

# Implementation and Effects of the G20 Financial Regulatory Reforms

2020 Annual Report



13 November 2020

The Financial Stability Board (FSB) coordinates at the international level the work of national financial authorities and international standard-setting bodies in order to develop and promote the implementation of effective regulatory, supervisory and other financial sector policies. Its mandate is set out in the FSB Charter, which governs the policymaking and related activities of the FSB. These activities, including any decisions reached in their context, shall not be binding or give rise to any legal rights or obligations.

---

Contact the Financial Stability Board

Sign up for e-mail alerts: [www.fsb.org/emailalert](http://www.fsb.org/emailalert)

Follow the FSB on Twitter: [@FinStbBoard](https://twitter.com/FinStbBoard)

E-mail the FSB at: [fsb@fsb.org](mailto:fsb@fsb.org)

# Table of Contents

Executive Summary .....	2
Implementation of reforms in priority areas by FSB jurisdictions (as of October 2020).....	4
1. The COVID-19 shock and G20 reforms .....	7
2. Implementation of reforms .....	9
2.1. Building resilient financial institutions .....	9
2.2. Ending too-big-to-fail .....	10
2.3. Making derivatives markets safer .....	12
2.4. Enhancing resilience of non-bank financial intermediation .....	13
3. Effects of reforms.....	15
3.1. Financial system resilience during the COVID-19 shock .....	15
3.2. Evaluation of the effects of TBTF reforms .....	16
4. Looking ahead .....	19
Annex 1: Monitoring and evaluations forward planner.....	20
Annex 2: Sources of information .....	21
Abbreviations .....	22

## Executive Summary

**The G20 reforms that followed the 2008 crisis have served the financial system well during the pandemic.**

- The COVID-19 shock hit a global financial system that is more resilient and better placed to sustain financing to the real economy as a result of progress made in implementing the G20 reforms.
- Greater resilience of major banks at the core of the financial system has allowed the system largely to absorb, rather than amplify, the macroeconomic shock.

**Bold and decisive actions by authorities have helped maintain global financial stability.**

- Monetary, fiscal and prudential responses by authorities to the pandemic sustained the supply of credit to the real economy, supported financial intermediation, and preserved the resilience of the financial system. Coordinated action between jurisdictions, including through the FSB, helped preserve a level playing field and avoid market fragmentation.
- The large majority of regulatory and supervisory measures introduced by authorities made use of the flexibility built into existing international standards, though there have been a few instances where individual temporary measures went beyond this flexibility.

**Given the pandemic, there has been limited additional progress in implementing G20 reforms since last year.**

- Acknowledging the extraordinary circumstances, the FSB and standard-setting bodies (SSBs) have extended implementation deadlines for certain international reforms to provide additional capacity for firms and authorities to respond to the COVID-19 shock.
- Regulatory adoption of several core Basel III elements has generally been timely to date, although there have been delays in implementing other Basel III standards. Implementation of over-the-counter (OTC) derivatives reforms is also well-advanced.
- Substantial work remains to operationalise resolution plans for systemically important banks and implement effective resolution regimes for insurers and central counterparties (CCPs). Work is also ongoing at the international level to enhance CCP resilience, recovery and resolution, and to make trade reporting truly effective. The implementation of non-bank financial intermediation (NBFII) reforms continues but it is at an earlier stage than other reforms.

**The pandemic provides an opportunity to assess the effectiveness of the reforms...**

- An FSB evaluation based on information collected prior to the pandemic finds that too-big-to-fail (TBTF) reforms have made banks more resilient and resolvable, resulting in significant net benefits for society. The evaluation also finds some gaps that need to be addressed.

- The COVID-19 pandemic represents the first major global test of the post-crisis financial system, and an opportunity to examine whether reforms have worked as intended.
- The question of whether the flexibility provided by authorities is actually used by financial institutions – for example, in the case of bank capital and liquidity buffers – may require particular attention and will inform discussions of future policy adjustments, including on the eventual exit from temporary measures.
- The extraordinary policy measures taken in response to the financial market turmoil in March raise issues for further consideration. The FSB’s holistic review of the turmoil considers the implications for regulatory and supervisory policies, especially for NBFIs. The FSB and SSBs will carry out further work to identify potential lessons learned from the COVID-19 experience for international standards.

**... and underscores the importance of global regulatory cooperation with G20 support.**

- The COVID experience has demonstrated once again how interconnected the global financial system is. Maintaining close cooperation is critical given the uncertainty about the pandemic, and necessary for the full, timely and consistent implementation of the reforms, which will help to further strengthen the resilience of the financial system.
- The FSB and SSBs will continue to promote approaches to deepen international cooperation, coordination and information-sharing, underpinned by the FSB principles for the COVID-19 response, with the support of the G20.



## Legend

	<ul style="list-style-type: none"> <li>■ <b>Basel III:</b> Final rule published and implemented. Risk-based capital and leverage ratio are based on the initial reform package agreed in 2010 prior to Basel III finalisation in December 2017. Requirements for SIBs – covering both D-SIBs and higher loss-absorbency for G-SIBs (for G-SIB home jurisdictions) – published and in force.</li> <li>■ <b>OTC derivatives:</b> Legislative framework in force and standards/criteria/requirements (as applicable) in force for over 90% of relevant transactions.</li> <li>■ <b>Resolution:</b> Final rule for external Total Loss-Absorbing Capacity (TLAC) requirement for G-SIBs published and implemented. For the powers columns, all three of the resolution powers for banks (transfer, bail-in of unsecured and uninsured credit claims, and temporary stay) and insurers (transfer, bridge and run-off) are available. Both recovery and resolution planning processes are in place for systemic banks.</li> <li>■ <b>Compensation:</b> All FSB <u>Principles</u> and their <u>Implementation Standards for Sound Compensation Practices</u> (Principles and Standards) implemented for significant banks.</li> <li>■ <b>Non-bank financial intermediation (NBFI):</b> MMFs – Final implementation measures in force for valuation, liquidity management and (where applicable) stable net asset value (NAV). Securitisation – Final adoption measures taken (and where relevant in force) for an incentive alignment regime and disclosing requirements.</li> </ul>
△	<ul style="list-style-type: none"> <li>■ <b>Basel III:</b> Final risk-based capital rule implemented, with the exception of countercyclical capital buffer rule.</li> <li>■ <b>Compensation:</b> All except a few (three or less) FSB Principles and Standards implemented.</li> </ul>
	<ul style="list-style-type: none"> <li>■ <b>Basel III:</b> Final rule published but not implemented, or draft regulation published.</li> <li>■ <b>OTC derivatives:</b> Regulatory framework being implemented.</li> <li>■ <b>Resolution:</b> Final rule for external TLAC requirement for G-SIBs published but not yet implemented, or draft rule published. For the powers columns, one or two of the resolution powers for banks (transfer, bail-in of unsecured and uninsured credit claims, and temporary stay) and insurers (transfer, bridge and run-off) are available. Recovery planning is in place for systemic banks, but resolution planning processes are not.</li> <li>■ <b>Compensation:</b> FSB Principles and Standards partly implemented (more than three Principles and/or Standards have not yet been implemented) for significant banks.</li> <li>■ <b>NBFI:</b> MMFs – Draft/final implementation measures published or partly in force for valuation, liquidity management and (where applicable) stable NAV. Securitisation – Draft/final adoption measures published or partly in force for implementing an incentive alignment regime and disclosing requirements.</li> </ul>
	<ul style="list-style-type: none"> <li>■ <b>Basel III:</b> Draft regulation not published.</li> <li>■ <b>Resolution:</b> Draft rule for external TLAC requirement for G-SIBs not published. For the powers columns, none of the three resolution powers for banks (transfer, bail-in of unsecured and uninsured credit claims, and temporary stay) and insurers (transfer, bridge and run-off) are available. Neither recovery nor resolution planning processes are in place for systemic banks.</li> <li>■ <b>NBFI:</b> MMFs – Draft implementation measures not published for valuation, liquidity management and (where applicable) stable NAV. Securitisation – Draft adoption measures not published for implementing an incentive alignment regime and disclosing requirements.</li> </ul>
	<ul style="list-style-type: none"> <li>■ <b>Resolution:</b> Minimum TLAC requirements not applicable for jurisdictions that are not home to G-SIBs or to a subsidiary of a G-SIB that is a resolution entity under a multiple point of entry resolution strategy.</li> </ul>
C / LC / MNC / NC	<ul style="list-style-type: none"> <li>■ <b>Basel III:</b> Regulatory Consistency Assessment Program (RCAP) – assessed “compliant” (C), “largely compliant” (LC), “materially non-compliant” (MNC) and “non-compliant” (NC) with Basel III rules. See the RCAP scale. The grade for SIB requirements relates only to the G-SIB requirements.</li> </ul>
^	<ul style="list-style-type: none"> <li>■ <b>Basel III:</b> Does not include reforms finalised in December 2017, which take effect from 2023. Risk-based capital column excludes certain technical standards that came into force in 2017. Leverage ratio column based on the 2014 exposure definition and not the 2017 definition.</li> </ul>
&	<ul style="list-style-type: none"> <li>■ <b>Basel III:</b> Australia’s implementation status on the leverage ratio is based on the revised (2017) exposure definition. China’s G-SIB requirements are in force, while a draft D-SIB policy has been published. The US does not identify any additional D-SIBs beyond those designated as G-SIBs; its framework was found to be broadly aligned with the D-SIB principles; see the <u>US RCAP assessment</u> (June 2016).</li> </ul>
R / F	<ul style="list-style-type: none"> <li>■ <b>OTC derivatives:</b> Further action required to remove barriers to full trade reporting (R) or to access trade repository data by foreign authority (F). See the FSB report on <u>Trade reporting legal barriers: Follow-up of 2015 peer review recommendations</u> (November 2018).</li> </ul>
* / **	<ul style="list-style-type: none"> <li>■ <b>NBFI:</b> Implementation is more advanced than the overall rating in one or more / all elements of at least one reform area (MMFs), or in one or more / all sectors of the market (securitisation). The <u>2019 update</u> was undertaken by IOSCO using the assessment methodology in its 2015 peer reviews in these areas.</li> </ul>

## Changes in implementation status over the past year

The table shows the changes in implementation status by FSB jurisdiction across priority areas since September 2019. The colour on the left-hand cell reflects the status as of September 2019, while the colour on the right-hand cell indicates the status as of October 2020.

Reform area / Jurisdiction	Basel III	OTC derivatives	Resolution	Non-bank financial intermediation+
Canada	Large exposures NSFR			
China			Minimum external TLAC requirement for G-SIBs	
Indonesia	Leverage ratio			
Japan	Large exposures			
Korea				MMFs
Saudi Arabia				MMFs
Singapore	Large exposures			
South Africa	Large exposures			MMFs
Switzerland				MMFs
Turkey			Recovery and resolution planning for SIBs	

+ The 2020 update on MMFs and securitisation was undertaken by IOSCO using the assessment methodology in its 2015 peer review reports in these areas.



# 1. The COVID-19 shock and G20 reforms

## **COVID-19 represents the biggest test of the post-crisis financial system to date.**

- The pandemic constitutes an unprecedented global macroeconomic shock, which has pushed the global economy into a downturn of uncertain magnitude and duration.
- Downward revisions of expected economic activity and heightened risk aversion led to a major re-pricing and repositioning in global financial markets. An increased preference for short-term safe assets and sharply rising credit risks placed strains on the global financial system. Heightened operational risks have added to vulnerabilities.

## **The G20 financial reforms in response to the 2008 crisis have supported a rapid and coordinated response to support the real economy, maintain financial stability and minimise the risk of market fragmentation, underpinned by the FSB's principles.**

- Authorities have taken a wide range of measures to sustain the supply of credit to the real economy, support financial intermediation, and preserve global financial stability.<sup>1</sup>
- Fiscal policy helped to shield the real economy from the effects of the pandemic and maintain credit supply, while the extraordinary central bank interventions eased liquidity strains particularly during the March market turmoil. Regulatory and supervisory measures contributed to the effectiveness of these policy actions by expanding financial intermediaries' capacity to continue to lend as well as to absorb losses.
- These measures, combined with greater resilience of banks at the core of the financial system and of financial market infrastructures (FMIs) as a result of the G20 reforms (see section 3), have enabled the continued provision of financial services, including lending, thereby supporting economic recovery.
- The FSB Principles underpin the official community's response to the pandemic (see Box 1). One of those principles is that authorities' actions will be consistent with maintaining common international standards and will not roll back regulatory reforms or compromise the underlying objectives of existing international standards.

### **Box 1: FSB Principles that underpin the official sector response to COVID-19<sup>2</sup>**

1. Authorities will, individually and collectively through the FSB and standard-setting bodies (SSBs), monitor and share information on a timely basis to assess and address financial stability risks from COVID-19, so as to maximise the benefit of a global policy response.
2. Authorities recognise, and will make use of, the flexibility built into existing financial standards – including through the use of firm-specific and macroprudential buffers – to sustain the supply of financing to the real economy, to support market functioning and to accommodate robust business continuity planning.

<sup>1</sup> See *COVID-19 pandemic: Financial stability implications and policy measures taken – Report to the G20* (July 2020) and *COVID-19 pandemic: Financial stability impact and policy responses* (November 2020).

<sup>2</sup> See *COVID-19 pandemic: Financial stability implications and policy measures taken* (April 2020).

3. The FSB, SSBs and authorities will continue to seek opportunities to temporarily reduce operational burdens on firms and authorities, so as to assist them in focusing on COVID-19 response. This includes, for instance, delaying implementation deadlines, reprioritising timetables for initiatives in other policy areas, or providing flexibility in technical compliance rules.
4. Authorities' actions will be consistent with maintaining common international standards, given that these provide the resilience needed to sustain lending to the real economy, and preserve an international level playing field. Such actions will not roll back regulatory reforms or compromise the underlying objectives of existing international standards.
5. Authorities will coordinate through the FSB and SSBs the future timely unwinding of the temporary measures taken, to assist in returning financial conditions and firms' operations to normal in a smooth and consistent manner and to maintain financial stability in the longer term.

**The FSB, working with the SSBs, is monitoring the use of flexibility and consistency of jurisdictions' COVID-19 policy responses with international standards.**

- Acknowledging the extraordinary circumstances, the FSB and SSBs are coordinating their responses to enable firms and authorities to focus their resources on COVID-19 response. This includes extending deadlines for implementation of reforms, where this can be done in a way consistent with the reforms' underlying objectives (see Table 1).
- The FSB and SSBs have also reprioritised, and in some cases, delayed implementation monitoring initiatives that were to begin in 2020 to maximise the value of their work during the pandemic and to use members' resources effectively.<sup>3</sup>

**Table 1: Changes in the timelines of financial regulatory reforms in light of COVID-19**

SSB	Area	Change (with weblinks to the press releases)
BCBS	Basel III	<u>Extended the implementation date of the final Basel III framework by one year, to 1 January 2023</u>
BCBS	Basel III	<u>Clarified the treatment of payment moratoria and public guarantees in the context of risk based capital requirements, and agreed to amend its transitional arrangements for the regulatory capital treatment of expected credit loss accounting</u>
BCBS	Basel III	<u>Postponed implementation of revised G-SIB framework by one year, to 2022</u>
BCBS- IOSCO	OTC derivatives	<u>Deferred by one year the two final implementation phases of the framework for margin requirements for non-centrally cleared derivatives</u>
FSB	NBFI	<u>Extended the implementation timelines for minimum haircut standards for non-centrally cleared securities financing transactions</u>
IAIS	Ending TBTF	<u>Deferred by one year the 2020 Global Monitoring Exercise (GME) of the Holistic Framework for systemic risk in the insurance sector</u>

<sup>3</sup> See <https://www.fsb.org/work-of-the-fsb/addressing-financial-stability-risks-of-covid-19/>.

## 2. Implementation of reforms

### 2.1. Building resilient financial institutions

**Regulatory adoption of several core Basel III elements has generally been timely to date, but there are delays in some FSB jurisdictions in implementing other Basel III standards.**

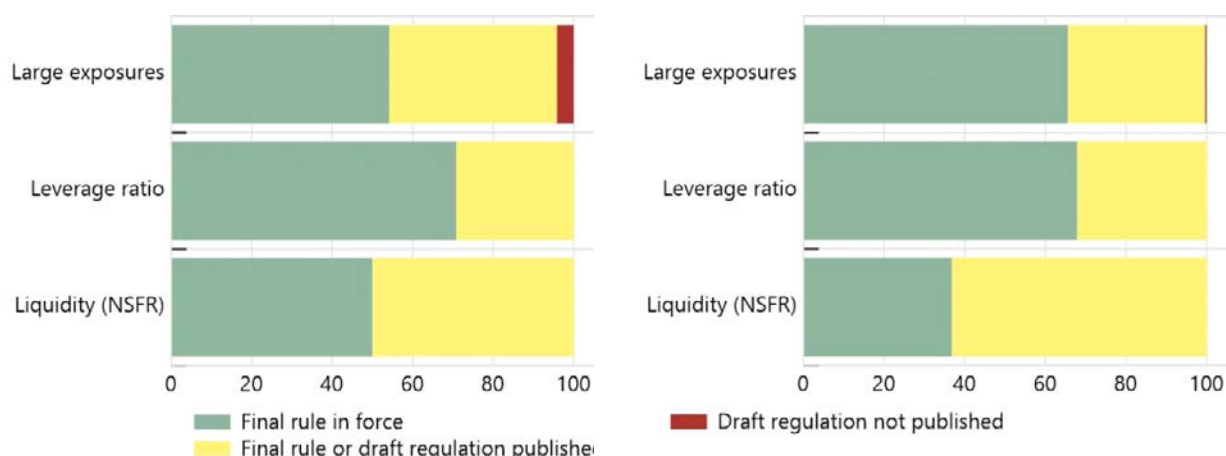
- The leverage ratio,<sup>4</sup> Net Stable Funding Ratio (NSFR), and the supervisory framework for measuring and controlling large exposures (LEX) are not yet in place in all jurisdictions (see Graph 1), though there was some progress in implementing the LEX framework over the past year. There is still limited progress in the implementation of other Basel III standards whose deadline has passed.<sup>5</sup> The BCBS is monitoring implementation closely and will consider additional measures to improve timeliness.

#### Implementation is behind schedule on certain Basel III standards

Graph 1

As percent of number of FSB jurisdictions<sup>1</sup>

As percent of market size<sup>2</sup>



<sup>1</sup> The five EU members of the FSB are presented as separate jurisdictions. <sup>2</sup> Market size based on assets of banks domiciled in each FSB jurisdiction at end-2018.

- Implementation of the finalised Basel III reforms, which were agreed in December 2017 and will take effect from January 2023, has started but is still at a very early stage.

**Recent assessments of consistency of implementation with Basel standards are positive.**

- In 2018 the BCBS began to assess the consistency of implementation of the NSFR and the large exposures framework. The 10 FSB jurisdictions assessed so far were found to be compliant with both standards.

<sup>4</sup> Based on the existing (2014) exposure definition. Implementation based on the revised exposure definition, agreed in December 2017, is due by 2023. Eleven FSB jurisdictions have issued draft or final rules for the leverage ratio based on the 2017 definition.

<sup>5</sup> They include: interest rate risk in the banking book; standardised approach for counterparty credit risk exposures; capital requirements for bank exposures to central counterparties, equity investments in funds and TLAC holdings; margin requirements for non-centrally cleared derivatives; and the revised Pillar 3 framework.

**Authorities in many jurisdictions have taken regulatory and supervisory measures to alleviate the economic impact of COVID-19 on the banking system. The large majority of these measures make use of the flexibility embedded in the Basel framework.**

- Most measures taken make use of the flexibility in the current Basel III framework or in forthcoming Basel standards, such as in the form of system-wide and firm-specific buffers. These measures are mainly capital or liquidity-related, and aim to support banks' ability to continue lending and meet their liquidity needs.
- There have been a few cases where individual measures went beyond the flexibility of the standards. Most of these are temporary, in order to respond to extreme financial conditions and to provide additional operational flexibility to financial institutions. Such measures include reducing certain credit risk capital, leverage ratio or liquidity requirements; and postponing the application of the LEX framework.

**Work is progressing to develop a global insurance capital standard.**

- The IAIS is developing a global risk-based Insurance Capital Standard (ICS) for internationally active insurance groups. In November 2019, the IAIS Executive Committee agreed on ICS version 2.0, which will be used for confidential reporting to supervisory colleges in a five-year monitoring period.

**Authorities in some jurisdictions have introduced prohibitions or set supervisory expectations on compensation to address COVID-related risks.**

- The FSB *Principles* and *Standards for Sound Compensation Practices* (P&S) are implemented for all banks considered significant for P&S purposes. Fewer jurisdictions have implemented the P&S for the insurance and asset management sectors.
- To ensure that banks preserve the capital needed to support lending, authorities in some jurisdictions have taken compensation-related measures. Consistent with the expectation in the P&S that compensation actions are risk-aligned, several jurisdictions have also asked banks to consider prudential risks when taking compensation actions.

## 2.2. Ending too-big-to-fail

**Implementation of the policy framework for global systemically important financial institutions has advanced the most for G-SIBs.**

- Implementation of Higher Loss Absorbency as well as of reporting and disclosure requirements for G-SIBs is proceeding on a timely basis.
- The level of compliance with the BCBS *Principles on risk data aggregation and risk reporting* is still to be improved. Banks' efforts to implement the Principles have resulted in tangible progress in several key areas, including governance, risk data aggregation capabilities and reporting practices.
- Implementation of the Total Loss-Absorbing Capacity (TLAC) Standard continues. All relevant G-SIBs already meet the final 2022 minimum external TLAC requirements, and

disclosure of external TLAC levels has improved over the past year. There is, however, little information available to market participants on TLAC distribution within groups.

**Substantial work remains to operationalise resolution plans for systemically important banks and implement effective resolution regimes for insurance companies and CCPs.**

- Almost all G-SIB home and key host jurisdictions have in place comprehensive bank resolution regimes that align with the FSB *Key Attributes of Effective Resolution Regimes for Financial Institutions* (see Graph 2). However, implementation of the Key Attributes is still incomplete in some FSB jurisdictions. The powers most often lacking are bail-in and to impose a temporary stay on the exercise of early termination rights.

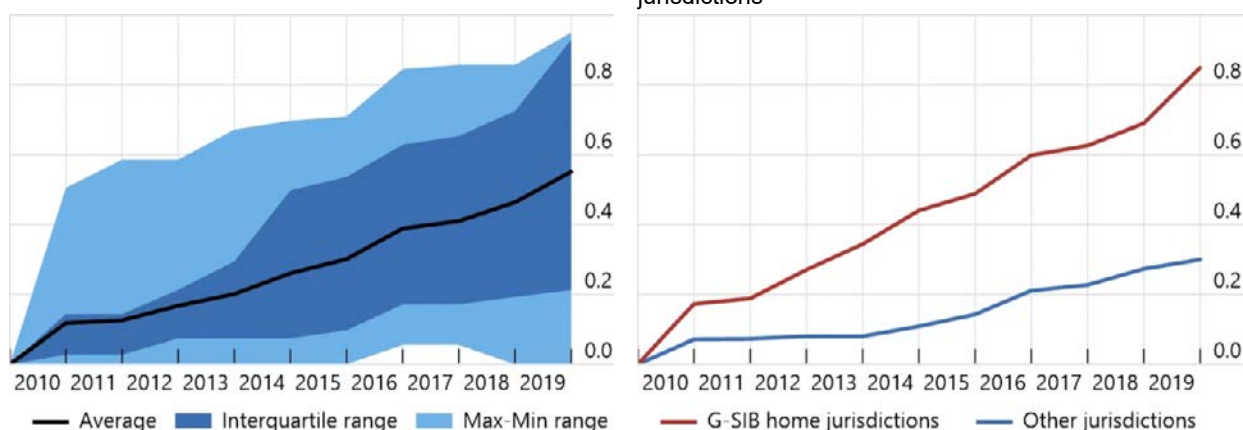
**Progress of FSB jurisdictions in the implementation of resolution reforms**

Resolution reform index (RRI)

**Graph 2**

RRI across FSB jurisdictions

Simple average of RRI scores for G-SIB home and other jurisdictions



Source: FSB consultative report on evaluation of the effects of too-big-to-fail reforms. The RRI illustrates the progress made by FSB jurisdictions in adopting comprehensive bank resolution reforms, and captures a mixture of legislative and regulatory reforms and policy guidance. It has values between 0 and 1, where 0 represents no implementation and 1 represents full implementation of a reform.

- Crisis management groups (CMGs) continue to make progress on G-SIB resolvability. Resolution planning work by firms and authorities focuses in particular on the allocation of TLAC resources within groups; the estimation of liquidity needs in resolution and corresponding funding plans; operational continuity; and continuity of access to FMIs.
- Implementation of resolution reforms is less advanced in the insurance sector, with no significant reforms reported over the past year.
- Jurisdictions are still in the process of developing resolution regimes and cross-border cooperation arrangements for CCPs. Authorities have established CMGs for all CCPs identified as systemically important in more than one jurisdiction (S>1), with the exception of one CCP that was recently added to the group.<sup>6</sup> Most authorities have commenced resolution planning for S>1 CCPs, but statutory resolution regimes for CCPs need to be completed in four of the 10 jurisdictions with such CCPs.

<sup>6</sup> These CCPs were reported as systemically important in more than one jurisdiction by agreement between home and host authorities on the basis of a set of criteria set out in the FSB *Guidance on CCP Resolution and Resolution Planning* (July 2017).

**The powers and capabilities established over time to implement the Key Attributes have served authorities well during these times of stress.**

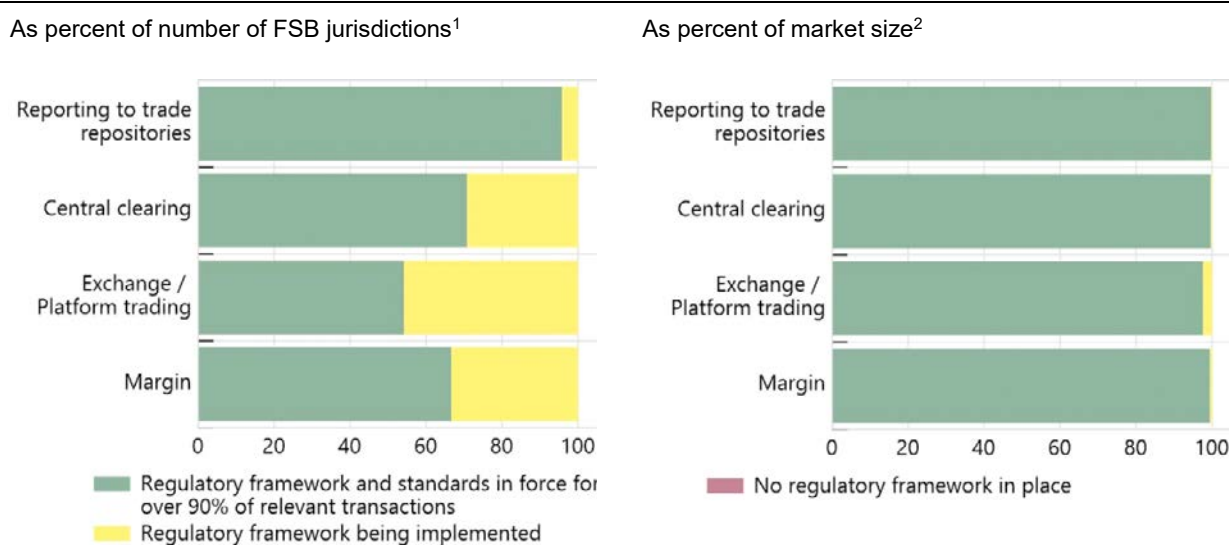
- Resolution authorities have continued recovery and resolution planning consistent with the Key Attributes. CMG coordination and information capabilities have supported the monitoring of liquidity positions and more frequent and granular sharing of information.
- Some authorities have taken actions to alleviate the burden on firms for reporting and for meeting certain requirements regarding resolution capabilities.

### 2.3. Making derivatives markets safer

**Overall implementation of the G20’s OTC derivatives reform agenda is well-advanced, though progress since 2019 has been very limited (see Graph 3).**

**Implementation is most advanced in the largest OTC derivatives markets**

**Graph 3**



<sup>1</sup> The five EU members of the FSB are presented as separate jurisdictions. <sup>2</sup> Market size is proxied by single currency interest rate derivatives’ gross turnover in April 2019 (Bank for International Settlements (BIS) 2019 Triennial Survey).

- There has been no increase over the past year in the number of FSB jurisdictions with comprehensive<sup>7</sup> trade reporting requirements, central clearing frameworks, margin requirements for non-centrally cleared derivatives (NCCDs), or platform trading frameworks. Final capital requirements for NCCDs are in force for eight jurisdictions (one more since 2019) and were adopted (but not yet in force) by two other jurisdictions.
- Authorities in some jurisdictions where requirements were already in force have expanded the scope of trade reporting and central clearing requirements, removed barriers to data sharing, and took steps to strengthen the resilience of CCPs.

<sup>7</sup> For the purposes of this sub-section, “comprehensive” means that the standards, criteria or requirements apply to over 90% of OTC derivatives transactions as estimated by that jurisdiction. In the case of margin requirements, “comprehensive” means that the standards, criteria or requirements in force in a jurisdiction would have to apply to over 90% of transactions covered, consistent with the BCBS–IOSCO Working Group on Margin Requirements phase in periods.



## Many jurisdictions took regulatory or supervisory measures in response to COVID-19.

- To alleviate operational burdens, some jurisdictions relaxed trade reporting requirements. Other jurisdictions strengthened the supervision of and engagement with FMIs, to assess their operational readiness to different risk types. As a response to heightened volatility and margin increases during the March market turmoil, some jurisdictions issued recommendations regarding managing and mitigating procyclicality.

## Work is ongoing at the international level to enhance CCP resilience, recovery and resolution, and to make trade reporting truly effective.

- The FSB, in close collaboration with CPMI-IOSCO, continues its work to support CCP resolution authorities and CMGs in assessing the adequacy of financial resources for CCP resolution.<sup>8</sup> CPMI-IOSCO outlined issues that CCPs should consider regarding default management auction processes, identified practices that CCPs could consider to address these issues, and is working with the industry to make progress on some of these issues.<sup>9</sup>
- The FSB has transferred the governance of various OTC derivatives identifiers to the Regulatory Oversight Committee as of October 2020.<sup>10</sup> International work streams continue to focus on globally harmonised derivatives identifiers and data elements to facilitate the effective use of trade reporting data.

## 2.4. Enhancing resilience of non-bank financial intermediation

### Implementation of NBFIs reforms continues but it is at an earlier stage than other reforms.

- Adoption of IOSCO recommendations to reduce the run risk of money market funds (MMFs) is most advanced in 16 FSB jurisdictions (see Graph 4). The fair value approach for valuation of MMF portfolios is adopted in 23 jurisdictions (two more since 2019). Progress in liquidity management is less advanced, with 16 jurisdictions having reforms in effect (two more since 2019). IOSCO's review of the consistency of implementation finds that the policy measures in nine jurisdictions that represent approximately 95% of global net MMF assets are generally in line with the IOSCO recommendations.<sup>11</sup>
- Adoption of the IOSCO recommendations on incentive alignment approaches for securitisation has been completed by 15 FSB jurisdictions (see Graph 5).
- Implementation of the FSB policy recommendations for securities financing transactions continues to face significant delays in some jurisdictions. Work is underway

---

<sup>8</sup> See the FSB *Guidance on financial resources to support CCP resolution and on the treatment of CCP equity in resolution* (November 2020).

<sup>9</sup> See *Central counterparty default management auctions – Issues for consideration* (June 2020) and *Cover note to the CPMI-IOSCO report on CCP auctions* (June 2020).

<sup>10</sup> See the FSB press release on the *LEI ROC to become governance body for OTC derivatives identifiers* (25 September 2020).

<sup>11</sup> See the IOSCO *Level 2 Peer Review of Regulation of Money Market Funds* (November 2020).

to adopt standards and processes on global securities financing data collection and aggregation.

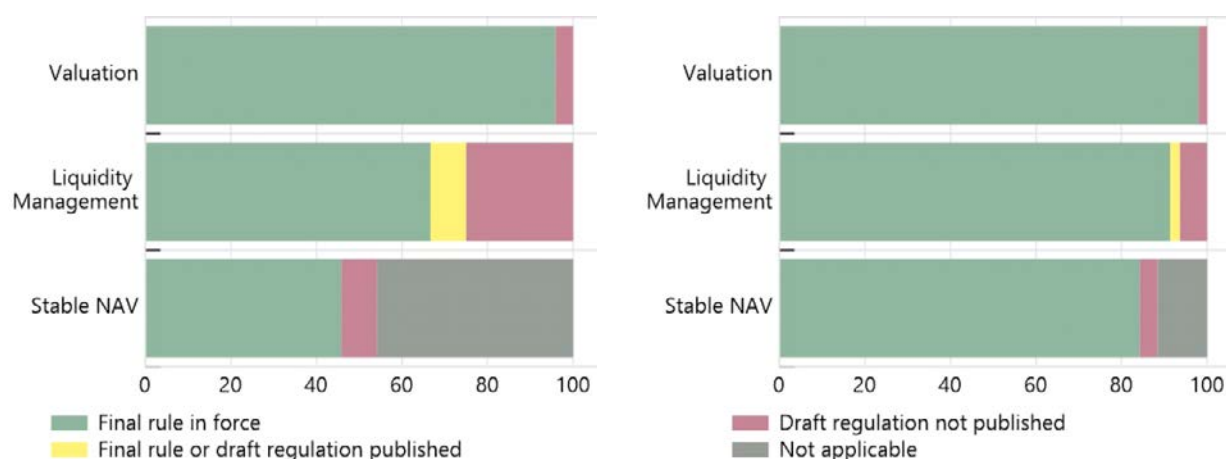
- Implementation of the FSB and IOSCO recommendations to address structural vulnerabilities from liquidity and leverage in asset management activities is ongoing.

### Adoption is most advanced in the largest MMF markets

Graph 4

As percent of number of FSB jurisdictions<sup>1</sup>

As percent of market size<sup>2</sup>



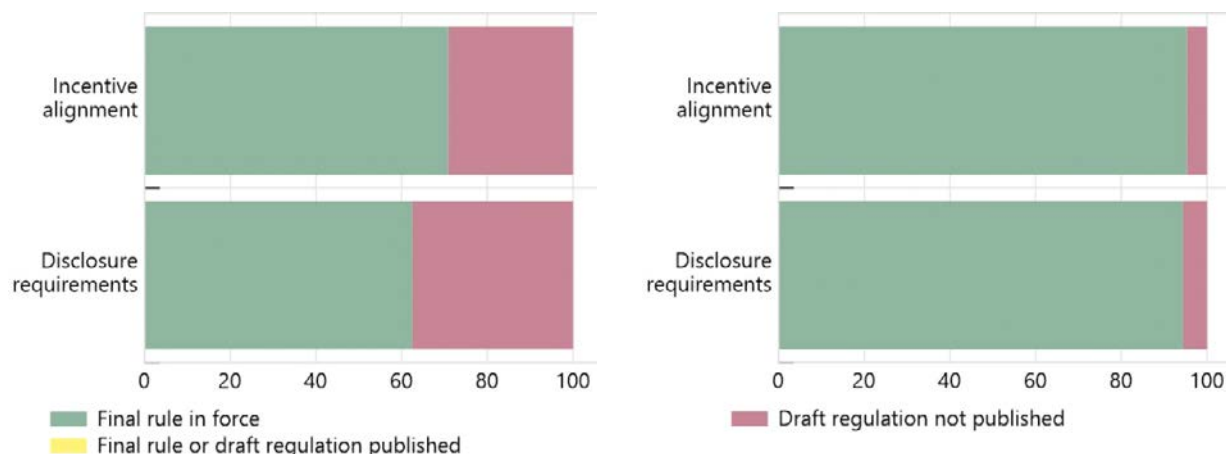
<sup>1</sup> The five EU members of the FSB are presented as separate jurisdictions. <sup>2</sup> Market size based on assets under management in FSB jurisdictions at end-2018.

### Adoption of incentive alignment reforms in securitisation is uneven

Graph 5

As percent of number of FSB jurisdictions<sup>1</sup>

As percent of market size<sup>2</sup>



<sup>1</sup> The five EU members of the FSB are presented as separate jurisdictions. <sup>2</sup> Market size based on value of securitisation issuance (collateralised debt obligations, mortgage-backed securities and asset-backed securities) in FSB jurisdictions during 2014.

### Authorities have taken a number of measures relating to funds to respond to COVID-19.

- Jurisdictions report enhanced monitoring of investment funds' liquidity and redemptions; issuance of additional guidance; relaxation of certain regulatory thresholds (e.g. liquidity thresholds, borrowing limits and disclosure requirements); use of stress testing; and requirements for notification on the use of certain liquidity management tools.



### 3. Effects of reforms

- Regulatory reforms have been an important driver of change in the global financial system. With the main elements of reforms agreed, the FSB and SSBs are focused on evaluating their effects. The objective is to assess whether reforms are achieving their intended outcomes and help identify any material unintended consequences that may have to be addressed without compromising on the agreed level of resilience.
- This section discusses aspects of the resilience of the global financial system during the COVID-19 shock that relate to the G20 reforms. It also presents the main findings of the FSB evaluation of the effects of TBTF reforms for SIBs.<sup>12</sup>

#### 3.1. Financial system resilience during the COVID-19 shock

**The global financial system entered the crisis more resilient and better placed to sustain financing to the real economy as a result of the G20 regulatory reforms in the aftermath of the 2008 global financial crisis.**

- In contrast to the 2008 financial crisis, the COVID-19 shock originated outside the financial system. The pandemic and government containment measures led to a sudden sharp pullback in real economic activity and placed the financial system under strain.
- Greater resilience of major banks at the core of the financial system has allowed the system largely to absorb rather than amplify the macroeconomic shock. Higher capital and liquidity buffers, combined with authorities' support measures, have enabled banks to continue lending, thereby supporting economic recovery.
- FMIs, particularly CCPs, have functioned well, despite challenging financial and operational conditions.

**The market turmoil has reinforced the need to better understand the nature of liquidity risks in the financial system and vulnerabilities in non-bank financial intermediation.**

- Key funding markets experienced acute stress in March. Amid extreme demand for cash and near cash assets, market activity and price discovery was impaired, including in some markets that are usually highly liquid.
- Since then, financial market strains have eased on the back of decisive policy action. Over the past few months, funding markets have continued to recover from the most severe stress since the 2008 global financial crisis. Credit market conditions have eased, while corporate bond issuance has increased compared to previous years.

---

<sup>12</sup> See the FSB [\*Evaluation of too-big-to-fail reforms: consultation report\*](#) (June 2020).

- The March turmoil has underscored the need to strengthen resilience in the NBFIs sector.<sup>13</sup> The episode has highlighted issues associated with particular market activities and mechanisms that may have caused liquidity imbalances and propagated stress. These include: significant outflows from non-government MMFs; similar dynamics, albeit less intense and widespread, in specific types of open-ended funds; redistribution of liquidity from margin calls; the willingness and capacity of dealers to intermediate in core funding markets; and the drivers of dislocations in key government bond markets, including the role of leverage in amplifying the stress. The turmoil also highlighted the increased importance of interconnectedness – both within the NBFIs sector and with banks – and of system-wide liquidity conditions for the resilience of the financial system.
- The FSB will coordinate the international regulatory community’s assessment of identified vulnerabilities and the appropriate financial policy response, working closely with SSBs and member authorities.

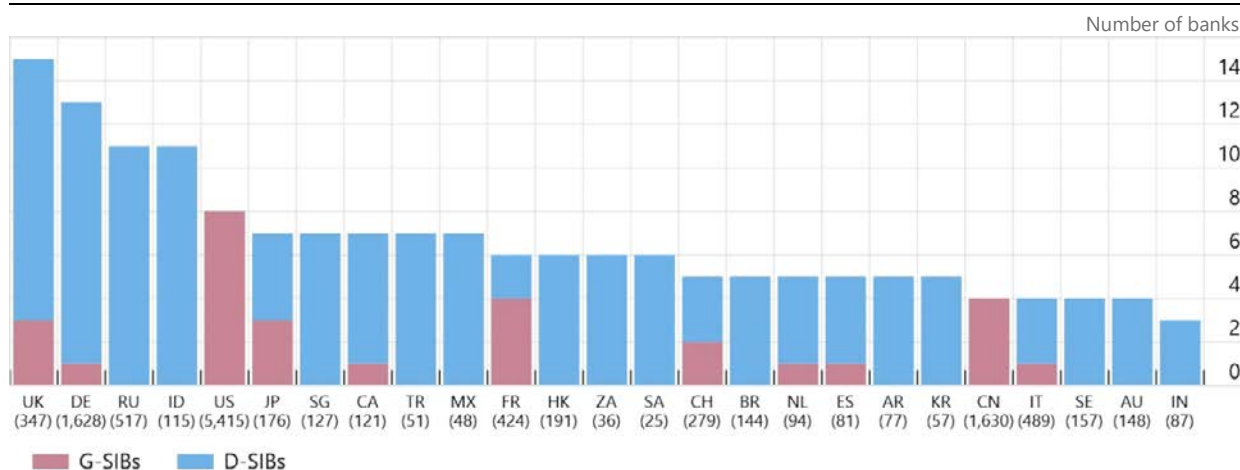
### 3.2. Evaluation of the effects of TBTF reforms

The evaluation examines the extent to which the reforms are reducing the systemic and moral hazard risks associated with SIBs and their broader effects on the financial system.

- The reforms being evaluated are: (i) standards for additional loss absorbency through capital surcharges and 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 bank resolvability. SIBs represent an important part of the banking sector in all FSB jurisdictions (see Graph 6).

**Number of SIBs by jurisdiction as at end-2018**

**Graph 6**



Notes: The total number of banks in each jurisdiction is shown in parenthesis below the country label. Jurisdictions are ordered by the number of SIBs in the jurisdiction. China and the US have not designated D-SIBs. A bank that is a D-SIB in one jurisdiction may be a subsidiary of a G-SIB in another jurisdiction.

Source: FSB TBTF evaluation.

- It is not always possible to attribute observed outcomes to the TBTF reforms. Some TBTF reforms were only recently implemented; other reforms have been implemented

<sup>13</sup> See the FSB’s *Holistic Review of the March Market Turmoil* (November 2020).

in parallel; and low interest rates and unconventional monetary policies may have affected the evolution of key indicators. Because systemic risk and moral hazard are not directly observable, the evaluation focuses on the mechanisms through which the reforms are expected to operate. These include changes in the behaviour of banks due to the prospect of effective resolution rather than bailout, together with capital surcharges, enhanced supervision and changes in how market participants price bank risks and exert market discipline.

### **TBTF reforms have made banks more resilient and resolvable.**

- SIBs are better capitalised and have built up significant loss-absorbing capacity. The capital ratios of G-SIBs have doubled since 2011. Their profitability has fallen, consistent with a reduction in funding subsidies and risk-taking as a result of the reforms. However, G-SIBs continue to have complex structures.
- Significant progress has been made in establishing resolution regimes and enhancing the resolvability of banks (see section 2.2). These reforms give authorities more options for dealing with banks in stress. Resolution planning, together with enhanced supervision, have significantly improved the operational capabilities of banks and authorities, as well as the accuracy and detail of the information available to them.

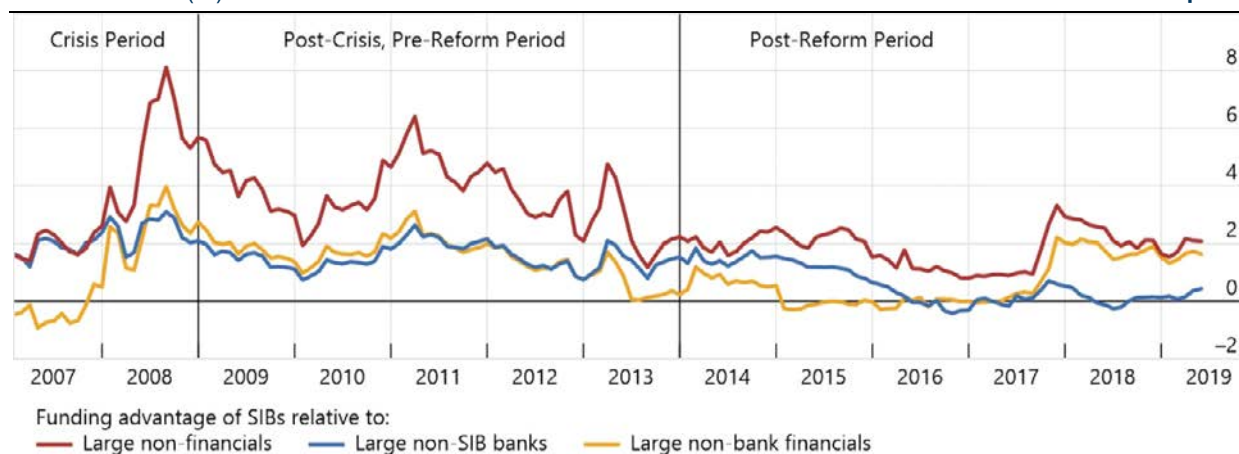
### **Evidence from market prices and credit ratings suggest that these reforms are seen as credible by market participants.**

- The estimated funding cost advantages of SIBs have fallen since the implementation of reforms, but remain at least as high as they were before the 2008 financial crisis (see Graph 7). Funding cost advantages tend to be lower in jurisdictions that have implemented resolution reforms more fully.

#### **Funding cost advantage of SIBs in the global portfolio, factor pricing approach**

Portfolio returns (%)

**Graph 7**



Sources: FSB TBTF evaluation.

- The sensitivity of SIBs' credit default swap prices to their risk (as measured by expected default frequency) has increased since the 2008 crisis. TLAC-eligible debt yields suggest that investors are at least partially pricing in the risk of G-SIB failure and a

potential bail-in. The evolution of the price of structurally subordinated debt also suggests that market participants consider that resolution has become more credible.

- Credit rating agencies have removed the assumption of sovereign support in a number of FSB jurisdictions. Their base case in such jurisdictions is that unsecured creditors of a failing SIB will be bailed in, although they do not exclude the possibility of bailout.

### **The benefits of the reforms significantly outweigh the costs.**

- The evaluation assessed the TBTF reforms from the perspective of social costs and benefits, where the benefits are reduced probability and severity of financial crisis, and the costs arise via increases in the cost of bank credit. It also considered changes in bank competition, market structure, interconnectedness and the pricing of debt.
- Overall, the analysis suggests significant net benefits for society resulting from TBTF reforms. Observed changes suggest increases in resilience, no material increases in the costs of funding, and more market discipline.
- SIBs have lost domestic market share and market concentration has fallen. However, the supply of credit has not been materially affected by these changes in market structure. Financing for the economy has not fallen: following the introduction of TBTF reforms, aggregate credit and gross domestic product have grown at similar rates.
- Other potentially negative side effects, such as market fragmentation, have not been observed. Where SIBs have reduced their activities, other suppliers of financial services have stepped in. Market-based measures of systemic risk have fallen.

### **There are still gaps that need to be addressed.**

- Resolution of banks is a complex process, and some obstacles to resolvability remain. These involve TLAC implementation; resolution funding mechanisms; the valuation of bank assets in resolution; operational continuity and continuity of access to financial market infrastructure (especially CCPs); and cross-border coordination. The FSB is working to address these and encourage full implementation of the resolution reforms.
- State support for failing banks has continued. Only a few SIBs have been resolved in recent years, but public funds continue to be used to support small or medium-sized banks, even in jurisdictions with well-developed resolution frameworks.
- Supervisors, firms and markets have much better information than before the implementation of the reforms, but reporting and disclosures could still be improved.
- The application of the reforms to D-SIBs warrants further monitoring. D-SIBs are economically important and many of them operate across borders and are highly diverse and interconnected. However, compared to G-SIBs, relatively little information is published about D-SIBs' characteristics or the regulations to which they are subject.

## 4. Looking ahead

### **The real-life test of the pandemic bears important lessons for what has worked well...**

- International standards have helped build resilience over the past decade. The global financial system entered the pandemic better placed to sustain financing to the real economy as a result of the G20 reforms.
- The flexibility embedded in international standards (which are principles-based or have built-in options and buffers) is being used to respond decisively to the large external COVID-19 shock. The COVID-19 situation is still evolving, so there is a need to consider the consistency of policy responses with international standards in a dynamic way.

### **... while providing opportunities to identify areas where effectiveness could be improved.**

- The question of whether the flexibility provided by authorities is actually used by financial institutions may require particular attention and will inform discussions of future policy adjustments, including on the eventual exit from temporary measures.
- The extraordinary central bank interventions and policy measures taken in response to the financial market turmoil in March helped stabilise markets. They, however, raise issues for further consideration including on their longer-term consequences.
- More work is needed to assess interconnections in the global financial system, the nature of vulnerabilities in NBFIs in relation to the liquidity stress, and how central bank liquidity facilities have affected market conditions and market participant expectations.
- The FSB's holistic review and other work by the FSB and SSBs consider the implications of COVID-19 for regulatory and supervisory policies, including potential lessons learned for international standards. Areas of further work by the FSB and SSBs include buffer structure and usability for banks; policy proposals to enhance the resilience of MMFs; margining practices in derivatives markets; liquidity risk and its management in open-ended funds; liquidity, structure and resilience in core bond markets; potential sources of procyclicality relating to financial regulations; and crisis management frameworks.

### **The pandemic also underscores the critical importance of global regulatory cooperation.**

- The COVID experience has demonstrated once again how interconnected the global financial system is, and how market reactions and policies have cross-border effects.
- Authorities worked together in developing the G20 reforms, recognising the benefits of international standards in promoting confidence in the financial system and the resumption of cross-border financial activity in the aftermath of the 2008 crisis. Maintaining this level of cooperation is critical, given the uncertainty about the evolution of the pandemic and the implications for economic activity and the shape of the recovery.
- The FSB and SSBs will continue to promote approaches to deepen international cooperation, coordination and information sharing on the COVID-19 response, underpinned by the FSB principles.

## Annex 1: Monitoring and evaluations forward planner

Reform area	Body	Monitoring and evaluation activity	Expected publication date	
Building resilient financial institutions	FSB	<ul style="list-style-type: none"> <li>Country peer review of the UK (compensation practices)</li> </ul>	<ul style="list-style-type: none"> <li>2021Q1</li> </ul>	
	BCBS	<ul style="list-style-type: none"> <li><b>Evaluation of Basel III reforms</b></li> <li>Basel III monitoring report (semi-annual)</li> <li>Report on implementation of the Basel III regulatory reforms (annual)</li> <li>RCAP post-assessment follow-up reports (annual)</li> <li>Jurisdictional RCAP assessments of NSFR and LEX</li> <li>Progress report on adoption of the Basel regulatory framework (semi-annual)</li> </ul>	<ul style="list-style-type: none"> <li><b>Ongoing</b></li> <li>2021H1</li> <li>2021H2</li> <li>2021H1</li> <li>2020-2022</li> <li>2021H1</li> </ul>	
Ending too-big-to-fail	FSB	<ul style="list-style-type: none"> <li><b>Evaluation of the effects of too-big-to-fail reforms</b></li> <li>Resolution progress report</li> </ul>	<ul style="list-style-type: none"> <li><b>2021H1</b></li> <li>2021H2</li> </ul>	
	BCBS	<ul style="list-style-type: none"> <li><b>Evaluation of the G-SIB framework</b></li> </ul>	<ul style="list-style-type: none"> <li><b>2021H1</b></li> </ul>	
	IAIS	<ul style="list-style-type: none"> <li>Baseline assessment of implementation of the supervisory material from the Holistic Framework</li> <li>Targeted jurisdiction assessment of the supervisory material for the Holistic Framework</li> </ul>	<ul style="list-style-type: none"> <li>2021Q1</li> <li>2022Q4</li> </ul>	
Enhancing resilience of non-bank financial intermediation	FSB	<ul style="list-style-type: none"> <li>Global Monitoring Report on NBFIs 2020</li> </ul>	<ul style="list-style-type: none"> <li>2020Q4</li> </ul>	
	IOSCO	<ul style="list-style-type: none"> <li>Assessment of the consistency and effectiveness of IOSCO recommendations on liquidity risk management</li> </ul>	<ul style="list-style-type: none"> <li>2022</li> </ul>	
Making derivatives markets safer	FSB	<ul style="list-style-type: none"> <li>Monitoring note on OTC derivatives market reforms</li> <li>Country peer review of Indonesia (OTC derivatives)</li> </ul>	<ul style="list-style-type: none"> <li>2021H2</li> <li>2021Q1</li> </ul>	
	CPMI-IOSCO	<ul style="list-style-type: none"> <li>Implementation monitoring of the Principles for Financial Market Infrastructures (PFMI) – level 1</li> <li>PFMI – level 2 assessment reports (Turkey, EU)</li> <li>PFMI – level 3 assessment reports</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing</li> <li>Ongoing</li> <li>tbd</li> </ul>	
Other reform areas	FSB	<ul style="list-style-type: none"> <li><b>Evaluation of the effects of G20 reforms (topic tbd)</b></li> </ul>	<ul style="list-style-type: none"> <li><b>2021-22</b></li> </ul>	
		<ul style="list-style-type: none"> <li>Progress report on implementation of the recommendations in the second phase of the Data Gaps Initiative (by staff of the IMF and FSB Secretariat)</li> </ul>	<ul style="list-style-type: none"> <li>2021H2</li> </ul>	
	IOSCO	<ul style="list-style-type: none"> <li>Standards Implementation Monitoring for Principles Relating to the Regulator</li> </ul>	<ul style="list-style-type: none"> <li>2021</li> </ul>	
	IAIS	<ul style="list-style-type: none"> <li>Thematic review on business continuity plans</li> <li>Thematic peer review on Conduct of Business (Insurance Core Principle 19)</li> </ul>	<ul style="list-style-type: none"> <li>2021H1</li> <li>2021</li> </ul>	

## Annex 2: Sources of information

### Basel III

Implementation of Basel standards: A report to G20 Leaders on implementation of the Basel III regulatory reforms, November 2020 (BCBS)

Eighteenth progress report on adoption of the Basel regulatory framework, July 2020 (BCBS)

Basel III Monitoring Report, April 2020 (BCBS)

RCAP jurisdiction-level assessments of final Basel III regulations (BCBS)

RCAP assessments of the consistency of regulatory outcomes (BCBS)

### TBTF

2020 Resolution Report: “Be prepared”, November 2020 (FSB)

Evaluation of too-big-to-fail reforms: consultation report, June 2020 (FSB)

Progress in adopting the Principles for effective risk data aggregation and risk reporting, April 2020 (BCBS)

### Non-bank financial intermediation

Level 2 Peer Review of Regulation of Money Market Funds, November 2020 (IOSCO).

Global Monitoring Report on Non-Bank Financial Intermediation 2019, January 2020 (FSB)

Update to the IOSCO Peer Review of Regulation of Money Market Funds, October 2019 (IOSCO)

Update to the IOSCO Peer Review of Implementation of Incentive Alignment Recommendations for Securitisation, October 2019 (IOSCO)

### OTC derivatives

OTC Derivatives Markets Reforms: Implementation Note, November 2020 (FSB)

Implementation monitoring of the Principles for Financial Market Infrastructures (CPMI-IOSCO)



## Abbreviations

BCBS	Basel Committee on Banking Supervision
BIS	Bank for International Settlements
CCPs	Central counterparties
CMGs	Crisis management groups
CPMI	Committee on Payments and Market Infrastructures
D-SIBs	Domestic systemically important banks
EU	European Union
FinTech	Financial Technology
FMI	Financial market infrastructure
FSB	Financial Stability Board
G-SIBs	Global systemically important banks
IAIS	International Association of Insurance Supervisors
ICS	International Capital Standard (IAIS)
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commissions
LCR	Liquidity Coverage Ratio (Basel III)
MMFs	Money market funds
NAV	Net asset value
NBFI	Non-bank financial intermediation
NCCDs	Non-centrally cleared derivatives
NSFR	Net Stable Funding Ratio (Basel III)
OTC	Over-the-counter (derivatives)
PFMI	Principles for Financial Market Infrastructures (CPMI-IOSCO)
RCAP	Regulatory Consistency Assessment Programme (BCBS)
SIBs	Systemically important banks
SSBs	Standard-setting bodies
TBTF	Too-big-to-fail
TLAC	Total Loss-Absorbing Capacity (FSB)
TRs	Trade repositories