



# Evaluating the effectiveness of Basel III during Covid-19 and beyond

Speech by Pablo Hernández de Cos

Chairman of the Basel Committee on Banking Supervision and Governor of the Bank of Spain<sup>1</sup>

Keynote address at the BCBS-Bundesbank-CEPR workshop on evaluating financial regulation

20 April 2021

## Introduction

Good afternoon, and welcome to this virtual workshop jointly organised by the Basel Committee's Research Group, the Deutsche Bundesbank and the Centre for Economic Policy Research. Let me start by thanking our friends at the Programme Committee for putting together very topical sessions and distinguished speakers over these two days.

As part of its work, the Basel Committee consistently seeks the views and inputs of a wide range of stakeholders, including academics, analysts, banks, market participants and the general public. This workshop, along with all other events organised under the Committee's outreach programme with external stakeholders, are critical to engage with all relevant counterparts and discuss how best to strengthen the regulation, supervision and practices of banks worldwide with the purpose of enhancing financial stability, which is the core mandate of the Basel Committee. I am sure that this workshop will help contribute to meeting this objective.

The Committee's work programme for 2021–22, which was recently published,<sup>2</sup> comprises three main themes: first, supporting Covid-19 resilience and recovery; second, assessing and mitigating risks and vulnerabilities to the banking system, with the intention of putting particular emphasis on new origins of risk, such as those coming from climate change or technology; and third, strengthening supervisory coordination and practices. In addition, the Committee's Basel III-related work will focus on monitoring the full, timely and consistent implementation of Basel III reforms by our members, and completing an evidence-based evaluation of the effectiveness of these reforms.

Let me elaborate on the latter. Evaluating financial regulation, including its intended and unintended effects, and analysing how banks have responded to post-crisis reforms in the current macroeconomic environment – the theme of our workshop – is conducive to learning lessons that may be helpful to achieve all these objectives. As part of its evaluation work programme, the Committee has started to assess the ongoing impact of the Covid-19 pandemic on the banking system, which has been the first global test of the Basel III framework implemented after the Great Financial Crisis (GFC). In this

---

<sup>1</sup> In relation to the content of this address, as a member of the Governing Council of the European Central Bank, I am required to observe the so-called "quiet period" preceding meetings at which monetary policy decisions are to be taken. Accordingly, my reflections are related to my role as BCBS Chairman and should not be interpreted as indicating the monetary or economic outlook.

<sup>2</sup> See [www.bis.org/press/p210416.htm](http://www.bis.org/press/p210416.htm).



regard, while the full effects of the pandemic on the banking system, including banks' asset quality, may be yet to emerge, debate has already started about whether or not the Basel III reforms implemented to date have performed as intended and the degree to which they will facilitate or hinder the economic recovery.

This debate is fully legitimate, and thus I would like to focus my remarks today on the evaluation of the effectiveness of Basel III reforms, which is also the focus of a panel discussion tomorrow. First, I will remind you why and how the Committee is conducting the evaluation. Second, I will briefly comment on the main outcome of some of the evaluations already performed by the Financial Stability Board (FSB) with the collaboration of the Basel Committee from the perspective of the banking system. Third, I will reflect on some of the preliminary lessons learned from the Covid-19 shock, in terms of both the observed resilience of the banking system and the functioning of some elements of the Basel III framework, including capital and liquidity buffers.

## Evaluation of the effectiveness of Basel III reforms is an imperative and should be evidence-based

Let me first reiterate that it is an imperative for the Committee, as well as other standard-setting bodies, to evaluate the impact and effectiveness of any standard or reform it introduces. This is an integral part of our policymaking process.<sup>3</sup> Evaluations provide ex post appraisals of the degree of success in attaining our policy objectives and complement the range of ex ante assessments we conduct during the design stage. They also complement our monitoring and consistency assessments of the implementation of our standards, for example by providing context and reasons for our members' decisions to use the flexibility embedded in the Basel Framework and adopt temporary adjustments as those announced in many jurisdictions in the course of last year. This feedback loop between implementation, evaluation and policy development strengthens the accountability and credibility of our decision- and policymaking process.

As you may know, the Basel Committee approved a work programme for evaluating its post-crisis reforms towards the end of 2017. The current evaluation programme covers four broad objectives: (i) first, to analyse whether individual reforms, or a subset of reforms, have *achieved their intended objectives*; (ii) second, to evaluate the *interaction and coherence across different reforms*; (iii) third, to identify whether there are *gaps in our regulatory framework or any material unintended effects*; and (iv) fourth, to assess any *broader impact of the Committee's reforms*, in aggregate or for a subset of reforms, such as whether our standards are unduly complex given their objectives.<sup>4</sup>

While starting a set of evaluations with respect to all four of these cases, the Committee has also actively participated in cross-sectoral thematic evaluations alongside other standard-setting bodies and international forums such as the FSB. I will briefly refer to these evaluations later.

In designing this work programme and then pursuing both our evaluation work and in our contributions to related initiatives, we have been guided by a number of general principles that include the following:

- (i) Evaluations should focus on reforms already in force and implemented by most, if not all, member jurisdictions. Otherwise, we cannot fully evaluate the impact of our standards on the

---

<sup>3</sup> See [www.bis.org/speeches/sp200130.pdf](http://www.bis.org/speeches/sp200130.pdf).

<sup>4</sup> See [www.bis.org/speeches/sp191024.htm](http://www.bis.org/speeches/sp191024.htm).



global banking system and the extent to which they have achieved their objectives. Indeed, some of the Basel standards (eg leverage ratio and NSFR) with a past-due implementation date have not yet been implemented or fully implemented by all our members.<sup>5</sup> Our evaluation will be therefore also be updated as members implement these standards. Therefore, the ex post nature of our evaluation work should not be seen as a reason to delay the implementation of some Basel III standards among member jurisdictions, but mainly the contrary. G20 Leaders and the Group of Central Bank Governors and Heads of Supervision (GHOS) have consistently reiterated their expectation for the full, timely and consistent implementation of all aspects of the Basel III framework. Only doing so can help to lock in the benefits of our standards to ensure that banks can withstand future crises.<sup>6</sup>

- (ii) Evaluations should be based on rigorous conceptual and empirical analyses wherever possible. This means that we will remain open-minded about the findings and any potential policy responses as we complete our evaluation work. Put simply, we should not be motivated by ex ante desires to revise or recalibrate certain parts of the framework or, conversely, by a resistance to any form of change. However, let me admit that the bar for any potential future policy-related work is high, and this is where robust empirical analyses play an important role. In this regard, as stated by the GHOS, our present agreement on the Basel III framework marks “a clear end to the post-GFC Basel III policy agenda” and “any further potential adjustments to Basel III will be limited in nature and consistent with the Committee’s evaluation work”.<sup>7</sup>
- (iii) Evaluations should benefit from the views and input of a broad range of stakeholders. This is consistent with both our approach to designing standards, as reflected in the Basel Committee charter, and our commitment to engage with all relevant counterparts on robust methodological approaches, analytical issues, data collection and interpretation of findings. And this includes in-house researchers at the BIS, central banks and supervisory authorities, as well as external academics. Such engagement plays an important role not only in improving the quality of our analyses but also in providing a transparent and independent judgment on the outcomes of our evaluation work.

Let me illustrate how we have been implementing these principles recently. Last year, the Committee enhanced its evaluation work programme by setting up a dedicated Task Force on Evaluations (TFE). This task force is co-chaired by two of our Committee members, namely Mr Dominique Laboureix, Secretary General of the French Prudential Supervision and Resolution Authority, and Ms Jing Yang, Managing Director, Financial Stability at the Bank of Canada.

The TFE will focus on evaluating all aspects of the Basel III framework. As you know, our framework encompasses various reforms that have fixed many of the fault lines in the pre-GFC regulatory framework. Capital requirements have increased to ensure that banks can withstand losses in times of stress. Greater focus has been placed on truly loss-absorbing resources in the form of Common Equity Tier 1 (CET1) capital. The risk-weighted framework has been overhauled to enhance risk capture and improve comparability in banks’ reported capital ratios. A leverage ratio complements this framework by constraining excess leverage in the banking system. Macroprudential elements – including capital buffers to limit procyclicality and address the externalities created by systemically important banks – provide an overlay against system-wide risks. And we now have an international framework for mitigating excessive liquidity risk and maturity transformation, through the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR).

---

<sup>5</sup> See [www.bis.org/bcbs/publ/d506.pdf](http://www.bis.org/bcbs/publ/d506.pdf).

<sup>6</sup> See [www.bis.org/speeches/sp210415.htm](http://www.bis.org/speeches/sp210415.htm).

<sup>7</sup> See [www.bis.org/press/p201130.htm](http://www.bis.org/press/p201130.htm).



Consistent with our sole focus on evidence and hard facts, the TFE will develop empirical models to conduct its analysis, building on the prior work of the Committee's expert groups, including its Research Group, and use Basel III monitoring data collected via our quantitative impact studies (QIS) to the extent possible, complemented with vendor data and additional supervisory reporting data. In addition, our evaluation work will benefit from the support and expertise of external academics. Following the Committee's call for nominations last October, we have appointed three outstanding academic advisers to the TFE: Viral V Acharya (New York University, Stern School of Business), Thorsten Beck (Florence School of Banking and Finance) and Xavier Freixas Dargallo (Universitat Pompeu Fabra Barcelona). Tomorrow, we will have the pleasure of hearing from two of them, since Xavier will participate in the panel discussion on the evaluation of the effectiveness of the Basel Committee's reforms and Thorsten will chair the session on banking structure and competition.

In terms of substance, the TFE will start its evaluation work by drawing lessons learned from the Covid-19 pandemic. Let me stress that, while the Committee will review and discuss the findings of this work, such findings are expected to be *preliminary*, and further analysis will be conducted to get more evidence as the pandemic continues to unfold. Indeed, this analysis should benefit from the Committee's continuous monitoring of risks to the global banking system, including a series of outreach events this year with a range of different stakeholders.

These analyses of the lessons learned are part of a more comprehensive evaluation workplan that will notably assess the impact of Basel III reforms, both individually and collectively, on the resilience of banks and the global banking system (for example, as measured by regulatory metrics and market-based measures). This will include evaluating if and how changes in bank behaviour (such as funding and lending service provision) and business models triggered by the reforms have, in turn, affected banking sector resilience. Our plan is to then publish a comprehensive evaluation report in 2022.

## FSB cross-sectoral thematic evaluations related to the banking sector

As mentioned before, the Committee has actively participated in cross-sectoral thematic evaluations performed by the FSB. This has included evaluations related to the effects of reforms on: (i) incentives to centrally clear over-the-counter (OTC) derivatives;<sup>8</sup> (ii) infrastructure finance;<sup>9</sup> (iii) small and medium-sized enterprise (SME) financing;<sup>10</sup> and most recently (iv) systemically important banks ("too big to fail")<sup>11</sup>. Let me try to briefly summarise the main motivations and outcomes of these evaluations with respect to banking regulation, before offering some preliminary lessons that can be drawn from the current crisis.

### **Incentives to centrally clear over-the-counter (OTC) derivatives**

The central clearing of standardised OTC derivatives was a pillar of the G20 Leaders' commitment to reduce the systemic risk associated with OTC derivatives markets in response to the GFC. One of the first evaluations under the FSB framework for the post-implementation evaluation of the effects of the G20 financial regulatory reforms<sup>12</sup> thus related to the incentives to centrally clear OTC derivatives. Among the

---

<sup>8</sup> See [www.fsb.org/2018/11/incentives-to-centrally-clear-over-the-counter-otc-derivatives-2/](http://www.fsb.org/2018/11/incentives-to-centrally-clear-over-the-counter-otc-derivatives-2/).

<sup>9</sup> See [www.fsb.org/2018/11/evaluation-of-the-effects-of-financial-regulatory-reforms-on-infrastructure-finance/](http://www.fsb.org/2018/11/evaluation-of-the-effects-of-financial-regulatory-reforms-on-infrastructure-finance/).

<sup>10</sup> See [www.fsb.org/2019/11/evaluation-of-the-effects-of-financial-regulatory-reforms-on-small-and-medium-sized-enterprise-sme-financing-final-report/](http://www.fsb.org/2019/11/evaluation-of-the-effects-of-financial-regulatory-reforms-on-small-and-medium-sized-enterprise-sme-financing-final-report/).

<sup>11</sup> See [www.fsb.org/2021/03/evaluation-of-the-effects-of-too-big-to-fail-reforms-final-report/](http://www.fsb.org/2021/03/evaluation-of-the-effects-of-too-big-to-fail-reforms-final-report/).

<sup>12</sup> See [www.fsb.org/2017/07/framework-for-post-implementation-evaluation-of-the-effects-of-the-g20-financial-regulatory-reforms/](http://www.fsb.org/2017/07/framework-for-post-implementation-evaluation-of-the-effects-of-the-g20-financial-regulatory-reforms/).



subset of relevant reforms, the evaluation covered a number of Basel standards relevant to OTC derivatives, including the BCBS-IOSCO minimum standards for margin requirements for non-centrally cleared derivatives, the BCBS standards for capital requirements for OTC derivatives (for example relating to credit counterparty risk, credit valuation adjustment (CVA) risk and banks' exposures to central counterparties (CCPs)) and the leverage ratio.

Overall, the evaluation concluded that the reforms – particularly the Basel III risk-based capital and margin requirements for non-centrally cleared derivatives – achieved their goals of promoting central clearing, especially for the most systemically important market participants. While noting that the resilience of banks and other OTC derivatives market participants has been strengthened by the reforms, the evaluation identified, the treatment of initial margin in the leverage ratio as an area that may warrant further consideration given its potential disincentive for client clearing service providers to offer or expand client clearing. Subsequently, the Basel Committee set out a targeted revision of the leverage ratio treatment of client cleared derivatives following the results of this evaluation. The objective of this revision was to balance the robustness of the leverage ratio as a non-risk based backstop with the policy objective of the G20 Leaders to promote central clearing of standardised derivative contracts.<sup>13</sup>

### **Infrastructure finance**

The other initial evaluation focused on infrastructure finance that is provided in the form of corporate and project debt financing (loans and bonds).

This evaluation concluded that the effect of G20 reforms on infrastructure finance has been of a second order relative to factors such as the macro-financial environment, government policy and institutional factors. In particular, the analysis did not identify material negative effects of the Basel III capital and liquidity requirements and OTC derivatives reforms on the provision and cost of infrastructure finance. In addition, the analysis showed that for global systemically important banks (G-SIBs) the reforms have contributed to shorter average maturities of infrastructure loans. However, this effect was not necessarily unintended given that reducing maturity mismatch on bank balance sheets was one of the objectives of the reforms.

### **Small and medium-sized enterprise (SME) financing**

Another evaluation, also motivated by the need to better understand the effects of G20 reforms on the financing of real economic activity, examined the effects of the reforms on the financing of SMEs. Given that banks are the primary providers of external SME financing, the evaluation again focused on Basel III capital and liquidity requirements.

The analysis did not find material and persistent negative effects on SME financing in general but showed some nuances across jurisdictions. In particular, the evaluation provided some evidence that the more stringent risk-based capital requirements under Basel III slowed the pace, and in some jurisdictions tightened, the conditions of SME lending at those banks that were least capitalised relative to other banks. However, these effects were not the same across jurisdictions, and they were generally found to be temporary. The evaluation also provided some evidence for a reallocation of bank lending towards more creditworthy firms after the introduction of reforms, noting that this effect was not specific to SMEs. Finally, similar to what was observed for infrastructure finance, the evaluation suggested that SME financing trends were largely driven by factors other than financial regulation, such as public policies and macroeconomic conditions.

### **Systemically important banks (“too big to fail”)**

---

<sup>13</sup> See [www.bis.org/bcbs/publ/d467.htm](http://www.bis.org/bcbs/publ/d467.htm)



The most recent evaluation focused on the effects of too-big-to-fail (TBTF) reforms for systemically important banks and covered: (i) standards for additional loss absorbency through capital surcharges and total loss-absorbing capacity (TLAC) requirements; (ii) recommendations for enhanced supervision and heightened supervisory expectations; and (iii) policies to put in place effective resolution regimes and resolution planning to improve the resolvability of banks.

Overall, the evaluation found that TBTF reforms have made banks more resilient and resolvable, and that indicators of systemic risk and moral hazard moved in the right direction. In particular, capital and liquidity at systemically important banks have improved as a result of the implementation of Basel III, which includes capital surcharges<sup>14</sup> that G-SIBs should meet with CET1, ie the highest-quality type of capital. In addition, most G-SIBs already meet or exceed their minimum external TLAC requirement on both risk-weighted assets (RWA) and leverage ratio exposure measures. Importantly, such higher capital requirements have not been associated with significant changes in the balance sheet structure of G-SIBs and in the supply of credit.

The evaluation also highlighted that good progress has been made in enhancing the intensity and effectiveness of supervision of systemically important banks, and in heightening the supervisory expectations relating to their risk governance, internal controls and risk management, as well as their risk data aggregation and risk reporting capabilities. This includes: (i) the enhancements introduced by the Basel Committee into its Core Principles for Effective Banking Supervision;<sup>15</sup> (ii) the adoption and implementation of the Committee's *Principles for effective risk data aggregation and risk reporting*;<sup>16</sup> and (iii) the Committee's revised *Principles for effective supervisory colleges*.<sup>17</sup> However, more remains to be done, and the Committee will follow up on some gaps identified by the evaluation, such as the need to improve TLAC disclosures and further monitor the application of reforms to domestic systemically important banks (D-SIBs), and will continue to promote and monitor G-SIBs' progress in adopting the principles for effective risk data aggregation and reporting.

Finally, while most of the analysis covered the period prior to the outbreak of the pandemic, the evaluation's findings are relevant to future developments: systemically important banks have higher capital and loss-absorbing capacity to deal with potential future losses. This brings me to the preliminary lessons that can be drawn from the current crisis.

## Basel III reforms' performance through the Covid-19 pandemic

The TFE is examining the resilience of the banking system during the pandemic as well as several specific aspects related to the functioning of the Basel reforms, including: (i) banks' use of capital buffers and our member jurisdictions' experience with the countercyclical capital policies; (ii) the impact of the leverage ratio on financial intermediation; (iii) the usability of liquidity buffers; and (iv) the (pro)cyclicality of specific Basel capital requirements. I won't attempt to cover all these aspects today as they will be discussed in our panel discussion tomorrow, when we will hear notably from the TFE co-chairs about the analyses and early findings to date. Instead, I would like to focus my comments on the impact on the banking system's

---

<sup>14</sup> The surcharges have so far ranged from 1% to 2.5% of risk-weighted assets.

<sup>15</sup> See [www.bis.org/publ/bcbs230.htm](http://www.bis.org/publ/bcbs230.htm).

<sup>16</sup> See [www.bis.org/publ/bcbs239.htm](http://www.bis.org/publ/bcbs239.htm).

<sup>17</sup> See [www.bis.org/publ/bcbs287.htm](http://www.bis.org/publ/bcbs287.htm).



resilience and two aspects of the framework that were highlighted during the pandemic: buffer usability and the (pro)cyclicality of some of our requirements.

### **The resilience of the banking system**

The global banking system entered the Covid-19 pandemic on a more resilient footing than in the run-up to the GFC with robust capital and liquidity levels, bolstered by the Basel III reforms. We have seen a significant improvement in the overall resilience of banks since the adoption of the initial Basel III framework. Their risk-weighted CET1 capital ratio now stands at around 13%, compared with 7% in 2011.<sup>18</sup> At a global level, their CET1 capital is now more than 2.5 times its value in 2011. During the same period, their Tier 1 leverage ratio rose from 3.5% to over 6%. Similarly, they also improved materially, both qualitatively and quantitatively, their liquidity positions, with LCR and NSFR standing at around 140% and 120%, respectively, compared with 120% and 110% in 2011. Overall, their holdings of high-quality liquid assets increased from €7.1 trillion in 2012 to €10.7 trillion during this period.

Importantly, this build-up in resilience has been experienced globally. Across all regions, albeit with some nuances, banks entered the Covid-19 event with strong capital and liquidity positions.

And one year into the crisis, banks' capital and liquidity positions remained strong and did not appear to be significantly affected by the pandemic, thanks also to the unprecedented range of fiscal and monetary measures taken by all jurisdictions to support the real economy, which have shielded banks to date from losses and the crystallization of risks.

While some banks may have experienced strain at the onset of the pandemic, when market liquidity deteriorated significantly and bank funding costs increased sharply, no internationally active bank failed or required significant public sector funding up to date.

Further, the banking system has so far broadly maintained its provision of lending and other critical services to households and businesses, thanks also to the extraordinary support measures taken by public authorities across jurisdictions to contain the effects of the pandemic. While decreasing in the second half of the year, demand for credit generally remained relatively high in advanced economies in 2020, again despite some divergent tendencies across jurisdictions, and banks were able to meet the liquidity needs to support the real economy through the crisis. In addition, banks mainly attributed the ongoing credit tightening to corporate sectors most adversely affected by the pandemic and an uncertain economic outlook, rather than constraints related to bank liquidity and capital.<sup>19</sup>

As supervisors we should continue to closely monitor these developments to assess risk and vulnerabilities in a forward-looking manner, but put simply, unlike during the GFC, banks' behaviour to date has not amplified the crisis.

This enhanced resilience stems in large part from the implementation of the post-GFC Basel III reforms, while the set of measures promptly agreed by the Committee at the start of the pandemic was key to ensure global, timely and comprehensive response during the initial phase of the crisis to address some of the short-term financial stability issues. These included technical guidance on the prudential treatment of government support measures, expected credit loss provisioning, buffer usability and the implementation timeline of outstanding Basel III standards.<sup>20</sup> The actions adopted by the Basel Committee have helped to complement the actions taken at the jurisdictional or regional level and provide additional operational capacity for banks and authorities to respond to short-term financial stability challenges.

---

<sup>18</sup> For "Group 1" banks that participate in the Basel III monitoring exercise, ie those that have Tier 1 capital of more than €3 billion and are internationally active.

<sup>19</sup> See eg IMF, *Global Financial Stability Report*, October 2020.

<sup>20</sup> See [www.bis.org/press/p200403.htm](http://www.bis.org/press/p200403.htm) and [www.bis.org/press/p200327.htm](http://www.bis.org/press/p200327.htm).



Let me acknowledge again that this improvement in overall bank resilience is against a backdrop of a wide range of fiscal and monetary support measures as well as complementary policy and supervisory actions taken by our member jurisdictions. These include monetary interventions (notably asset purchase programmes), government support to the corporate sector and households (such as loan guarantee schemes and moratoriums on debt service), and other measures more directed at banks, such as: (i) central bank term funding and funding-for-lending schemes; (ii) regulatory relief measures (for instance releases of the Basel III countercyclical capital buffer and reductions in some capital and leverage requirements); and (iii) capital conservation measures (such as restrictions on dividend payments, share buybacks and bonuses paid out).

All these measures introduced to mitigate the initial and far-reaching impact of the pandemic have helped maintain the stability of the banking system and their effects should not be understated.<sup>21</sup> However, it is difficult to isolate the impact of each of them, just as it is difficult to disentangle the effects of the regulatory framework from these measures.

As part of its evaluation, the TFE is examining the extent to which Basel III reforms contributed to bank resilience, notably by looking at the relationship between regulatory measures and market-based resilience metrics (for instance banks' credit default swap (CDS) spreads). Looking forward to getting the conclusions of this analysis, let me say that preliminary findings indicate that higher regulatory capital measures are associated with a stronger market-based measure of resilience. Further, recent analyses concur with this observation, noting also that banks that increased their capital and thus their lending capacity more also increased their loan growth more.<sup>22</sup> In addition, evidence also points out that the uptake of public support measures, such as loan guarantee programmes, was higher for better-capitalised banks.<sup>23</sup>

The ongoing pandemic highlights the importance of a resilient banking system underpinned by global and prudent regulatory standards, and our reforms undoubtedly contributed to such resilience. As I have previously remarked, bank resilience matters before, during and after a crisis.<sup>24</sup> That said, focusing on the overall Basel III objective of making the global banking system more resilient should not prevent us from examining whether the various elements of our regulatory framework functioned as intended.

### **Buffer usability**

Capital and liquidity buffers are important features introduced as part of the Basel III framework and sit above minimum requirements. Capital buffers comprise the capital conservation buffer (CCoB) and, by extension, the countercyclical capital buffer (CCyB) and buffers for systemically important banks. While each of these buffers seek to mitigate specific risks, they share similar design features and have two objectives: first, to ensure that banks absorb losses in times of stress without breaching their minimum requirements; and second, to help maintain the flow of credit to the real economy in a downturn by lending to creditworthy businesses and households. Liquidity buffers comprise high-quality liquid assets that banks are required to hold in order to help them absorb liquidity-related shocks and maintain the flow of lending to the real economy.

---

<sup>21</sup> As an illustration of the importance of these measures, IMF stress test results presented in the October 2020 GFSR suggested that, under a severe adverse macroeconomic scenario laid out in the World Economic Outlook, more than 90 percent of banks by assets across 29 systemically important jurisdictions would remain above statutory minimum capital levels through 2022. These results reflected not only extraordinary monetary and fiscal policy support but also important bank-specific mitigation policies. Without such policies, the IMF estimated that the proportion of capital-deficient bank assets would have roughly doubled.

<sup>22</sup> See eg [www.bis.org/publ/bisbull38.pdf](http://www.bis.org/publ/bisbull38.pdf).

<sup>23</sup> Bank of Spain, mimeo.

<sup>24</sup> See [www.bis.org/speeches/sp201019.pdf](http://www.bis.org/speeches/sp201019.pdf).



As part of our evaluation work, we have carefully considered the usability of capital buffers prior to the Covid-19 outbreak. This work has included engagement with a wide range of stakeholders, including banks, bank investors and other market participants, to discuss their views on the role of the capital buffers. In the light of these discussions, the Committee published supervisory guidance in 2019 to reiterate the importance of the capital buffer framework and to emphasise that buffers are usable in the following manner:

- (i) Banks operating in the buffer range would not be deemed to be in breach of their minimum regulatory capital requirements as a result of using their buffers.
- (ii) Banks that draw down their buffers will be subject to the automatic distribution restriction mechanism set out in the Basel III framework.
- (iii) Supervisors have the discretion to impose time limits on banks operating within the buffer range, but should ensure that the capital plans of banks seek to rebuild buffers over an appropriate time frame.<sup>25</sup>

Since then, and following the outbreak of Covid-19, the Committee has been closely monitoring the use of capital and liquidity buffers and has consistently repeated that a measured drawdown of these buffers is both anticipated and appropriate in a period of stress like the current crisis, and that until the crisis is over, supervisors will provide banks with sufficient time to restore their buffers, taking account of economic, market and bank-specific conditions.<sup>26</sup>

In practice, however, only a few banks' capital ratios have fallen below their regulatory capital buffer levels up to date, while many banks maintained substantial capital buffers. Similarly, in most jurisdictions banks experienced downward pressures on their liquidity buffers during March 2020, when the financial market stress was most intense, and took management actions (such as borrowing from central banks) to preserve LCR levels well above the 100% minimum requirements. This prompted some stakeholders, from both the industry and the regulatory community, to point out that buffers were not as usable as intended and thus to call for changes to the Basel III buffer framework.

Our outreach sessions with international banks and bank investors, information-sharing among Committee member and observer jurisdictions, and other public sources, such as publications by credit rating agencies, included extensive discussions on the potential reasons for which banks may have been unwilling to use their buffers. These can be grouped into three broad categories, and are not mutually exclusive. First is the fear of market stigma or negative signalling associated with buffer use that may lead to adverse market reactions (for example, a fall in share price and/or a credit ratings downgrade), especially in the case of automatic distribution restrictions as introduced in the capital buffer framework. Second, as the pandemic continues to unfold, the uncertainty in macroeconomic outlook may be conducive to capital buffer conservation to absorb potential future losses, rather than to buffer use to support lending. Third is the uncertainty in supervisory expectations or responses in case of buffer use in spite of the guidance provided by the Committee. Some recent evidence also points out at the role of profitability as a determining factor of banks' economic incentives for capital buffer usability.<sup>27</sup>

While there is a range of hypotheses put forward on the usability of buffers thus far, I think that at this stage further empirical analysis is needed before we consider whether any adjustments to the current framework are warranted. In addition, these hypotheses should be tested taking account of the objectives of our standards and the Committee's broader financial stability mandate. From that

---

<sup>25</sup> See [www.bis.org/publ/bcbs\\_nl22.htm](http://www.bis.org/publ/bcbs_nl22.htm).

<sup>26</sup> See [www.bis.org/press/p200320.htm](http://www.bis.org/press/p200320.htm) and [www.bis.org/press/p200617.htm](http://www.bis.org/press/p200617.htm).

<sup>27</sup> See IMF April 2021 GFSR.



perspective, as noted, substantial increases in capital and liquidity at banks over the past decade helped them to act as shock-absorbers instead of amplifiers of the economic impact of the Covid-19 pandemic.

That said, buffer usability poses intertemporal trade-offs that could become relevant in the future. The use of capital buffers creates lending space to support the real economy and so can help bridge the impact of the Covid-19 shock and reduce the chances that a transitory shock will have permanent consequences for financial stability and the global economy. However, if the pandemic continues to unfold and escalate, ultimately affecting the solvency of borrowers, banks will have lower buffers against future shocks that may increase future vulnerabilities. Policymakers and supervisors should be mindful of such trade-offs when considering the use of bank capital buffers, including the optimal pace of rebuilding these buffers, and may use stress-test results to reassess forward-looking bank capital plans.<sup>28</sup>

### **The (pro)cyclicality of specific Basel capital requirements**

Moving to the (pro)cyclicality of the Basel III framework, let me first highlight that for the purpose of our evaluation we have been focusing on how and to what extent some of our capital requirements respond to movements in risk (thus analysing a co-movement). This is quite different from considering *pro-cyclicality*, which would assess if, and to what extent, capital requirements amplify economic cycle fluctuations (thus determining a causal effect). This distinction between cyclicality and pro-cyclicality is not just semantics, as the distinction between a co-movement and a causal effect is of considerable importance in evaluating the performance of our standards during the Covid-19 pandemic. That said, our related evaluation work focuses on two aspects of the Basel III framework: first, credit risk including movements in loan loss provisions, and second, movements in market risk capital requirements.

With respect to credit risk, the extensive governmental support measures and payment moratorium programmes, along with the Committee's guidance to ensure that these risk-mitigating actions are reflected in banks' capital requirements, undoubtedly dampened the impact of economic contraction on banks' capital positions, making it difficult to draw clear lessons about credit risk cyclicality. Further, we set out expectations that banks use the flexibility inherent in expected credit loss (ECL) accounting frameworks to take account of such credit risk mitigation measures and provided jurisdictions with greater flexibility in deciding whether and how to phase in the impact of ECL on banks' regulatory capital.<sup>29</sup> These have probably dampened loan loss provisions, which increased significantly following the Covid-19 outbreak, particularly between the first and second quarters of 2020 albeit with variations across jurisdictions, before decreasing slightly in the third quarter. Further, recent financial reports from a sample of G-SIBs showed a growing divergence in provisioning actions among banks and jurisdictions in the last quarter of 2020, with some banks reporting negative provisions while others increased provisions. As such, we are conducting further analysis related to loan loss provisioning and bank behaviour to determine the reasons for such an evolution and the interactions between banks' provisions and capital positions. In addition, analysis is to be conducted to evaluate how other aspects of credit risk evolve as support measures are unwound. These include credit rating downgrades, probabilities of default (PDs) and losses-given-default (LGDs) used under the internal risk-based approaches (IRB), and their impact on banks' RWA calculations.

Turning to market risk, our analysis indicates that the heightened financial market volatility caused by the Covid-19 outbreak in the first quarter of 2020 led to significant rises in market risk capital requirements for those banks using internal model approaches (IMA). This increase in capital requirements, largely reflecting the risk sensitivity of the current Basel 2.5 market risk framework,<sup>30</sup> resulted from: (i) an increase in their value-at-risk (VaR) measures; (ii) a larger number of observed backtesting exceptions that,

---

<sup>28</sup> See for instance the IMF stress test results and policy discussion presented in the October 2020 GFSR.

<sup>29</sup> See [www.bis.org/bcbs/publ/d498.pdf](http://www.bis.org/bcbs/publ/d498.pdf).

<sup>30</sup> See [www.bis.org/publ/bcbs158.htm](http://www.bis.org/publ/bcbs158.htm).



in turn, led to higher capital multipliers to be applied to these VaR measures; and (iii) updates of the stressed financial period to be used by banks for their stressed VaR (SVaR) calculations. And this led supervisors in several jurisdictions to take targeted measures to address such sources of cyclicity, including temporary reductions of additional capital requirements under IMA, for example by allowing banks to discard backtesting exceptions and/or not requesting that they update their stressed financial period to the Covid-19 pandemic. Looking ahead, further analysis is to be conducted to put these movements in capital requirements into perspective with traded risk and returns during that period and to assess the extent to which the revisions to the market risk framework, finalised in 2019 and which will take effect as of 1 January 2023, will tackle such sources of cyclicity.<sup>31</sup>

## Conclusion

Let me conclude.

As we have started to assess the effects of the Covid-19 pandemic on the banking system and evaluate the effectiveness of our regulatory framework, there is clear evidence that robust levels of capital and liquidity at banks helped to act as shock-absorbers of the economic impact of the pandemic. This suggests that by bolstering banks' capital and liquidity positions, the Basel III reforms achieved their overall objective of strengthening the resilience of the banking system, which has held up remarkably well over the past decade and during the recent stressed period. However, we are still far from declaring victory when it comes to the safety and soundness of the global banking system. There continues to be no shortage of risks to the banking system as the pandemic continues to unfold and extraordinary measures are unwound. In addition, the pandemic has highlighted some aspects related to the functioning of our reforms that may warrant further consideration, such as buffer usability and the (pro)cyclicity of some capital requirements. As robust empirical evidence is fairly scarce to date, the Committee will continue to closely monitor and analyse these areas in the context of its evaluation work.

Looking ahead, the Basel Committee will be devoting a substantive part of its agenda over the next few years to carefully evaluating the impact and effectiveness of its post-crisis reforms, which have been 10 years in the making. This work will be grounded in rigorous empirical analysis, and will require the full implementation of our standards in order to be performed and arrive at an accurate assessment. We will be actively seeking stakeholders' views to support us in this work, and I am certain that the interesting sessions and papers included in this workshop will serve as an important input.

Thank you.

---

<sup>31</sup> See [www.bis.org/bcbs/publ/d457.htm](http://www.bis.org/bcbs/publ/d457.htm).