



Special Series on COVID-19

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Strengthening Regulatory Reporting and Supervisory Analysis in Response to COVID-19

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This note discusses MCM views on practical regulatory reporting and supervisory analysis that can be introduced as part of an enhanced approach to supervision, specifically in relation to COVID-19. Borrowers across the world have been directly impacted by the pandemic, which in turn has a significant and direct impact on the credit quality of banks' balance sheets and risk profile. Support measures introduced by governments and the use of the inherent flexibility of regulatory frameworks have enhanced the ability of the financial system to support the economy. However, these measures have made it harder for supervisors to assess the financial soundness of banks and might create severe effects when supporting measures are withdrawn. In this context of heightened risk—and the reduced ability to undertake in-depth onsite¹ examinations—supervisors should be enhancing data collection to strengthen their financial and risk analysis. This note complements MCM's advice on regulatory responses and to supervisory actions and priorities.²

INTRODUCTION

Accurate and timely regulatory reporting is essential for supervisors to perform effective supervision, monitor the performance of banks, and identify emerging risk. This is particularly the case in this period where: (i) extraordinary measures have been implemented; and (ii) in many jurisdictions, onsite examinations have been suspended.³ Governments around the world have implemented policies (such as loan moratoria, loan guarantees, property rent freezes, and foreclosure restrictions) to help mitigate the economic impact of the pandemic. In addition, supervisors have encouraged banks to use the inherent

¹ Onsite supervision activities are those undertaken by supervisors at the supervised institutions' premises and generally involve investigation of risk management, governance and control frameworks.

² <https://www.imf.org/en/Publications/SPROLLs/covid19-special-notes#mfj>.

³ The IMF published a joint paper with the World Bank providing guidance on regulation and supervision. The paper provided a set of high-level recommendations that can guide national regulatory and supervisory responses to the COVID-19 pandemic and offers an overview of measures taken across jurisdictions to date. See - <https://www.imf.org/en/Publications/Miscellaneous-Publication-Other/Issues/2020/05/20/COVID-19-The-Regulatory-and-Supervisory-Implications-for-the-Banking-Sector-49452>.

flexibility of regulatory frameworks (e.g., supervisors have encouraged banks to use buffers, clarified the asset treatment under loan moratoria, and postponed initiatives that could impact the operational capacity of banks, such as the introduction of new regulation). These measures should help banks continue to support the economy and allow temporary relief for borrowers but stress on asset quality and the financial position of banks are expected to manifest. Thus, while supervisors could consider postponing nonessential, resource intensive activities that might be less relevant in the current context, such as introducing complex regulations **or routine inspections not related with the main risks amplified by the pandemic**, close monitoring of credit, solvency and liquidity (backed by sound regulatory reporting) should be a priority. Supervisors need to strengthen financial and risk analysis to identify emerging risks and threats to financial soundness caused by the pandemic, particularly considering that the need for social distancing has reduced and, in many cases, halted onsite supervision.

The objective of this note is to discuss practical enhancements to regulatory reporting that allow supervisors to strengthen supervision and improve the assessment of COVID-19-related risks. IMF technical assistance and surveillance work revealed that some members with less developed supervisory capacity did not have enough information to monitor the financial system and this note provides practical guidance to these countries, listing some essential baseline information that all supervisors should collect, and additional information that would be useful for the ongoing assessment of the financial soundness of supervised institutions during the COVID-19 pandemic. Supervisory reporting—both in content and frequency—needs to be proportional to the nature of the information requested, the risk profile and systemic importance of the banks, and the complexity of the banking system.⁴ The note does not intend to cover all reporting that should be required of globally systemic or complex institutions, it rather sets out priority areas for supervisors to monitor, and recommends specific metrics and measures supervisors need to integrate into their analysis. Annex 1 sets out an illustrative example of how information could be presented for analysis and reporting by supervisors.

SUPERVISION

Supervisors need to enact innovative solutions to maintain adequate supervisory intensity during the pandemic. In many jurisdictions, onsite examinations have been suspended and staff are working from home. Financial institutions they supervise have also implemented modified work processes, having a profound impact on governance arrangements, risk management and controls. In addition, supporting measures and the uncertainty generated by the pandemic have brought new challenges for the assessment of financial institutions. In this context, supervisors should be seeking ways to enhance financial and risk analysis and enact innovative solutions to maintain supervisory intensity and new ways to interact with financial institutions⁵. For example: conducting virtual onsite examinations; virtual meetings with boards of directors and senior management; and obtaining internal and external audit reports and board reporting. While these measures cannot fully replicate the benefit of interacting face-to-face with supervised institutions and their Boards (and as such should not in any way be seen as a replacement for actually undertaking onsite examinations where supervisors are able to safely do so), they can complement regulatory reporting and provide an insight into the efficacy of an institutions' risk management and controls. It is also important to undertake more frequent and in-depth consultations with other supervisory agencies (domestic and foreign)

⁴ See [Core Principles for effective banking supervision](#), Principle 10: supervisory reporting.

⁵ In instances where onsite examinations did not stop, or have restarted, the enhancement of reporting and analysis is still important as a means of identifying emerging risks and threats to financial soundness caused by the pandemic.

and other financial sector stakeholders (such as the audit profession) to ensure effective exchange of information and counteract potential fragmentation in risk analyses.⁶

CREDIT RISK

The main focus of supervisors should be to identify early risks in credit exposures owing to the nature of the economic shocks associated with the pandemic. The sharp and potentially protracted decrease in economic activity and loss of income put pressures on banking books. Loan repayment moratoria and other support measures provide short-term relief for borrowers but add to the uncertainty about the valuation of loans and the future financial performance of banks. To mitigate the risks to financial stability, supervisors should implement enhanced monitoring of the performance of bank exposures.⁷ Granular information about the composition and performance of the banking book is needed to identify potential deterioration in asset quality (see the table below for suggested indicators).

Additional information collected and analyzed should take into account both mandated government measures, with the inherent certainty and uniformity of structure and timing, and other measures taken at the initiative of commercial banks such as restructuring of loans (unrelated to or in addition to government measures). In both situations, information on the volume of loans that will be coming off payment or other support over time will be important for effective risk assessment. And as banks' may have made specific arrangements with individual borrowers, the timing of removal of special arrangements may vary across the loan book and potentially impact the formal recognition of loan impairment at certain points in time. This information could be complemented with data on total exposures that were eligible for support measures, thereby assisting supervisors monitor the uptake of support policies and identify the intensity of credit concerns among borrowers, especially under a scenario of a more persistent economic downturn. In addition, there is a risk that measures implemented at the discretion of commercial banks for individual borrowers, may continue for a protracted length of time, creating uncertainty for both the borrowers and the banks' loan valuation for an extended period, and as such supervisors need to have an understanding of the extent and functioning of these specific measures.

Baseline Credit Risk Information for Supervisors to Collect and Analyze in Relation to the Pandemic*	
Total loans granted payment moratoria by vintage of moratoria	Total Retail loans granted payment moratoria, by loan type / purpose
Total loans granted payment moratoria by asset classification	Total of Corporate and SME loans granted payment moratoria by sector
Total loans granted payment moratoria by Loan to Value ratio (LTV)	New loans (by type, sector, LTV, government guaranteed)
Total loans granted payment moratoria by arrears at initiation of moratoria	Large Exposures granted payment moratoria (by asset classification, loan type / purpose, sector, LTV)
Total restructured loans	Total government guaranteed loans

⁶ The IMF has issued guidance specifically pertaining to supervisory actions and priorities during the pandemic. See MCM Special Series on COVID-19: Supervisory Actions and Priorities in Response to the COVID-19 Pandemic Crisis <https://www.imf.org/en/Publications/SPROLLS/covid19-special-notes#mfj>.

⁷ In addition to the standard collection and assessment of credit quality data, which should include customer and sector-based concentration ratios; total provisions/total performing loans; loan restructuring data; granular information on provisioning; foreign exchange lending and hedging and the standard financial soundness indicators.

Total loans granted interest rate adjustment	Total loans granted payment moratoria by days to moratoria expiration
Loans eligible for payment moratoria (for comparison to loans granted moratoria)	

Monitoring asset quality will be key during this period given the expected increase in nonperforming loans (NPLs) and defaults. Public authorities and supervisors need to rely on accurate data to take appropriate decisions. In this context, tracking the quality of the loan portfolio will be important for supervisors to ensure banks are provisioning accurately and prudently and that banks' capital ratios reflect their actual solvency conditions. International standards-setters⁸ have clarified that loan classification and provisioning rules should not be relaxed, and it is critical to measure nonperforming loans and potential losses as accurately as possible. Banks should not be encouraged to hide losses (as this would lead to moral hazard and a lack of transparency). The status of the exposures (performing vs. nonperforming) and the level of provisioning should be reassessed on a regular basis to account for the evolution of the situation.⁹

It is important for supervisors to understand how relaxing loan classification and provisioning rules impact transparency and data reliability. Indeed, if such a relaxation occurs, financial statements and prudential ratios may no longer adequately reflect the financial situation of banks. Without reliable information, the market, the public and the authorities cannot distinguish weak banks from sound banks, which could lead to a wider loss of confidence in the banking system, with adverse implications for stability. Reliable data is also crucial if supervisors need to work with governments on actions to support the financial system, in cases when there is a longer-term impact with systemic implications. In reality, some jurisdictions have temporarily adjusted loan loss provisioning rules, for instance, freezing the classification status and the amount of provisions associated with loans that are eligible for moratoria. Supervisors in jurisdiction that have taken policies of this nature should emphasize that banks should continue to regularly assess the creditworthiness of borrowers and should collect detailed information that allows them to assess the solvency conditions of banks, irrespective of these temporary relief measures. As such, it is important for supervisors to understand in detail banks' credit position, taking into account the difference between loans under payment moratoria that are inherently strong and those loans that are inherently weak (which are unlikely to be performing once moratoria ceases); and the stressed or "real" credit position of banks in situations where provisioning and classification rules have been adjusted.

Given that the time horizon of the crisis is highly uncertain, supervisors should capture information that differentiates between short-term or longer-term impacts, which would require different supervisory and provisioning approaches. Supervisors will need to assess the situation where commercial banks extend moratoria to exposures that are unlikely to continue performing without support measures. Continued forbearance is a significant risk to a bank's financial position. Collection of data on the

⁸ Both the Basel Committee and the IFRS have issued press releases on this (BCBS <https://www.bis.org/press/p200403.htm>; IFRS <https://www.ifrs.org/news-and-events/2020/03/application-of-ifrs-9-in-the-light-of-the-coronavirus-uncertainty/>). The BCBS, however, adjusted transitional arrangements to smooth the impact of expected credit loss accounting approaches on regulatory capital.

⁹ On the treatment of loans, IMF staff has recommended that banks should work with affected borrowers and supervisors should encourage prudent loan restructuring where necessary to sectors or firms heavily impacted by the crisis <https://www.imf.org/-/media/Files/Publications/covid19-special-notes/enspecial-series-on-covid19banking-sector-regulatory-and-supervisory-response-to-deal-with-coronavir.ashx> The restructuring decision is a business decision by the bank based on the assessment of the borrower's capacity to pay under the new terms. Restructuring could take the form of renegotiated terms (maturity, interest rates, fees), moratorium policies or grace periods. These types of measures fall under loan restructuring, which is a standard practice when borrowers face temporary difficulties (due—among others—to natural disasters, economic shocks, and sectoral difficulties).

volume of loans coming off support and performing, compared to loans that have support extended, is useful information for supervisors to assess the extent of potential losses and the depth of the credit risk caused by the pandemic. Collection of additional data should facilitate this analysis, and include data on the stock of loans, and how the stock changes over time (flow). For example:

<p>Total nonperforming loans (NPL) by:</p> <ul style="list-style-type: none"> - Retail / Corporate / SME - Sector (for corporate and SME) - LTV - Vintage - Restructured / non-restructured 	<p>Total loan losses by:</p> <ul style="list-style-type: none"> - Retail / Corporate / SME - Sector (for corporate and SME) - LTV - Vintage - Restructured / non-restructured
<p>NPL to total loans in percent (NPL – stock and flow measures)</p>	<p>Loan losses to total loans in percent (stock and flow measures)</p>
<p>Total loans by arear time buckets (stock and flow measures), by:</p> <ul style="list-style-type: none"> - Retail / Corporate / SME - Sector (for corporate and SME) - LTV - Vintage 	<p>Restructured loans by:</p> <ul style="list-style-type: none"> - Retail / Corporate / SME - Sector (for corporate and SME) - LTV - Vintage
<p>Total provisions for loan losses (as a percentage of NPLs) (stock and flow measures) (broken down by NPL categories above)</p> <ul style="list-style-type: none"> - Specific provisions - General provisions 	<p>Restructured loans to total loans in percent (stock and flow measures) (broken down by the restructured loans categories above)</p>
<p>Loans by classification grades (e.g., pass, special mention, sub-standard, doubtful, loss etc.) (stock and flow measures)</p>	<p>Total loan growth by:</p> <ul style="list-style-type: none"> - Retail / Corporate / SME - Sector (for corporate and SME) - LTV

CAPITAL

The impact on capital adequacy and the potential need to use capital buffers should be assessed through detailed solvency analysis. The economic impact of the pandemic has the potential to cause material losses on banks' loan books and a reduction in income. This would reduce additions to capital through retained earning accumulation and in current circumstances could lead to net operating losses and a reduction in capital. A detailed assessment of banks' capital plans and forward-looking analysis of the adequacy of capital and the drivers of capital (both volume and quality), such as assessment of interest and non-interest income generation, and corresponding expenses, is always a key part of offsite analysis but, is particularly important during the pandemic. Undertaking detailed analysis to assess potential capital impact of the pandemic will assist supervisors determine supervisory action to mitigate financial stability risks. It is also important for supervisors to assess changes in the ability of banks to raise new capital, and the quality and cost of capital potentially raised, which may be negatively impacted in the current environment.

Supervisors should consider limiting imprudent capital distributions (e.g., dividend payouts, share buybacks, bonus payments).¹⁰ At the current stage, the potential impact of the COVID-19 pandemic on the financial sector is highly uncertain. Initial estimates, however, suggest that the potential impact may be substantially higher than the stress test scenarios that had been used by supervisory authorities to assess the capital adequacy of financial institutions. In this context, to ensure that the banking sector continues financing the real economy and has enough resources to absorb losses, supervisory authorities are encouraged to take actions to preserve banks' capital resources by temporarily suspending the distribution of capital (dividends, share buybacks and discretionary bonus payments) for all banks, until the impact of the pandemic becomes clearer.

Net interest income and potential change over time due to pandemic	Interest margin to gross income (in percent) and potential change over time due to pandemic
Net interest expense and potential change over time due to pandemic	Noninterest income to gross income (in percent) and potential change over time due to pandemic
Net interest margin	Noninterest expenses to gross income (in percent) and potential change over time due to pandemic
Expectations on return on assets (before tax, in percent)	Detailed breakdown of revenue (both interest and noninterest)
Expectations on return on equity (before tax, in percent)	Detailed breakdown of operational expenditures

LIQUIDITY

Bank funding and liquidity positions could be disrupted as a result of the pandemic and may lead banks to experience stressed outflows. Economic and financial impacts of the COVID-19 pandemic may disrupt access to funding and increase the outflow of deposit and other liabilities. Guidance issued by global standards-setting bodies regarding liquidity during the pandemic encourages banks to use their liquidity buffers, if needed. For those jurisdictions that have implemented the Basel III liquidity framework, the Liquidity Coverage Ratio (LCR), the Net Stable Funding Ratio (NSFR) and the underlying information that allow their calculation, should be the immediate metrics supervisors use to monitor changes in liquidity position, and this should be analyzed on a much more frequent basis during the pandemic. In accordance with the LCR standard, banks may use their stock of high-quality liquid assets (HQLA) during a stress period, thereby falling below 100 percent (otherwise, maintaining the LCR at 100 percent under such circumstances could produce undue negative effects on the bank and other market participants). Supervisors should subsequently assess this situation and adjust their response depending on the magnitude and duration of the shortfall.

Enhanced supervisory reporting could be introduced, with increased frequency of reporting and interaction with banks on liquidity risk management. Potential measures to restore liquidity levels should be discussed and should be executed over a period of time considered appropriate to prevent additional stress on the banks and on the financial system as a whole. In addition to regulatory metrics noted above, tools such as contractual maturity mismatch, concentration of funding, available unencumbered assets and

¹⁰ The IMF has issued guidance specifically pertaining to capital buffers during the pandemic. Please see MCM Special Series on COVID-19: Restriction of Banks' Capital Distribution during the COVID-19 Pandemic (Dividends, Share Buybacks, and Bonuses) at <https://www.imf.org/en/Publications/SPROLLS/covid19-special-notes#mfp>.

LCR by significant currency are important for a more complete picture of the liquidity position of banks. Supervisors should also evaluate the available sources of funding, both in domestic and international markets. For example, trends in funding costs, renewal rates, margin calls or early termination warrant careful monitoring, as well as the use of central bank emergency funding relative to funds acquired from private sources.¹¹

MARKET AND INVESTMENT RISK

Whilst credit and liquidity risks may be at the forefront of thinking in relation to impacts of the pandemic, it is important to assess the impact on exchange rate revaluations and corporate and government bond investments. The economic impact of the pandemic has the potential to cause significant exchange rate revaluations, particularly in emerging markets. The pandemic will also undoubtedly increase the debt burden of most countries, and corporations, leading to potential rating downgrades and defaults. As such banks' exposures to foreign exchange risk and investments in government and corporate bonds will need to be analyzed using indicators such as forward FX rates and implied volatility of FX options, as well as equity and credit risk spreads, respectively. Information on these exposures would normally be collected as part of standard prudential reporting, but where it is not, supervisors should request detailed breakdowns of foreign exchange exposures and investments.

Financial sectors vary considerably in size and structure and therefore markets critical to the maintenance of financial stability must be carefully assessed in each jurisdiction. The government securities market is perhaps the most important market to the functioning of the financial system because of its size, liquidity, and benchmark status as a risk-free asset. For open economies, with floating exchange rates, the FX spot market is also critical to facilitate capital flows and will also be more important in jurisdictions with large unhedged exchange rate exposures, with high exchange rate pass through to domestic prices. Other markets supervisors may want to examine commercial paper, longer-term private sector securities (e.g., asset-backed securities), repo, and FX derivative markets.¹²

OPERATIONAL RISK

The COVID-19 pandemic is a severe operational risk event, that is also increasing the inherent operational risk profile of supervised institutions. With many supervised institutions around the world working remotely during this pandemic (and the possibility of financial institutions continuing remote working at significantly higher levels than prior to the pandemic), there is an increased risk of information technology system failures and exposures to cyber-attacks.¹³ In addition, the changing work environment is likely to have created stress on financial institutions' operational systems, people, processes and controls, which increases inherent operational risk. As the pandemic comes to an end, the return to a new normal working environment will further disrupt the internal processes and systems developed during the pandemic. In short,

¹¹ The IMF published a note that provides broad guidance to country authorities regarding possible central bank responses to impairment in money, securities and foreign exchange (FX) markets that could emerge in the wake of financial disruptions including the COVID-19 pandemic. See – <https://www.imf.org/en/Publications/SPROLLS/covid19-special-notes#mfp>

¹² For further details please see IMF Special Series on Covid 19 Note on Central Bank Support to Financial Markets in the Coronavirus Pandemic. <https://www.imf.org/en/Publications/SPROLLS/covid19-special-notes#mfp>

¹³ The IMF has issued guidance specifically pertaining to cybersecurity risk and the pandemic. Please see MCM Special Series on COVID-19: Cybersecurity of Remote Work During the Pandemic at <https://www.imf.org/en/Publications/SPROLLS/covid19-special-notes#mfp>

there is likely to be a prolonged period of continuous change to the operating environment and in the way financial institutions address it, with change being a key driver of inherent operational risk.

Supervisors should ensure they are receiving sufficient data and information for the assessment of operational risk and the quality of operational risk management and controls. Supervisors should collect operational data on the number of staff working remotely in financial institutions, branch operation status, service availability metrics, and the corresponding increase or change in internal controls to mitigate the increased risk associated with these changed operating conditions. Information on information technology system upgrades or changes (traditional sources of operational risk) would be increasingly relevant as financial institutions adjust to the changing needs of their customers and the way products and services are delivered. Specifically, to the increased cybersecurity risk landscape, supervisors should ensure effective use of domestic and regional cyber-attack and response data, as well as encouraging supervised institutions to proactively share information on cybersecurity threats. And with financial institutions relying on their people to deliver the bulk of their services and the management and control of risk, the well-being of those people is paramount to the effective, safe and sound operation of their business. As such, data collected by supervisors on personnel changes (in particular, in risk management and control functions), role and organisation adjustments and staff wellbeing, will provide useful insight for supervisors in assessing inherent operational risk.

CONSOLIDATED SUPERVISION

The ability of supervisors to understand the consolidated financial position of banking groups is vital for effective supervision during any crisis. Host supervisors should be requesting additional information on local activities, as outlined in this paper, and also be in regular contact with home supervisors to understand the global position of their institutions. Home supervisors, likewise, need to be aware of the financial position of their supervised institutions' foreign operations (e.g., subsidiaries and branches). Non-bank businesses are also likely to suffer an adverse financial impact from the crisis. Accordingly, supervisors should enhance their surveillance of the potential impact on supervised institutions from wider group activities to improve their understanding of the financial position of these institutions. Virtual meetings with supervisors responsible for non-bank financial entities, monetary authorities and financial market and conduct regulators, can help to gauge financial soundness at the consolidated level. Supervisors should also assess interconnectedness through data on intragroup transactions and exposures.

INTERNAL MANAGEMENT AND BOARD REPORTS

An important component of supervision information are the reports prepared by Management and the Boards (e.g., Asset and Liability Committee, executive credit committees and risk-management units). Such reports could be a valuable source of information during the pandemic and an important supplement to standard prudential reporting. Supervised institutions are expected to be reporting on a more frequent basis management information, including credit quality and liquidity risk related to the current business environment and the policy-support measures provided by governments. These reports are expected to include business management and risk management teams' assessment of the impact of the pandemic on the institution, new risks and corresponding management actions, which will provide useful input into supervisor's risk assessments. The assessments should lead to discussions with institutions about the expected impact of the pandemic and the institutions' internal risk assessments and proposed actions.

STRATEGIC, REPUTATIONAL, AND BUSINESS MODEL RISKS

Strategic and reputational risks will be relevant for supervisors' risk assessment as financial institutions deal with the pandemic. The pandemic is creating a difficult operating environment for financial institutions, with deteriorating economic conditions, increasing unemployment and high uncertainty that is likely to continue for some time. Difficult operating environments can create elevated levels of strategic and reputational risks. For example, institutions may attempt to recover lost revenue by engaging in new markets, new products, aggressive pricing strategies, and new business incentives. Banks may also look to recover profit by cutting costs in non-revenue generating components of the business, such as compliance and risk management. It will be important for supervisors to collect information to assess strategic risk, such as business generated in new markets and products, pricing levels and the breakdown of operating costs as well as specific policies and strategies developed by the bank to deal with challenges arising from the pandemic. Difficult operating environments and economic disruption can also provide opportunity for new financial technologies to enter markets. This can be positive in terms of access to finance and efficiency of financial services, but it also presents different risks. Supervisors will need to be cognizant of market conduct and consumer protection risks associated with new technologies, and the risk new market entrants pose to traditional financial institutions.

Given the widespread impacts from the pandemic, supervisors should examine the sustainability of bank business models. There are numerous channels by which risk can be transmitted to banks as a result of the pandemic (e.g., loan portfolio quality, lack of new business opportunities, remote work operational expenditure, redundancy payments, and significant reduction in interest margin potential). As suggested above, Supervisors should increase their assessments on earnings and profitability to support the analysis on the impact of capital adequacy. Analysis of earnings and profitability could also reveal potential weaknesses in financial institutions business models and allow for supervisors to act proactively, based on risk assessment and rating, to help ensure the financial institution is stable.

ANNEX I. ILLUSTRATIVE EXAMPLE CHARTS FOR FINANCIAL AND RISK ANALYSIS



