jurisdiction, because they vary so much even between neighbouring countries. In the EU, dividend restrictions have been partially removed, conditional upon each bank's capital strength. Authorities can choose to retain discretion by describing the metrics that will be monitored but without determining threshold conditions for policy changes. Alternatively, they could precommit, and insulate themselves from political pressures, by establishing threshold conditions that, if met, would trigger a change of policy.

The third approach, in particular, requires timely data. Since the decision on adjusting or withdrawing from the measures will depend on conditions, timely and high-frequency data are necessary to assess when the turning point in the crisis has been reached (see Box 2).

### Box 2: High-Frequency Data

The benefit of exceptional COVID-19 support measures depends on the state of the economy, and policies that may be quickly withdrawn in the event of a V-shaped recovery might have to be maintained in the event of a U-shaped or W-shaped recovery.<sup>74</sup> Understanding the state of the economy in a timely fashion, in order to inform decisions about support measures, requires higher-frequency data than standard macroeconomic measures such as GDP (released quarterly) or unemployment and inflation rates (released monthly), which are also lagged. However, standard measures at higher frequencies would not be enough. The pandemic, which represents a series of shocks in the form of waves of infection, requires policymakers to make assumptions about the future evolution of the virus and its impact on the economy using more fine-grained indicators. Fortunately, the expanded reach of large datasets ("big data") and techniques designed to exploit them have increased authorities' ability to monitor the state of the economy in real time. For example, Chetty et. al. (2020) use daily statistics on consumer spending, business revenues, employment rates, and other indicators disaggregated by post code, industry, income group, and business size to estimate the impact of state-ordered reopenings, stimulus payments to low-income households, and small business loans predicated on maintaining employment. Using their approach it is possible to estimate more quickly whether specific policy measures are achieving their objectives. Other high-frequency data that can help to understand the state of the economy and policy impacts include the location of COVID-19 transmissions, restaurant reservations, pedestrian traffic, mobile phone data, airport checkpoint volume, retail activity and even night-time images of Earth from space. The OECD has begun to produce a weekly tracker of economic activity for 46 countries using high-frequency data.

## 5. Cross-sectoral and cross-border issues

### 5.1. Cross-sectoral issues

Cross-sectoral effects can materialise when events affect different parts of the financial system or through spillovers between sectors. Banks, insurance companies and other non-bank

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<sup>73</sup> For Argentina this applies to the elimination of import taxes and the payment of the statistical fee on imports of critical supplies such as laboratory and pharmaceutical items, equipment and other health supplies.

<sup>74</sup> A "V-", "U-" or "W-shaped" recovery describes a fast recovery after a collapse in economic activity, a recovery after a longer downturn, or a recovery followed by further downturns, respectively.

financial intermediaries have been affected by the pandemic, associated behavioural restrictions and policy support measures in different ways. They were all affected by short-lived volatility during the March 2020 market turmoil. Insurers have also been affected on the liability side by way of insurance losses (for example, business interruption insurance as well as property and casualty), but they remain resilient. Operational challenges in the early phases of the pandemic were equally relevant for the insurance sector, and insurance supervisors provided similar operational relief to that provided by bank supervisors. Like bank supervisors, they also granted operational relief for example by delaying on-site inspections or putting on hold supervisory data collections. Insurance supervisors have also granted regulatory relief to trade credit insurers.<sup>75</sup>

Contagion channels exist between the banking and insurance sectors, but their impact seems limited at present. However, where credit risk is transferred between sectors (by way of guarantees or credit default swaps, for example), a decrease in the asset quality of a loan portfolio may generate losses elsewhere in the system. Another potential contagion channel is intragroup transmission within financial conglomerates, which could cause problems if one part of the conglomerate deteriorates. A conglomerate could also be sensitive to risk concentration, for example if it suffers losses on credit or trade insurance and in bank lending. A survey of ESRB members (ESRB, 2021) finds that EU authorities currently expect few cross-sectoral implications, but the ESRB recommends continuing to monitor the issue.

Support measures to economic sectors also benefit adjacent parts of the financial sector. In particular, measures aimed at stabilising market liquidity and reducing volatility benefit all market participants. Those measures could, however, have led to comparative distortions between sectors, if support measures were available only to one sector (debt moratoria typically apply to loans only, for example, not to market-based financing).

In the same vein, withdrawal of support measures could give rise to spillovers, in particular if they trigger cliff effects or promote uncertainty in financial markets. For instance, withdrawal of liquidity support to key funding markets could affect other parts of the financial system through a repricing of liquidity risk and funding shortages.

## 5.2. Cross-border spillovers

### 5.2.1. *General observations*

While the pandemic at first created a largely synchronised shock, the economic impact of the pandemic is becoming less synchronised. The economic impact also varies across jurisdictions, influenced by initial economic conditions and the severity of health-related restrictions, so the countercyclical withdrawal of support in one jurisdiction could have procyclical effects in other economically connected jurisdictions.

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<sup>75</sup> International Association of Insurance Supervisors (2020).

Cross-border spillovers can be transmitted through a variety of channels:<sup>76</sup>

- channels related to the real economy (trade, supply chains, sectoral exposures, remittances<sup>77</sup>);
- financial interlinkages, through cross-border lending and investment; and
- liquidity-related impacts (for example, search for yield effects) on foreign-currency, bond, commodity, equity and derivatives markets.<sup>78</sup>

Exposure to cross-border spillovers varies significantly. Open economies are more exposed to the demand channel. Some, especially EMDEs, also have sectoral concentrations (e.g. to trade, tourism, remittances or commodities) and are therefore sensitive to demand spillovers. EMDEs are also often dependent on non-domestic investment, relying on external direct financing, non-domestic banks and foreign investors.

### **Box 3: Implications of the structure of external direct financing**

The extent to which shocks are propagated across internationally-active banks depends on their organisational structure. Most international banks set up subsidiaries in each jurisdiction in order to serve local customers. But within the subsidiaries model, there are differences in funding strategies. In some subsidiaries, local assets are funded with local liabilities, so that foreign subsidiaries are less vulnerable to shocks arising elsewhere within the group. Retail deposits are often denominated in local currency and protected by the local deposit guarantee scheme. However, many international banks attract wholesale funding for their group in financial centres and then use this to fund other branches and subsidiaries, creating significant interdependencies.

## **5.2.2. Externalities**

In general, support measures for financial and non-financial institutions have near-term positive effects on interconnected jurisdictions, and the withdrawal of support is also likely to give rise to spillovers. In addition to the beneficial direct impact on cross-border demand, more liquidity and capital in the financial system help to maintain cross-border lending and investment. As ESRB (2020) describes, foreign support measures benefit financial institutions directly by lowering credit risk on foreign loans and bonds and indirectly by supporting foreign bank counterparts.

EMDEs are typically more vulnerable to policy spillovers. The most material spillovers appear to arise in monetary policy and market liquidity support in AEs, which affect capital flows and exchange rates. The support measures adopted by advanced economy FSB jurisdictions are believed to have had positive cross-border spillover effects on EMDEs.<sup>79</sup> Most AEs have had enough fiscal headroom to deploy massive resources to counteract the depressive effect of the shock and of the restrictions to economic activity and to mobility.

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<sup>76</sup> For a more detailed analysis of the impact of these channels see for example ESRB (2021).

<sup>77</sup> Remittances – a significant source of income in many jurisdictions - are expected to have declined across all regions by about 20% (from \$554 billion in 2019 to \$445 billion in 2020). See World Bank (2020), at page viii.

<sup>78</sup> By design, the Federal Reserve's and the ECB's swap and repo facilities create cross-border liquidity spillovers.

<sup>79</sup> FSB (2020b) at page 10.

However, there could also be negative externalities. The policy mix varies across jurisdictions, which may affect the capital allocation decisions of financial institutions. If the withdrawal of support measures causes capital constraints, there is a risk of renewed home bias in lending and regulatory arbitrage.

As support measures are withdrawn, there could be negative cross-border spillovers through the channels described above (see Table 2 for three potential examples).<sup>80</sup> For example, as the rate of recovery differs across jurisdictions, their interest-rate cycles may diverge. Rising interest rates in those advanced economies experiencing more rapid recovery could lead to a tightening of monetary conditions in EMDEs, volatile capital flows and an increase in the burden of servicing debt denominated in foreign currency. The lack of policy headroom in some EMDEs poses additional challenges, and jurisdictions that are more exposed to capital flows or that are highly interconnected through home-host banking relations could experience material spillovers.

If withdrawal of measures gives rise to domestic cliff effects, cross-border effects such as a reduction in the supply of credit are more likely to be material. In fact, most jurisdictions expect to withdraw support gradually in order to avoid cliff effects; this should also mitigate the risk of material cross-border spillovers.

**Table 2: Cross-border spillovers of selected unwinding measures**

<b>Type of measure</b>	<b>Purpose and effect of the measure</b>	<b>Potential spillover effects of withdrawing the measure</b>
Export Credit Agencies (ECAs) facilities	A number of jurisdictions adopted measures via their ECAs to cover the cash flow needs of export firms affected by the pandemic. They typically contained expiry dates when announced.	Amplifying spillover effects in those sectors depending on foreign investment, tourism
State-guaranteed loans	Public guarantees on loans to businesses aim to support and provide incentives for continued bank lending, often targeted to domestic SMEs.	Gradual negative capital effect on cross border institutions profiting from guarantees, possible reduction in flow of new lending.
Payment moratoria	Allow debtors to delay the payment of interest and/or principal for a defined period.	Potential sharp increase in non-performing loans and defaults after expiration of moratoria

### **5.2.3. Implications for international coordination**

The scale and scope of support measures adopted, and the likelihood of international spillovers, underline the importance of international coordination. This may include sharing information on measures adopted, learning through the sharing of experiences and identifying elements of effective practices.

When endorsing the FSB’s COVID-19 principles, FSB members committed to coordinate on the unwinding of COVID-19 support measures. The FSB will continue to facilitate the sharing of

<sup>80</sup> ESRB (2021).

information on jurisdictions' approaches to extending, adjusting and unwinding their support measures, in order to enable authorities to learn from each other as they make their own policy decisions.

FSB members will also periodically discuss approaches to adjusting and unwinding support measures in order to share elements of effective practices with each other and to identify any areas of market fragmentation that need to be addressed. Over the medium term, coordination within the FSB and standard-setting bodies could help to ensure that jurisdictions return to compliance with global standards in order to minimise the risk of harmful market fragmentation.

Supervisory dialogue and cooperation are also essential as support measures are withdrawn and non-performing loans increase. Supervisory colleges and crisis management groups provide a forum to discuss firm-specific issues and contingency planning.<sup>81</sup> Discussion in these international groups can also be complemented by dialogue between the most interconnected jurisdictions.

## 6. Communication

Market participants pay close attention to financial authorities' communications' during a crisis in order to understand how they may act. Central banks have long understood the role of communications in monetary policy. Since the global financial crisis of 2008, forward guidance for unconventional monetary policy has further evolved.<sup>82,83</sup>

The announcement of a measure, or its withdrawal, may affect behaviour before it is implemented. Initial evidence suggests that markets reacted more to the announcement of COVID-19 programmes, rather than to the uptake of those measures, in both advanced<sup>84</sup> and EMDE<sup>85</sup> economies.<sup>86</sup> Announcing the withdrawal of a measure could also have a similar leading effect. Consistent and timely communication can affect behaviour and thereby help reduce some of the costs associated with withdrawal of support. Sunset clauses, for example, can mitigate the risk of negative surprises. If households and firms have sufficient time to factor in a clearly communicated decision, they can adapt so as to minimise the negative impacts from reduced or withdrawn measures.

Given the uncertainty over the evolution of the pandemic and associated behavioural restrictions, and the involvement of multiple public authorities, the risks of miscommunication

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<sup>81</sup> Coordination becomes more important where groups have scarce liquidity or capital. It can help to resolve conflicts over deleveraging and ring fencing. A good example of such coordination was the Vienna Initiative, which facilitated a coordinated policy response in the 2008 global financial crisis in emerging Europe. See <http://vienna-initiative.com/about/vienna-initiative-1-0/overview/>

<sup>82</sup> Vayid (2013).

<sup>83</sup> Despite the importance of communications, evidence on successful communications is limited. Anecdotal evidence indicates that authorities should make expiration dates known to the public and take particular care for policies affecting more sophisticated financial agents. The literature focuses on communications that may have had unintended consequences, including the 2013 "taper tantrum". In that event, investors believed that US Federal Reserve Chair Bernanke had signalled that asset purchases would slow, and over several months the 10-year yield rose by nearly a percentage point. However, purchases did not in fact end until October 2014. Nevertheless it is hard to draw general conclusions from a single event.

<sup>84</sup> ESRB (2021).

<sup>85</sup> Arslan et al. (2020).

<sup>86</sup> See also Boyarchenko et al. (2020), who find announcement effects for two Federal Reserve corporate credit facilities.

are high. In these circumstances, policymakers may be inclined to retain flexibility as they develop their withdrawal strategies. But households and firms need to plan. Support measures have had a significant impact on economic activity, and they significantly affect the investment and employment decisions of households and firms. If communications are vague or untimely, households and firms may overreact or react in unforeseen ways, and uncertainty may diminish confidence, increase risk premia and depress investment. On the other hand, households and firms may underreact if they think the policy response is permanent, delaying the necessary economic adjustment. Authorities face a difficult task in striking the right balance, but they have to make their actions transparent and predictable to the extent possible.

Consistent messaging is critical. Because support measures were implemented together in response to the same shock, households and firms may draw inferences about the withdrawal of other support measures and about the authorities' overall policy posture. Since many COVID-19 support measures are directly tied to public health measures, households and firms may also draw inferences about support measures from communications about health measures. Inconsistent messaging increases the risk of incorrect inference. The relevant authorities should therefore coordinate their key, high-level messages about the future of policy support, and ensure that their more specific communications are consistent with the overall messages, to the extent consistent with their mandates.<sup>87</sup>

Messages may need to be targeted to the audience. Financial institutions are the lynchpin of many COVID-19 programmes, such as state-guaranteed loan schemes and debt moratoria. They need to know the specifics of the support schemes in order to implement them. Their conduct will also be affected by their expectations about the duration and future design of support schemes. Similarly, the effectiveness of more general measures such as regulatory capital relief relies on financial institutions to respond. Uncertainty about public authorities' future behaviour may limit the effectiveness of such measures. Communicating with other parts of the government, including the legislature, is needed to smooth the path to eventual unwinding. Finally, communicating to the public is important so that they understand that support measures will not be withdrawn prematurely but will not last forever.

Some lessons might be learned from communications in prior crises. The effectiveness of sovereign guarantees for financial sector liabilities (e.g. deposit guarantees) depends on the public's trust in the government and the communication of the guarantee, rather than the operational details. Used in at least 34 crisis episodes since the 1980s, they are often unwound years after the crisis in which they were created. For example, the blanket, temporary deposit guarantee in Japan lasted ten years from 1995 to 2005.<sup>88</sup> The expiry date was set out well in advance in legislation and public communications as early as a year ahead warned that there would be no renewal. Similarly, the US Treasury provided a temporary guarantee on money market funds from September 2008 to 2009. It was renewed once, for six months, but the end date was fixed at the time the policy was implemented. This may also indicate that considerations for communicating the unwinding of policy measures that have direct effects are different from those that act in effect as insurance.

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<sup>87</sup> See also Cortavarría Checkley and Piris (2020).

<sup>88</sup> Laeven and Valencia (2018).

In the current crisis it may be hard to commit to a withdrawal date, in light of uncertainty, but authorities could consider other ways of providing forward guidance. If commitment to a withdrawal date is seen as too risky in light of the uncertainty, authorities may nevertheless consider announcing other dates to which it is possible to commit, such as dates on which decisions will be taken. Authorities may also commit not to withdrawing before a certain date, while retaining discretion to withdraw later.

Committing to state-contingent, data-driven decision-making could anchor stakeholders' expectations. Authorities might consider state-contingent guidance that is relevant to the conditions of the pandemic (e.g. rate of infections, vaccine doses administered), or to related economic conditions.<sup>89</sup> State-contingent guidance on future policy steps may also support the consistency of messages discussed before.

Where authorities are inclined to stay on the side of maintaining support measures, they may improve confidence by saying so. Authorities can also communicate the objectives of measures, the matters that will be considered in deciding whether to extend, amend or withdraw, including metrics being monitored. For example, in deciding whether to roll over its recommendation discouraging banks' capital distributions, the ECB has announced that it will consider the economic environment, the stability of the financial system and the reliability of banks' capital planning. The BCBS mentioned in its 17 June 2020 press release that "supervisors will provide banks sufficient time to restore buffers taking account of economic and market conditions and individual bank circumstances."

Some COVID-19 policies, such as loan guarantees, loan programmes and equity support vehicles, will last well beyond the initial uptake phase is closed. Publishing frequently asked questions during transition periods would be helpful to ensure that these programmes are maintained and successfully wound down.

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<sup>89</sup> Evidence suggests that the discussion of financial sector vulnerabilities in the most recent round of central bank financial stability reports was driven more by fears of the pandemic than traditional financial stability metrics: see Yang et al. (2020)

# Annex 1: Summary of extension and unwinding considerations in FSB jurisdictions

FSB members have reported on the factors they consider when thinking about amending, extending or ending their support measures. This annex provides an overview of those considerations per type of measure.<sup>90</sup> It finds that many FSB jurisdictions are keeping support measures in place. Jurisdictions report that they monitor health (and health-related behavioural), economic and financial developments to determine whether and when to fine-tune, extend or end a specific support measure. For some measures, in particular prudential measures, jurisdictions have provided forward guidance in the form of end dates or conditional (not-before) dates.

## 1. Liquidity support to the financial system

### 1.1. Liquidity facilities

Many central banks have established additional facilities to fund bank lending. These have been reported to have been unwound so far in four cases (CH, CN, RU, TR). Russia terminated a new pandemic-related mechanism for SME refinancing, and at the same time extended until July 2021 a measure that involved a redefinition of the terms of the pre-existing facility to better support lending to SMEs. In Turkey the central bank conducted 10 repo auctions in the context of the targeted additional liquidity facility offered to banks but then did not renew the matured auctions. It had also introduced Turkish lira rediscount credits as a temporary measure to assist SMEs: after an initial discounted interest rate of the central bank policy rate minus 150 basis points, the interest rate for these credits was revised to the policy rate and the credits were finally terminated. In Switzerland, the central bank introduced a COVID-19 refinancing facility, for the first time granting financing secured by state-guaranteed corporate loans; this measure was fully unwound and the facility will be terminated once the guaranteed credits mature. China injected liquidity into the inter-bank market through open market operations and extended central bank lending with a lower interest rate to support sectors and enterprises essential to epidemic prevention and control; these measures were terminated owing to the improvement in the market situation and in funding conditions.

Some jurisdictions have specified a future end date for a bank funding measure (AU, CA, EA, ID, KR, MX, RU, SA, SG, UK), in some cases after extending their initial funding schemes. To support banks in offering loans to micro, small-, and medium-size enterprises (MSMEs) and individuals affected by the pandemic, Mexico extended until September 2021 both the possibility of the central bank providing financing at favourable conditions to banks and the operation of the collateralised MSME financing facility for commercial banks. This decision took into consideration the time it takes for banks to grant credit once they have available resources, and that the measures are deemed useful for strengthening the credit-granting channels as the economic recovery process in the country advances. The UK extended a term funding scheme,

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<sup>90</sup> AR Argentina, AU Australia, BR Brazil, CA Canada, CH Switzerland, CN China, DE Germany, EA Euro area, ES Spain, EU European Union, FR France, HK Hong Kong, ID Indonesia, IN India, IT Italy, JP Japan, KR Korea, MX Mexico, NL Netherlands, RU Russia, SA Saudi Arabia, SE Sweden, SG Singapore, TR Turkey, UK United Kingdom, US United States, ZA South Africa.



with incentives for SME lending, by six months. The ECB reported that in December 2020 it decided to offer four additional 1-year pandemic emergency longer-term refinancing operations (PELTROs), in addition to the series of seven additional longer-term refinancing operations conducted originally. The ECB also decided to conduct three additional targeted longer-term refinancing operations (TLTRO III) between June and December 2021.

A large number of jurisdictions indicated that the termination of some of their bank funding measures will depend on conditions (AR, AU, CA, CN, EA, HK, IN, ID, IT, JP, KR, MX, RU, SG, SA, SE, UK, US). The Singaporean facility is tied to the Enterprise Singapore (ESG) loan schemes and the facility will be withdrawn once ESG's loan schemes cease. Singapore reported that it is important to communicate the withdrawal in advance to ensure that the market can transition and function smoothly upon the withdrawal of the measure. Singapore is likely to retain an additional term facility for local currency funding at longer tenors and against a wider range of collateral until the pandemic has subsided: the authorities indicated a regular review of the need for the expanded collateral eligibility. Korea reported that it aims to unwind temporary financial support measures with a soft landing policy and authorities will guide financial institutions to strengthen loss absorbency capability through increasing provision for bad debts and raising capital.

In some cases, bank funding measures have been tapered. For example, in November 2020 the Bank of Canada, which originally established a liquidity facility to lend to financial institutions for up to 90 days, reduced the maximum term to 30 days. It also reduced the frequency of its term repo operations from twice a week to weekly in June 2020 and further to once every two weeks in October 2020. Saudi Arabia, which had injected liquidity into the banking sector to enable it to continue to lend to its private clients reported that the deposits will be withdrawn gradually on the maturity dates in June. In Mexico, the central bank issued further guidance for some of its liquidity facilities, reducing the available amounts in the upcoming months, and setting an end date of 30 September 2021.

Several jurisdictions report that they continue to inject a higher level of liquidity into the financial system (AU, IN, SG). Australia provides as much liquidity as is demanded during its daily operations, but notes that demand has fallen owing to elevated reserves arising from the RBA's purchase of government bonds and banks' use of the Term Funding Facility. Singapore reports that it would consider withdrawal of excess SGD liquidity gradually via daily money market operations once the crisis has subsided. India purchased government securities in open market operations in March 2020 and conducted simultaneous sales and purchases in several instances to inject liquidity against maturing short-term securities, while keeping liquidity in the system at its elevated level.

Others reported that they have ended some of these liquidity measures in view of improvements in the market situation. China injected substantial liquidity into the inter-bank market in early February 2020 but withdrew it two weeks later. Korea offered unlimited liquidity through repo operations between end March and end July 2020. Korea also implemented a Corporate Bond Backed Lending Facility for banks and NBFIs, with loans of up to six months maturity. It extended the facility twice by three months each, but then closed the facility on 3 November 2020, with last loans maturing by early February 2021. However, the central bank noted that it is willing to reopen the facility if financial markets become volatile again. Mexico allowed some of its liquidity facilities to lapse, while stating that the central bank will maintain its capacity to use these

programmes if deemed necessary, for instance, maintaining excess intraday liquidity, entering into foreign exchange hedging operations in US dollars and carrying out swap operations of government securities.

### *Asset purchases*

The asset purchase programmes that were established to support the functioning of financial markets at the outbreak are mostly still in operation. They often have end dates included by design. Six jurisdictions provided further comments (AU, CA, EA, IN, JP, UK).

Some programmes expired upon the date initially set (CA, EA, IN). For example in India the special liquidity scheme for non-banking financial corporations (NBFCs) and housing finance companies (HFCs) expired on 1 October 2020, as well as the ECB envelope of additional net asset purchases of €120 billion that was fully used during 2020. The use of several programmes that support the functioning of financial markets has declined significantly in Canada as financial market conditions continue to improve. In particular, Canada reported that there was no need to extend their Insured Mortgage Purchase Program in the absence of any recent take-up by market participants. Another Canadian programme, an asset purchase facility acquiring provincially-issued money market securities, was phased out gradually (with 40%, 20% and 10% purchase limits of each accepted offering) before its expiration, reflecting the continued improvement in the functioning of short-term funding markets and financial markets more generally.

In Japan, the additional purchases of commercial paper and corporate bonds were extended twice and currently run until the end of September 2021. The UK reported that it would close its COVID Corporate Financing Facility (which purchases commercial paper issued by firms) because of improved market conditions.

Other programmes are still in operation and often have a fixed or “not before” end date (AU, CA, EA). The ECB will conduct its net purchases under the Pandemic Emergency Purchase Programme until the crisis phase is over, but will not withdraw before the end of March 2022. In Australia, banks can draw on a three-year Term Funding Facility until end of June 2021, but the RBA would consider extending this if there is a marked deterioration in funding and credit conditions.

## 1.2. Swap lines

### *US dollar funding*

US dollar funding measures generally continue, though some have been partially unwound. The Federal Reserve’s temporary swap lines with nine other central banks have been extended to September 2021. The Federal Reserve’s standing swap lines with other central banks have also reduced their frequency of operations. In July, 7-day US dollar operations were reduced in frequency from daily to three times per week, and in September they were reduced to weekly. This decision, made jointly between the central banks, was made because funding conditions had improved and there was low demand.

The Federal Reserve has also extended its temporary repurchase agreement facility for foreign and international monetary authorities (FIMA Repo Facility), to September 2021. Central banks have also separately undertaken USD swap auctions, and while some of these have matured and not been renewed (IN, TR), others are ongoing (BR, MX).

### *Other foreign currency liquidity*

The ECB also established bilateral euro repo lines with European central banks outside the euro area. These have been extended to March 2022.

Turkey reported that it has unwound some other measures concerning foreign currency liquidity: the FX reserve requirement has been increased to pre-pandemic levels and maximum maturities for FX export rediscount credits have been shortened to pre-pandemic maturities, as uncertainties for exporters were decreasing.

## 1.3. Other funding support

Various jurisdictions had amended rules or practices to support liquidity, some of which are being withdrawn while others are extended. Argentina has adopted several measures in relation to interest rates on bank deposits, to incentivise bank funding by savers, noting that it may change them as economic and financial conditions change. Argentina has also extended a measure whereby banks are enabled to provide new lending while simultaneously reducing the excess over their reserve requirement.

Two jurisdictions that had expanded their eligible collateral range or pledging limits per type of collateral for certain central bank operations report that they have ended (Canada) or are considering ending (Korea) these measures in view of improved funding conditions. However, others are keeping the expanded definition of collateral eligibility for the time being (for example, Mexico). In December 2020 the ECB announced that it would extend its collateral easing measures to June 2022. Argentina reports that it will retain its expanded range of eligible collateral even once the pandemic is over.

Canada had increased its frequency for T-bill auctions and announced that it would revert to its regular practice in November 2020, with a lead time of 3 weeks. India has extended the time window for fixed-rate repo and marginal standing facility (MSF) operations until midnight each day, and will continue this until further notice. Argentina reports that the increase in its deposit guarantee coverage level would not be reversed owing to the impact on stability.

## 1.4. Short-selling prohibitions

Several jurisdictions had previously adopted temporary prohibitions on short-selling, most of which are now withdrawn. Two jurisdictions reported that these bans expired in May 2020 (ES, FR). Turkey reported that it lifted its ban on short-selling of BIST 30 stocks in July 2020 and lifted further in relation to BIST 50 stocks on 12 February 2021. Korea reported that its ban on short-selling has been extended until 2 May 2021, and would be lifted as of 3 May on KOSPI 200 and KOSDAQ 150 stocks. The partial lifting of the ban is intended to minimise the impact on the markets, given these stocks have large market capitalisation and are liquid, so that the

resumption of short-selling would have limited impact on stock prices. Further decisions on the resumption of short-selling on other stocks would be made later based on market conditions. In the EU the reporting obligation for holders of a net short position of 0.1% of issued share capital was extended several times, for three months each time, and expired on 19 March 2021.

## 1.5. Enabling measures to support market functioning

A number of jurisdictions permitted remote board, committee and/or shareholder meetings (annual general meetings). The US has extended the permission to hold shareholder and board meetings remotely until further notice.

Amended conduct of business and/or investor protection requirements continue to apply in view of the continuing pandemic and health measures (AU, CH, MX, RU, SG, US). For instance, many employees of financial firms are working from home, which may complicate continued compliance with certain requirements, such as recording of relevant (trading) conversations or paper-based communication with the authorities. Australia relaxed documentation requirements for capital raising and has announced that the relaxation will end in April, in light of the state of capital markets, the economy and of the easing of health-related restrictions.

The US adopted temporary rule changes that ensured uninterrupted and orderly operation of the securities markets, including facilitating the closing of physical trading floors, transitioning to all-electronic trading, and the full or partial reopening of trading floors. As the exchanges resume normal floor trading operations the related temporary rules will expire. The US also provided temporary flexibility for certain open-ended funds to obtain short-term funding, including borrowing money from affiliates.

While the US did not take any action to restrict short-selling, it did provide emergency temporary relief for delivery of physical securities, in the absence of which the related transactions would have had to be classified as “short” orders.

## 2. Facilitate liquidity and finance provision to real economy

### 2.1. Direct public sector lending to firms

Few jurisdictions that have introduced direct public sector lending to firms provided information on the exit strategy for these measures. Some jurisdictions targeted these measures at industries such as food or health that have been particularly affected in the pandemic (SA, AR).

Korea explained its considerations around withdrawal of direct lending, highlighting that it prioritised a ‘soft landing’ as the support was unwound. It reported two measures that would be available, one for six months and the other until end-April 2021, both with the possibility of extension. Spain reported that support would be removed in a gradual manner. And the UK reported that loans targeted at firms driving innovation will convert to equity when firms next raise funding. No jurisdictions described the macroeconomic or health conditions that would influence their withdrawal from direct lending, although the Netherlands reported that it may extend its direct loan scheme to companies struggling to find bridging loans through banks beyond 30 June 2021 if the economy does not recover sufficiently.

## 2.2. Grants and equity

Most grant schemes across jurisdictions only offered one-off grants covering short periods, with new schemes launched for subsequent grants, so there is no active decision to withdraw. Many new grant schemes were specifically linked to new surges in COVID-19 cases and associated business trading restrictions.

In Russia, Switzerland and the UK, recent grants were tailored to sectors directly affected by the new lockdowns. The Netherlands reported that its schemes had short time horizons (three months for the major ones), but that it will consider extending a measure when it reaches its expiry date, depending on epidemiological developments. It reported that in some cases it had provided a longer pathway (e.g. nine months) in order to give some policy certainty. The Netherlands also highlighted that a specific end date for the grant scheme was determined on the basis of the European Commission's temporary framework for state aid.

Some jurisdictions offering direct equity support have extended or may extend the application window. The German scheme initially allowed capital injections until end 2020 but has been extended until 30 September 2021. Korea indicated that the planned deadline for application to a fund that supports key sectors and helps businesses retain jobs could be extended.

Japan reported that a deadline for regional banks to request a government capital injection in case of financial difficulty had been extended until 31 March 2026. This should, however, be a remote possibility in view of the current outlook.

## 2.3. Corporate relief

As at the beginning of 2021 most jurisdictions had not yet fully unwound measures providing relief to corporates. Some measures introduced to provide immediate support to sectors and regions strongly hit by the pandemic have since been withdrawn, e.g. support programmes for airlines and airports (RU), deferral of certain social security contributions (MX), exemption from corporation tax for SMEs located in a COVID-19 disaster area (KR), temporary VAT breaks for micro-business owners (KR), emergency support for firms involved in the production of pears and apples in certain provinces (AR). Argentina ended the period in which MSME taxpayers could apply for a tax debt relief scheme.

Such immediate measures were sometimes replaced by other measures. In Saudi Arabia a discount on the electricity bill for consumers in commercial, industrial and agricultural sectors for the two initial months of the crisis was then replaced by other support measures. In South Africa, a relief programme allowing small businesses to defer 20% of their pay-as-you-earn tax liabilities for four months was terminated in August 2020; however, businesses still in distress were allowed to apply for additional tax deferrals.

Some jurisdictions have announced end dates for some corporate relief measures (CA, CH, DE, ES, FR, HK, KR, NL, SA, UK). However, this does not mean that the measures will necessarily end then. The Netherlands reported that its measures generally have short time horizons, but have been extended and fine-tuned several times. That said, some of these measures will end at the time previously communicated. In Germany, tax deferrals and suspension of tax enforcement measures may last until 31 December 2021 only in the case of an instalment

agreement. In Japan, further extensions of the deadlines to file and pay taxes can be granted upon request. Korea has further extended, to end December 2021, its tax credit measure to landlords who have reduced the retail lease fee to tenants and increased the tax credit from initially 50% to 70% of the reduced fee.

Some other jurisdictions did not specify an end date for some measures and indicated that termination will depend on circumstances (AR, ES, KR, SA, SG, UK). Argentina and Saudi Arabia reported that the evolution of the measure is linked to the containment measures adopted. Argentina also indicated that some measures will remain in effect as long as the public health emergency lasts. Spain indicated that a package of measures had been adopted to cushion the shock to the tourism sector. Thanks to their heterogeneity, these measures will be lifted in a gradual manner, mitigating cliff effects.

## 2.4. Government guarantees on loans

For government guarantees, two time periods are relevant: the period during which a new state-guaranteed loan can be issued and the duration of the guarantee. The majority of FSB jurisdictions report that government-guaranteed loans are still available (AR, AU, CA, CN, DE, ES, EU, FR, HK, ID, IT, JP, KR, NL, RU, SA, TR, UK). Some jurisdictions have extended the programmes, specifying a new end date to apply for the government guarantee (AR, CA, DE, HK, IT, NL, RU, SA, UK), while Switzerland reports not having extended its related measure.

At least two jurisdictions have broadened the schemes. Italy broadened the eligibility criteria, allowing access to the guarantee fund for SMEs to mid-caps (firms with up to 499 employees) under certain conditions. Its schemes generally apply to new lending, but, in some cases and provided that the conditions are met, also to debt consolidation of existing loans and loans originated shortly before requesting the guarantee. Spain and Italy extended the duration of the guarantee. In Turkey, a loan package targeted at the tourism sector was announced towards the end of 2020: the loans were guaranteed by the Credit Guarantee Fund and required no instalment payments until November 2021.

Many other jurisdictions did not specify an end date to apply for the schemes (AR, AU, CN, ES, EU, FR, ID, IN, JP, KR, NL, SA, SG, US), but often reported that the end date will depend on circumstances. The main goal reported is to avoid cliff effects in 2021.

## 2.5. Release of countercyclical capital buffer and of other systemic risk buffers

Four jurisdictions provided information about the outlook of their CCyB or other systemic risk buffer levels. All of these are reporting that they expect to keep their countercyclical capital buffers constant for the foreseeable future, following cuts at the beginning of the pandemic. The UK said it would not implement an increase of the CCyB before Q4 2022. Switzerland and France have not defined exit dates. Canada released part of its Domestic Stability buffer in March 2020 and committed at that time that any increases to the buffer would not take effect for at least 18 months.

## 2.6. Encouragement to use capital and liquidity buffers

While many jurisdictions are still encouraging financial institutions to use their capital and liquidity buffers in order to maintain lending, some of them (DE, EA, IT, MX) have already given forward guidance about the path towards rebuilding buffers, in two ways.

First, some jurisdictions provide “not before” dates (EA, IT) or end dates (MX) for the drawdown of capital buffers. For example, the ECB announced that it would allow its directly supervised banks to operate below Pillar 2 guidance and the Basel III buffer requirement until at least end-2022, and this approach was also adopted by Italy for the banks under its remit. Mexico encourages banks to use their capital conservation buffers until 31 December 2021, with the expectation that they should rebuild capital by 25 basis points each quarter after this date.

Secondly, some authorities have informed banks about matters that will be considered when they assess buffer replenishment in the future (AU, DE, EA, IT, MX, UK). Jurisdictions have stated that they will not require banks to start rebuilding their capital buffers before the peak in capital depletion is reached or when the economic situation eases again. The ECB emphasises that it will assess case by case and this approach was followed by BaFin (Germany) and the Banca d’Italia for banks under their supervision.

Some authorities have equally provided forward guidance on the drawdown and replenishment of the liquidity coverage ratio (LCR). The RBI (India) and the Banco de Mexico and CNBV have already communicated their timelines up front, while OSFI (Canada) and the ECB reported that they are monitoring market developments in order to inform future timelines. When the RBI decided to bring down the LCR requirement for Scheduled Commercial Banks from 100% to 80%, it indicated that the LCR should be gradually rebuilt in two phases – back to 90% by 1 October 2020 and to 100% by 1 April 2021. In Mexico, temporary exceptions to the LCR will remain in place for six additional months, until 31 August 2021. After that, the exceptions will be gradually unwound in order to avoid any abrupt behaviour corrections that could negatively affect banks’ liquidity management. The normal LCR rules are expected to be back in place by 1 March 2022. The ECB will consider both bank-specific (e.g. access to funding markets) and market-specific factors (e.g. demand for liquidity) and OSFI will apply its four criteria (credible, consistent, necessary, and fit-for-purpose) when deciding how banks should replenish their LCRs.

## 2.7. Leverage ratio

Four authorities (CA, CH, US, JP) have temporarily modified the leverage ratio rule to exclude reserves or deposits at the central bank from the leverage exposure measure, without commensurate recalibration of the minimum leverage ratio requirement as set out in the finalised Basel III package. Two of them have also excluded sovereign bonds from the exposure measure (CA, US). At least two authorities have excluded loans under credit guarantee schemes from the exposure measure (BR, UK).

Most of these authorities have provided a form of guidance on the unwinding of these measures. Four jurisdictions specified end dates for these exemptions at the outset (CA, CH, EA, JP), two of which later extended them by at least 6 months (CA, CH), while in Japan the FSA has recently

extended them by one year. The PRA (UK) states that the end date for the exclusion of state-guaranteed loans depends on how long the government guarantee scheme runs.

## 2.8. Restrictions on dividends, share buybacks and bonuses

At the outbreak of the pandemic a number of FSB jurisdictions issued recommendations or restrictions on dividends, share buybacks and remuneration policies for banks and insurers, and most of these remain in place. The majority approach is to set either an end date (EA, ES, IT, MX, NL) or a review date (FR, UK). The ECB and the PRA (UK) provided guidance on returning to regular remuneration policies. The ECB intends to do this by 30 September 2021. The PRA expects to do so in the course of 2021, conditional on the lack of adverse developments, and aims to provide an update ahead of the 2021 half-year results of large UK banks. Restrictions on dividend pay-outs have been extended in Argentina and India. The Central Bank of Argentina has extended the suspension of dividend payments by financial institutions several times for successive quarters of 2020 and 2021. In December 2020 the RBI extended restrictions on dividend pay-outs from profits pertaining to financial year 2019-20. In January 2021 the Korean FSC recommended that banks temporarily limit dividends to below 20% of their net profits so as to maintain their capacity to absorb losses and be prepared for economic uncertainty arising from the COVID-19 pandemic.

A number of recommendations and restrictions have been modified when extended, allowing banks to make strictly defined and exceptional pay-outs (CA, DE, EA, ES, FR, IT, NL, UK, US), owing to improvements in macroeconomic conditions. Many authorities stated that even though the banking sector appears resilient, the financial impacts of the pandemic are yet to be fully realised, and so only exceptional pay-outs are allowed. The ECB later added a condition for dividend payments to remain below 15% of cumulative 2019-20 profits and not to exceed 20 basis points of the CET1 ratio. Some euro area countries extended this approach to institutions under their remit (ES, NL). OSFI announced principles to guide whether exceptional circumstances exist in which a non-recurring payment of special dividends may be acceptable. The PRA asks boards that distributions to ordinary shareholders by large UK banks should not exceed the higher of 20 basis points of risk-weighted assets as at end-2020, and 25% of cumulative eight-quarter profits covering 2019 and 2020 after deducting prior shareholder distributions over that period.

Several jurisdictions report that their decisions about capital distribution measures are informed by a range of analytical tools, such as stress tests (AU, ECB, UK), banks' and insurers' financial projections (AU) and vulnerability analysis (ECB).

Some of the restrictions on banks' (AU, CH) or insurers' (EU, NL) dividends have now ended.

## 3. Relief to lenders

### 3.1. Asset classification guidance

Several authorities provided guidance on the regulatory treatment of restructured or non-performing loans and payment moratoria. While many of these are still in force, some of them have an end date (AU, CA, EA, IN, MX, TR). For example, Australia's debt moratoria at the



beginning of the pandemic were complemented by a temporary capital treatment. Under this treatment, the period of the moratorium does not need to be treated as a period of arrears for APRA reporting purposes, nor do the loans need to be regarded as restructured or impaired. APRA required that financial institutions revert to the ordinary capital treatment after a maximum of 10 months or by 1 April 2021 (whichever is earlier), irrespective of when the moratorium was initially granted or whether it has ended. Similarly, depending on the date when the moratorium was granted, OSFI treated loans under moratoria as performing for a limited time only (three or six months), while providing that moratoria granted after 30 September 2020 would not be eligible for this capital treatment. In the EU, the EBA reactivated its guidelines on legislative and non-legislative moratoria indicating that they would apply until 31 March 2021. Similarly, the RBI implemented a three-month asset classification standstill for all loans that had been granted deferral, but later extended by three months until 31 August 2020.

Some jurisdictions had issued guidance on provisioning to accompany guidance on restructured or non-performing loans. Such guidance on provisioning has often included a timeframe and certain considerations regarding its unwinding. The UK PRA reduced minimum provisioning requirements for credit unions from 2 January 2021 until 31 December 2022, and stated that the timing of the unwinding would depend on observed rates of loan arrangements.

The Basel bank capital framework makes available transitional arrangements related to expected credit loss (ECL) provisioning, so that bank capital ratios do not experience large discontinuities. These have been applied in several jurisdictions. US applied these transitional arrangements. In Canada the transitional arrangements are expected to remain in place until the end of banks' 2022 fiscal year. OSFI provided guidance on certain aspects of ECL accounting, which will remain relevant while government support is still available. OSFI will consider removing such guidance when these extraordinary measures expire. The EU extended its prior transition period by two years, consistent with changes introduced in the Basel framework.

### 3.2. Flexibility in the application of prudential requirements

Many temporary measures allowing flexibility in the application of prudential requirements remain in force, but some jurisdictions reported how they are thinking about unwinding them. They usually include setting unwinding or review dates, while flagging that measures can be further extended depending on financial and economic conditions.

Some of the measures have expiration dates. For instance, the EBA extended its standards on prudent valuation until 31 December 2020. Some of the initial expiry dates have been postponed. The ECB decided to grandfather the eligibility of marketable assets and the issuers of such assets that fulfilled minimum credit quality requirements in case their credit ratings were to deteriorate, as long as the ratings remain above a certain credit quality level. It has decided to extend this treatment until June 2022. The RBI decreased the minimum daily cash reserve ratio (CRR) for a period of 3 months and extended it once before the measure lapsed in September 2020. The Banco de Mexico and CNBV (Mexico) announced a number of temporary flexibilities on bank liquidity requirements that were later extended until February 2022, as conditions in the interbank and debt markets remained challenging.

The Central Bank of Brazil allowed deduction of certain assets from the calculation of the reserve requirements and has announced that it will phase out the temporary flexibility by 2% every week from 5 July 2021.

### 3.3. Extension of deadlines for the implementation of regulatory requirements

Many FSB jurisdictions had previously extended deadlines for regulatory reporting, the submission of annual financial statements and other corporate disclosures. Many jurisdictions included end dates when the measures were announced (AR, BR, CA, DE, EA, FR, HK, IT, KR, MX, RU, UK, US, TR), the majority of which were in 2020 and have therefore expired. In Indonesia, the extended deadline was later brought forward, since banks had already adapted to new business operations.

Further extensions of implementation deadlines have been granted throughout the pandemic, and some jurisdictions state that they are open to further extensions if necessary, depending on the evolution of the COVID-19 pandemic and the social and economic context (AR). In Canada, extensions sought for submission of regulatory returns will be reviewed on a case-by-case basis.

### 3.4. Reduction of operational burden

Many authorities have suspended or extended timelines for firms' implementation of changes or regulatory expectations. After initial postponements to enable firms to focus resources on managing the risks associated with market volatility, several jurisdictions report having resumed policy development (AU, CA, UK). Some had previously postponed or cancelled stress tests or simplified data requests from firms. The UK reported that insurance stress testing work is scheduled to pick up in late 2021. Mexico indicated that the simplification of the data request for its stress test was only applicable for 2020.

Implementation of certain new prudential requirements had been postponed, and these postponements were announced with long lead times to the new implementation dates. APRA stated that it had delayed the implementation dates of certain prudential reporting requirements to 1 September 2022, as well as the go-live date of its new online data collection tool to 1 September 2021. It also deferred the commencement of certain legislated reforms to mortgage broker conduct and remuneration. Some of these reforms have since entered into application. The US announced a phased approach to the implementation of audit trail requirements for brokers. The UK has delayed implementation of measures relating to banks' credit risk models by one year to 1 January 2022. Canada has partially recommenced the process of implementing its IFRS 17 project from September 2020, since conditions had meanwhile stabilised.

Some operational relief has been withdrawn as businesses have adjusted to remote working. Russia initially decided to waive enforcement measures for breaches by financial firms of certain administrative and reporting requirements. It has since ended the waiver, since firms have meanwhile adjusted their business processes to comply with these requirements. Switzerland initially extended the deadline for confirming the identity of new clients from 30 to 90 days; it later reversed this measure for clients domiciled within the country, while the 90-day deadline still applies for clients abroad under certain conditions. Similarly, Australia had previously granted

relief measures to financial advisors; after an initial extension due to the continuing uncertain impacts of COVID-19, these measures are now scheduled to expire in April 2021. The US initially issued guidance or staff statements permitting the use of electronic signatures in connection with certain documents. The US subsequently issued a permanent rule addressing the use of electronic signatures for many of these documents.

## 4. Avoiding private sector overindebtedness

### 4.1. Restructuring of loan terms

Most FSB jurisdictions have either introduced the possibility of, or in some cases mandated, the restructuring of loan terms for businesses and/or households (e.g. mortgage loans), such as refinancing and extending loan maturity, waiving certain payments, and loan moratoria. These measures have ended in some jurisdictions. Mexico terminated the enrolment period of a credit restructuring measure with the objective of reducing overall payments by at least 25% and extending the remaining payment period by up to 50% of the original deadline. South Africa ended the possibility of restructuring public-funded loans to MSMEs negatively affected by the pandemic. India adopted several measures relating to working capital facilities (temporary deferral of interest, short-term loan arrangement for payment of deferred interest). It extended these measures once. The deferral period ended at end-August 2020 and the short-term loan could run up to the end of March 2021.

Loan payment moratoria have terminated in some cases. Argentina terminated the moratorium on payments of instalments to a government agency. It also implemented a measure by which unpaid balances on bank loans would only accrue compensatory interest (not punitive interest), and missed instalments during the period would be incorporated at the end of the original loan repayment schedule. This measure was extended, but then terminated at the end of 2020 because of an improvement in economic activity. Russia ended debt holidays which allowed postponement of loan payments for up to 6 months in case of financial difficulty. Saudi Arabia at first allowed Saudi workers receiving unemployment support (SANED) without any additional costs or fees to postpone the payment of three months instalments of all financing products. This measure has now ended. Germany terminated the suspension of payments on essential bills (e.g. electricity and telecommunication), interest and loan payments in favour of consumers and micro-enterprises severely affected by income-losses due to the pandemic.

Some jurisdictions specified a future end date their measures (HK, ID, IT, KR, NL, SG, ES, UK). Spain reported that the unwinding decision concerning loan moratoria will take into account the EBA's guidelines concerning the classification of non-performing loans based on the number of months of suspension of loan payments.

A number of jurisdictions have opted for a temporary extension or tapering. Italy extended a moratorium on loans to SMEs by a few months until June 2021. It noted that in deciding whether to extend, it is important to find a balance between providing support to the real economy and financial sustainability on the lenders' side. Singapore reported that credit relief measures such as principal moratoria, additional financing for working capital and extensions of tenors for loans and trade finance bills have been partially unwound since it was not sustainable to continue them indefinitely, given their long-term costs to the economy and financial system. To avoid cliff

effects, the relief measures will be tapered to ease borrowers back into repayments as the economy reopens and their cash flow improves. Hong Kong reported that principal payment holidays for corporate loans will be further extended by six months to October 2021, while those for trade loans will be extended by another 90 days. With a view to striking a balance between prudent risk management and continued support to SMEs, flexibility is allowed for banks to provide other forms of relief on a case-by-case basis for long extended loans (i.e. those that have been extended for more than 540 days for non-trade loans or 270 days for trade loans).

Some other jurisdictions did not specify an end date for some loan restructuring measures, but indicated that the timing of their unwinding will depend on circumstances (AU, ES, KR, NL, UK). Hong Kong introduced a measure allowing for a 90-day repayment deferral for trade facilities under a pre-approved principal payment holiday scheme. It has extended it several times.

## Annex 2: Mechanics of individual policy measures

### 1. Measures of a fiscal nature<sup>91</sup>

#### 1.1. Payment moratorium

In a general debt moratorium the lender agrees to a delay in the payment of the debtor's contractual obligations, while in a legislative moratorium the government establishes certain conditions under which debtors can apply for a delay in payment obligations. A moratorium envisages only changes to the schedule of payments, i.e. deferral of payment of interest and/or principal for a defined period.<sup>92</sup> In some cases, moratoria also feature public guarantees on suspended loans or a public-fund contribution to interest payments. Some jurisdictions combine a moratorium with other loan restructuring measures, such as extension of the maturity of the loan. The vast majority of jurisdictions have introduced some form of moratoria (AR, AU, CA, CN, DE, ES, FR, HK, ID, IN, JP, IT, MX, NL, RU, SA, SG, SE, TR, UK, US, ZA).

During the pandemic, moratoria are usually applied to performing loans granted before the pandemic outbreak. The aim is to help viable borrowers: those that were servicing their loan before the pandemic, but that are now faced with a temporary income shock for exceptional and exogenous reasons.

Withdrawing this measure would require these borrowers to resume servicing their debt. Withdrawal before borrowers' income is restored would be likely to lead to an increase in non-performing loans and defaults. Unless banks were fully provisioned, this would reduce banks' earnings and could, in a highly adverse scenario, create weak banks that are unable to maintain the flow of lending.

#### 1.2. Public guarantee schemes for bank loans

In a public loan guarantee scheme, the government guarantees the repayment to the bank of a proportion of the loan if the borrower defaults (for instance 50-100%, sometimes depending on the loan amount or the size of the borrowing firm), usually<sup>93</sup> in return for an annual premium (e.g. 0.5 to 2.5%) on the guaranteed portion of the loan. All FSB jurisdictions have introduced public

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<sup>91</sup> Cuadro-Sáez et al (2020) provide a descriptive and comparative analysis of the measures adopted in some larger economies (Germany, France, Italy, Spain, the United Kingdom and the United States). This yields a structured view of the similarities and differences in national responses in the area of fiscal policy. A comparison of the fiscal stance of the euro area and the US authorities is provided in Banco de España (2020) *Quarterly Report on the Spanish Economy*, April, Box 2.

<sup>92</sup> For instance, in the EU, an EBA Guideline on moratoria specifies that in the case of bank loans, no other credit lending standards, or conditions of the loans (such as the interest rate, maturity, pledged guarantees, etc.), should be changed (EBA Guideline, 2.4.2020). For the case of Spain, the latest available data (end-December 2020) shows that more than €56 billion of banks' loans (domestic ones, data on individual basis) are, or have been, under moratoria in Spain (see Banco de España, *FSR*, Autumn 2020, Box 1.2). Additionally, in Box 2 in Alves et al. (2020), it is shown that moratoria have been proportional, by bank, region and age group, to the share of total credit granted pre-pandemic, with no significant concentration of moratoria in specific segments of the banking system. This relatively uniform distribution suggests that the moratorium schemes have had a widespread impact on their target.

<sup>93</sup> Some public guarantees are provided at no cost, e.g. for SMEs.

guarantee schemes for bank loans (AR, AU, BR, CA, CH, CN, DE, ES, EU, FR, HK, ID, IN, IT, JP, KR, MX, NL, RU, SA, SG, TR, UK, US, ZA).

The aim of the public loan guarantee schemes is to ensure that credit provision to the real economy is maintained, by encouraging banks to provide new loans to firms (particularly SMEs, which have little or no access to market-based finance) or the self-employed. As with loan moratoria, this type of support measure seeks to support those agents that were servicing their loans before the pandemic but are facing a transitory liquidity problem as a consequence of a collapse in their cash flow.<sup>94,95</sup>

Withdrawing the public loan guarantee scheme would entail that banks resume their flow of new lending on the basis of the creditworthiness of the loan applicant, once again assuming full credit risk. If that happens when the transitory liquidity issues have not been resolved or when the borrower's solvency has deteriorated, some borrowers would no longer be able to roll over their short-term debt or meet their liquidity needs at an affordable cost. This might depress investment and innovation, and trigger a surge of insolvencies. In an adverse scenario this would lead to a spike in unemployment, a fall in consumption and general market turmoil, increasing financial stability risk.

### 1.3. Short-time work schemes

Short-time work schemes are public programmes that allow firms experiencing economic difficulties to temporarily reduce hours worked while providing their employees with income support from the state for the hours not worked.<sup>96</sup> Short-time work schemes can involve either a partial reduction in the normal working week for a limited period of time – i.e. a partial suspension of the employment contract – or a temporary redundancy (a zero-hours week) – i.e. a full suspension of the employment contract. The short-time work scheme replaces a proportion of the income (usually 50-80%) but does not guarantee the full salary. Many jurisdictions have implemented short-time work schemes (BR, CA, CH, DE, ES, FR, IT, KR, NL, TR, UK).

The short-time work scheme presupposes that the employment contract continues and is not broken. This helps employers to adjust labour costs to actual revenues and preserve the capital embodied in the relationship between employer and employee (minimising the cost of having to hire new workers once the period of distress ends and preserving the employee's skills), and on the other hand, it helps employees to retain a large part of their pay.<sup>97</sup>

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<sup>94</sup> Alves et al (2020), Box 1, presents the role that the Spanish public guarantee scheme plays in lending to the self-employed and non-financial corporations. In particular, the evidence collected suggests that the State guarantee programme contributes significantly to covering the liquidity needs of the companies hardest hit by the pandemic and that face the greatest difficulties in terms of access to credit. Furthermore, results suggest that the introduction of the scheme may have stimulated credit provision by financial institutions as they needed less capital to expand their balance sheet.

<sup>95</sup> Blanco et al (2020) include the results of an exercise simulating Spanish non-financial corporations' liquidity needs for 2020. The needs derive both from the possible shortfalls caused by less operating activity, and from investments in fixed assets and debt repayments. The paper estimates that the public guarantee schemes for lending to firms cover almost three-quarters of the liquidity needs (potentially over €230 billion between April and December 2020).

<sup>96</sup> See for instance the EU's [SURE Regulation](#) (Council Regulation 2020/672, OJ L 159).

<sup>97</sup> Banco de España, *Economic Bulletin* (2, 2020) includes a survey where a high proportion of firms believes that the measures facilitating ERTes (short-time working arrangements) are useful. In Gómez and Montero (2020) the importance of short-time work schemes alleviating unemployment raise and helping to curb the potential hysteresis effects on the euro area's labour markets is assessed.

Withdrawing the short-time work scheme will entail that employers will no longer benefit from income support to pay their staff. If that happens before the economic recovery is secured, firms will be forced to either lay off workers or, in countries with high employee protection legislation, face higher rigidity in labour costs against shrinking revenues. For banks this would translate into an increase in defaulting borrowers (both households with reduced income and firms with higher labour costs) and in non-performing loans. It could also spur a loss in consumer confidence and aggregate demand. Another possible second-round effect could be that the increase in non-performing household loans affects the valuation of residential real estate (a high proportion of which is pledged as collateral in bank loans).

#### 1.4. Deferral of tax and social security payments

Public authorities may postpone due dates for certain payments to them, such as taxes and social security contributions. The main aim of this measure is to alleviate firms' and personal liquidity constraints so that they can meet other financial commitments and continue their activity, with the aim to resume payments once their sources of income are restored.<sup>98</sup> Most jurisdictions have some form of tax deferral (AR, CN, DE, ES, FR, IT, JP, KR, MX, NL, RU, SA, TR, UK, ZA).

Tax deferrals delay tax obligations. They should therefore have only a transitory impact on public finances. They also have the advantage that they especially benefit viable and profitable firms. This measure is similar to a loan moratorium but in this case the lender is the government and the debt is a percentage of the liability to the public treasury.

Given the similarity of this measure to a loan moratorium, its withdrawal could imply comparable effects. If this happens prematurely, some of the funds available to firms and households from other support measures would have to be redirected to paying taxes, decreasing the effectiveness of other measures.<sup>99</sup>

#### 1.5. Tax relief

Public authorities may also choose to waive certain payments altogether, such as tax or social security contributions. Several jurisdictions have provided tax relief (AR, CN, ES, FR, ID, IT, KR, TR). Tax relief has focused on tax categories of which the base does not vary with the economic cycle, often social security contributions.<sup>100</sup>

Tax reliefs are equivalent to direct grants. Like tax deferrals, they have the advantage that they especially benefit viable and profitable (and taxpaying) firms or vulnerable households, at the expense of others that will eventually pay for the measure.

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<sup>98</sup> The payments concerned are generally taxes that require frequent (monthly or quarterly) payments, such as advance corporate income tax, personal income tax, value added tax and social security contributions. In some cases property tax payments have been deferred.

<sup>99</sup> Banco de España, *Economic Bulletin* (2, 2020) finds that over half of the firms surveyed consider that the tax deferral measures are important or very important. As expected, this percentage is higher (exceeding 70%) among firms whose activity has fallen in this period, given their greater need for liquidity.

<sup>100</sup> Other common examples have been waivers of property taxes and presumptive taxes for small businesses and, in some cases, reduction of water usage taxes or vehicle taxes. A few countries have also waived specific levies on tourism and airline companies, and some have reduced or exempted inputs used in certain sectors (including air transport, tourism, and manufacturing) from import taxes.

Withdrawing the measure means that firms would need to pay taxes regularly. If this happens prematurely, it absorbs some of the funds available from other public efforts to keep firms or households afloat (e.g. benefiting from short-time work schemes and paying social security contributions). The impact of withdrawing this incentive could be limited, as taxes are generally proportional to income.

## 1.6. Public support for trade credit insurance

Here the state establishes a guarantee scheme for the trade credit insurance market, which is similar to re-insurance. Several jurisdictions have adopted this type of measure (DE, ES, IT). The purpose of trade credit insurance is to protect companies supplying goods and services against the risk of non-payment by their clients. The trade credit insurance underwriter maintains a credit line that the policyholder (the selling firm) can draw on if it does not receive payment from the buyer. In return for the state's guarantee, the credit insurer cedes a part of its premium to the state and continues to bear part of the losses.

The aim of this state guarantee scheme is to encourage the insurance sector to continue to underwrite trade credit insurance. This may help to ensure an uninterrupted flow of funds in the supply chains and to support exports, and to smooth demand shocks across countries.

Withdrawing the state guarantee means that trade credit insurance companies would reinstate their underwriting policy solely on the basis of the credit risk of the buyer. If that happens prematurely, insurance companies might not offer trade credit insurance or do so at unaffordable premiums. The withdrawal of this measure could negatively affect domestic exporters and have negative spillovers on importing countries and on value chains.

## 1.7. Direct grants

Grants are non-repayable funds disbursed by the state to a recipient. Several jurisdictions have disbursed grants (AR, CH, DE, ES, FR, ID, IT, JP, NL, RU, SG, UK, US). Such schemes typically target small businesses or businesses in the most affected sectors. The aim is to provide one-off or temporary cash flow support, to help mitigate an increase in indebtedness or strengthen the capital base.

Withdrawing direct grant schemes – or not repeating the grant – as the pandemic carries on over time might imply hardship and insolvencies for small businesses, including those that had a viable business model before the outbreak of the pandemic.

## 1.8. Prohibition of layoffs

Several jurisdictions have implemented prohibition of dismissals (AR, IT, TR). Under this approach, layoffs for economic reasons<sup>101</sup> are temporarily restricted to avoid loss of income for individuals and sustain aggregate demand. This measure, however, puts a burden on

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<sup>101</sup> Employers may still be able to sack employees for gross misconduct, for example.



employers, who are prevented from adapting their workforce to the changes in demand, which other things equal may lead to additional insolvencies.

A premature withdrawal of layoff bans entails the risk of rising unemployment levels and the loss of jobs that would have been kept without the COVID-19 shock. On the other hand, it would restore the discretion of employers to adjust their staffing levels.

## 1.9. Freezing of insolvency procedures

Some jurisdictions have or had suspended the duty to report insolvencies (CH, DE, ES, IT,<sup>102</sup> RU). Here, the duty to file for insolvency is temporarily restricted to avoid the closure of businesses hit by the pandemic. This measure puts a burden on financial and non-financial lenders, who are deprived of valuable information on the real creditworthiness of customer firms.

A withdrawal of insolvency procedure suspensions entails the risk of the inefficient closure of viable businesses hit by the COVID-19 shock. It may also clog insolvency courts, which would need to tackle a backlog of previously suspended procedures. If not properly managed, it will also fuel an increase in declarations of default, with a potential cliff effect. This measure is also important to avoid predatory take-over, fire sales, protecting the value of collateral both for the creditors and the debtors.

## 2. Measures of a prudential nature

Prudential measures have been intended to free up bank capital to absorb losses and to support the flow of credit to the real economy. The main supervisory and macro-prudential banking measures that different jurisdictions have adopted are the following:

1. Release of capital buffers to provide the banks with extra (preventive) capacity to deal with possible loan losses:
  - (i) Release of the countercyclical buffer (CCyB) (CH, DE, FR, HK, SE, UK);
  - (ii) Release of some of the structural macroprudential capital buffers –systemic risk buffers and the buffers for systematically important banks (CA, NL). After economic and financial circumstances normalise the Netherlands will gradually build up a 2 per cent CCyB to replace its systemic risk buffer.
2. Temporary capital relief: prudential authorities allow banks to operate temporarily below their benchmark capital targets and/or the capital conservation buffer requirement, as well as the liquidity coverage ratio (LCR) (AU, BR, CA, DE, EA, IT, IN, JP, HK, KR, MX, RU, SG, TR, UK, US). The aim is to support bank lending.
3. Capital preservation: restrictions on dividend distributions, share buybacks and bonuses to ensure that banks preserve their going-concern loss-absorption capacity (AR, AU, BR, CA, CH, DE, EA/EU, ES, FR, IN, IT, MX, NL, RU, SE, SG, UK, US, ZA). The measure

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<sup>102</sup> In Italy, the suspension was lifted at the end of June 2020.

might cover financial institutions generally (banks, certain investment firms, insurers and reinsurers) and varying degrees of flexibility for supervisors, allowing distributions up to a conservative threshold for example.

4. Extension of the current transitional arrangements, e.g. for the ECL provisions in IFRS 9/CECL by two years to avoid capital erosion (EA).
5. Temporary relaxation of the leverage ratio for certain exposures (CA, CH, EA, JP, US): for instance, in the euro area, supervisors can allow banks to exclude central bank exposures from their leverage ratio until June 2021. In the US, banks can temporarily exclude Treasury securities and deposits held at Federal Reserve Banks from the supplementary leverage ratio.
6. Supervisory guidance on the prudential rules on the classification of non-performing loans (AR, AU, BR, CA, EA/EU, HK, IN, ID, JP, KR, MX, RU, SG, TR, UK): supervisory guidance with the aim of providing clarity on how to handle in a consistent manner aspects related to (i) the classification of loans in default and (ii) the identification of forbore exposures, in the context of relief measures such as guarantee schemes and moratoria.
7. Temporary relaxation of risk weights and LTV requirements for specific sectors (ID, IN, RU, TR), such as housing, gold loans and regulatory retail.
8. Temporary prudential relief such as enhanced exposure ceilings for groups of connected counterparties, relief from mark-to-market requirements for the securities portfolio (IN).
9. Extension of the more favourable treatment of publicly guaranteed loans (credit protection for loans used for financing exports) for the minimum loss coverage requirement for non-performing loans (“NPL backstop” in the EU).
10. Guidance for the accounting treatment under IFRS 9 (CA, EA/EU, UK): (i) leaving it to banks to use their own judgment when determining whether ECLs are required to be recognised; (ii) the assessment by a bank of a “Significant Increase in Credit Risk” (SICR in the EU) should be based on the remaining lifetime of a loan and not just on the sudden increase in the probability of default; and (iii) banks are invited to use quantitative and qualitative judgement and take into account the specific characteristics of the moratoria, to conclude whether loans subject to moratoria would have suffered a SICR.

These prudential measures have reduced the risk of bank capital depletion that could result from losses.

Withdrawing these measures could lead to cliff effects on the solidity of the banking system. Withdrawal will result in less available buffer capital for banks, increasing the risk of breaching buffers or even minimum capital requirements. This could force banks to deleverage, resulting in a credit crunch. At the same time, maintaining such measures for too long could also reduce the transparency of banks’ risk exposures and their resilience to any future shocks.

## Annex 3: Bibliography

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