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Banking Law and Climate Change: Key Legal Issues

Mario Tamez, Ender Emre and Alessandro Gullo

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Legal Department

Banking Law and Climate Change: Key Legal Issues
Prepared by Mario Tamez, Ender Emre, and Alessandro Gullo

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ABSTRACT: This paper explores the intersection of climate change policies with banking supervisory law. Statutory mandates define banking supervisory agencies' objectives, functions and powers. Policies that aim to address climate change risks appear fully germane to banking supervisors' main objective of safety and soundness. As such, banking supervisory agencies have a duty to address climate risks in light of their mandate. A mandate that is not anchored on safety and soundness in light of best practice would blur the accountability of banking supervisory agencies and undermine their legitimacy also with respect to climate. While legal changes can help provide greater legal certaintly, particularly given the long-term perspective of climate change, bank supervisory agencies can take action without fundamental reforms of their legal framework. Accordingly, they have set expectations or requirements for banks to incorporate climate into their strategy and business model, risk management, and governance. A combination of legal instruments—based on soft law and hard law—helps to achieve this objective. Notwithstanding implementation challenges, taxonomies and disclosures remain important tools, and banking supervisors should assess their role in the development of such tools in light of their mandate. The key responsibility to address climate risks rests on banks, and corporate governance frameworks could assist.

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WORKING PAPERS

Banking Law and Climate Change: Key Legal Issues

Prepared by Mario Tamez; Ender Emre; and Alessandro Gullo[1]

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I. Introduction

1. **Climate change has been increasingly considered a major threat to long-term growth and prosperity of countries and people.** Climate scientists have indicated that continued emissions in line with historical rates will lead to unprecedented temperature warming, increasing the likelihood of pervasive and irreversible impacts for ecosystems. Parties to the United Nations Framework Convention on Climate Change have signed the Paris Agreement with the objective of limiting global warming to below 2, preferably to 1.5, degrees Celsius.

2. **Ambitions to achieve global climate change goals call into question the role of public authorities, including banking supervisory agencies.** Policies to tackle climate change include: (i) containing and reducing greenhouse gas emissions (mitigation); (ii) building financial and institutional resilience to climate related hazards (adaptation), and (iii) updating regulations to cover climate risks and exposures (transition).[1] A key question for banking supervisory agencies is whether and how they can pursue any of such policies while carrying out their mandate - focused on the safety and soundness of the banking system.

3. **In response to the novel issues that climate change presents, many banking supervisory agencies are taking actions to address climate risks and to foster climate change policies on the basis of the existing legal framework.** As climate change alters the value of physical and financial assets, it can have an impact on the financial soundness of firms and on financial stability—which has a bearing on bank supervisory agencies' core objective. In this respect, it can be argued that banking laws support the actions to address climate risks taken by banking supervisory agencies within their existing mandate.[2]

4. **Government policies to mobilize financial resources in pursuit of climate objectives should be kept distinct from the mandate of supervisory agencies.** Industrial or fiscal policies can create incentives or take measures to pursue specific climate objectives that are relevant for banks. For instance, governments may utilize subsidized lending, credit guarantee schemes, carbon pricing or other non-pricing policies, affecting the value of financial assets and boosting lending to a selected industry or sector.[3] Such policies are to be kept distinct from the role of banking supervisory agencies. It is indeed rather in the pursuit of their primary objective of safety and soundness—in line with best international practices—that banking supervisory agencies can incorporate climate change considerations into their functions.

5. **Banks play an important role in enabling the financing needed for a sustainable economy.** If financing opportunities are timely identified, banks could capitalize on the shift in the market trends driven by climate change, for instance through financial products that support environmentally sustainable activities (e.g., financing low-carbon energy supply). Corporate governance mechanisms—their decision-making arrangements—are a key instrument framing the integration of climate change risks and opportunities in the activities of banks.

[1] IMF (2022a).

[2] In this paper the term "banking laws" includes laws that establish supervisory agencies, in addition to laws that define substantive aspects of prudential frameworks.

[3] For a comparison of the economic effects of different climate policies see IMF (2022b).

6. **This paper aims to fill a gap by advancing the legal understanding on the intersection between climate change and banking law.** To that end, it seeks to take stock of the role of banking supervisory agencies in pursuit of climate policies under banking laws, and identify what legal considerations may affect their role and policies. In recognition of the banks' role in tackling climate change, the analysis is complemented by canvassing key legal issues on the relationship between climate policies and corporate governance of banks. While literature on climate change and financial law issues is growing, there is limited analysis that combines the above perspectives in a comparative manner. The approach of this paper will be guided by international best practices endorsed in standards. It does not address the broader societal responsibility concerns arising from the exposure of financial firms to activities that may cause or be affected by environmental degradation—e.g., air pollution, water pollution and scarcity of fresh water, land contamination, biodiversity loss and deforestation.

7. **A pragmatic, middle ground way forward on the role of supervisory agencies and banks on climate policies is conceivable.** Bank supervision is premised on the safety and soundness of banks and on financial stability. The paper seeks to anchor the pursuit of climate policies on the mandate of bank supervisory agencies and on key tenets of bank supervisory law that derive from international standards. While mobilizing financial resources is not in the remit of supervisory authorities, a number of actions can and should be taken to integrate climate into their core functions. For banks, corporate governance arrangements provide several legal mechanisms to balance different interests in the pursuit of climate activities, according to the different business model and needs of banks. In laying out a conceptual framework on how banking laws should cater for climate policies, this paper seeks to foster an intellectual dialogue with policy makers and the private sector on what is still an evolving area.

8. **The paper is structured as follows.** The first section examines the role of banking supervisory agencies on climate policies, with a focus on their objectives and functions. In addition, it lays out key legal considerations on taxonomies and disclosure as policy tools. The second section assesses whether and how the legal framework for the corporate governance of banks can be conducive to the pursuit of climate policies. A third and last section offers some conclusions and key considerations.

II. Legal Mandate of Banking Supervisory Agencies and Climate Change

A mandate is understood as an instruction from an authorized, politically accountable body (e.g., legislature) that allocates responsibilities to a public authority to perform certain activities. A mandate comprises a clear and internally consistent set of objectives, functions, and powers (See Box 1). This section aims to present the key elements of banking supervisory agencies' statutory mandate under the existing tenets of banking law and discusses whether and how such mandate should support climate policies.

9. **The role of banking supervisory agencies in support of climate change policies is defined by their legal framework.** In responding to calls for climate action, banking supervisory agencies, as any other public entity, can only undertake those actions which are legally authorized. Along the same vein, they are accountable for the performance of their mandate, entrusted to them under the law. If the legal mandate is not observed, such actions become vulnerable to political and legal challenges, undermining the legitimacy of the banking supervisory agency and the legality of its actions. Determining whether and how the pursuit of climate

policies falls within the banking supervisory agency's mandate requires an analysis of the legal formulation of its objective, functions, and powers.

10. An emerging practice among banking supervisory authorities is the issuance of mission statements or similar documents to strengthen the public understanding of their contributions to climate policies. For example, in its climate change strategy the Reserve Bank of New Zealand describes the ways through which it can contribute to efforts to mitigate the effects of climate change, such as by reflecting climate risks within the supervisor's core functions.[4] The Japan Financial Services Agency (JFSA) published its strategy for developing well-functioning financial markets to finance Sustainable Development Goals (SDGs). The JFSA defines as its ultimate *mission* the maximization of national welfare by promoting sustainable growth of the economy and national wealth through its supervision and acknowledges that promoting SDGs in finance will serve this mission.[5] Such emerging practices contribute to transparency and manage stakeholders' expectations. However, none of these documents include legally enforceable commitments or would alter the mandate of supervisory agencies under the law. Such documents should be therefore aligned and read in conjunction with the legal provisions governing the mandate of supervisory agencies.

Box 1. Legal Mandates of Banking Supervisory Agencies: The Concept

Under the approach followed in this paper, the mandate of a public agency consists of three interlinked legal aspects: objectives, functions, and powers.

The objectives are the purposes for which the banking supervisory agency is legally required to act.

The functions represent the scope of the activities legally entrusted to the banking supervisory agency to fulfill its objectives.

The powers are the specific legal tools and means that enable a banking supervisory agency to carry out its assigned functions, in a manner consistent with the objectives.

For a mandate to be effective, the *objectives, functions, and powers*, should be internally aligned and clearly established. When an objective is established without appropriate *functions* and *powers*, the banking supervisory authority will not be able to pursue it. If the law grants *powers* without clearly delineating *objectives* and *functions*, the banking supervisory agency may exercise them in a manner that may not be intended.

Examples of legal mandates are:

Australia—"Purpose for establishing APRA (1) The main purposes for which APRA exists are as follows: (a) regulating bodies in the financial sector in accordance with other laws of the Commonwealth that provide for prudential regulation or for retirement income standards; (b) administering the financial claims schemes provided for in the Banking Act 1959 and the Insurance Act 1973; (c) developing the administrative practices and procedures to be applied in performing that regulatory role and administration.

*(2) In performing and exercising its functions and powers, APRA is to balance the objectives of financial safety and efficiency, competition, contestability and competitive neutrality, and in balancing these objectives, is to promote financial system stability in Australia." (*Article 8 Australian Prudential Regulation Authority Act 1998.)

Peru—"*The Superintendency must defend the public's interests by overseeing the economic and financial soundness of the natural and legal persons subject to its supervisions by ensuring that the legal rules, regulations and statutes that apply to the same are observed; for this purpose, it exercises broad monitoring of all corresponding operations and businesses and will press criminal charges against natural and legal persons that, without prior authorization, engage in the activities defined by this law, and will close their places of business and request that the offending party be dissolved or liquidated.*" (Article *347 Ley General del Sistema Financiero y del Sistema de Seguros y Orgánica de la Superintendencia de Banca y Seguros.)*

[4] Reserve Bank of New Zealand. "Our climate change strategy", accessed March 23, 2022.

[5] Japan Financial Services Agency, "JFSA's Strategy for SDGs_ENG.pdf", accessed March 23, 2022.

A. Objectives

The objectives of the banking supervisory agency are the goals that the agency should aim to accomplish (the "why"). The legal regimes set forth such general objectives, typically including the safety and soundness of banks and the pursuit of financial stability.

11. As recommended by modern international best practices, the primary objective of banking supervision should be to promote the safety and soundness of banks and the banking system. Such objective should be laid out in the law. A clear legal formulation of the objectives, explicitly indicating that safety and soundness prevail over any other assigned objective, guide the bank supervisory agency's policies. It also strengthens accountability by providing a benchmark for the evaluation of its performance.

12. Many banking supervisory agencies have recognized that climate risks have an impact on their financial stability objective, although the understanding of such risks is still evolving. Banking supervisory agencies are expected to develop and maintain a forward-looking assessment of the risk profile of individual banks and banking groups, proportionate to their systemic importance, and to identify and address risks emanating from banks and the banking system as a whole.[6] It is widely acknowledged that climate risks may impact the safety and soundness of banks, although, to some extent, they differ from traditional risks (see Box 2).

Box 2. Climate Change Risk: Specific Features & Implications for the Financial System

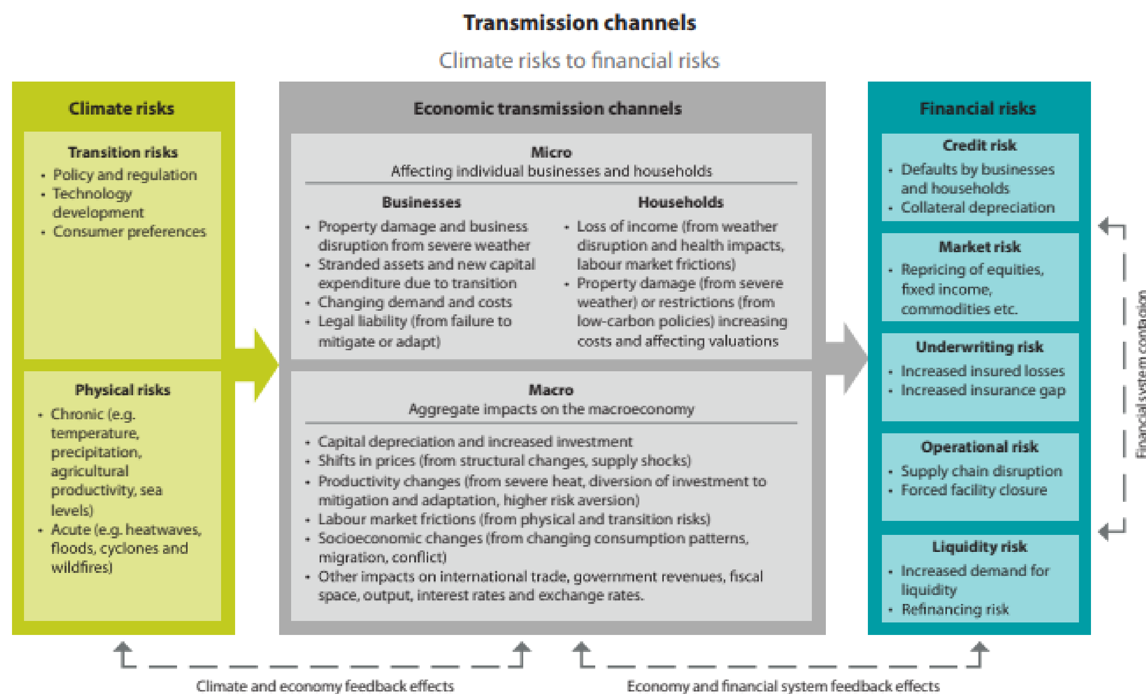
Climate change has the potential to severely impact the conventional risks borne by financial institutions with system-wide effects, although its precise path and impact are still uncertain. Climate risks and transmission channels translating these risks into traditional financial risks are illustrated below:

> *Physical,* directly related to acute or chronic climate events (e.g., draught, floods, hurricanes, and storms). As a result of these events, the value of assets may shift dramatically, or valuing assets may prove challenging.
>
> *Transition,* relating to the process of economic adjustment that incorporates climate change concerns (e.g., by moving away from industries heavily reliant on fossil fuels). In this process, legal and regulatory changes, technological innovation, or market sentiment could prompt a reassessment of the value of assets.[1]

The Basel Core Principles for effective banking supervision defines climate-related financial risk as follows: "potential risks that may arise from climate change or from efforts to mitigate climate change, their related impacts and their economic and financial consequences."

[6] BCP, Principle 8, Essential criteria (1), (2), (4) and (5).

Figure 1: Transmission Channels[1]



While translating into financial risks, it is recognized that climate risks present idiosyncratic features:

- *Irreversibility:* evidence is mounting on the abrupt and irreversible consequences of climate change.
- *Far-reaching impact:* climate change can affect all countries and economic agents.
- *Foreseeable nature:* there is a high degree of certainty that climate change events are crystalizing.
- *Dependency on short-term actions:* the magnitude and nature of the impact will be determined by comprehensive, credible, and forward-looking actions taken today.[2]
- *Long-term materialization.* The materialization of climate change risk would occur in the long term.

Although climate change events are foreseeable, uncertainties and potential non-linearities related to them (e.g., their location, frequency, and severity) present several challenges for banking supervisory agencies to assess the risks. The Basel Committee has indicated that further research would help have a better understanding of climate risk drivers and their transmission channels, across all risk types.[3]

---

[1] Source of the graph in this figure is the Network for Greening the Financial System: "NGFS Scenarios for central banks and supervisors" (September 2022)—cited as NGFS (2022d) in the reference list.

[2] Network for Greening the Financial System (2019).

[3] Basel Committee on Banking Supervision (2021).

13. **The objective of safety and soundness provides, in principle, adequate legal ground to integrate climate risks into the legal framework for supervision.** A risk-oriented approach informs the rationale of banking laws and their implementing regulations.[7] To the extent that climate change has consequences for the resilience of banks and the banking sector, the banking authority's primary objective provides the legal basis for a range of regulatory and supervisory actions regarding climate risks (See Box 3). Even more so, a safety and soundness objective implies a duty for these authorities to give consideration to climate change when discharging their supervisory responsibilities.[8] Banking supervisory agencies have thus adopted several actions—such as monitoring banks' approach to risks and opportunities,[9] issuing supervisory expectations or binding rules such as (e.g., on disclosures), developing stress test and scenario analysis, and other regulatory or supervisory actions in case of increased climate risks—without a reform in their primary law, by exercising their legal authority under the incumbent banking law.

Box 3. Examples of Approaches followed by the Banking Supervisory Agencies to Address Climate Risks

Canada

The Office of the Superintendent of Financial Institutions (OSFI) "approaches climate change through the lens of its legislative mandate as the prudential regulator and supervisor". In that vein, OSFI indicates that its role is to facilitate the preparedness and resilience of the supervised institutions to navigate through the uncertainty related to climate change. This, in turn, will contribute to continued public confidence in the Canadian financial system.[1]

Germany

BaFin has indicated that "As a financial supervisory authority, it is our duty to detect risks for the financial system and to call on supervised undertakings to take these into account appropriately. To do this, we must be able to thoroughly examine, quantify and understand the complexities of sustainability risks".[2]

New Zealand

The Reserve Bank of New Zealand aims to deliver on its mandate in a holistic manner by looking at a broad range of challenges and opportunities that impact our effectiveness as *kaitiaki* (guardians) – including focusing on the economic impacts of COVID-19, climate change, financial inclusion and other areas where we can have an impact.[3]

UK

The Prudential Regulatory Authority (PRA)'s primary objective is to promote the safety and soundness of the firms it regulates. Climate change is relevant to this objective as the regulated entities are exposed to climate related financial risks. The PRA is therefore taking action to ensure that such firms identify, measure, manage and mitigate the climate related financial risks they face. This is consistent with the existing supervisory and regulatory principles, in the same way that the PRA expects firms to manage other drivers of financial risks.[4]

[7] For instance, Section 2A of Australia's Banking Act states that prudential standards by APRA will achieve the objectives of the Act by ensuring the prudent management of banks and managing circumstances where a bank's ability to meet its obligations is threatened. Similarly, see Article 67 of Turkey's Banking Law and Article 7 of Switzerland's Financial Market Supervision Act (FINMA Act).

[8] Within the context of central banks, see Alexander and Fisher (2020).

[9] See, for example, Financial Conduct Authority (2019); Canadian Securities Administrators (2019) and Financial Stability Board (2020).

Box 3. Examples of Approaches followed by the Banking Supervisory Agencies to Address Climate Risks (*Continue*)

US

The USA Office of the Comptroller of the Currency (OCC) interprets its role regarding climate policies as follows: "Several agencies are charged with the responsibility of addressing climate change. The OCC's attention, however, as the prudential supervisor of the federal banking system, is always focused on the safety, soundness, and fairness of national banks…. Our role is to ensure that those financial institutions understand the risks they face and have robust risk management to control and monitor the risks and their impacts. Accordingly, in common with others, we are developing our knowledge of the risks in this area by engaging with relevant stakeholders."[5]

[1] Office of the Superintendent of Financial Institutions Canada (OSFI) (2021).

[2] BaFin (2019b).

[3] Reserve Bank of New Zealand (2021).

[4] Bank of England Prudential Regulatory Authority (2021) at page 2.

[5] Paulson (2021).

14. Bank supervisors lacking a clear safety and soundness objective in their legal framework might face challenges in defining their role on climate change policies. Even in the absence of an explicit reference to climate, several bank supervisors consider that their mandate presents no specific legal barriers to address climate risks within their existing framework.[10] However, the impact of different legal formulations will need to be assessed.[11] For instance, some jurisdictions refer to depositor protection alternatively to a safety and soundness objective or incorporate depositor protection under the latter objective. A question arises if this formulation would be fully supportive of supervisory responses to climate change over a long-time horizon. Depositors' interests are to be construed in light of the short-term nature of their claims, although concerns on safety and soundness will arguably have an impact on their ultimate interest. More fundamentally, several jurisdictions particularly with a stand-alone supervisor do not include safety and soundness in the legal mandate, notwithstanding leading international practices. In these cases, the role of banking supervisory agencies in tackling climate change could be unclear, exposing them to legal, political, and reputational risks.

15. Governmental climate policies have an impact on the—distinct—pursuit by banking supervisory agencies of their core objective. Fiscal and industrial policies to reduce greenhouse gas emissions may involve the reallocation of capital across industries and do not fall in the remit of the banking supervisory agency. At the same time, they could impact risk management by banks and in general their financial activity. For instance, a price on carbon via a carbon tax or an emission trading scheme lead market would enable banks to better incorporate climate considerations into their risk analysis and pricing.[12] Banking supervisory agencies will have a duty to assess the implications of governmental climate change policies on the safety and soundness of banks and the banking system.

[10] Basel Committee on Banking Supervision (2020), at pages 3 and 4.

[11] Kirakul et al. (2021), at page 11 et seq.

[12] Commodity Future Trading Commission (2020).

16. The linkages between governmental and financial sector policies prompt to examine the role of coordination mechanisms—an area where new interesting practices are emerging. Existing interagency fora for macroprudential policies could serve this purpose to the extent that coordination aims—in line with the traditional mandate of such arrangements—to assess and tackle macro risks arising from climate change.[13] As such, they are not designed for a broader coordination between supervisory policies and government policies on climate change. Some jurisdictions established climate-specific interagency coordination arrangements involving financial sector regulators too.[14] It is important that legal instruments establishing such coordination mechanisms do not undermine the autonomy of the banking supervisory agency or require them to depart from their core objective.

17. A question arises as to whether public international law provisions can create legal obligations for bank supervisors to foster climate policies at national level. Governments are required to determine, submit, and update their nationally determined contributions to achieve climate goals under the Paris Agreement.[15] It is a matter of national constitutional law to determine if and how international agreements may supersede national law or when they are directly applicable. Typically, governments transpose their commitments under an international agreement into, and through, domestic legal instruments, which will then be binding on private actors and public entities and would have to be reconciled with the mandate of the authorities under the current legal framework. Some banking laws generally refer to obligations established in international agreements. For instance, when exercising its bank supervision functions, the Maltese authority is under an obligation to *"have regard"* to Malta's international commitments, including under any treaty.[16] The applicability of obligations under the Paris Agreement, including for banking supervisors, is a matter of national legal interpretation and warrants analysis by the authorities, in the interest of legal certainty and accountability.[17]

18. In some jurisdictions, the legal framework of banking supervisors includes an objective to support governments' economic policies. Central banks' support to governmental economic policy is listed in many central bank laws, as an objective and will inform the mandate of the central bank when it acts also as a supervisor.[18] It is not common to have such an explicit provision for stand-alone banking supervisory

[13] See Executive Order (2021), ordering that the Secretary of the Treasury, as the Chair of the Financial Stability Oversight Council (FSOC), engage with FSOC members to consider various actions by FSOC, including the assessment of climate related financial risks and a report on the integration of such risk in their policies and programs.

[14] The Ministry of Finance of Chile announced the creation of the Green Finance Public—Private Roundtable, whose purpose is to define a dialogue and joint agenda among the Government, regulators and entities of the financial market to incorporate the risks and opportunities of climate change into decision making. The German Ministries of Finance and of the Environment established in 2019 a Sustainable Financial Advisory Committee that aims to develop a strategy and proposals on how to enhance Germany's role as a sustainable finance location, with the participation of the Deutsche Bundesbank and BaFin, as observers.

[15] United Nations (2015) article 3.

[16] See Article 4(2) of Malta's Financial Services Authority Act.

[17] It has been argued that the Paris Agreement provides legal grounds for financial authorities to enhance the role of the financial system in reducing greenhouse gas emission in the economy as one of its objectives is 'making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development'. There is an ongoing debate as to whether the agreement itself establishes an explicit obligation for the parties regarding the global response to climate change and what are the consequences for non-compliance. Climate finance in the Paris Agreement is reflected in a special provision (Article 9), requiring developed countries to provide financial resources to assist developing country Parties for mitigation and adaptation. It has been pointed out that one persistent challenge in climate finance is that State parties lack the resources to adequately address climate change. This requires the engagement of private finance, which however consists of non-parties to the Paris Agreement with therefore no obligations. See Calster et al. (2021).

[18] See the parallel working paper on legal issues related to central banking law and climate change Tamez et al. (2024), "that concludes that 73% of central bank laws contain broader mandates allowing them the conduct of "promotional" activities.

agencies, but a similar mandate may be inferred in some jurisdictions based on different formulations of the law. In some Latin American countries, financial sector policies are determined by the government when it designs the overall economic policies.[19] In Japan, the supervisor assists the Cabinet, who makes decisions on important financial sector policies, and is thus able to coordinate these policies with its broader economic policy.[20] The banking supervisory authority in Turkey is under a duty to comply with the principles, strategies and policies set out in the government's development plan and programs, subject to its objectives.[21]

19. Whether the objective to support government policies is a legal ground for bank supervisors to adopt climate policies will depend on the interpretation of the relevant laws in each jurisdiction. In the absence of an explicit reference to climate policies in the formulation of such objective, a clarification by the government on how climate policies fit within its broader economic policy could help the supervisor interpret its support objective. This may be particularly relevant for climate mitigation, entailing key strategic policy decisions by the government. On the other hand, a more direct and explicit approach can be observed where laws adopted to implement the government's climate policies assign a support role to public entities, including banking supervisory agencies. For instance, in Indonesia environmental legislation—not specific to the financial sector—mandates that all regulations be in line with the principles of environmental protection and management, which include climate change.[22] However, questions would still arise on the implications of these provisions on the legal mandate of the supervisor.

20. Recommendations or similar instruments by governments may be taken into account by the bank supervisors, without however weakening their operational autonomy. In some jurisdictions, governments can make recommendations to the banking supervisory agency on issues that pertain to government policies. These recommendations may request the bank supervisor to consider governmental climate policies while pursuing its mandate (See Box 4). The legal design of these instruments should preserve the operational autonomy of the supervisor and avoid blurring its accountability, as governmental policies fall outside its mandate. Furthermore, these instruments should have a non-binding nature or in any event should not alter the legally assigned objective of the supervisor. Prior consultation and ex-post publication requirements, including a public response by the supervisor on whether and how it intends to comply with the recommendation, could also enhance the transparency of this mechanism and the distinct role of the government and the banking supervisor.

21. Other formulations of the supervisor's legal mandate may have a bearing on its role on climate policies. For instance:

- *In some jurisdictions, the sustainability of the financial system is stated, with different formulations, as an objective of bank supervisory agencies.* For instance, in Indonesia, the supervisory authority's objectives include "a financial system growing in a sustainable and stable manner". In Malaysia, the supervisory objective is "financial stability conducive to the sustainable growth of [the economy]". The link between these objectives and climate change is not evident, as the term "sustainability" may have different implications for banking supervisors, not necessarily related to climate change.[23] Additionally,

[19] See Article 46 and 47 of the Colombia's Organic Law on Financial System, and Article 7 of Bolivia's Law on Financial Services.

[20] See Article 3(2) of the Law on Financial Services Agency Establishment.

[21] See Article 93(3) of Turkey's Banking Law.

[22] See Articles 42 and 44 of the Law 32 of 2009 on Environmental Protection and Management.

[23] Alexander and Lastra (2019). Some commentators consider that these objective cover green finance policies. See Dikau and Volz (2021).

sustainable economic growth and a sustainable financial system are not the same concepts and may have different implications when interpreting the supervisor's role in fostering low-carbon, environmentally sustainable "green" finance.

- *The development of the financial sector or markets is an objective for standalone supervisory agencies in several jurisdictions.* Chile, Kazakhstan, Poland, and Turkey have such an objective, although the wording may differ.[24] Under one interpretative approach, this objective could be linked to policies fostering efficient markets in the context of climate mitigation (e.g., through transparency of information regarding climate risks and lower transaction costs). Chile's Financial Market Commission notes these correlations when it states that its financial market development legal mandate encompasses the need to facilitate the provision of suitable financial services, and in that light aims to identify regulatory changes allowing the financial system to assist the national economy in adaptation and mitigation efforts.[25] Arguably, a financial sector development goal along this dimension can be more pertinent for integrated supervisors, in charge of both banking sector and capital markets.

Box 4. Examples of Legal Frameworks Providing for Government Recommendations to Banking Supervisory Authorities

UK: The Prudential Regulation Committee (PRC) should have regard to recommendations made by the Treasury about the economic policies of the government (Section 30B of the Bank of England Act 1998). For this purpose, in 2021, the Letter from the Chancellor of the Exchequer to the Governor of the Bank of England providing recommendations for the PRC indicates that, among others, the "PRC should have regard to the government's commitment to achieve a net-zero economy by 2050 under the Climate Change Act 2008 when considering how to advance its objectives and discharge its functions." At the same time, the letter recognized that the PRC's main contribution to this economic policy is by promoting the safety and soundness of firms it regulates.

New Zealand: Under the recently adopted Reserve Bank of New Zealand Act, the Minister will issue a financial policy remit to specify or provide matters desirable for the Reserve Bank to have regard to, in relation to achieving the financial stability objective and acting in a way that furthers the objectives or purposes of the prudential legislation (section 201). The Reserve Bank's Board will take this remit into account when it is acting in relation to the Bank's prudential strategic intentions and prudential standards. It is yet to be seen how this remit will be implemented, but it appears to enable a remit asking the Reserve Bank to have regard to the government's climate change commitments when making decisions.

Liechtenstein: The "owner's strategy" under the public enterprise legislation is made applicable to the Financial Markets Authority (FMA). This Government-issued strategy intends to set the guidelines on the core principles of the FMA. The Board of the FMA is under an obligation to implements this strategy, with deviations possible where necessary and in consultation with the Government.

22. In any event, any additional roles of the supervisory agency should remain subordinated to the main objective of banking supervision law, anchored on safety and soundness. International good practices recommend that when the banking supervisory agency is assigned broader responsibilities, these

[24] For a clear formulation, see Art. 94 of the Turkish Banking Law.

[25] See Financial Market Commission (2020).

should be subordinated to the primary objective of safety and soundness.[26] When supervisors—to the extent permitted by their mandate—adopt measures to mitigate climate change (e.g., mandating environmentally sustainable "green" lending or in support of governmental economic policies), legal concerns would arise if these measures conflict with the safety and soundness objective.[27] For instance, it might be challenging for the supervisor to justify how adopting actions to promote sustainable finance activities *for the sole purpose* of mitigating greenhouse gas emissions fit within the legal framework, premised on prudent management of risks, particularly if it found that there are no risk differentials between low-carbon and carbon intensive assets.[28] It is again the existence of climate risks that guides the action of bank supervisors on climate.

23. The prioritization of a safety and soundness objective serves as a key legal mechanism to preserve the autonomy and accountability of banking supervisory agencies. Notwithstanding the best practices recommended by the Basel Core Principles, the supremacy of the safety and soundness objective is still not firmly enunciated in the legal frameworks of many stand-alone supervisory agencies. Such supremacy grants a clear and binding legislative instruction that safeguards the autonomy of the banking supervisory agency, including when governments incorporate climate change mitigation into financial sector policies. It enhances its accountability in case of judicial review of supervisory actions or for public scrutiny over them. Distinguishing the roles of the government and bank supervisors is key to an effective implementation of climate policies in a harmonious and synergic fashion, and helps to ensure legitimacy and avoids detrimental effects on financial stability, while mitigating legal and reputational risks. It also clarifies the role of the supervisor when fiscal policies for climate change mitigation involve state-owned banks (e.g., through subsidized or directed lending).

24. Banking supervisory agencies should assess how the integration of climate considerations impacts their decision-making arrangements. In order to achieve their legally assigned objectives, governing bodies of supervisory agencies should be adequately informed on the impact that specific policies or events may have on the solvency, liquidity, and profitability of banking institutions and on the sector as a whole and should develop sufficient capabilities to evaluate the potential financial stability consequences. As the Basel Committee recommends, supervisors should ensure that they have adequate resources and capacity to effectively assess the management by banks of climate-related financial risks.[29] While this may not entail specific legal underpinnings in the primary law, the board of a banking supervisory agency should be required to have, collectively, adequate capacity to design and to assess climate measures appropriately and proportionally.

25. Banking supervisory agencies should also evaluate whether their internal allocation of responsibilities is conducive to an efficient integration of climate change into their activities—and different models are emerging. Given the breadth and magnitude of climate concerns, the involvement of many different departments and experts is warranted. Agencies are adopting different models to integrate

[26] BCP, Principle 1.

[27] In many jurisdictions, particularly emerging markets, there is a historically strong link between the legal mandate of the supervisor and a development objective in support of governmental policies. In some of these jurisdictions, banking supervisory agencies have adopted regulatory instruments or directives to foster green or sustainable finance goals. In India, the priority lending policy of the supervisor has been extended to cover renewable energy. In Bangladesh banks are instructed to have a minimum target of direct green finance as defined in green finance taxonomy (i.e., 5% of the total funded term loan) and sustainable finance, as defined in the sustainable finance taxonomy issued by the Bank of Bangladesh (i.e., 20% of the total loan disbursement/investment by a bank or non-bank financial institutions).

[28] For further details in connection with risk differentials, please see Network for Greening of the Financial System (2022).

[29] Principle 17, Basel Committee on Bank Supervision (2022).

climate change into their internal structure. Options so far span from dedicated units (ECB, Bank of Thailand, and OCC in the US),[30] hubs or centers (Bank of England, Bank of Greece), to commissions (the ACPR in France) and internal networks (Monetary Authority of Singapore). The specific functions and reporting lines vary across jurisdictions.[31] Regardless of the approach taken, the legal framework should clearly assign roles and responsibilities among the different bodies of the agency, preventing gaps and overlaps. Integrating climate policies should also be done in a manner that preserves the overall role of the main governing bodies of bank supervisors and their different function (e.g., policy making, oversight, executive management). The allocation of functions and reporting lines within the internal governance of bank supervisors may be done through changes in the primary law or—more frequently, depending on the specific legal framework—in secondary legislation or regulation (e.g., charters of supervisory agencies).

B. Functions and Powers

The functions represent the scope of activities that an authority will be responsible for in order to achieve its defined objectives (the "what"). The powers are the specific legal tools available to an authority to implement its functions (the "how"). The powers confer legal capacity to carry out the functions in a manner that is consistent with the stated objective. This section examines selected issues in the integration of climate change policies into three key functions of the supervisory agencies, i.e., market entry, regulation (including on taxonomies and disclosure), and supervision.

26. The integration of climate change considerations into banking prudential frameworks may not always entail changes in the primary law. International best practices recommend that banking laws, regulations and prudential standards be updated as necessary to ensure that they remain effective and relevant to changing industry and regulatory practices. Apart from a few recent examples, banking laws do not include explicit provisions on climate change.[32] Nonetheless, as noted in the previous section, climate risks are relevant for the pursuit of the banking supervisors' objectives. On this basis, many banking supervisory agencies have been able to develop policies and to issue secondary instruments related to climate change without any amendment in their primary legislation.

27. Given their mandate, banking supervisory agencies' prudential powers do not directly pursue the objective of an efficient allocation of resources. The purpose of supervisory powers is to foster prudent risk taking and management by banks. The driver for efficiently allocating resources lies in banks' business decisions, based on benefits and risks. Several banking laws explicitly recognize this, requiring the bank supervisor to observe the autonomy of banks in managing their affairs.[33] This general approach also informs the purpose and rationale of the prudential instruments issued by bank supervisors in the area of climate.

[30] In the US, the OCC has created a Climate Change Risk Officer, leading the agency's efforts to ensure banks are appropriately managing risks around climate change. See OCC (2021).

[31] Network for Greening the Financial System (2020).

[32] For instance, please see various references made to the specific provisions of the EU's Regulation No 575/2013, usually known as the Capital Requirements Regulation (CRR), and Directive 2013/36/EU, known as the Capital Requirements Directive (CRD), both as amended in 2024. As an example, Article 501c of the CRR mandates the EBA to assess whether there is a case for a dedicated prudential treatment of exposures related to assets and liabilities, subject to the impact of environmental or social factors is to be adjusted.

[33] See Article 2 of the Law on Financial Services Commission in Korea and Article 5 of the Law on Banks and Banking in Ukraine.

28. **While significant work has been done, the integration of climate risks into prudential frameworks is work in progress and multilateral cooperation is essential for a global response.** Banks are at an early stage in developing their approach to climate risks, while supervisors are focused on the integration of climate risks into banks' governance and risk management. At the international level, the Network for Greening the Financial System's (NGFS) guide for supervisors recognizes the relevance and flexibility of existing good practices to accommodate supervisory responses to climate risks.[34] The BCBS concluded that its core principles for effective banking supervision were sufficiently broad to accommodate additional supervisory responses to climate financial risks.[35] Revisions to these core principles in 2024 include explicit references to climate change, and other international standard setting bodies reflect climate change in their work as well (See Box 5). As noted by the FSB, there is a need for developing common principles and good practices to pursue the comparability of climate-related financial risks, considering sectoral and jurisdictional specificities.[36] Further, coordinated efforts at global level are needed to advance in building climate information architecture for high-quality, reliable, and comparable data, harmonized and consistent climate disclosure standards, and climate finance taxonomies and other classification approaches to align investments with climate goals.[37] International soft law and international standard setters can play a critical role in this convergence.[38] These standard setters present a forum for multilateral cooperation, essential in view of the fact that climate change is a global phenomenon and cannot be tackled by unilateral actions only. The IMF plays a key role in advancing these efforts through its analytical work and by bringing different perspectives of its membership typically with a broader coverage of countries than those directly involved in such forums. Further, there is a need for significant capacity building efforts to support jurisdictions in the adoption and implementation of national policies consistent with international guidance -this is another area where the IMF plays a major role.[39]

29. **If aligned with best practices, the mandate of supervisors allows to reflect the cross-border dimension of climate policies and the related need for collaboration across jurisdictions.** Banking supervisory authorities exercise their powers in the pursuit of domestic financial stability. Yet, many banks and banking groups tend to operate across jurisdictions. Domestic supervisory approaches to climate risks may have spillover implications on financial stability in other jurisdictions, create regulatory arbitrage opportunities, or affect financial flows. For instance, differences in supervisory review processes over Pillar 2 capital requirements to capture climate risks may impact the location and amount of additional loss absorbing capacity across a group.[40] Undue divergences across jurisdictional requirements on disclosures can affect the global comparability and interoperability of climate-related disclosures. Similarly, significant divergences on transition planning may undermine the effectiveness of this tool in relation to cross-border groups. Cross-border spillover of supervisory policies is not a new issue, but further guidance to develop consistent requirements across banking groups and jurisdictions would help overcome unwarranted differences.[41] Cross-border coordination mandates of the banking supervisory authorities under banking laws, if aligned with best practices, offers a sufficient legal basis for cooperation among supervisors.

[34] Network for Greening the Financial System (2020).
[35] Basel Committee on Bank Supervision (2022).
[36] Financial Stability Board (2021b).
[37] Ferreira et al. (2021).
[38] Alexander et al (2023).
[39] For an overview on how the IMF's Resilience and Sustainability Trust Fund can help catalyze climate finance, see IMF (2024).
[40] Coelho and Restoy (2022), at p. 5.
[41] *Ibid.*

Box 5. International Standard Setting Bodies and Climate Change

The FSB roadmap for addressing climate-related financial risks responds to the need for coordination across standard setters and relevant bodies in developing adequate, timely and consistent international guidance on climate change. The roadmap covers four main, interrelated areas: (i) climate-related disclosures based on TFCD recommendations; (ii) comprehensive, consistent, and comparable data to monitor and assess climate-related financial risks; (iii) analytical tools used to assess climate-related vulnerabilities; and (iv) the integration of climate-related risks to supervisory and regulatory approaches that address financial risks.

Standard setters have made progress in reflecting climate change in their work. In the area of bank regulation and supervision, the BCBS developed (June 2022) its principles for the effective management and supervision of climate-related financial risks, based on a principles-based approach to improve both banks' risk management and supervisors' practices. Revisions in 2024 introduced explicit references to climate change in Basel Core Principles for effective banking supervision. Revised principles introduce a definition of climate-related financial risks and require supervisors to take into consideration climate-related financial risks in their supervisory methodologies and processes (Supervisory approach (CP8) and Supervisory reporting (CP10)). Revised CP15 requires banks to have comprehensive risk management policies and processes for all material risks (including climate-related financial risks) over varying time horizons and implement appropriate measures to manage such risks. Adjustments to Internal control and audit (CP26) require banks to consider climate-related financial risks as part of their internal control framework.

Climate-related disclosures have been a common theme across different standard setting bodies' work. As recognized by the FSB, progress in the financial sector relies on making similar progress in relation to non-financial sector, including in the areas of firm-level disclosures, addressing data gaps and transition plans. G20/OECD Principles of Corporate Governance 2023 were revised, among others, to include recommendations on sustainability disclosures as well as the role of Boards and the rights and interests of shareholders and stakeholders on sustainability matters. The International Sustainability Standards Board (ISSB) issued IFRS S1 on general sustainability-related disclosures and IFRS S2 on climate-related disclosures, the latter building on the recommendations of the FSB's Task Force on Climate-Related Financial Disclosures and the work of other sustainability bodies. The IOSCO recently endorsed the ISSB's Financial Disclosures Standards as a global framework for capital markets to develop the use of sustainability-related financial information in both capital raising and trading and for the purpose of helping globally integrated financial markets accurately assess relevant sustainability risks and opportunities. As part of efforts to develop standards to ensure a high-quality framework for assurance over sustainability-related disclosures, IAASB launched a Public Consultation on Proposed Global Sustainability Assurance Standard. At the sectoral level, the Basel Committee consulted on a Pillar 3 disclosure framework for climate-related financial risk, which seeks to build on and complement the ISSB's disclosure standards with a set of bank-specific disclosure requirements. The Committee will consider which disclosure elements would be mandatory and which are subject to national discretion.

(i) Market Entry of New Banking Institutions

30. Under banking laws, authorities typically enjoy wide discretion, arguably allowing them to incorporate climate concerns into their licensing decisions. Banking supervisory agencies should be able to take into account different risks when assessing the effectiveness of the proposed bank's governance and risk management systems. Supervisory requirements and expectations regarding climate risks could be legally factored into such assessments. In some jurisdictions, even when the bank seeking a license appears to have

sound governance and sufficient financial resources, a license application can be refused based on the economic, financial and commercial needs of the country or market to be served.[42] In contrast, some banking laws explicitly preclude considering any other matter not specifically prescribed among licensing conditions.[43] The latter approach seems conducive to legal certainty and even-handedness, while still enabling the supervisor to assess the integration of climate aspects into the bank's business strategy, corporate governance, and risk management.

(ii) Prudential Instruments

(a) General Legal Considerations

31. Banking supervisory agencies should assess how general administrative law principles affect their policies on climate issues. Banking supervisors, as public entities, exercise public law powers, generally laid out in the administrative law framework of their jurisdiction and further specified in banking laws. Administrative law provides the legal basis for the pursuit by supervisors also of climate policies in the following five areas. These are common considerations arising in relation to any supervisory activity, and as such they may not entail a change in the law—but they must be reflected in the legal and regulatory framework governing the action of supervisors also with respect to climate policies.

- **a)** *Principle of attribution and alignment of powers with stated objectives.* The principle of attribution requires that the bank supervisor exercise the powers it explicitly or implicitly received from law. Judicial review of agencies' decisions verifies not only the existence of a certain power, but also whether this is used in connection with the underlying goals. As noted, a safety and soundness objective provide a solid legal basis for actions aimed to address climate risks (e.g., from adaptation). On the other hand, supervisory authorities should carefully consider whether and how the use of their existing powers for certain climate change policies (e.g., related to mitigation) complies with their stated objectives in the law. For example, on sustainability issues the Swiss FINMA has clarified that, "in line with its mandate, FINMA's focus is on the associated potential financial risks and client protection issues."[44] The Danish FSA considers that, in addition to ensuring adequate consideration of climate risks in firms under its oversight, it should exercise supervision on whether products labeled as sustainable can be classified as such, to safeguard investors and confidence in the markets—a mandate legally assigned to the FSA.[45]
- **b)** *Principle of proportionality.* The proportionality principle requires that prudential powers be exercised in a manner commensurate with their underlying objective, by tailoring them to the degree of system-wide risks and to the idiosyncratic situation of banks. This principle is recommended by good practices on bank supervision and is based on the Constitution or broader administrative law system of most jurisdictions, sometimes explicitly embedded in banking laws.[46] Requirements and expectations on the integration of climate issues should be therefore commensurate to the size, business and risk profile of

[42] See Article 54(b) of the Banking Law Royal Decree of the Sultanate of Oman and Section 7(2)(c) of the Banking Act 2004 of Mauritius.

[43] See Article 11 of the EU CRD IV and Article 18 of the Law on Banks and Banking Activity of Ukraine.

[44] See FINMA.

[45] Danish Financial Supervisory Authority (2019).

[46] See Section 7 of FSMA 2000 in the UK.

banks.[47] For instance, a question arises as to whether and how small and regional banks should rely on methodologies developed by supervisors for larger firms, more diversified geographically and/or by sector. The supervisor should have the authority to exercise judgement and rectify assessments. In addition, supervisory reporting requirements for these banks may be observed with lower frequency and reduced scope, but still in a manner appropriate to manage climate risks over banks' financial soundness.

c) *Precautionary principle.* The international community recognizes the existence of challenges in the availability, comparability, and reliability of climate-related data and in the development of appropriate methodologies.[48] Several supervisors have been cautious when utilizing prudential policies, given their evolving understanding of climate risks as well as the timeline and magnitude of these risks. However, the high potential of climate change to disrupt financial stability is generally recognized (See Box 2). Limitations in determining the exact impact and outcome of climate risks do not inhibit swift adoption of climate policies on the basis of the "precautionary principle" embedded in the administrative laws of many jurisdictions.[49] Again, these are not new themes. In the area of environmental or pharmaceutical regulations, scientific uncertainties and methodological limitations have not prevented administrative authorities from taking regulatory actions, and courts from deferring to the authorities' discretion, if a reasoned decision is made based on best available science and explaining the link between facts and conclusion.[50] Moreover, banking laws do not require an exact quantification of risks, as financial policy is inherently prone to uncertainties. Post-global financial crisis frameworks recognize that quantitative assessments may not fully capture the risks to which banks and the banking system are exposed and recommend a forward-looking supervisory judgement on qualitative aspects as well.[51]

d) *Procedural safeguards.* Administrative law principles can support—on climate, as in other areas of risk regulation—the decisions of supervisory agencies based on qualitative assessments and available data and methodologies, when they are subject to procedural safeguards, such as ex-ante guidance and consultations with industry, impact analyses, and reasoned decisions.[52] Due process safeguards may be explicit in the law or be inferred from the standards of judicial review.[53] The adherence to procedural safeguards in the underlying decision-making process may also affect the degree of deference by courts to such supervisory decisions.

[47] Hong Kong Monetary Authority (2021).

[48] Network for Greening the Financial System (2022b).

[49] Recent literature suggests that the lack of full quantification of climate risks gives impetus to take action based on precautionary principle, as it is certain that climate risks present a danger. However, such principle is not available in all jurisdictions. Chenet et al. (2021); Gelzinis (2021).

[50] A recent survey found that US courts generally defer to agencies in cases involving scientific uncertainties on climate change and environmental matters, where environmental agencies have a mandate to act on the "best scientific and commercial data available". See Glicksman et al. (2022). The "best available science" standard is also recognized under the Paris Agreement as a consideration that would inform many aspects of the commitments, including in relation to adaptation. See, for instance, Article 7(4) of the Paris Agreement.

[51] Financial Stability Board (2014), at page 9. See also European Banking Authority (2019) at page 62.

[52] See BCP 1, Essential Criteria 4, suggesting consultation with industry when updating prudential frameworks.

[53] Some banking laws require a public consultation (e.g., see Article 4 of the SSM Regulation in the EU) or an impact analysis before issuing prudential instruments (see section 255-257 of the Reserve Bank of New Zealand Act).

e) *Time-horizon in the assessment of risks and pursuit of financial stability.* Banking supervisory agencies should assess material risks, including climate-related ones, within their different time horizons.[54] (See Box 6). A question arises as to whether administrative law confines the bank supervisor's powers to a specific timeframe, possibly precluding to tackle risks that may emerge in the long term. Indeed, while certain risks such as physical risks can emerge in the short run, the assessment of other types of climate risks—especially transition risks—requires a combination of business-as-usual risk management tools with structural, long-term considerations, given the high degree of uncertainty around their timing.[55] Banking laws rarely establish a time horizon for risk assessments. Financial stability present time inconsistencies and trade-offs between short-term benefits and long-term risks, and entails a continuum of actions to promote the safety and soundness of banks and the banking system.[56] When long-term climate risks materialize, it might be too late or difficult to take remedial action (e.g., on the risk profile of portfolios). On this basis, it can be argued that banking supervisory agencies may adopt policies to address material risks that could crystalize in the long-term, including climate risks.[57] This said, some jurisdictions have adopted amendments in primary supervisory law, which may further reinforce a long-term approach to climate risk management.[58] In any event, supervisory decisions should remain subject to the above-mentioned administrative law principles, including due process requirements.

[54] Bank of England Prudential Regulation Authority (2018), at p. 4; and the European Banking Authority (2019), p.19: "This short-termism is not fully attributable to the nature of prudential frameworks, as other reasons may include shareholder pressures, accounting framework, macro-economic factors, and disclosure requirements."

[55] Basel Committee on Bank Supervision (2022); Enria (2020).

[56] Schinasi (2004).

[57] Similarly, financial crises statistically occur on average over a long-term time horizon (e.g., 25 years), but financial authorities should still devote their daily efforts to enhance the resilience of the banking system.

[58] For instance, see Articles 73(1), 74(1), 76(1), and 87a of the EU's Capital Requirements Directive (Directive 2013/36/EU), as amended in 2024, that overall require institutions to include short, medium and long-term horizons of ESG risks in the review of strategies and business cycle, for evaluating internal capital needs, and in their governance arrangements.

Box 6. Prudential Time Horizons and Climate Change

Many aspects of prudential frameworks have a short-term or short-to-medium-term time horizon. Banks mostly define their business model and set strategy over a time horizon of up to 3 to 5 years. Requirements under supervisory rules and processes reflect this approach, although supervisory guidelines allow going beyond this horizon. At the licensing of a bank or during the approval of control changes, the primary law or implementing regulations can define a similar time horizon for the business plans and the assessment of the financial strength of significant shareholders. However, it is not immediately evident whether and how the licensing authority could factor those climate risk exposures of: (i) the bank seeking a license, or (ii) the significant shareholder (e.g., parent company active in fossil-based energy) that could materialize in the long-term. Supervisory stress tests and credit risks analysis are also carried out with a short to medium term perspective.[1] Risk weightings under the standardized model do not recognize long-term risks from climate change, and banks using internal methodologies face a similar time problem. Pillar 1 (minimum) capital requirements take a short-term perspective for calculating capital requirements. While Pillar 2 requirements allow a forward-looking approach, typical capital planning horizon for banks is usually 2 to 3 years.

Bank supervisors are seeking to expand the time horizon for the assessment of business model and risks in relation to climate change. The Basel Committee recommends ensuring that banks asses risks that could materialize over longer time horizons (including risks related to digitalization, climate-related financial risks) in their risk identification and assessment, capital and liquidity planning, as well as in scenario analysis (see revised Basel Core Principles, Principle 15 on Risk Management). Prudential instruments on climate risks so far emphasize a long-term perspective to capture climate risks in bank's financial and strategic decisions. For instance, the bank supervisor in Costa Rica considers that the analysis of climate risks goes beyond the usual period applied for all other risks and requires a change in paradigm in risk management.[2] Some prudential instruments seek to achieve this by specifying an indicative timescale expected by the supervisory authority for business model and strategy risk, such as beyond 5 years (ECB), minimum 10 years (Hong Kong), or in the order of decades (UK). Requirements concerning stress testing expect banks to consider their risks based on a range of climate-related scenarios, potentially extending to 2030 or 2050 or beyond (Australia). How prudential instruments define a long-term perspective for main financial risk categories (e.g., credit risk, liquidity risk, market risk) also differs. Current instruments mostly mention the long-term identification and management of climate-related risks as a principle, whereas some supervisors are considering more granular guidance (EBA).

[1] Monnin (2018).

[2] Superintendencia General de Entidades Financieras of Costa Rica (2021).

(b) Legal considerations on prudential instruments addressing climate risks

32. A growing number of banking supervisory agencies have issued or plan to adopt regulatory instruments to integrate climate change risks into the prudential framework. Most legal instruments issued so far by banking supervisory agencies are aimed at recommending banks to develop a strategic approach to climate risks (See Box 7). The scope of activities addressed in these legal instruments varies. Certain guidelines cover all types of climate risks in all banking activities, while others apply only to credit risk or to certain categories of lending decisions (e.g., Bangladesh and Nepal).

Box 7. An Overview of the Scope of Prudential Instruments on Climate Change

Prudential instruments issued by bank supervisors expect or require banks to incorporate climate risks broadly in the following key areas.

- *Business model and strategies*: Climate change may affect the viability of banks' business models. Several supervisory agencies are developing stress testing to assess the potential consequences for financial stability of climate physical and transition risks under plausible future scenarios. Banks are expected to use the findings from these assessments to test the resilience of their business model. The Bank of England published in 2022 the 2021 Climate Biennial Exploratory Scenario, indicating that transition to net zero can significantly impact some sectors of the real economy, and compelling banks that are exposed to such sectors to adapt their business models or become unviable over time.
- *Governance:* As in all aspects of the banking business, the allocation of duties and responsibilities and a sound decision-making process are key for the prudent management of risks, including climate risks (See Section III). Some banking authorities (e.g., APRA in Australia and ACPR in France) provided further guidance on the governance of climate risks.
- *Risk management*: While banks are required to identify, assess, monitor, and manage material risks, it is generally recognized that further progress is needed for integrating climate risks into their risk appetite, processes and policies. Several banking supervisory agencies have issued prudential instruments seeking to clarify their expectations; however, the specific requirements are still at an early stage. Themes include the adaptation of risk limits and risk controls in view of business strategy (e.g., Nepal) and integrating climate risks into bank's capital adequacy assessments (ECB).

  Concentration risk is another area that deserves further attention. Limits imposed for large exposures and risks to a single counterparty under prudential framework do not specifically factor in climate risks. While most regulatory instruments reviewed in this paper do not elaborate on concentration risks related to climate change, others have recently defined high-level expectations or recognized the relevance of concentrations to various aspects of risk management. The EBA expects banks to consider their concentration in a certain product, region and sector to identify their vulnerabilities to climate change.
- *Regulatory capital:* Banking supervisory agencies are evaluating whether and how regulatory capital requirements can better capture climate risks. Calibration of risk weightings under Pillar 1 presents challenges, given current limitations on data gaps, methodological problems, and uncertainties about policy transition. Some banking supervisory agencies have clarified that they expect banks to incorporate climate risks into their capital adequacy under Pillar 2 (e.g., ECB) and that their climate guidance is also relevant to ICAAP instruments (e.g., Australia, Hong Kong, and UK). Others have directly imposed an obligation for banks to incorporate climate risk analysis into their ICAAP assessment (e.g., Brazil). Finally, the relevance of Pillar 3 of the Basel's capital framework for climate disclosures has received greater attention recently (see section on disclosures below).
- *Disclosure:* Climate disclosure can incentivize banks to integrate sustainability into their business and lead to discipline banks in reducing physical and transition risks. Disclosure also enables market participants to access key information on a bank's exposure to risks and the overall adequacy of its regulatory capital (see discussion below).

33. Authorities should evaluate whether their regulatory instruments should address climate risks on a standalone basis or in combination with other relevant risks or policy goals. Instruments issued by authorities so far focus on climate change risks either as a stand-alone issue (e.g., Australia, Hong Kong SAR, Israel, and UK), in the context of the management of environmental risks -including biodiversity loss risk—(e.g., Singapore), or as part of the broader category of environmental, social and governance (ESG) risks (e.g., Bangladesh, Brazil, EU, Nepal, and Sri Lanka) or of sustainable finance initiatives (e.g., Indonesia). These approaches present trade-offs. An ESG perspective could offer opportunities to capture interaction between climate change and other ESG risks in a holistic manner. However, a focus on stand-alone climate change risks may present less difficulties for banks to implement, as their understanding of climate issues could be more advanced compared to other ESG risks.

34. The legal nature of prudential instruments on climate risks should be made clear. In view of the incipient understanding over these policies, most jurisdictions have adopted soft-law instruments—mainly "guidelines" or "guidance"—to define supervisory expectations or to offer recommendations. Their non-binding nature is mentioned in the instruments (e.g., Hong Kong SAR, Singapore, and Turkey) or can be inferred. However, hard law instruments have also been used (e.g., ICAAP in Brazil). These are arguably not new hard law requirements for banks, as they integrate climate risks into existing prudential requirements. Hard law instruments appear more common in the introduction of obligations for promoting environmentally sustainable finance (See Annex I). It is important that banks have a clear understanding of the legal nature of these instruments and if binding requirements may apply.

35. Prudential instruments and the broader legal infrastructure relevant to banks' activities can play a mutually reinforcing role in advancing climate policies. New legal instruments such as climate laws and international agreements enacted into domestic law have repercussions on the legal ecosystem within which banks operate, including various fields of business law (e.g., corporate, bankruptcy, contract, competition, consumer protection). For instance, legally binding sustainability reporting standards for corporate clients could assist banks in the assessment of climate risks exposure in their asset portfolio and in the development of prudent transition plans.[59] Conversely, even when not directly addressed to banks, climate-related laws could have repercussions on banks' legal risks.[60] For instance, if climate legislation defines certain activities as illegal (e.g., deforestation), contracts entered by banks to finance such activity may be deemed illegal or unenforceable.[61]

36. Similarly, bank supervisors may deploy contract law mechanisms in fostering climate policies. Banking laws interact with contract law, for instance when they prescribe the inclusion of certain clauses in deposit, loan, or outsourcing contracts. Some supervisors require banks to include in their loan documentation commitments from the borrowers to comply with all environmental and social legislation, to follow an environmental risk management plan, and to provide reports on progress.[62] Banks may be expected to treat material non-compliance of these commitments as a default under the contract. When banking supervisory

[59] Elderson (2022). In connection with transition plans see paragraph 47. Banks could also be subject to legally binding sustainability reporting standards (see for instance the EU Taxonomy regulation 2020/852).

[60] For instance, OCC (2023) recognizes the risks that changes in the legal environment can raise.

[61] See Bangladesh Bank (2017 updated in 2022 with sector specific checklists), requiring banks to assess transactions against an exclusion list.

[62] For instance, see the Regulations for Social and Environmental Risk Management in Peru. Similar requirements also exist in Nepal.

agencies leverage contractual law in their climate policies, they need to ensure that the prescribed or recommended contractual clauses are valid and enforceable under civil and commercial law.

(c) Taxonomies

37. Well-defined taxonomies are necessary instruments to support climate policies. Taxonomies define key concepts such as “environmentally sustainable”, “low-carbon” (‘*green*’) and “carbon intensive” (‘*brown*’) assets, economic activities, technologies, production processes, and products and services. If clear and widely accepted, they can contribute to consistency in informing supervisory standards and climate risks management, underpin disclosure to the market, limit opportunities for regulatory arbitrage (e.g., ‘greenwashing’) and help direct financial flows towards sustainable development priorities.[63] Taxonomies also help anchor actions of bank regulators and supervisors on sound scientific premises, thus buttressing their legitimacy.

38. Currently, there are significant variations in the legal form and issuing authority of taxonomies. In most cases, taxonomies are adopted as instruments of subsidiary legislation (See Table 1). When intended to cover both financial and non-financial activities, as is the case in the EU’s “Taxonomy Regulation”, governments are well placed to lead the adoption of taxonomies. In these circumstances, primary laws seem a more appropriate legal avenue to introduce a taxonomy, also to ensure application to non-financial corporations—falling outside the scope of a banking supervisor’s regulatory perimeter. In several jurisdictions, governments and the banking supervisory agencies have worked jointly to develop a taxonomy.[64] Banking authorities have also contributed to industry-led initiatives (e.g., Singapore).

39. The differing objectives and scope of taxonomies may pose challenges for implementation. Although climate change is a common theme, some taxonomies seek to serve other environmental objectives as well. Multiplicity of objectives can increase complexity and affect overall implementation and monitoring.[65] In some cases, taxonomies may be applicable to only certain operations of banks or have different applications based on the type of activity concerned. While some taxonomies are more granular and supported by technical screening criteria to inform monitoring and implementation, several supervisors have defined broad principles and criteria to facilitate the assessment and classification by financial institutions of economic activities that are considered to contribute to climate change mitigation and adaptation (e.g., Bangladesh, Indonesia, and Malaysia).[66]

40. Taxonomies seem to focus on defining what is “low-carbon” or environmentally sustainable, to encourage capital flows into such activities. It has not yet been scientifically established that low carbon assets pose lower financial risks than carbon intensive assets. Taxonomies are not a risk management tool *per se* and cannot offer a precise quantification of climate-related risks and risk exposures.[67] However, taxonomies can help supervisors develop a better understanding of banks’ assets based on their sustainability or lack

[63] European Commission (2018).

[64] In China, a multi-layered taxonomy exists: the Guiding Catalogue for the Green Industry, a joint work of ministries and financial supervisors, and the banking supervisor’s Green Credit Guidelines that includes a “brown list” of loans for reporting purposes. Similarly, the ongoing work of the Association of Southeast Asian Nations (ASEAN) for a regional Taxonomy of Sustainable Finance involves both governments and supervisors.

[65] Ehlers et al. (2021).

[66] See World Bank (2020).

[67] Network for Greening the Financial System (2022c), at page 19. See also NGFS, footnote 28.

thereof. For instance, banking supervisors can identify the level of exposure to transition risk and assets that may become stranded in the future. Moreover, given that economic activities, technologies, production processes, and products and services that qualify as low carbon or environmentally sustainable are limited, transition taxonomies are gaining attention. Such taxonomies signal which activities, while not yet sustainable, are in line with transition goals and can thus facilitate the availability of funding for firms transitioning to less harmful activities. Disclosure over such transition taxonomies in legally binding plans seems a promising avenue in support of climate efforts by supervisors and banks.[68]

Table 1: A Comparison of Selected Taxonomies

	EU	***China[69]***	***Bangladesh***	***Malaysia***
Taxonomy	EU Sustainable Finance Taxonomy	Green Industry Guidance Catalogue	Green Taxonomy, as part of Sustainable Finance Taxonomy	Principle-Based Taxonomy
Adopting body	Legislature	National Development and Reform Commission	Bangladesh Bank	Bank Neyagara Malaysia (in collaboration with the Joint Committee on Climate Change)
Role of the supervisor	Advisory	Collaborator	Issuer	Issuer
Legal nature	EU Regulation Binding	Guidelines	Regulation Binding	Guide Non-binding
Purpose	Identify environmentally sustainable activities	Promoting green development and pollution prevention	Identify green activities	Identify activities that meet climate objectives
Intended Users	Financial market participants, and all non-financial entities falling under the NFRD	Policymakers and also Chinese businesses and financial institutions	Banks and other financial institutions	Banks and other financial institutions
Level of Granularity	Granular criteria	Principle-based	Granular list of activities	Principle-based
Relevance to high-carbon activities	No	No	Partially (exclusion list)	Partially (exclusion list)
Relevance to banks	As issuer of bonds, or portfolio manager for product disclosure or as entities that fall under the NFRD for	As a reference point for green taxonomies design for	Yes (including green lending)	Yes

[68] See paragraph 47 and fn. 78.

[69] Based on Natixis (2023).

	financial statement disclosure	financial instruments (bond and credit)

41. Where multiple taxonomies exist within a jurisdiction, misalignments can be a concern. Taxonomies and their disclosure can inform stakeholder actions in a wide range of areas, with respect to fiscal, industrial, and trade policies, central bank collateral policies, and financial sector supervision. In principle, different authorities may issue a taxonomy to fulfill their own functions. However, multiple taxonomies can weaken standardization and may lead to significant inconsistencies (e.g., between the banking supervisor's taxonomy and the central bank's collateral taxonomy). This ideally calls for a coherent taxonomy (or set of coherent taxonomies), ultimately supported by the government, while allowing modifications for different areas of use. While centralized setting of standards may give rise to increased costs and weaken flexibility, these risks can be minimized by strong interagency coordination. [70]

42. Taxonomies may be applicable to banks directly or may be indirectly relevant to them, to understand the carbon footprint of their corporate clients. When banks issue listed securities or their products are subject to other disclosure requirements, their securities and financial products will be governed by the relevant taxonomy. Banks will therefore have to comply with the relevant rules. There will be other cases however where the taxonomies will be indirectly relevant to the lending activity of banks. For instance, the disclosure made by their corporate clients under the taxonomies will inform the risks and business strategy of banks from a climate perspective.

43. The development of environmentally sustainable taxonomies calls for a careful assessment of the role and mandate of banking supervisory agencies also from a legal perspective. Taxonomies could pursue broad policy goals, especially when adopted by Governments and have become a mainstream policy tool only recently.[71] The role of the supervisor in their development and adoption should be in line with its mandate. It is essential that banking supervisors develop their understanding of whether the classification system in taxonomies could be relevant for supervisory assessments and binding prudential requirements, which would then inform their possible role in enforcing the taxonomy (See Box 8). A question for instance is whether taxonomy classifications are aligned with prudential considerations. A legal approach could be to recognize that banking supervisors have the power to back up taxonomies with modifications, where necessary, to capture the risks that climate change presents to the safety and soundness of banks.[72] There should also be clarity as to whether taxonomies would be directly applicable for banking supervision purposes or if they would require the adoption of any legal instrument by banking supervisors.

[70] Japan Financial Services Agency (2021).

[71] See, paragraphs 37-39.

[72] Such back-up powers are typically recognized in the case of accounting and financial reporting, as banking supervisors can fill in the prudential gaps presented in such accounting and reporting standards.

44. The legal design and governance of taxonomies should give consideration to their revisions over time. Legal clarity on the entry into force of the legal instrument establishing taxonomies allows transparency over the transitioning to environmentally sustainable activities. While setting the minimum floor, taxonomies should not prevent banks from "gold plating". Importantly, taxonomies and their supporting screening criteria and metrics need revisions over time, for instance to expand to new economic activities, technologies, production processes, or products and services, and to review their transition. The governance of taxonomies is unclear in existing instruments, including how they will be adjusted and by whom. As banks may develop expectations based on existing classification and metrics, authorities should consider how they will balance flexibility and legal certainty. For instance, when updating their screening criteria, the UK authorities plan to follow the same process of public consultation and legislation, ensuring that the revision process involves parliamentary scrutiny and give due notice to stakeholders. In the EU, a new regulation on European Green Bonds provides a partial phasing, as bond issuances made before a change in the technical screening criteria can continue to align with previous criteria for 7 more years, subject to transparency requirements.[73]

Box. 8: Legal Nature of Taxonomies and Their Enforcement

The legal nature of taxonomies differs. As noted, some jurisdictions have adopted taxonomies in the form of binding instruments (e.g., EU and Bangladesh), while others have issued non-binding instruments (e.g., China and Malaysia). Unless adopted by legislature in the form of a primary law instrument, the authorities may decide whether a binding or a non-binding secondary instrument would best serve their purpose. Secondary instruments issued by banking supervisory authorities often do not describe the legal basis for their adoption. Good practices on transparency and accountability should lead supervisory authorities to disclose the legal basis of their instruments.

The enforcement of taxonomies is typically linked to other binding obligations. As a mere system of classification to identify "low-carbon (or environmentally sustainable) activities", a taxonomy typically does not give rise to enforceable requirements *per se,* but can inform the qualification of assets in the implementation of another requirement (e.g., disclosure requirements). Such requirements may be included in the legal instrument establishing the taxonomy or in other instruments. Any failure to follow the taxonomy may only be sanctioned if that other action by a bank is susceptible of enforcement (e.g., an inaccurate disclosure) and to the extent that the respective requirement falls under their prudential remit. For instance, taxonomies may inform relevant market disclosure requirements—either related to the marketing of certain products or to financial reporting. Where banks are subject to a "comply or explain" requirements (not having thus a directly binding effect)—failures to comply may prompt enforcement action only if such failure give rise to a breach of a different obligation. Disclosure based on soft law expectations can still positively contribute to the objectives of taxonomies illustrated above.

(d) Climate disclosures and the role of law in their implementation

45. Climate disclosures are a key instrument to tackle climate policies and in particular to promote climate change mitigation. Disclosures under corporate and securities laws can incentivize banks to integrate environmental sustainability into their business and lead investors to discipline banks in reducing physical and transition risks (thus promoting "climate finance"). The FSB's Taskforce on Climate-Related Financial Disclosures (TCFD) provided recommendations to improve climate disclosure regimes, which impacts banks as

[73] See Article 8 of the Regulation (EU) 2023/2631 of the European Parliament and of the Council of 22 November 2023 on European Green Bonds and optional disclosures for bonds marketed as environmentally sustainable and for sustainability-linked bonds. Also see International Capital Market Association (2022), at page 16.

well. In addition to “governance” and “risk management”, TCFD Recommendations include disclosures on “strategy”, and “metrics and targets”. Recently, the International Sustainability Standards Board (ISSB), established by the IFRS Foundation, issued standards on climate-related disclosures, integrating the TCFD recommendations, and assumed the task to monitor progress in relation to climate-related disclosures by corporations. A growing number of jurisdictions has strengthened transparency on climate risks. Many jurisdictions have introduced climate disclosure regimes applicable to banks as corporations or under the prudential regulatory framework.[74] In some cases, multiple climate disclosure regimes have emerged for different purposes, on the top of disclosure provisions that banks are already subject to under corporate, banking and securities law.[75]

46. Several bank supervisors consider climate disclosures relevant to their legal mandate in various respects.—Incorporating, or informed by, TFCD Recommendations, these supervisors have clarified their expectations regarding the disclosure of climate risks.[76] Some bank supervisors approach climate disclosures under their mandate to promote market development and protect investors and market confidence (e.g., Danish FSA).[77] The legal mandate will define the purpose and scope of the disclosure requirements that supervisors can impose.

47. Legally binding transition plans for banks are increasingly being considered as an important policy tool. One approach is that banks disclose their plans on how they will align their business with the jurisdiction’s policy objectives towards the net zero target under the Paris Agreement, with tangible milestones until 2050, allowing bank management and the authorities to monitor progress.[78] This means that banks will need to design tailored mitigation measures and banking supervisory agencies will need to assess their adequacy. Different types of transition plans are developing, although the “legally binding” component of it refers generally to their preparation and/or disclosure, rather than on the undertaking of the activities contemplated in them. A number of legal issues need to be considered to pursue such a tool.

- *Legal basis.* Transition plans can help limit the magnitude and duration of transition risks, also minimizing physical risks.[79] This can arguably turn these plans into a prudential tool within the safety and soundness of bank supervisor’s objective. If there is no such a link between the plans and supervisory powers, legal challenges could arise. To address these concerns, consideration could be given to the introduction of legal provisions—either in primary laws or in implementing regulations—

[74] New Zealand made TFCD-aligned disclosures mandatory for large-listed companies and financial institutions. The UK has made TCFD-aligned disclosures mandatory across the economy. In France, legal provisions impose a “comply or explain” requirement: all major institutions (listed companies, but also banks and institutional investors) are required to report their exposure to long-term climate-related financial risk. In Australia, listed companies are required to disclose climate risks in their annual reports.

[75] In line with its scope, this paper focuses on disclosure from a banking law perspective, covering prudential aspects and risk management.

[76] For instance, the ECB established supervisory expectations for credit institutions under its supervision on disclosures of climate related and environmental risks, incorporating the Non-Financial Reporting Directive (NFRD) and TCFD Recommendations into the supervisory framework on disclosures.

[77] See footnote 45.

[78] Financial Stability Board (2021a). and Elderson (2022). See also Article 76(2) of the EU’s CRD (Directive 2013/36/EU), requiring that “... the management body of a bank develops and monitors the implementation of specific plans that include quantifiable targets and processes to monitor and address the financial risks arising in the short, medium and long term from ESG factors, including those arising from the process of adjustment and from transition trends in the context of the relevant Union and Member State regulatory objectives and legal acts in relation to ESG factors, in particular the objective to achieve climate neutrality, as well as, where relevant for internationally active institutions, third-country legal and regulatory objectives.”

[79] Evain et al. (2022).

establishing binding requirements to develop and disclose transition plans. This can also be helpful if transition plans entail changes in business models, based on broader public policy objectives.

- *Ongoing enforcement*. A separate issue is how to monitor and enforce legally binding plans. Transition plans will entail judgement from a business perspective, while the main focus of banking supervisory agencies is the assessment of risks. Supervisory action may be justified (only) to the extent that failure in adherence to such plans results in financial risks.

48. Pillar 3 disclosure under the Basel framework is another tool in the mandate of banking supervisors, albeit with certain legal limitations on confidentiality. Pillar 3 disclosures enable market participants to access key information on a bank's exposure to risks and the overall adequacy of its regulatory capital.[80] Some supervisors noted that disclosure of climate risks by banks could enhance market discipline and complement regulatory capital requirements.[81] While mainly enhancing market discipline, Pillar 3 disclosures can also incentivize capital allocation to sustainable investments and support a long-term approach in markets.[82] In the EU, the implementing technical standards were adopted on Pillar 3 disclosures for ESG risks and risk mitigation actions, as required by the CRR. These requirements originally applied to large banks whose securities are traded on any EU regulated market, although recent legislative amendments expand their scope to all banks, with the frequency of reporting calibrated to the size of the bank.[83] In defining the information to be disclosed, banks should not be put in a position to breach their confidentiality duties to individual customers.[84]

49. Disclosures by banks' clients on climate may also be relevant for the safety and soundness of the banking system. For banks to effectively manage their exposure to climate risks or to assess potential opportunities, information on how their counterparties perform relative to climate issues is essential.[85] However, the banking supervisory agency's powers typically do not extend to such counterparties. Where applicable (e.g., in case of listed counterparties), bank supervisors can advise or coordinate with other public bodies (e.g., securities regulators) the development of appropriate disclosure rules.

50. Notwithstanding the progress in developing frameworks for climate disclosures, challenges remain. Stocktaking by supervisors show that banks are far from meeting all supervisory expectations on disclosures.[86] "Low-carbon" taxonomies allowing comparability appears to be a useful tool to inform effective disclosure, but are still under development in most jurisdictions. As noted, where taxonomies are in place, they are geared towards defining what is environmentally sustainable and seem to be of more limited use for disclosures of climate risks per se. In addition, while it is the key benchmark to inform disclosures, the meaning of materiality can differ depending on the purpose and nature of the underlying requirements, such as financial reporting requirements and Pillar 3 disclosures. Some jurisdictions (e.g., EU, UK, and Switzerland) have introduced the notion of double materiality to recognize feedback loops between financial activities and climate

[80] See BCBS, Basel Framework, Disclosure Requirements.

[81] See Office of the Superintendent of Financial Institutions (2021).

[82] EBA (2022).

[83] See Art. 449a of the EU CRR (Regulation (EU) No 575/2013), as amended in 2024. For a background on the change, see European Commission (2021).

[84] See EBA, in footnote 82, at page 96.

[85] Elderson (2022), see in footnote 78.

[86] See European Central Bank (2022).

change (or more broadly ESG).[87] Where banks are subject to a multitude of climate disclosure requirements under various legal instruments within a jurisdiction, undue misalignments between them may frustrate the objectives of transparency and create additional complexities.

(iii) Supervision

51. Banking laws aligned with good practices are in general sufficiently broad to allow banking supervisory agencies to assess compliance with climate rules and expectations and to enforce them. The principles for the effective management and supervision of climate-related financial risks, adopted by the Basel Committee, advocate for the integration of these risks, among others, into bank's business strategies, corporate governance, and internal controls. They also recommend adopting adequate follow-up measures in case of material misalignment with supervisory expectations.[88] Some jurisdictions established legally binding climate requirements via hard law instruments (e.g., Brazil). While several instruments issued by banking supervisory agencies are not binding *per se,* they often presuppose that climate change aspects fall within existing, more general binding rules.[89] (See also Annex I). On this basis, where the banking supervisory agency identifies that its guidance is not met, such failure may not be a breach of a climate-specific requirements *per se*, but it will be considered as a factor to determine if binding rules under the broader bank supervision regime have been observed. If so, the banking supervisor may utilize the enforcement mechanisms under the banking law, such as warnings, cease and desists orders, and monetary fines. In other cases, agencies have issued non-binding guidance that aim to assist banks in tackling climate concerns, without envisaging legally enforceable actions.

52. Similarly, the early intervention toolkit remains relevant to banks in financial difficulty due to climate risks. From a legal perspective, early intervention frameworks in line with good practices grant an adequate degree of discretion to the authorities to respond to different circumstances flexibly. To this end, automatic and mandatory early intervention triggers may limit such flexibility, for instance when the impact of an extreme weather event on banks within a specific region is at stake.

III. Corporate Governance of Banks and Climate Change

Corporate governance determines how a company is directed and managed by its decision-making bodies. While the integration of climate change into corporate governance of banks is evolving, general good practices

[87] The Directive (EU) 2022/2464, known as the Corporate Sustainability Directive, mandates the development of common sustainability reporting standards that will be built on the double materiality perspective (see recital 37 and 39 of the Directive). The notion of double materiality aims to cover climate-related impacts on the company that can be material, as well as impacts of a company on the climate—or any other dimension of sustainability. As far as greenhouse gas emissions are concerned, the traditional approach to materiality (i.e., financial materiality) may not capture feedback loops between a firm's activities and climate financial risks, which in turn may affect the firm.

[88] The Basel Committee on Bank Supervision (2022).

[89] For instance, Bafin's Guidance Note on Dealing with Sustainability Risks clarifies that it does not affect existing legal requirements (see Bafin (2019a)). APRA more explicitly states that its draft Practice Guide on climate change supports compliance with APRA's existing risk management and governance requirements and the guide should be read in conjunction with its relevant documents setting these requirements(see Australian Prudential Regulation Authority (2021)) .

on corporate law and corporate governance can help develop a strategic approach to climate change through an active role for the boards.

Framing climate against best international practices on corporate governance for banks

53. Best international practices on corporate governance principles assert the duties of a bank's directors. General international principles for corporate governance indicate that "*board members should act on a fully informed basis, in good faith, with due diligence and care, and in the best interest of the company and the shareholders, taking into account the interests of stakeholders*."[90] The Basel Committee's Guidelines on Corporate Governance Principles for Banks state that *"the primary objective of corporate governance should be safeguarding stakeholders' interests in conformity with public interests on a sustainable basis. Among stakeholders, particularly with respect to retail banks, shareholders' interests would be secondary to depositors' interests".* The Guidelines also recommend that board members exercise their duty of care and duty of loyalty to the bank "*under applicable national laws and supervisory standards*" and indicate that the duty of loyalty entails acting in good faith in the interest of the bank rather than acting in one's own interest or in the interest of another individual or group at the expense of the bank and shareholders.[91]

54. Best practices on the corporate governance of banks are comprehensive enough to cater for climate considerations. The G20/OECD consultative document issued as part of the review of the OECD Principles of Corporate Governance recognizes that "[a] sound framework for corporate governance with respect to sustainability matters, in accordance with a jurisdiction's laws and regulations, can help companies recognize and respond to the interests of shareholders and different stakeholders, as well as manage their own long-term success.[92] This review resulted in a new chapter on "Sustainability and Resilience" as part of the principles. The key recommendations concern (i) the responsibilities of the Board on sustainability matters, including climate change; (ii) disclosure of sustainability-related information; and (iii) the dialogue on sustainability issues between a company and its shareholders and stakeholders on sustainability.[93] These new principles reinforce good practices in the area of bank supervision. International standards require bank boards to have ultimate responsibility for the bank's business strategy and financial soundness, governance structure and practices, risk management.[94] Accordingly, banks' boards are being called to understand and assess the financial risks caused by climate change with a forward-looking approach and to integrate them into the banks' business model, strategy, and risk management framework. Boards are also expected to conduct effective oversight over climate risks.[95]

[90] OECD (2023), Principle V.A.

[91] Basel Committee on Banking Supervision (2015). For an account of the broader issue of bank's corporate governance, see Kokkinis (2015).

[92] See also Bank of England Prudential Regulation Authority (2018).and World Economic Forum (2020).

[93] OECD(2023), Chapter VI.

[94] See BCP Principle 14, EC. 1 and 5 and Basel Committee on Banking Supervision (2015). This understanding found its reiteration in the Basel Committee's principles for the effective management of climate-related financial risks (see principles 1-3 of the Basel Committee on Banking Supervision, 2022).

[95] See for instance European Central Bank (2020) the EBA (2021). Similar statements can be found in various instruments adopted in France, Germany, Australia, Hong Kong, Singapore, Vietnam, and the UK.

Duties of directors and corporate governance models: implications on the pursuit of climate policies by banks

55. The duty of care of directors remains generally applicable to climate risks and opportunities, although the definition of its precise scope is under development. This duty concerns how board members make decisions, by requiring to act in an informed and prudent manner as expected from a reasonable director under similar circumstances. This standard is dynamic, as the content of required diligence is informed by the evolving understanding of risks and opportunities. As risks posed by climate change affect a bank's safety and soundness, board members' duty of care requires considering them.[96] Similarly, climate opportunities are also relevant to the board's overall responsibility on the bank's business and strategy. Some supervisors (e.g., APRA) have clarified that a prudent institution should consider both the opportunities and the financial risks of climate change in setting its strategy. The precise contours of the duty of care are to be developed as banks build the technical expertise on the integration of climate change into their governance and risk management. It remains generally relevant that bank supervisory agencies should not overstep into the board's business judgment, for which the board is accountable to shareholders.

56. Framing the duty of loyalty of a bank's board in furtherance of climate policies is complex. The key question is whose interests board members should protect—i.e., to whom they owe fiduciary duties, including when interests of different stakeholders are not aligned. Traditionally, the duty of loyalty is about the interests that directors should protect, rather than about the conflict between the directors' interests, the company, and the shareholders' interests.[97] (See Box 9). For banks, delineating the perimeter of the duty of loyalty for board members could be further complicated by the different layers of the banking legal framework (consisting of corporate and banking laws) and the wider range of stakeholders, including depositors. Climate change exacerbates complexities in light of the intertemporal nature of climate concerns and the potential misalignments of interests between shareholders and other stakeholders. In addition to primary laws, companies' by-laws and contractual arrangements can help determine the scope of the duty of loyalty and the related accountability of board members.

57. Conceptually, corporate governance models appear to converge in catering for climate risks. When the bank's own viability is exposed to risks, none of the interests of shareholders or of other stakeholders is fostered. The safety and soundness of the bank is the shared core aspect in any corporate governance model.[98] These models thus converge, and the interests of shareholders and other stakeholders seem to coincide, when there are foreseeable risks to the long-term viability or for the soundness of the bank—including climate risks. The board members' duty of loyalty will entail identifying, quantifying, mitigating, and managing climate-related risks with a view to ensure the resilience of the bank.

[96] It has been argued that, given the widespread acknowledgement of climate risks, 'reasonableness' assessed against an objective standard means that directors could be held liable for a breach of their duty of care. Sarra et al. (2021).

[97] Some corporate laws only refer to the interests of the company, without explicitly assimilating the best interests of the company with those of its shareholders (see section 181 of Australia's Corporations Act). Other laws evolved to recognize the interests of other stakeholders such as employees, creditors, customers, suppliers, the community and the environment (see for example Section 166(2) of the Indian Companies Act).

[98] New Zealand Ministry for the Environment & Ministry of Business, Innovation& Employment (2019).

Box 9. Corporate Governance Models and Banks

General corporate governance laws reflect the ongoing debate on how directors may balance the shareholders' and stakeholders' interests. Jurisdictions fall somewhere in between the following models:[1].

(i) At one end of the spectrum, the shareholder primacy model obliges directors to exclusively consider the shareholders' financial interests, while observing the applicable legal framework and ethical standards. Under this model, the interests of other stakeholders are implicitly *permitted* for consideration to the extent that those interests may be relevant for the creation of long-term value for the shareholders and other relevant laws. In a different variation, the board, while fulfilling its duty to the corporation, must *"consider"* stakeholders' interests, and the social and environmental stakes (this is the so-called enlightened shareholder value model of the UK). In this model, stakeholders' interests are required to be considered, and the board will be liable accordingly, in view of the different laws (environmental laws, labor laws, etc.) preserving such interests. It should also be noted that companies' bylaws and contractual arrangements can provide to the relevant parties considerable flexibility in practice, in each relevant circumstance, to require the consideration of different stakeholders, other than the shareholders.

(ii) At the other side of the spectrum lie models where the directors owe their loyalty to shareholders and other predefined stakeholders equally (e.g., India). In its variation involving societal goals, the directors are required to balance shareholder's financial interest with the best interests of stakeholders, and to fulfil a number of specified public interests defined in the company's article of association (e.g., public benefit companies in Delaware).

The scope of the bank board's duties varies in banking legislation. Typically the duties of bank's board members will derive from general corporate law and the legal relationship between the bank and board members (e.g., an agency or labor contract with fiduciary components). Few banking laws include statements on the long-term interests of the bank as a principle guiding corporate governance arrangements (e.g., see the recent amendents to the EU's Capital Requirements Directive).[2] Some banking laws specify that the board will have regard to the interests of depositors, while others, in addition, refer to the interest of "investors and other creditors and all clients".[3] In certain cases, the interests of the bank, depositors and shareholders are put on equal footing, which complicates the assessment of how the board will manage trade-offs between possibly conflicting interests. On the other hand, some jurisdictions only refer to the interest of the bank as the factor guiding the board.

[1] OECD (2022).

[2] See European Banking Authority (2021) and European Commission (2021), for the rationale of these changes.

[3] See Article 72 and 130 of Angola's Financial Institutions Law.

58. The debate on the configuration of the boards' duties appears more nuanced when the support of climate mitigation is at stake.[99] The question is whether these duties can compel or be a basis for the boards to reallocate capital to low-carbon activities (e.g., environmentally sustainable 'green' lending), when the value maximization in the short term may not be immediately evident—but such decisions may increase the expected long-term value of the entity. Banks' boards may be required to consider the long-term sustainability

[99] See more broadly Bolton et al (2020).

of the bank under corporate law.[100] In principle, stakeholder models may be viewed as more apt for such corporate behavior, since in those models the board takes into account or serves the interest of other constituencies. Under this approach, stakeholder interests can be put on equal weight with the company's interest[101] and they may arguably be served even when not associated with financial performance.[102] However, there is skepticism about stakeholder models, including in a climate context.[103] A concern raised is that boards face challenges in solving trade-offs involving non-financial results and can appeal to other stakeholder interests to avoid accountability for financial performance.[104] At the same time, the shareholder model may still allow the board to consider the interests of non-shareholders with a view to promote the interests of the company and its shareholders, i.e., value maximization.[105]

59. Regardless of the different corporate governance models, several legal changes and mechanisms can shape and guide boards' duties in integrating climate change over a long-term perspective. Different legal avenues—statutory or contractual - could be pursued to inform the duties of the boards in view of such perspective. For instance, in addition to the selection of board members and the right to request information, shareholders can pursue, through proxy voting and shareholder engagement, amendments in the entity's foundational legal instrument (e.g., articles of association) to clarify the firm's goals (e.g., other than short-term maximization of value), or seek to pass resolutions in the shareholders meeting. Such resolutions can ask the bank board to take various actions, including a reduction in greenhouse gas emissions.[106] Even when not binding, it will be difficult for the board to ignore such resolutions. Other instruments include disclosure requirements, addressed in Section I, sub-section (iv)above.[107] Some jurisdictions introduced references to climate change in the primary law relevant to the duties of the board, including to factor in climate risks also within a longer time horizon.[108] Moreover, the recently emerged good practices recommends that corporate governance frameworks should *"allow for dialogue between a company, its shareholders and stakeholders to exchange views on sustainability matters as relevant for the company's business strategy and its assessment of what matters ought to be considered material"*, a mechanism which is acknowledged to be more relevant in case of assessing risks and benefits within a different time horizon.[109]

[100] See section 172(1) of the UK's Company Act 2006, which requires that a "director of a company must act in the way he considers, in good faith, would be most likely to promote the success of the company for the benefit of its members as a whole, and in doing so have regard" to specified other interests, consequences, and impacts, including "the likely consequences of any decision in the long term" and "the need to foster the company's business relationships with suppliers, customers and others" and "the impact of the company's operations on the community and the environment", and Malaysia's Code of Corporate Governance, requiring that the board, on a "comply or explain basis", takes appropriate action to ensure they stay abreast with and understand the sustainability issues relevant to the company and its business, including climate-related risks and opportunities.

[101] See for example Section 166(2) of the Indian Companies Act.

[102] Varottil (2022).

[103] Bebchuk and Tallarita (2020).

[104] It may not be easy for the board to decide the best outcome for society if it needs to weigh between financing a project involving factory update to emit less Co2 a year or another project that would preserve certain hectares of tropical forest. See OECD (2022).

[105] Marshall and Ramsay (2012).

[106] Ceres, a sustainability nonprofit, reported record numbers of climate resolutions (215) filed during 2022 proxy season. These include for example resolutions filed in large international banks in the US, asking these banks to adopt a financing that does not contribute to new fossil fuel supply. Similarly, some Australian banks' shareholder meetings in 2022 considered shareholder climate resolutions asking the banks to fulfill their commitments to align lending with the Paris Agreement and stop financing expansionary fossil fuel projects (See PRI 2022). While no resolution passed in any of these countries yet, the mere filing of proposals is seen as a major milestone.

[107] Sustainable investment funds can also play a greater role in transition to a green economy, although they are limited in size and scope today. IMF (2021).

[108] See footnote 58, for references to the provisions of the EU's Credit Requirements Directive (Directive 2013/36/EU)..

[109] See OECD (2023), Principle VI.B

Good practices are not prescriptive about relevant mechanisms, although shareholders meeting is naturally the primary forum for dialogue with shareholders.

60. General corporate accountability mechanisms may contribute to the pursuit of climate policies by the bank's corporate governance bodies. The board is generally responsible for the bank's business, including its strategy, financial soundness, and risk management, and disclosing relevant information. Various mechanisms are available to shareholders under corporate law to hold board members accountable. For instance, some large asset managers have expressed a policy, in relation to the shareholding held on behalf of their clients, to vote against management and board directors failing to make progress in disclosing climate risks.[110] To the extent permitted under corporate law, shareholders can also request information from the board on climate change, such as on climate-related financial risks or on progress in the implementation of bank's climate strategy and metrics. Board members can also be held liable for failure to fulfill fiduciary duties and to observe the duty of care. However, the standard for liability is high, and is yet to be tested in the context of climate change, where complexities emerge (e.g., establishing causation and damage as climate risks tend to materialize over the long run). Only the company—represented by the board—and shareholders (under certain conditions) have the legal standing to use this accountability route. Other stakeholders typically do not have such standing (except creditors in case of insolvency).

61. Clarifying the allocation of competences between shareholders and boards over "business strategy" will assist in defining the board's role. Legal frameworks often define the board's ability to set the strategy and allocate different roles for the board and the shareholders meeting. Such a strategy could include climate objectives (e.g., the development of sustainable products).[111] If some matters in the strategy are reserved for the shareholders meeting under corporate law or the bank's articles of association, the board may need to receive shareholders' approval for such strategic changes. However, typically, boards have ultimate responsibility for the bank's business strategy and their financial soundness, corporate culture, governance structure and practices, risk management and compliance obligations.[112]

Climate responsibilities in banks' corporate governance bodies

62. Approach to assign responsibilities over climate risks within the corporate governance of banks vary. The unique features of climate change require a strategic approach—that is yet under development. Often, banks have established board-level committees to address financial risks arising from climate (e.g., credit risk at transaction and counterparty level). Others have set up risk committees and require the reporting to the board on climate risks by a risk management function. As regards the scope of responsibilities, some jurisdictions focus on climate risks (e.g., UK), while others also mention the business opportunities for banking institutions (e.g., Australia). The EBA recommends allocating duties and responsibilities among board members rather than to one board member, without prejudice to the collective liability of the board. In the UK, responsibilities can be assigned to one or more persons from the board or to the executive management at the highest level. Jurisdictions may give board discretion to establish sub-committees (e.g., Australia, Germany, and Singapore) or require a dedicated committee for large and complex institutions (e.g., Brazil). In these cases, it should be clear that committees would assist the board. As with any

[110] See Blackrock (2020).

[111] European Banking Authority (2021).

[112] See BCP Principle 14, EC. 1 and 5 and Basel Committee on Banking Supervision (2015). Several banking laws also include formulations along these lines.

other risks, the board bears the ultimate responsibility and should maintain mechanisms to monitor the exercise of any delegated authority, such as in the case of executive committees (See Box 10).

63. Banking supervisory agencies should seek a clear allocation of responsibilities also at the executive management level of a bank. In Singapore, the supervisor expects that banks' senior management (i) implements the bank's climate strategy (including both risks and opportunities) and its risk management framework and policies, and (ii) updates the board regularly, to enable its effective oversight. In Hong Kong, banks are expected to clearly allocate these responsibilities to designated individuals or management-level committees. A few jurisdictions have in place more granular guidance and require that dedicated units coordinate different functions of the bank in order to comply with environmental and social risk management (e.g., Pakistan and Bangladesh). Some supervisors indicate that it may be difficult to manage climate risks with a siloed climate change function (e.g., UK).[113] Where dedicated climate units are set up, their responsibilities and interaction with existing governance structures should be clearly defined. The approach generally followed by authorities seems to give flexibility to banks to decide what is best based on their structure and business model. Annex II presents examples on how banks integrate climate risks into their governance models.

64. Gaps and overlaps in the allocation of climate responsibilities should be avoided. These may arise when the corporate governance framework does not assign the different responsibilities relevant to climate change (e.g., strategy setting, oversight, and execution) among the bank's organs, or assigns a responsibility to multiple bodies. For instance, the law may lack a clear formulation on the responsibility of the board over the bank's affairs or conflate the role of the shareholders and of the board.

Other supervisory law aspects

65. Board members and senior managers should collectively be fit and proper to fulfill their responsibilities, including with respect to climate risks.[114] Good practices require that the board be collectively suitable based on the bank's business and risk profile. Having this general requirement in the banking law enables the supervisor to vet a composition of the board that gives due regard to risks, including climate risks when deemed material. Such overall suitability is essential for the board to collectively understand and assess regularly risks, including those arising from climate change (e.g., EU).[115] Moreover, banking supervisory agencies may give regard to climate considerations when applying the fit and proper test to individual board members or senior managers - especially those to be charged with climate change responsibilities. While banking laws should retain a degree of flexibility allowing to cater for different circumstances, banking supervisory agencies could evaluate updating their regulations and policies to reflect climate change aspects, if needed.[116]

66. Adequate remuneration policies and practices can support the integration of climate considerations by banks. Remuneration policies should be sensitive to the time horizon of risks and could allow to defer variable compensation payments accordingly. Good practices recognize an active role for the

[113] Bank of England Prudential Regulation Authority (2019b).

[114] European Banking Authority (2021) at page 100.

[115] See Art. 91(2b) of the EU CRD (Directive 2013/36/EU), as amended in 2024, stating that "The management body shall possess adequate collective knowledge, skills and experience to be able to understand the entity's activities, as well as the associated risks it is exposed to, and the impacts it creates in the short, medium and long term, taking into account ESG factors."

[116] The DNB expects proposed managers to be able to define climate risks, be aware of relevant legislation, identify, monitor and manage them, and formulate a strategy and policies to tackle such risks (see De Nederlandsche Bank, 2021).

bank's boards in overseeing the design and operations of compensation systems. Without being prescriptive at this stage, some authorities have recognized the relevance of the issue and expect banks to consider climate concerns in the design of their remuneration policies (e.g., EBA). It seems opportune for the authorities to assess if the remuneration framework for banks may be adjusted to address climate risks and opportunities. For instance, it could be evaluated whether the deferral period of variable compensation is commensurate to the exposure of banks to risks running over a longer time horizon (e.g., transition risks). Also in this case, consideration should be given to retaining an adequate degree of flexibility in the primary law, while adapting implementing regulations.

67. The mandate of supervisory authorities in assessing the fulfilment by the board of its climate related responsibilities varies depending on whether climate risks or climate mitigation policies are at stake. Directors are responsible to oversee the management of risks. Given the increasing evidence that climate change can present material risks for banks, there is no doubt that the responsibilities of board members include overseeing the management of these risks. As long as risks are related to the bank's safety and soundness, the supervisor should assess the appropriateness of the bank's evaluation of such risks, and request action where shortcomings are observed.[117] Board members must attest to the supervisory authority the full compliance of the bank with laws and regulations, including climate change. External audits can provide input to bank supervisors as well as to stakeholders on the responsibilities of the board, particularly if adequate expertise is built for special audits.[118] Different considerations arise with respect to climate mitigation policies, relevant for the bank's approach to climate opportunities. In this case, the supervisory assessment should be strictly limited to an evaluation of the implications of such opportunities on the bank's strategy and viability and to the related decision-making process, rather than substitute for the technical business judgement underlying them.[119]

68. The interplay between climate disclosures and corporate governance can strengthen climate action by banks. On one hand, corporate law enables the monitoring by shareholders and creditors of any excessive risk-taking by management. On the other hand, financial standards require the disclosure of information that could reasonably be expected to influence investors or creditors' analysis of a firm. Banks' assets may be difficult to value[120] also in a climate context, complicating such monitoring. Improving climate disclosures can address this issue. Laws and regulations increasingly require banks and their boards to disclose and integrate climate risks into a bank's governance and risk management processes.[121] In addition, disclosures inform the accountability of board members to internal or external stakeholders in relation to climate actions, with different variations depending on whether disclosures are required or have a "comply or explain" nature.[122] Annex I give an overview of different legal instruments adopted in several jurisdictions.

[117] Basel Core Principles, Principle 8 on Supervisory Approach and Principle 15 on Risk Management. See as an example European Central Bank (2020).

[118] As climate matters will be reflected in financial statements if they have a material effect, this seems to provide a basis for the external auditors' work to include climate risks, to the extent relevant to the bank's financial statements. See also Box 5 on IAASB (2023).

[119] European Banking Authority (2021) at page 135.

[120] Kokkinis (2015).

[121] New Zealand Ministry for the Environment & Ministry of Business, Innovation& Employment (2019), at page 31.

[122] Recently, customers and investors have brought lawsuits based on the breaches of disclosure requirements and the fiduciary duties of board members and managers (see National Association of Corporate Directors, 2020 and Network for Greening the Financial System, 2021).

Box 10. Banking Supervisory Agencies' Rules and Expectations on Corporate Governance and Climate Change—Selected Examples

UK: PRA strategic approach to managing the financial risks from climate change[1]

The PRA expects that the bank's response to financial risks from climate change (climate risks) be proportionate to the nature, scale, and complexity of its business, and intends to embed the measurement and monitoring of these risks into its existing supervisory framework.

Governance

Boards are expected to assess, address and oversee climate risks within the bank's overall business strategy and risk appetite. The board should understand climate risks with a sufficiently long-term view (i.e., beyond standard business planning horizons). Banks are expected to have clear roles and responsibilities for the board and its sub-committees in managing climate risks. The board should ensure that adequate resources and expertise are devoted to manage climate risks.

Disclosure

In addition to their existing disclosure requirements, banks should consider whether further disclosures are necessary to enhance transparency on their approach to manage climate risks. The PRA expects banks to consider engaging on initiatives on climate financial disclosures (e.g., the TCFD framework).[2]

Australia: APRA Prudential Practice Guide on Climate Change Risk[3]

APRA underlines that the ultimate responsibility for the sound and prudent management of banks rests with its board of directors, and considers a prudent practice for the board to understand and regularly assess climate risks. APRA is of the view that such risks should be managed within an institution's overall business strategy and risk appetite, and the board should be able to evidence its ongoing oversight. A prudent board is likely to:

a) ensure an appropriate understanding and discuss climate risks at the board and sub-committee levels, which may include appropriate training for board members;

b) set clear roles and responsibilities of senior manage, and hold senior management accountable;

c) re-evaluate risks, opportunities and accountabilities on a periodic basis;

d) take a shorter-term and longer-term view when assessing climate risks and opportunities; and

e) ensure that, where climate risks are found to be material, the institution's risk appetite framework incorporates the risk exposure limits and thresholds for the financial risks that the institution is willing to bear.

In addition, APRA indicates that senior management would typically be responsible for:

a) applying an institution's risk management framework to assess and manage climate risk exposures;

b) regularly reviewing the effectiveness of the framework;

c) providing recommendations to the board on the institution's objectives, plans, strategic options, and

d) ensuring that adequate resources, skills and expertise are allocated to the management of climate risks, including through training and capacity building amongst relevant staff.

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[1] Bank of England Prudential Regulation Authority (2019a).

[2] Pillar 3 disclosures—as required under Capital Requirements Regulation (575/2013) (CRR) and Solvency II, and on principal risks and uncertainties in their Strategic Report—as required under the UK Companies Act.

[3] Australian Prudential Regulation Authority (2021). Prudential practice guides assist regulated institutions in complying with prudential, risk management and governance standards, but do not create enforceable requirements.

IV. Conclusions

69. Bank supervisory agencies' climate actions must be consistent with the legal framework. Stepped up ambitions to achieve global climate change goals call into question the role of public authorities, including banking supervisory agencies. While the primary responsibility rests on politically accountable bodies, supervisory agencies should incorporate climate change considerations into their actions given the impact of climate change and climate policies over banks. However, they must do so in the pursuit of their legally assigned mandate aligned with best practices.

70. Bank supervisory agencies, within their current legal regime, have adopted measures to respond to climate change. To the extent that climate change impacts the stability of the banking sector and the financial soundness of banks, banking laws aligned with good practices are in general sufficiently broad to support the actions taken by banking supervisory agencies within their existing mandate. In that light, many banking supervisory agencies are taking actions to address climate risks without the need to amend primary laws, and recent revisions to the Basel Core Principles reinforce this position. These measures include issuing supervisory expectations or binding rules to integrate climate change into the prudential framework, developing stress test and scenario analysis, incorporating climate considerations into supervisory practices, taking actions in case of increased risks, and contributing to the development of taxonomies. Banking supervisory agencies should also assess how the integration of climate considerations impacts their decision-making arrangements, and how general administrative law principles, such as the principle of attribution, proportionality, precautionary principle, and due process safeguards, could affect the making of their regulatory decisions related to climate change. This paper argues that uncertainties in the exact quantification of risks and different time horizon of climate events should not impede under general administrative law the ability of supervisory agencies to adopt such decisions, subject to appropriate safeguards.

71. Legal concerns arise if climate actions adopted by the banking supervisor conflict with the safety and soundness objective. When legal frameworks, departing from international best practices, lack a clear safety and soundness objective, banking supervisory agencies may face challenges in defining their role on climate change policies. If the banking supervisory agency is charged with additional responsibilities, these should remain subordinated to the main objective of banking supervision law. i.e., safety and soundness of banks and the banking system. Adopting measures to pursue climate objectives in a way that compromises the safety and soundness anchor would expose the bank supervisory agency to legal, political and reputational risk, potentially undermining its legitimacy, and its ability to achieve its assigned mandate. This could blur the responsibility of politically accountable authorities and expose the bank supervisory agency to attempts to limit its operational autonomy. On the other hand, linkages between governmental and financial sector policies prompt to examine the role of coordination mechanisms, and new practices are emerging in this respect. In any event, coordination mechanisms should respect the autonomy of the banking supervisory agencies.

72. Taxonomies are important policy instruments to promote adequate policies, albeit with some limitations and pending progress on several fronts. Notwithstanding their use as a source of information for supervisors, current taxonomies focus on defining what is "low-carbon" or environmentally sustainable, and therefore they are not a risk management tool per se and cannot offer a precise quantification of climate-related risks and exposures. There are also significant variations in the legal form, objective, scope, and the issuing authority of taxonomies, and in some cases, multiple taxonomies within a jurisdiction may raise concerns about misalignments. Legal aspects to consider include the participation of banking supervisory agencies in the

development of taxonomies and how taxonomies fit within their mandate, as well as granting them back up powers where taxonomies' classifications are not fully aligned with prudential considerations around the safety and soundness objective. In addition, the implementation of taxonomies presents several challenges, including the governance of the existing instruments (e.g., how they will be adjusted and by whom, while balancing flexibility and legal certainty), and the scope of disclosures.

73. Climate disclosures have so far been the key policy instrument to tackle climate change and in particular to promote climate change mitigation. Disclosures are the common theme across all guidance issued or under consideration by different standard setting bodies. Many jurisdictions have introduced climate disclosure regimes applicable to banks as corporations or under the prudential regulatory framework, and in some cases, multiple climate disclosure regimes apply to banks. Supervisors consider climate disclosures relevant to their legal mandate in various respects. Existing disclosure requirements (e.g., Pillar 3 under the Basel framework) can be utilized to cover climate risks. As new instruments, transition plans that require banks to prepare and disclose tailored mitigation plans gain growing attention. Banking supervisory agencies should assess whether they can impose such plans under their existing powers and how they will monitor and enforce these plans. Despite commendable progress in climate disclosures, challenges remain, linked to issues around taxonomies, the meaning of "materiality", and misalignments between multiple disclosure regimes. Importantly, banking supervisors should recognize their efforts on disclosures should be complemented by progress on disclosures related to non-financial corporate sector and engage with relevant authorities to that end.

74. Corporate governance frameworks and in general banking laws could assist in integrating climate considerations into the bank's business model. Building on existing international good practice, such framework could help delineate the contours of the board member's duties with regards to climate risks. Several legal mechanisms can help clarify the understanding of fiduciary duties and the accountability of bank's boards in a climate change context, including how the trade-offs between short-term value maximization and long-term value is struck. These mechanisms could be statutory or involve corporate law arrangements (i.e., articles of association). The interplay between climate disclosures and corporate governance as well as general corporate accountability mechanisms may contribute to the pursuit of climate policies by bank's bodies, although those mechanisms that rely on civil liability are yet to be tested.

75. Banking supervisors can define their expectations on how climate change considerations feed into corporate governance. These include the ultimate responsibility of the board for the integration of climate change into bank's business strategy, and risks-management, and a clear allocation of climate-related responsibilities across different bodies without gaps and overlaps. Banking supervisors add climate considerations into the application of their fit and proper assessments, and in defining remuneration policies. However, when assessing the fulfillment by the board of its climate-related responsibilities, banking supervisors should exercise care to avoid undue interference with the technical business judgement underlying board decisions.

Banking Law and Climate Change

Key Considerations Table

	Legal Mandate	Paragraph
1.	Banking supervisory agencies should determine whether and how the pursuit of climate policies, and what type of climate policies, fall within their mandate anchored on the safety and soundness of the banking system. To the extent that climate policies fall with their mandate, banking supervisory agencies should take steps to pursue them.	#9, 13
2.	Mission statements or similar documents are helpful instruments to strengthen the public understanding of banking supervisory agencies' contributions to climate policies and should be aligned with the legal provisions governing their mandate.	#10
	Objectives	
3.	In the interest of legal certainty and accountability, bank supervisory authorities should analyze the applicability of obligations under the Paris Agreement to their activities.	#17
4.	Where recommendations by governments or similar instruments can be taken into account by the bank supervisors, such instruments should not weaken the bank supervisor's operational autonomy. Their design should be guided by transparency principles, in light of the distinct roles played by the government and banking supervisory agencies.	#20
5.	Any roles assigned to the supervisory agency should remain subordinated to the main objective of banking supervision law, anchored on safety and soundness in line with best international practices.	#22-23
6.	Banking supervisory agencies should design their decision-making arrangements in a manner that integrates climate considerations into their mandate.	#24
7.	The board of a banking supervisory agency should be required to have, collectively, adequate capacity to design and to assess climate measures appropriately and proportionally.	#25
	Functions and Powers	
8.	Banking supervisory agencies should assess how general administrative law principles guiding their activities affect their policies on climate issues, in particular: (a) Principle of attribution and alignment of powers with stated objectives; (b) Principle of proportionality; (c) Precautionary principle; (d) Procedural safeguards, and (e) Time-horizon in the assessment of risks and pursuit of financial stability. Legal reforms may be pursued to provide higher legal certainty in carrying out climate goals by the banking supervisory agency.	#31
9.	Authorities should evaluate whether their regulatory instruments should address climate risks on a standalone basis or in combination with other relevant risks or policy goals.	#33
10.	Banking supervisory authorities should clarify the legal nature of their prudential instruments on climate change, and how this affects their ability to take supervisory measures if a bank fails to act in line with the relevant instrument.	#34
11.	To pursue climate policies within their mandate, authorities should consider the interaction between prudential instruments and the broader legal infrastructure relevant to banks' activities.	#35

12.	Banking supervisory agencies should assess their role in the development of taxonomies in light of their mandate.	#43
13.	Banking supervisors should determine whether the classification system in taxonomies could be relevant for supervisory assessments and binding prudential requirements, which would then inform their possible role in enforcing the taxonomy.	#43
14.	The design and governance of taxonomies should give consideration to legal certainty and require their periodic review.	#44
15.	Banking laws should not impede (e.g., as a result of automatic triggers for intervention) the banking supervisory agency's flexibility to adopt appropriate policies while dealing with the impact of extreme weather events.	#52
Banks' Corporate Governance		
16.	Jurisdictions should determine the legal avenues available in their legal system in interpreting the board of directors' duties with respect to climate change activities, particularly over a long-term perspective.	#59
17.	Jurisdictions should clarify that boards bear the ultimate responsibility in relation to climate change and maintain mechanisms to monitor the exercise of any delegated authority.	#61, 62, and 64
18.	Banking supervisory agencies should seek a clear designation of responsibilities related to climate change among decision-making bodies of a bank and at the executive management level, avoiding gaps and overlaps.	#63, and 64
19.	Banking supervisory agencies should integrate climate change risk considerations into their assessment of collective and individual suitability of the board and of remuneration policies, and evaluate updating their regulations and policies to reflect climate changes aspects, if needed.	#65 and 66
20.	Banking supervisory authorities should assess the appropriateness of the evaluation of climate change material risks by the bank's board.	#67
21.	Banking supervisors could evaluate whether disclosures and external audits can provide them and other stakeholders with input on the responsibility of the boards in relation to climate change.	#67 and 68

Annex I. Different Legal Nature of Regulatory Instruments-Selected Examples[1]

Regulatory Action	Legal Nature Soft/ Hard-Law	Focus	Prioritizing Green Finance
Australia			
Prudential Practice Guide on Climate Change Financial Risks. Final Prudential Practice Guide CPG 229 Climate Change Financial Risks (apra.gov.au)	Soft-law, non-binding, principles-based approach, proposed good practice standards	Climate change; governance, risk management, scenario analysis, stress testing practices	No
Germany			
BaFin Guidance Notice on Dealing with Sustainability Risk	Soft-Law, non-binding, good practice principles	ESG; risk management and strategy, corporate governance, stress testing, entity specific testing	No
Hong-Kong			
• HKMA White Paper on Green & Sustainable Banking. • HKMA Supervisory Policy Manual • HKMA, Hong Kong Taxonomy for Sustainable Finance (hkma.gov.hk), May 2024 • HKMA, Hong Kong Taxonomy for Sustainable Finance: Supplemental Guidance (hkma.gov.hk), May 2024	Soft-Law, supervisory expectations; good practices by banks in the industry. The taxonomy is currently for voluntary use by the industry.	Climate change; governance, risk management and disclosures principles/ practices	Yes
Indonesia			
Sustainable Finance Regulation[2]	Hard Law, binding, principle-based requirements on financial services institutions[3]	ESG; requirements on financial service institutions to apply “sustainable finance” in business activities, implementing responsible investment principles, risk management, governance	Yes

[1] This table does not intend to provide an exhaustive list of the instruments issued by relevant authorities in connection with climate change or ESG issues. Please consult the relevant banking authorities’ websites for more details on their work related to climate change. The legal nature of an instrument indicated in this table reflects the authors’ own assessment, without prejudice to any different interpretation that the authorities may have.

[2] Based on Law 32 of 2009 on Environmental Protection and Management.

[3] As defined in Article 1 of the Regulation.

Bangladesh			
• Environmental Risk Management Guidelines for banks and FIs in Bangladesh, 2011 • Policy Guidelines for Green Banking for Banks and non-bank FIs, 2013 • Green finance products list of 55 products, 2017 • Guidelines on Environmental Risk Management, 2017 and updated in 2022 • Bangladesh Bank Mandatory Green Finance& Sustainable finance Credit Targets • Bangladesh Bank Integrated Risk Management Guidelines for Financial Institutions, 2016 • Bangladesh Bank Guidelines on Environmental and Social Risk Management for Banks and Financial Institutions, 2017 and updated in 2022 • Bangladesh Sustainable Finance Policy for Banks and Financial Institutions, 2020 • Policy on Green Bond Financing for banks and FIs, 2022 • 70 Green Finance Products in 11 sectors,2023 • 5 Refinance Schemes. • All are Open pdf files (bb.org.bd) • The policies are issued under the authority of section 45 of Bank Company Act, 1991 and Section 18 (Cha) of Financial Institutions Act, 1993.	Soft and hard law	ESG/ Climate change; requirements to make environmental considerations in providing new loans, establishing climate risk fund; minimum green & Sustainable credit quotas	Yes
Vietnam			
Directive on Promoting Green Credit Growth & Environmental Social Risk Management in Credit Granting Activities	Binding regulations	Environment; focus on financing environmentally friendly activities, developing green credit programs	No
Brazil			
• Banco Central do Brasil Circular 3,547 of July 7, 2011 • National Monetary Council, Resolution No. 4,327/2014 • BCB Policy for Socio- Environmental Responsibility (PRSAC) • BCB Resolution No. 153/2021 • NMC (CMN) Resolution No. 495/2021 • BCB regulations related to social environmental and climate-related risks and disclosures (Voto (bcb.gov.br)) o CMN Resolution No 4943(which amends Resolution No 4557)[4]	Binding regulations	ESG; assessment of operational and financial risks of climate change, capital adequacy requirements, civil liabilities for indirectly financing environmental pollution	No

[4] Enters into force July 1, 2022.

◦ CMN Resolution No, 4944 (which amends Resolution No. 4606 [5]) • BCB Report on Social, Environmental and Climate- related risks and Opportunities			
China			
• PBC, Ministry of Environmental Protection (MEP), China Banking Regulatory Commission (CBRC) – Opinions on Implementing Environmental Protection Policies and Rules Precenting Credit Risk • Green Credit Policy 2007 • CBRC Notice on Issuing the Green Credit Guidelines	Non-binding; voluntary recommendations and standards	ESG; environmental and social risk assessment in lending processes; prohibition on lending to blacklisted firms	Yes
Nepal			
Guideline on Environmental and Social Risk Management (ESRM) ESRM-February 2017.doc (nrb.org.np)	Non-binding, principles-based	ESG; credit risk assessment of ESG and climate issues, governance and management strategies, scenario analysis, stress resting, reports on sustainability performance for banks	Yes
Singapore			
• Guidelines-on-Environmental-Risk-Management-for-Banks.pdf (mas.gov.sg) • Handbook on Implementing Environmental Risk Management for Asset Managers, Banks and Insurers[6]	Soft-Law, non-binding, good practice principles	ESG; governance and strategy incorporating environmental considerations, risk management, scenario analysis, stress testing, disclosure	Yes
UK			
• PRA Supervisory Statement on enhancing banks' and insurers' approaches to managing financial risks from climate change • Bank of England climate scenario stress testing of banks and insurers • PRA Supervisory Statement SS31/15	Policy Statement, supervisory expectations	Climate change; identify and management financial risks from climate change, determine exposure limits and thresholds, stress testing, scenario analysis	No

[5] Enters into force December 1, 2022.

[6] The Handbook complements the Guidelines and provides practical implementation guidance and good practices on environmental risk management.

Annex II. Examples of Governance Models to Integrate Climate Considerations

ING Group[1]

ING's Supervisory Board (SB), as part of its responsibility for assessing, overseeing, monitoring ING's strategy and business execution, appointed an ad hoc ESG Committee from among its members to assist with overseeing ESG-related topics, and to monitor and advise on relevant ESG developments. The ESG Committee includes at least one member of other SB committees, to prevent overlaps and to promote an aligned and common view on ESG.

Sustainability—and climate-related topics in the context of the day-to-day management of the business are decided by the Management Board Banking, which also has a role in global ambition setting. Tasks related to the ING's overall sustainability approach and how that aligns with ING's global strategy is carried out by a Global Sustainability department, reporting to the CEO.

Various boards and committees exist at the senior management level governance. These include an ESG Change Board, for the integrated oversight of all ESG-related regulatory and change initiatives, a Disclosure Committee, to advise the Boards with respect to periodic and ad-hoc disclosure obligations and activities, and review external presentations including sustainability information; Steering Committees to ensure that relevant ESG-related regulations and programs are monitored, assessed and implemented; and an ESG Sounding Board, including senior leaders from the organization, help to guide the development and implementation of the group's strategy related to ESG topics, as well as monitoring and reporting on progress.

At business level governance, a Wholesale Banking Sustainability Steering Committee aims to help set and implement wholesale banking line's sustainability commitments. The Retail Banking Sustainability Steering Committee steers the development sustainable products and the progress of lending portfolios towards climate goals.

The Group reports that ESG risk is integrated and aligned with the existing Risk governance structure, and accordingly, relevant risk categories/types are a function of global risk domains. The ESG Risk department is in place to ensure that relevant risk domains adequately adapt and account for ESG risks.

YES Bank[2]

YES Bank, to strengthen its governance structure for ESG and climate action, established an Executive Level Sustainability Council chaired by the Managing Director and the Chief Executive Officer. The Sustainability Council develops and reviews the Bank's sustainability strategy, oversees the implementation of the Bank's sustainability agenda, sets targets, and monitors ESG performance. The Board Level Corporate Social Responsibility and ESG Committee (CSR and ESG) provides oversight over the functioning of the Sustainability Council and to review the Bank's ESG performance. The Board level Risk Management Committee assesses and monitors risk profile of the Bank, including sustainability & ESG related risks. Various business units and executive level committees work in tandem under the supervision of the board to mainstream climate action within the Bank.

[1] ING Group (2023), at pages 15 and 16

[2] YES Bank (2022).

Westpac Banking Corporation[3]

The board approves the Climate Action Plan and oversees the management of climate actions. The board Risk Committee considers and approves the Sustainability Risk Management Framework, which includes climate risks.

A Sustainability Council manages Westpac's sustainability agenda, including climate change, and reports periodically to the Executive Team and to the board. A Credit Risk Committee, chaired by the Group Chief Credit Officer, leads the optimization of credit risk across Westpac, within the context of the risk appetite determined by the Board, including climate risks, and reports quarterly to the Executive Risk Committee.

In addition, various committees oversee different elements of Westpac's climate change strategy, including the Sustainable Finance Committee that coordinates initiatives to achieve Westpac's climate change targets.

[3] Westpac Banking Corporation (2020), at pages 32 and 33.

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