Introduction

Sustainability is one of the biggest challenges for the political, regulatory and supervisory authorities, as well as for market operators. The Bank of Italy has long taken account of this issue and has recently included it in various parts of its strategic plan: economic research, its portfolio investments, financial education schemes, supervision and the management of the bank’s internal operations.

Sustainability offers supervised entities new business opportunities via support for customers’ ecological transition process, but at the same time it poses new challenges linked to the need to manage the impact of climate-related and environmental risks on traditional financial risks effectively (e.g. credit, market, operational and liquidity risk).

A sustainable transition must also take the development of technologies into account so as not to risk being incomplete and potentially inefficient. Digitalization can actually be an enabling factor for a sustainable transition, and in the long term could make its achievement easier. The new technologies can improve the accessibility and use of ESG data, for example, thereby increasing their critical mass and reducing the data gap, with benefits for the resilience of the business model and the effectiveness of the risk management system.

Market initiatives in this area are already being developed, as seen in some of the projects presented in Milano Hub’s first call for proposals and promoted by various consultancy firms. Nevertheless, it is clear that digitalization also needs to be sustainable, for example by keeping low levels of energy consumption in new technological solutions. This is why we talk about a twin transition, namely the use of digitalization to support the ecological transition, also with a view to limiting the impact of technologies on the environment.
In this speech, I will look at the main elements of the ESG regulatory framework, highlighting in particular the work under way on disclosure and on accounting issues. I will then review the Bank of Italy’s main activities to step up the banking and financial industry’s sensitivity to climate-related and environmental risks, indicating the progress achieved and the ongoing issues. Finally, I will examine the main opportunities and challenges that fintech could provide in order to support the transition towards sustainability.

1. The evolution of the ESG regulatory framework

There has been intense debate for some years now at international and European level on the opportunities, methods and time frames for intervening in the current prudential regulatory framework in order to incorporate ESG risks as well. The decision on the need to make substantial changes within the first pillar has been postponed for the time being,\(^1\) in the knowledge that the current limited availability of reliable data and models does not make a thorough review of the framework easy. In contrast, especially at European level, the analytical work on supervisory activities and market disclosure (Pillar 2 and Pillar 3 respectively) is at a more advanced stage, and is already part of the forthcoming version of the CRR3/CRD6, currently in the trilogue phase.

In the financial and accounting fields, the sustainability reporting requirements applicable to larger financial and non-financial firms have been greatly strengthened to increase the quantity and quality of corporate information, in line with the information needs set out by market participants. The Taxonomy Regulation was followed by the entry into force of the Corporate Sustainability Reporting Directive and the first sustainability standards have been released by EFRAG in the last few months.

However, the regulatory framework for sustainability reporting is not complete. Further progress is needed, for example, in the ‘European taxonomy for climate change’, which sets technical rules and criteria to determine the conditions under which an economic activity can be considered as contributing significantly to mitigating and adapting to climate change.\(^2\) The current structure of the taxonomy does not cover all categories of economic activity, and the criteria and rules need to be expanded, so as not to discourage investment in those activities for which there are currently no technical criteria.

Alongside disclosure, there is an increasing focus on the accounting implications of ESG-related factors. The IFRS Foundation has shown how, although the IAS-IFRS make no specific reference to it, climate-related matters should be considered, if their impact on the balance sheet is judged to be material.\(^3\)

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\(^1\) See BCBS, ‘Frequently asked questions on climate-related financial risks’ (December 2022) and the EBA’s ‘Report on the role of environmental and social risks in the prudential framework’ (October 2023).

\(^2\) The current rules on the European taxonomy for climate change are in Delegated Regulation (EU) 2021/2800.

\(^3\) In 2020, the IFRS Foundation published a document on the ‘Effects of climate-related matters on financial statements’, containing educational material on the impacts of climate risks on balance sheets drawn up in accordance with the IFRS International Accounting Standards. An updated version of this document was republished in July 2023.
A recent analysis, carried out by the Bank of Italy on the first public documents available in the balance sheets and the ESG disclosures of the largest banks, shows that the Italian banking system is making significant progress in responding to the challenges posed by climate change. Most Italian banks have already launched specific initiatives, both to assess the accounting impacts of climate risks and to include their effects when estimating expected losses, and to respond adequately to the demands and/or obligations stemming from the legislation on disclosure currently being drafted. However, further effort is needed, especially with regard to safeguarding the robustness and reliability of the data and methodologies used to estimate the impacts of climate-related and environmental risks on its portfolio.

In addition to the disclosure rules, the European Commission’s proposal for a Corporate Sustainability Due Diligence Directive (CSDDD), currently in the trilogue phase and intended to protect human rights and the environment, aims to introduce specific governance requirements, a dedicated sanctioning system and a specific civil liability regime for larger companies. This Directive may have a significant impact on banking and financial intermediaries in terms of (i) the tasks and responsibilities of corporate bodies, (ii) the implementation of new processes to identify, prevent and potentially minimize any adverse impacts on human rights and the environment, and (iii) the legal risks in the event of non-compliance with due diligence obligations, including in relations with recipients of credit and other financial services.

2. The Bank of Italy’s supervision on ESG matters

The regulatory framework is thus quite elaborate and complex. In recent years, the Bank of Italy has undertaken numerous activities to raise awareness of the growing importance of ESG issues in the banking and financial system, with a view to ensuring that they are given proper thought in corporate operations and risk management.

In line with the work done by the ECB and other national authorities, in April 2022, we published an initial set of supervisory expectations regarding the integration of climate-related and environmental risks into corporate strategies, governance and control systems, as well as into the risk management framework and public disclosure by banking and financial intermediaries.4

This document, which is general and non-binding, addresses all intermediaries directly supervised by the Bank of Italy, thus establishing principles to be applied according to the criterion of proportionality. Each intermediary is therefore required to perform a self-assessment of the materiality of its exposure to climate-related and environmental factors, defining solutions consistent with its operations, size and organization.

In addition, in line with the SSM, the Bank of Italy has included climate-related and environmental risks in its supervisory priorities and has progressively strengthened its dialogue with banks and trade associations through dedicated surveys, meetings and workshops.

4 Bank of Italy - Supervisory expectations for climate-related and environmental risks.
Specifically, in the second half of 2022, following the publication of the supervisory expectations, two thematic reviews were conducted on a sample of 21 less significant institutions (LSIs) and 86 non-bank financial institutions (NBFIs), in order to gather initial evidence on the level of integration of climate-related and environmental risks into management paradigms. A set of preliminary best practices was also published, with practical examples that banking and financial intermediaries can take into account as they progressively align with the expectations.\(^5\)

All supervised intermediaries were also asked to prepare an action plan laying out the measures scheduled to ensure a gradual alignment with expectations by 2025. These action plans are a useful tool for continuing and further strengthening the technical dialogue already begun with the industry. The main findings of the analysis carried out on the action plans and an update to the best practices will be published in the coming days.

The evidence gathered in the course of the supervisory activities of this two-year period demonstrates that widespread awareness regarding the strategic relevance of this type of risk for the forward-looking sustainability of business models has now been achieved, and also demonstrates the significant – albeit uneven – progress made by the system in including climate factors in its business operations. However, despite their commitment, only a minority of banking and financial intermediaries have already started implementing their action plans and still have a long way to go to meet expectations.

The analysis of the plans, while highlighting some similarities between LSIs and NBFIs, also brings to light some appreciable differences. Overall, LSIs are further ahead in the implementation of the initiatives compared with most NBFIs. LSIs also generally appear to have more detailed and more clearly scheduled plans. Indeed, a number of NBFIs have failed to include even the most basic initiatives in their plans; some of their plans provide no detailed reference to the time frame for implementing the initiatives, and, in some extreme cases, have set the conclusion of certain activities after the 2025 deadline.

At the same time, there is evidence of common areas for improvement for both LSIs and NBFIs. In general, the plan of activities is generic in several cases, leaving the details of their implementation to a later stage, and very few plans give any indication of the human resources and investments needed to implement them. These shortcomings prevent the feasibility of meeting expectations within three years, the economic viability of the project and the associated execution risk from being fully assessed.

In addition, ESG plans are becoming an integral part of the strategies on which businesses base their business plans. However, only a minority of players have expanded their commercial range with products and services designed to support businesses in their transition, and, even then, the offer is not always associated with performance indicators linked to sustainability objectives. The number of banking and financial intermediaries that have formalized a long-term net-zero emissions plan is also limited, in part owing to the fact that most counterparties have not yet drawn up transition plans. However,

\(^5\) For **LSIs**: Bank of Italy - Climate and environmental risks. Main findings of a Bank of Italy survey on a sample of less significant institutions (bancaditalia.it) For **NBFIs**: Com-sistema-INB-27-dic-2022-en.pdf (bancaditalia.it)
improvements are also expected with the introduction of the requirements set out in the Corporate Sustainability Due Diligence Directive (CSDDD).

Governance and organizational systems are the areas of greatest alignment with expectations, bearing in mind that climate and environmental issues have now entered the day-to-day business of the boards of directors of almost all banking and financial intermediaries. Specific training courses are also being offered to improve the skill sets of corporate boards, management and staff, and, in some cases, boards have been strengthened through the entry of new members with ESG skills, sometimes to meet a specific provision defining the company board’s optimal qualitative and quantitative composition.

Organizational measures to strengthen internal coordination on ESG issues are in a preliminary phase of development: in most cases, new roles and responsibilities have been assigned, either to existing units or to ad hoc units, to manage the transition process; alternatively, an ESG contact person reporting directly to top management has been appointed. The noteworthy solution of some large banking and financial intermediaries, for example, was to establish advisory committees or working groups to support the board of directors on sustainability, usually involving personnel from different corporate functions (especially from control functions).

In some cases, the initiatives seek to enhance the role of intermediaries as ‘sustainable companies’ by adopting strategies to reduce their environmental impact (e.g. promoting sustainable mobility, upgrading the areas in which intermediaries operate, green procurement, and energy saving measures). Measures to include ESG risks in the scope of control functions, remuneration policies and the system of reporting to the corporate bodies are also under way, albeit at a rather slow pace. The risk management framework is where the most significant delays are being observed, especially for credit and liquidity profiles, with most of the initiatives still only in the planning phase and often insufficiently detailed. Frequent shortcomings are detected in the materiality assessments, which are typically restricted to qualitative aspects. This is at least partly due to the limited sustainability data available to financed counterparties, as well as to objective difficulties in identifying statistically robust relationships between sustainability indicators and traditional risks.

However, best practices are gradually including climate factors in the framework for managing financial risks – in relation to both the proprietary portfolio and the provision of investment services – while intermediaries are also increasingly taking into account the sustainability preferences of customers in their advisory and asset management activities. Progress is also being observed in the incorporation of physical risks into business continuity plans, which lay out the possible adverse impact of extreme climate-related and environmental events on banking and financial intermediaries’ premises and on significant suppliers.

As mentioned in the introduction, the main difficulties have to do with the availability and quality of ESG data (especially for SMEs), which are the enabling factors for measuring risks and implementing numerous projects. Many intermediaries are acquiring data from professional providers, often supplementing them with information collected through questionnaires administered to financed counterparties.
At the same time, it would help if the information already available to intermediaries and from which useful data can be retrieved (such as that relating to the insurance coverage taken out by counterparties against physical risk) could be leveraged at the outset. Many intermediaries also intend to develop proprietary algorithms that assess sustainability risks so that they can take such risks into account in their credit and portfolio selection processes.

In this respect, let me reiterate four key points to address the issue of data and of the use of professional providers effectively. The first concerns the definition of effective data governance measures: the use of third-party providers to acquire ESG information, especially for SMEs not subject to disclosure requirements, can be a first step in the process of building a critical mass of data on the riskiness of their portfolio.

However, as end-users of data, intermediaries must be aware of their responsibility to put in place adequate measures as to the characteristics, reliability and limitations of the data they use. Looking ahead, the gradual implementation of the Corporate Sustainability Reporting Directive (CSRD) and of the EFRAG sustainability standards – to which SMEs can adhere on a voluntary basis – will help increase data reliability and facilitate the implementation of appropriate verification mechanisms by intermediaries.

The second concerns the merits of strengthening dialogue and synergies between the financial system and non-financial corporations: for example, the respective industry associations could work together to standardize and collect sustainability information, and develop reporting models that are harmonized but differentiated according to the size and complexity of counterparties.

The third aspect concerns the need for intermediaries to adapt their information systems to systematize the data they collect. Effective data management, aggregation and analysis systems are essential for making informed strategic decisions, improving the effectiveness of risk management systems and supporting disclosure activities.

The fourth element is institutional support. The Bank of Italy is actively involved in various international and national initiatives aimed at increasing the availability and quality of ESG information. One of these is the sustainable finance working group set up last year at the initiative of the Ministry of Economy and Finance (MEF), in which the Bank of Italy participates alongside the Ministry of the Environment and Energy Security (MASE), the Italian Companies and Stock Exchange Commission (Consob), the Pension Fund Supervisory Authority (COVIP) and the Italian Insurance Supervisory Authority (IVASS). Among the activities promoted by the working group to increase the availability of reliable ESG data, I would like to mention two in particular: the first, coordinated by the Bank of Italy, is an inventory of the databases available on climate-related and environmental risks to integrate existing databases and make them more accessible; the second, coordinated by Consob, entails mapping the data required by ESG disclosure regulations in order to identify the most difficult information to obtain, on the one hand, and to support SMEs in providing this information to banks and other firms operating in their value chain, on the other.
Finally, I would like to point out how reviewing the action plans of intermediaries has enabled the Bank of Italy to obtain a comprehensive and in-depth picture of the initiatives that have arisen from the market. Given that there is significant room for improvement, we expect the efforts made so far to continue in order to fully align with the expectations by 2025. To this end, it is essential that the banking and financial intermediaries’ corporate bodies and management are fully involved in the effective governance of the action plans, implementing and monitoring the many scheduled initiatives.

The Bank of Italy will continue to consider sustainability issues as part of its regular supervisory dialogue, monitoring progress in the implementation of the action plans, through a pragmatic and iterative approach, and in accordance with the criterion of proportionality.

3. The interrelations between sustainability and fintech

Fintech, which is technological innovation applied to the financial system, can facilitate the achievement of ESG goals. For instance, big data and advanced analytic methodologies can help expand the ESG dataset that is available on financed counterparties. By means of advanced analytics and artificial intelligence technologies (such as machine learning), ESG data analysis methodologies will also be able to evolve and contribute to how we understand risks and can better identify the links between pertinent factors.

Technology also supports data aggregation and data verification processes for risk management and control purposes, including climate and environmental risks. For example, there are now new algorithm-based digital solutions that make it possible to assess the carbon footprint of companies more precisely.

Given these opportunities, it is also necessary to consider there are challenges that need addressing by means of appropriate safeguards and precautions. These new technologies can undoubtedly improve ESG data analysis by providing more efficient and comprehensive procedures. At the same time, the intensive use of highly innovative solutions typically tends to heighten some of the risks inherent to IT. Firstly, the extensive use of external providers, which are often large-scale and operate in a highly concentrated market, has to be properly monitored and necessarily affects the overall interconnectedness of the banking and financial environment. Secondly, some of these pioneering initiatives (such as artificial intelligence) may lead to new risks linked to some of the specific features of the workings of these solutions (e.g. less transparency in the decision-making process and difficulties in monitoring the process behind the outcome of an analysis), with potential legal and reputational repercussions.

Signally, artificial intelligence models need to be fed with a wide range of data that are adequately representative of the matter under consideration in order to produce reliable results. Furthermore, algorithms are based on numerous assumptions that need constant monitoring in order to prevent the system’s self-learning mechanisms from amplifying any undesired distortion effects. In order to mitigate these new risks,
new forms of control and appropriate safeguards must be adopted, including the data governance safeguards I discussed above.

More generally, banks need to seriously commit to redesigning their business models by building on new technologies in order to support their ESG transition. This entails a careful assessment of the financial sustainability of the transition and adequate oversight of all the associated risks, not least reputational risks (to avoid greenwashing, for instance), and cyber and IT security risks. The systemic environmental costs of developing artificial intelligence tools cannot be overlooked either, due to the growth in demand for the energy that will be required to support the higher computing capacity.

4. Conclusions

It is important that intermediaries continue to invest in identifying the relationships of climate and environmental factors with traditional risks, recognize the importance of this approach in the sustainability of their business model and use the interconnectedness between ESG issues and digitalization to their advantage. The first results of the Fintech Survey 2023, conducted by the Bank of Italy and currently under way, show that fintech investment in ESG is limited; moreover, plans to align with supervisory expectations rarely include initiatives for applying innovative technologies. The results show that there is still room for growth in this area and that it is important to follow trends in the market, which is developing solutions that, looking forward, could make it possible to harness the potential of the twin transition.

However, the opportunities of the twin transition should not distract from safeguarding against relevant risks. Appropriate governance and control mechanisms need to be developed, for example by involving new professional roles and/or increasing the competences of the board and internal control functions, adjusting the verification processes and tools, and strengthening the safeguards on services provided by third parties.

To this end, the Bank of Italy has taken a proactive role to foster the financial system’s sustainable and technological transition, and promotes a constructive dialogue with operators, believing that this is a necessary condition to ensure that the potential of the dual transition engenders benefits not only for the financial world but for the entire community.