Integrating sustainability in management control systems: an exploratory study on Italian banks

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Abstract

Purpose – Drawing insights from institutional theory, this paper aims to examine whether and to what extent banks have reconfigured their management control systems (MCSs) in response to growing institutional pressures towards sustainability, understood as environmental, social and governance (ESG) issues.

Design/methodology/approach – The authors conducted an exploratory study at the three largest Italian banking groups to shed light on changes made in MCSs to account for ESG issues. The analysis is based on 12 semi-structured interviews with managers from the sustainability and controls areas, as well as from other relevant operational areas particularly concerned with the integration process of ESG issues. Additionally, secondary data sources were used. The Malmi and Brown (2008) MCS framework, consisting of a package of five types of formal and informal control mechanisms, was used to structure and analyse the empirical data.

Findings – The examined banks widely implemented numerous changes to their MCSs as a response to the heightened sustainability pressures from regulatory bodies and stakeholders. In particular, with the exception of action planning, the results show an extensive integration of ESG issues into the five control mechanisms of Malmi and Brown's framework, namely, long-term planning, cybernetic, reward/compensation, administrative and cultural controls.

Practical implications – By identifying the approaches banks followed in reconfiguring traditional MCSs, this research sheds light on how adequate MCSs can promote banks' "sustainable behaviours". The results can, thus, contribute to defining best practices on how MCSs can be redesigned to support the integration of ESG issues into the banks' way of doing business.

Originality/value – Overall, the findings support the theoretical assertion that institutional pressures influence the design of banks' MCSs, and that both formal and informal controls are necessary to ensure a real engagement towards sustainability. More specifically, this study reveals that MCSs, by encompassing both formal and informal controls, are central to enabling banks to appropriately understand, plan and control the transition towards business models fully oriented to the integration of ESG issues. Thereby, this allows banks to effectively respond to the increased stakeholder demands around ESG concerns.

Keywords Sustainability, ESG, Management control systems, Banks, Institutional theory

Paper type Research paper

1. Introduction

This study aims to examine whether and to what extent banks have reconfigured their management control systems (MCSs) in response to the growing institutional pressures

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towards sustainability, understood in terms of environmental, social and governance (ESG) issues [1] (Drempetic *et al.*, 2020; Jusoh *et al.*, 2021; Russo *et al.*, 2022; Dicuonzo *et al.*, 2022a). To this end, we carried out an exploratory study at the three largest Italian banking groups to shed light on changes made in MCSs to account for ESG issues.

The banking institutional environment has changed radically over the past few years, bringing banks under immense pressure to improve their commitment to sustainability (Raut *et al.*, 2017; Aras *et al.*, 2018; Avrampou *et al.*, 2019; Galletta *et al.*, 2021; Houston and Shan, 2022). This attention to sustainability is mainly driven by the growing demand of different banks' stakeholders, especially customers and investors, who are increasingly concerned about ESG issues and therefore expect banks to be proactively engaged in sustainable activities (La Torre and Chiappini, 2020; Houston and Shan, 2022). Regulatory and policy pressures are also growing, with policymakers and authorities involved in fostering sustainable economic growth putting heightened pressure on banks to address the sustainability imperative and to do so promptly (Wu and Shen, 2013; Zimmermann, 2019; Cosma *et al.*, 2020; Umar *et al.*, 2021). In the European Union (EU) context, for example, regulators have envisaged a precise ESG path aimed at further connecting finance with sustainable growth (EC, 2018; EBA, 2019; ECB, 2020). Particularly, EU banks are called upon to play a pivotal role in financing the transition to a more sustainable economy by favouring the financing of business initiatives oriented towards combining economic-financial and ESG objectives, as well as the promotion of sustainable investments in allocating customers' savings. The underlying idea is that by changing their business strategies to encompass ESG factors, banks will be able to effectively contribute to the sustainable growth of economies (Ahmed *et al.*, 2018; La Torre *et al.*, 2021).

Considering the above, most banks are currently exploring the costs, risks and opportunities associated with reinventing their business under the umbrella of sustainability. They undertake redesigning their products and services, invest in eco-sustainable projects or carry out initiatives consistent with ESG objectives (Raut *et al.*, 2017; Aras *et al.*, 2018; Khattak and Saiti, 2021). This, inevitably, can result in a significant transformation of banking management practices, which is necessary to enhance banks' commitment to sustainability and thus respond to stakeholder demands around ESG concerns (Munir and Baird, 2016; Chaudhry and Amir, 2020). Specifically, research grounded in institutional theory (DiMaggio and Powell, 1983) suggests that changes in the institutional environment and new stakeholders' expectations can stimulate changes in the structures, systems and strategies of an organisation, which, in turn, can lead to new management control systems (MCSs) being adopted or to the existing ones being modified (Damanpour and Evan, 1984; Hussain and Hoque, 2002; Gooneratne and Hoque, 2013; Munir and Baird, 2016; Christensen *et al.*, 2018). It is indeed widely acknowledged in the literature that MCSs, which "include all the devices and systems managers use to ensure that the behaviours and decisions of the employees are consistent with the organisation's objectives and strategies" (Malmi and Brown, 2008, p. 290), are central in organisations to capture wider institutional expectations. This is because MCSs provide direction for organisational behaviour and ensure the validity of information for internal and external decision-making processes (e.g. Merchant, 2012; Thomson and Bebbington, 2013; Crutzen and Herzig, 2013; Wijethilake *et al.*, 2017; Chaudhry and Amir, 2020). We therefore expect that, in response to the increased institutional pressures towards sustainability, banks will reconsider the suitability and effectiveness of their MCSs and introduce necessary changes to make such MCSs more effective in meeting the business environment's new challenges.

To date, however, research examining how MCSs for sustainability are actually used and implemented in banks is scant (Mio *et al.*, 2022). This gap is particularly unfortunate given the important role that a properly designed MCS can play in helping banks to incorporate sustainability principles in decision-making processes and business operations, aligning strategies with ESG objectives, and thereby boosting their commitment to sustainability

(Bonacchi and Rinaldi, 2007; Gond *et al.*, 2012; Crutzen and Herzig, 2013; Corsi and Arru, 2020).

In this study, we seek to fill this gap in the literature by examining the extent and nature of changes brought about in banks' MCSs as a response to the institutional pressures towards sustainability. Thereby, we shed light on how banks redesign their MCSs to foster their commitment to ESG objectives. Institutional theory is used as theoretical perspective to investigate the institutional pressures towards sustainability and to explain the process by which they influence the reconfiguration of banks' MCSs.

For our investigation, we conducted an exploratory analysis of the three largest Italian banking groups. The Italian banking system represents an ideal setting for our research as, similar to other EU banking systems, it is called to play a relevant role in promoting sustainable behaviours within Italy and, by extension, throughout the EU. Supporting the transition to a more sustainable European economy is indeed a key objective for EU policymakers and supervisors (EBA, 2019; ECB, 2022; EC, 2023). It is therefore evident that Italian banks, as well as European ones, are facing mounting pressures from authorities and other stakeholders to embrace ESG issues, thereby fostering the sustainability transition (Falcone *et al.*, 2018). Such pressures force banks, especially the largest ones, to react promptly to the evolving landscape and also to maintain and/or strengthen their competitive positioning.

We collected data using twelve semi-structured interviews with managers from the sustainability and controls areas, as well as from other relevant operational areas particularly concerned with the integration process of ESG issues. To guide the data collection and organise observations, we adopted the management controls framework proposed by Malmi and Brown (2008), which consists of a package of five types of formal and informal control mechanisms, namely:

(1) planning;
(2) cybernetic controls;
(3) reward and compensation;
(4) administrative controls; and
(5) cultural controls.

This framework builds upon a broad understanding of MCSs and conveys the idea of MCSs as a "package" (Guenther *et al.*, 2016; Ghosh *et al.*, 2019), thereby offering a holistic perspective of management controls in organisations (Lueg and Radlach, 2016; Svensson and Funck, 2019). This holistic approach, which considers MCSs as a package of formal and informal control mechanisms, is particularly relevant for our purpose because the literature largely acknowledges that formal and informal elements are both necessary to really integrate sustainability in the organisational "way of thinking and operating" (e.g. Durden, 2008; Riccaboni and Leone, 2010; Crutzen *et al.*, 2017; Corsi and Arru, 2020).

Grounded in the institutional theory, our results show that the examined banks responded to the increasing sustainability pressures by integrating the ESG dimensions by widely implementing numerous changes to their MCSs. Specifically, while *normative* pressure from various stakeholders, especially customers and investors, played an important role in promoting banks' commitment to sustainability, *coercive* pressure from regulatory bodies was the most significant driver for inducing changes to MCSs. Banking authorities, in particular, have indeed prompted the integration of ESG factors into the strategies and business models of banks. The findings support the argument that MCSs are central to capturing wider institutional sustainability expectations, helping banks translate

sustainability strategies into actions, and thus ensuring a real engagement to achieve ESG goals. Nevertheless, our results also reveal some shortcomings that banks need to address to enable the full integration of ESG factors. These concern particularly the process of integrating ESG factors into action planning and the banks' internal processes and procedures (e.g. risk management), where there is still room for improvement.

This study makes several contributions. First, we contribute new insights to the management accounting literature by responding to recent calls to investigate how MCSs for sustainability are actually used and implemented (Ghosh *et al.*, 2019; Beusch *et al.*, 2022). Indeed, although the use of different types of management controls has been studied intensively over the years in various contexts (e.g. Crutzen *et al.*, 2017; Cavicchi *et al.*, 2022), we know very little about how organisations should redesign their traditional MCSs to effectively support the formulation and implementation of sustainability strategies (Corsi and Arru, 2020; D'Onza, 2022). Also, detailed studies of the banking sector have been lacking (Gooneratne and Hoque, 2013; Christensen *et al.*, 2018). In this respect, Mio *et al.* (2022) call for research in under-investigated research settings, such as the financial industry. In so doing, we also extend prior research on MCS changes in banks (e.g. Cobb *et al.*, 1995; Guerreiro *et al.*, 2006; Munir *et al.*, 2013; Christensen *et al.*, 2018), by providing new insights on the impact institutional factors (i.e. sustainability pressures) have on the design of MCSs. Particularly, to the best of our knowledge, this is the first study that examines the impact of institutional pressures for sustainability on MCSs in banks. Finally, we extend prior research on sustainability in banking. Although the literature on sustainability in banking has grown exponentially over the last couple of years (e.g. Carnevale and Mazzuca, 2014; Broccardo *et al.*, 2016; Martin-Sardesai and Guthrie, 2019; Oliveira *et al.*, 2019; Galletta *et al.*, 2021), research examining how sustainability principles are incorporated in banks' decision-making processes and business functions is scant. We contribute to this line of research by examining changes to MCSs in response to institutional pressures for sustainability. Thereby, we shed light on how banks integrate ESG issues into their MCSs to help foster a commitment to sustainability.

The remainder of this article is structured as follows. The next section presents the literature review and the theoretical background. Section 3 describes our research methodology. Section 4 presents the analysis results, while Section 5 provides a discussion of the findings and gives concluding remarks on the study.

2. Literature review and theoretical background

2.1 Institutional pressure for sustainability in banking

Institutional theory has largely been adopted in research examining management accounting changes (e.g. Hussain and Hoque, 2002; Gooneratne and Hoque, 2013; Munir *et al.*, 2013; Wijethilake *et al.*, 2017). It posits that organisations are embedded in an institutional environment including regulatory authorities, governments and professional associations that create sets of implicit and/or explicit rules and expectations that can exert pressures on organisations and their members, forcing them to adopt specific behaviours (isomorphic behaviours) or practices to achieve legitimacy and secure the requisite resources for survival and growth (Meyer and Rowan, 1977; DiMaggio and Powell, 1983; Scott, 1994). In other words, organisational success is a function of conforming to the institutional environment in which organisations operate and, as such, to the rules and expectations prevailing in that context. Specifically, this theory suggests that organisations can be influenced by various external environmental pressures, and it provides an important theoretical framework to explain the phenomenon through which institutional pressures towards sustainability can trigger changes in MCSs. Such institutional pressures include

coercive, *mimetic* and *normative* pressures (DiMaggio and Powell, 1983), which we now describe briefly.

Coercive pressure is typically exerted by governments, regulatory institutions or other related bodies to push organisations towards adopting a particular structure or system. It includes regulations and socio-economic–political pressures on organisations (Amran and Haniffa, 2011). In the sustainability arena, this can derive from regulatory and policy pressures to account for ESG issues and the consequent regulations. Here, it is useful to recall the "Action plan on sustainable finance" developed by the European Banking Authority (EBA, 2019), which defines a roadmap for regulating the integration of ESG factors in the strategies, business models and risk management practices/procedures of banks by 2025, as well as setting prudential supervision requirements and sustainability disclosure criteria.

Mimetic pressure stems from the competition in a specific industry (Huang *et al.*, 2022). Companies voluntarily imitate the best practices adopted by highly legitimate organisations in a given industry to avoid the risk of losing legitimacy in the eyes of external stakeholders (e.g. clients, regulatory authorities, etc.), and thus to maintain their level of competitiveness (Unerman and Bennett, 2004). In the context of sustainability, banks can face general mimetic pressures from industry leaders who implement management practices (e.g. management accounting, human resources and external reporting) that raise the bar of sustainability commitment for all the actors competing in the industry (Phan and Baird, 2015; Marrucci *et al.*, 2023). Accordingly, to remain competitive, banks facing such strong mimetic pressures are expected to improve their sustainability management practices.

Finally, *normative pressure* arises from standards, rules and values that professional groups (e.g. credit rating agencies, bankers' professional associations) impose on organisations, as well as from changes in customers', investors' and social publics'/markets' expectations (Berrone *et al.*, 2013; Huang *et al.*, 2022). Normative pressure for sustainability can stem from fast-changing customers' awareness and preferences that put pressure on banks to prioritise social inclusion and environmental sustainability in every aspect of their operations. Such pressure can also stem from investors, who increasingly expect banks to weigh how investment decisions impact society and the environment.

According to institutional theory, these institutional factors can push organisations towards adopting certain changes and applying particular systems, including MCSs, to reflect their current institutional environment (Damanpour and Evan, 1984; Guerreiro *et al.*, 2006; Qian and Burritt, 2008). Drawing on the institutional theory, we thus expect that the current banking environment puts pressure on banks to foster their commitment to sustainability and, consequently, can induce them to implement profound changes in their MCSs, which, as we discuss below, are central prerequisites to better understanding, planning and controlling the transition towards business models oriented to the integration of ESG issues.

2.2 Management control systems conceptual framework: a sustainability perspective

MCSs are central in directing an organisation towards established strategic and operational goals (e.g. Simons, 1995; Otley, 1999; Malmi and Brown, 2008; Ferreira and Otley, 2009). As fundamental operational systems for the effective and efficient utilisation of resources in input, process and output relationships (Wijethilake *et al.*, 2017), these systems play an important role in formulating and implementing organisational strategy by communicating objectives, monitoring performance and motivating the achievement of organisational goals (Lindsay *et al.*, 1996; Langfield-Smith, 1997; Tucker and Parker, 2015).

While the traditional role of MCSs has been to ensure that the organisations' financial performance is successful and that it creates shareholder value in accordance with business objectives (Ittner and Larcker, 1998; Bititci *et al.*, 2000; Merchant and Van der Stede, 2003), recent research has argued for a change in MCSs' role so as to capture wide institutional expectations, particularly regarding their response to stakeholders' sustainability concerns (e.g. Merchant, 2012; Baker and Schaltegger, 2015; Wijethilake *et al.*, 2017). Several authors have indeed argued that the appropriate use of MCSs can support sustainability-related strategy implementation and thus push organisations towards the achievement of ESG goals (e.g. Bebbington, 2007; Gond *et al.*, 2012; Crutzen and Herzig, 2013; Lueg and Radlach, 2016; Beusch *et al.*, 2022). For instance, Riccaboni and Leone (2010) claimed that an MCS is central to successfully implementing sustainability-oriented strategies because it informs employees on how to behave in their efforts to translate abstract sustainability principles into actions. If properly designed, MCSs can help organisations disseminate sustainability in every business process and in day-to-day operations throughout the organisation, turning them into management practices (Bebbington, 2007; Engert *et al.*, 2016; Corsi and Arru, 2020). Moreover, adequate MCSs enable organisations to measure the ESG dimensions (i.e. performance) in addition to the financial ones, thereby ensuring the accuracy of information reported to internal and external decision-makers (Bonacchi and Rinaldi, 2007; Ditillo and Lisi, 2014, 2016; Corsi and Arru, 2020). According to Durden (2008), this would allow organisations to quantify sustainability as well as understand the factors that contribute to it, thereby enabling them to regularly monitor whether the business is operating in accordance with established sustainability goals.

Hence, the literature indicates MCSs as key factors in effectively integrating sustainability into organisations' conduct and, thus, in business operations and activities (Durden, 2008; Riccaboni and Leone, 2010; Gond *et al.*, 2012). In this respect, several studies have investigated the different control tools companies use simultaneously, showing that a combination of formal and informal controls is required to reinforce one another and ensure that MCSs lead to the achievement of ESG goals (e.g. Riccaboni and Leone, 2010; Ditillo and Lisi, 2014; Crutzen *et al.*, 2017; Corsi and Arru, 2020). Formal controls include practices and rules, such as performance evaluation, well-designed reward criteria and reliable budgeting systems, aimed at controlling results through feedback and feed-forward loops (Norris and O'Dwyer, 2004; Langfield-Smith, 2008). In contrast, informal controls direct organisational members' behaviour through unwritten policies, shared values, beliefs and traditions that derive from the organisational culture (Falkenberg and Herremans, 1995; Langfield-Smith, 2008). These two MCS elements are both necessary and should work together "to really integrate sustainability in the organisational way of thinking and operate" (Riccaboni and Leone, 2010, p. 142).

Based on the considerations given above, we thus adopt a holistic perspective that includes both formal and informal controls to shed light on changes that occurred in the MCSs of banks in response to institutional pressures towards sustainability. In particular, we rely on Malmi and Brown (2008), who developed a broad, comprehensive and integrated framework of management controls consisting of a "package" of five types of formal and informal control mechanisms (as shown in Table 1), namely:

(1) planning controls;
(2) cybernetic controls;
(3) reward and compensation controls;
(4) administrative controls; and
(5) cultural controls.

Mechanisms	Description	Components
Planning controls	These controls set out the organisation's objectives, as well as the standards to be achieved in relation to those objectives, to direct and align the effort and behaviour of organisations' actors (Flamholtz *et al.*, 1985)	Action planning (the short-term goals and actions), long-range planning (the medium and longer-term goals and actions)
Cybernetic controls	These controls include the quantification of an underlying phenomenon, activity or system, the alignment to standards of performance and the feedback loops that detect unwanted variances so that the system's behaviour or underlying activities can be suitably modified (Green and Welsh, 1988)	Budgets, financial measures, non-financial measures and hybrids that contain both financial and non-financial measures
Reward and compensation controls	These controls aim to motivate and increase individuals' or groups' performance towards attaining organisational goals	Attaching rewards and or compensation to the achievement of goals
Administrative controls	These controls direct organisations' actors behaviour by organising the individuals, monitoring their behaviour and specifying how tasks or behaviours should be performed or not	Governance structures, organisational structure, policies and procedures
Cultural controls	They refer to a "[. . .] set of values, beliefs and social norms which tend to be shared by its members and, in turn, influence their thoughts and actions" (Flamholtz, 1983, p. 158)	Value controls, symbol controls, clan controls

Source: Table by the authors

Table 1.
Malmi and Brown's (2008) framework

Anchored in a practice-oriented perspective, the core idea of Malmi and Brown (2008) is that these different types of controls, which can be used in parallel and in a complementary manner, constitute a MCS package (Guenther *et al.*, 2016). By considering these different controls as a package rather than individual systems, this framework offers a holistic perspective of management controls used by organisations (Ghosh *et al.*, 2019). This allows us to mitigate the risks of fragmentation (Guenther *et al.*, 2016), and model underspecification (Chenhall, 2003; Lueg and Radlach, 2016) as identified in prior research. It also extends beyond the scope of cybernetic controls to encompass both formal and informal controls, thereby presenting a broader understanding of MCSs (Guenther *et al.*, 2016; Lueg and Radlach, 2016; Crutzen *et al.*, 2017; Traxler *et al.*, 2020). Notably, the inclusion of organisational and cultural dimensions of MCS is particularly noteworthy, as these elements have been often overlooked in traditional management accounting literature (Ditillo and Lisi, 2014; Dumay and Dai, 2017). Given this, such a framework is considered to be one of the most comprehensive MCSs approaches developed to date (Guenther *et al.*, 2016; Traxler *et al.*, 2020). It has indeed been well received in the management control literature and has been also used in prior research on MCSs for sustainability (e.g. Bouten and Hoozée, 2016; Crutzen *et al.*, 2017; Sundin and Brown, 2017; Svensson and Funck, 2019; Corsi and Arru, 2020). Finally, it enables the study of the various (internal and external) contingencies that influence the design and implementation of MCSs (Lueg and Radlach, 2016; Crutzen *et al.*, 2017; Svensson and Funck, 2019). As such, it

appears particularly suitable for analysing whether and to what extent banks have reconfigured their MCSs in response to institutional pressures for sustainability.

3. Methodology

Given the limited knowledge on MCSs for sustainability in banks (Mio *et al.*, 2022), we conducted an exploratory study to investigate changes in banks' MCSs that emerge in response to institutional sustainability pressures. This method is deemed to be particularly suitable to investigate relatively unexplored and complex phenomena when there is limited existing knowledge (Edmondson and McManus, 2007).

We carried out our analysis by gathering and examining analytical data about sustainability and changes in MCSs in the three largest Italian banking groups [2]. The selected banks are listed and identified as "significant entities" [3], and as such, they fall under the European Central Bank's (ECB) direct supervision in line with the Single Supervisor Mechanism (SSM) Regulation and the SSM Framework Regulation. Moreover, the selected banks were classified as Other Systemically Important Institutions (O-SIIs) for the year 2021 [4]. O-SIIs are institutions deemed systemic at the EU or Member State level – i.e. they are more likely to contribute to the financial instability of the EU or a Member State – based on specific quantitative and qualitative criteria defined by the EBA (Andrieş *et al.*, 2022). These criteria relate to the size, importance for the economy of the relevant Member State or the EU, complexity and interconnectedness of the institution (EBA, 2014).

As the largest, listed and most important within the Italian banking system (and for the EU), the three O-SIIs are therefore particularly exposed to market discipline and to stakeholder attention (D'Apolito *et al.*, 2019). Hence, it is evident that these banks are, for both systemic and reputational reasons, the first entities called to promote sustainability strategies and then to integrate ESG issues into their business and strategies (Dicuonzo *et al.*, 2022b). Because our aim was to explore how MCSs have been changed in response to institutional pressures for sustainability, we checked whether the selected banks are actively involved in sustainable activities. We evaluated the conditions by carefully checking secondary sources, with particular reference to websites, reports, press releases and news about the banks and their sustainable activities. Additionally, we checked whether banks are listed in sustainable indices, such as the Mib ESG index, the Standard Ethics Index and the Dow Jones Sustainability Index (DJSI).

We believe that our results may be generalised to the banking sector. This is because of the fact that banks present some homogeneous features linked to operational and structural factors (e.g Bernini *et al.*, 2022). Operational factors relate, among others, to the business, which is similar for all banks, albeit with varying diversification levels based on the size, complexity and customer segments they serve. On the other hand, structural factors relate to supervision and regulation, with the specific requirements varying depending on the size and complexity of each bank. This is because of the supervision by the ECB, the increased harmonisation of principles and rules in the European banking industry, and, more generally, the growing integration of the European financial markets. These peculiar factors allow us to adequately generalise some considerations, like the ones resulting from our study. Particularly, the generalisation is intuitive at the European significant banks level; for the less significant banks (the small and medium ones, directly supervised by the national competent authorities under the oversight of the ECB), the generalisation may be considered an opportunity to have best practices to refer to, useful for leading the evolutionary path of the banking sector as a whole.

3.1 Data collection and analysis

Similar to prior studies on MCSs for sustainability (e.g. Durden, 2008; Ditillo and Lisi, 2014; Crutzen *et al.*, 2017), we chose qualitative-based interviews as the main data collection method (see Appendix for the interview guide). Semi-structured interviews afford the opportunity to deal with phenomena for which a consolidated body of knowledge does not yet exist. The method promotes flexible data collection, allowing respondents to touch on emerging aspects that were initially not directly included in the interview's structure (Griffith *et al.*, 2015; Merriam and Tisdell, 2015; Bell *et al.*, 2018). As a guide to collecting the empirical data, a semi-structured questionnaire consisting of open-ended questions was used (Lillis, 1999). Having designed the research within the framework of Malmi and Brown (2008), the interview agenda aimed to examine whether and to what extent banks had introduced changes to the five components of management control (planning, cybernetic control, reward/compensation, administrative control and cultural control) in response to the institutional pressures for sustainability.

A research team of three conducted the interviews via online calls. This allowed us to collect different points of view during the interviews, thereby increasing the richness and reliability of the findings (Eisenhardt, 1991). Interviews were carried out in two waves and involved participants selected on the basis of their knowledge and experience with the phenomena under investigation (Creswell and Poth, 2016). As reported in Table 2, which summarises the respondents and the main information for each bank, we conducted a total of twelve interviews. The first round of interviews was carried out between September and December 2021 and consisted of six interviews with top managers in the sustainability area and in key control roles. The second round of interviews took place between July and August 2023 and involved six interviewees among managers from more operational areas (e.g. risk management) who are particularly concerned with the integration process of ESG issues. We intentionally interviewed actors with different tasks and positions in the banks because, in addition to the best information on all the aspects related to sustainability issues, they could provide a holistic perspective of their integration in the banks' strategies, as well as processes and procedures, with important insights on the change in the approach to the business and the relationship with the market and stakeholders (especially customers). Notably, while the first round of interviews was targeted at actors from the sustainability and controls areas, strongly involved in the strategic approach to sustainability, the second round of meetings was aimed at interviewing managers from operating areas. This allowed us to achieve a broader perspective on the organisation's sustainability commitment to understand whether the integration of ESG issues was fully spread within the organisation as a whole and how such integration affects the relationship with customers. Indeed, the different perspectives provided us with insights into the application of sustainability within daily operations, shedding light on how ESG goals are translated into practical actions. Moreover, by considering the standpoints of actors with different tasks and positions within the banks (sustainability managers, business controllers and managers from operational functions), we also address an important limitation in prior research that only considered the view of sustainability managers (Crutzen *et al.*, 2017; Corsi and Arru, 2020).

The interviews, lasting between 55 and 90 min each (the average time of the interviews was 70 min), were recorded and transcribed to enable the gathered data to be systematically organised and analysed (McLellan *et al.*, 2003). We reviewed the transcripts multiple times with reference to the original recording to ensure information accuracy and reliability. Additionally, as Yin (2003) suggests, we returned the report of each interview to the informants for verification and to ensure data validity. We recontacted each individual informant after the first round of interviews to verify the main evidence identified during the

Bank	Respondent	Role	Time duration (min)
First round of interviews			
A	Respondent A	Group Sustainability Manager	85
	Respondent B	Business Controller	63
B	Respondent C	DC Strategic Support	72
	Respondent D	Business Controller	88
C	Respondent E	Business Controller	65
	Respondent F	Sustainability Communications Manager	67
Second round of interviews			
A	Respondent G	Manager – Strategy Implementation (ESG)	63
	Respondent H	Manager – Reporting (ESG)	69
B	Respondent I	Manager – Internal controls and capital adequacy	73
	Respondent L	Risk management (ESG)	56
C	Respondent M	Manager – Business and operations	57
	Respondent N	Manager – Finance (ESG)	82

Source: Table by the authors

Table 2.
Interview summary

meeting, thereby consolidating the collected information, cross-checking relevant data and clarifying important issues. Such interviewee feedback is essential to avoid observers' bias and thus ensure the accuracy of the collected data. Finally, the collected interview data were triangulated with documentary information from annual reports, sustainability reports, company websites, press releases and information available on the internet about each bank (see Table 3). In particular, the use of these secondary sources allowed us to integrate and validate data collected from the interviews. The triangulation of data from various sources, the interviews and external sources, was crucial in ensuring the validity of our analysis (Yin, 2003; Merriam and Tisdell, 2015).

To analyse and summarise the large volume of data collected, we used manual content analysis procedures. No formal coding program was used; instead, the data collected from interviews and secondary sources were carefully examined and categorised to understand the types of institutional pressures (i.e. coercive, normative and mimetic) and the related changes that occurred in the various elements of the management control package, in accordance with the Malmi and Brown (2008) framework. As a first step, we analysed the data by investigating the individual banks through detailed descriptions of the changes that occurred in all the elements of the MCS package. Subsequently, we conducted a comparative analysis to identify the similarities and differences across the three banks regarding how management controls have been reconfigured in response to institutional pressures towards sustainability (Eisenhardt, 1991; Yin, 2014). To increase external validity, the results were then compared with the existing literature (Riege, 2003; Yin, 2003).

4. Results

As emerged from the interviews, banks' commitment to sustainability has significantly increased over the past few years, covering the ESG dimensions, particularly because of the changing expectations of banks' stakeholders. Notably, all respondents indicated the important role EU banking authorities played (i.e. coercive pressure) in fostering banks' commitment to sustainability by increasingly recommending that banks act proactively in incorporating ESG considerations into their business. Among the different initiatives EU banking authorities undertook, respondents indicated the EBA's (2019) "Action plan on sustainable finance" which, as a priority matter, provided considerations on how ESG issues

MCSs components	Secondary sources
Planning controls	Strategic plans
	Banks' website
	Sustainability reports
	Annual reports
Cybernetic controls	Sustainability reports
Reward and compensation	Report on remuneration policy and compensation paid
Administrative controls	Corporate governance reports
	Banks' website
	Banks' policies
	Sustainability reports
Cultural controls	Banks' website
	Sustainability reports
	Annual reports

Note: Banks' reports were analysed for the period 2017–2022
Source: Table by the authors

Table 3.
Secondary sources

could be incorporated in the regulatory and supervisory framework of EU credit institutions. Additionally, they mentioned the EBA's (2020) "Guidelines on loan origination and monitoring", which introduced prominently environmentally sustainable lending dimensions and set requirements for institutions to consider ESG factors and associated risks in their credit policies and procedures.

In addition to banking authorities, respondents highlighted the growing demand of customers and investors (i.e. normative pressure), who are increasingly sensitive to the importance of sustainable finance and consequently expect banks to account for their engagement in sustainability issues. This is particularly explicit in the following passages, in which all banks explain the role of customers and the investor community in influencing the bank's commitment to sustainability:

> Our commitment has changed over the years because interest in sustainability issues is now widespread among investors, employees and customers. To give you an example, a few years ago when the bank presented its results to the investor community there were no questions in the ESG area; today, we receive many questions about ESG issues. Accordingly, alongside the investor relator, there is often an expert on these issues who produces answers to these specific topics. Therefore, it becomes essential to take these elements into account (Bank B, Respondent C).

> In addition to regulations, the shift towards greater emphasis on sustainability is driven by an increasing and diverse sensitivity of customers towards these issues. There are now numerous customers who have specific expectations regarding ESG topics and are demanding more and more ESG products, such as ESG funds (Bank C, Respondent M).

> There is an increasing market demand, particularly from corporations. Companies have come to recognize that sustainability is not merely a matter of compliance, but a pivotal factor for competitiveness. They are indeed embracing this transformation to effectively address the evolving consumer demands, and, in certain instances, to ensure their own survival. For other companies, sustainability represents an authentic paradigm shift (Bank A, Respondent G).

By contrast, we did not find evidence of mimetic pressure. This finding could be attributed to the fact that institutional pressures for sustainability in the banking industry are recent. As a result, there may not be enough banks that have fully integrated ESG issues into their strategies and business practices for mimetic behaviour to be prevalent.

Below, we report on the observed changes in the MCSs in line with each of the five control mechanisms of Malmi and Brown's (2008) framework.

4.1 Planning controls

Although the origin of banks' commitment to sustainability can be traced back to the early 2000s, it is noteworthy that in the past, banks did not carry out well-structured forms of long-term planning regarding ESG objectives. Indeed, as emerged from the interviews, banks started setting up long-term planning of ESG objectives only recently (generally from 2019 on):

> Our group has been dealing with sustainability issues for many years; for example, our first social and environmental report dates back to the year 2000. However, in the past, we did not have a proper sustainability strategy. The fundamental change, in my opinion, is that today we have a concrete strategy, which we presented for the first time in the 2019 annual report, and we are now further strengthening and integrating it into the overall strategies of the group (Bank A, Respondent A).

> We have been dealing with sustainability for years (e.g., using electricity generated from renewable sources, providing funding for sustainable initiatives, etc.). What has recently changed is that sustainability has become an integral part of our strategic planning, with the establishment of important sustainability objectives (Bank C, Respondent F).

> The ESG themes have always been strongly prioritized by our group. However, with the new strategic plan, sustainability has become one of the four pillars of the bank's strategy, thereby raising the bank's ambitions regarding ESG themes by setting specific objectives (Bank B, Respondent L).

Moreover, while in the past years the planning related to ESG goals was separated from the overall banks' strategic-management processes, currently it is fully integrated, with the ESG strategy which is therefore becoming embedded in the banks' global strategy. This is demonstrated by the inclusion of explicit ESG objectives in the most recent published strategic plans (Crutzen *et al.*, 2017). This means that the ESG theme has become one of the key pillars of the banks' strategy, resulting in clear and explicit ESG objectives that are consistent with the strategic plan's objectives and are foregrounded in the entire first line, from the CEO to subsequent levels of middle management. In this respect, one of the respondents explains the importance of integrating the sustainability strategy with the overall business strategy to foster sustainability principles across every business process and operation:

> The ESG strategy must not be a stand-alone issue, it must be something in the DNA and the overall conception of the group strategy. This is necessary for the full engagement of all business areas that should aim to take a strategic approach to achieve sustainability goals (Bank A, Respondent A).

On this issue, coercive pressure stands out as the most significant driver, with banks that have indicated the regulatory regime as one of the institutional pressures that has initiated the formalisation of long-term planning for ESG goals. Notably, banking authorities have developed new regulatory standards that demand banks to integrate ESG factors into their strategies, business models and risk management practices. Only Bank A identified the board (i.e. normative pressure) as the main actor in driving its full integration into the bank's global strategy:

> The main force driving this change is the influence of European regulation on sustainable finance, which is constantly evolving; let's consider, for example, the regulation on the taxonomy of sustainable activities, which sets the criteria by which sustainable activities, compatible with the transition, are identified. There is also a strong and growing attention from the European supervisory authority (i.e., the ECB), which is actively involved on this issue conducting thematic reviews on ESG themes (such as the Thematic Review on Climate and Environmental Risks) in order to understand how banks are addressing these matters. (Bank B, Respondent I)

> Our approach to sustainability has evolved over time in response to the changing stakeholder expectations and, especially in recent years, due to regulatory developments that have made certain activities mandatory. Let me say, however, that a key role in this process was played by the former board of directors, which had an internal committee comprising individuals with a strong interest in sustainability. This committee advocated for the full integration of the ESG strategy with the group's overall strategy. Specifically, the board asked, and to some extent strongly urged, the management to include explicit sustainability objectives in the old strategic plan announced in November 2019. (Bank A, Respondent B)

Although all banks institute long-term planning for ESG objectives, notably, only one bank (Bank A) currently endorses a written action plan to operationalise long-term objectives by translating them into short-term (annually) goals and providing a road map to achieve them. This action plan provides a structured and comprehensive approach to integrating long-term ESG objectives into the budgeting process. Specifically, it outlines the yearly objectives to be achieved and the critical activities to be pursued in each banking area (e.g. commercial banking, corporate investment banking and real estate), also ensuring that responsibilities are clearly assigned for their achievement. Additionally, it delineates the budget monitoring process that helps track progress towards these targets and ensure their successful realisation.

Probably, Bank A is the only one to have already adopted the action plan because it was the first to start the process of integrating the ESG theme into the global strategy. In the other two banks, however, the integration of ESG factors in the budgeting processes is in an advanced state of progress.

4.2 Cybernetic controls

All the banks in our study have some kind of performance measurement system (PMS) in place for measuring and assessing their ESG performance. These ranged from dedicated IT systems (Bank B and Bank C), aimed at collecting a package of sustainability KPIs, to fairly complex systems that integrate the ESG dimensions with the economic and financial ones (Bank A). Particularly, Bank A has adopted a single and structured PMS that takes ESG performance into consideration in addition to financial performance. It is based on the collection of qualitative and quantitative measures from the KPIs bluebook (a collection of economic and non-economic KPIs); these measures are recommended to the top management to enable the cascading of their objectives to the levels below.

The interviews revealed significant changes in the PMSs of banks, particularly in terms of ESG measures and, consequently, of KPIs required to capture and convey ESG performance/risks. In particular, following the growing coercive pressure from regulatory authorities towards improved ESG metrics, with a particular focus on the environmental dimension, banks have more recently started to adopt quantitative and objective indicators, such as the green asset ratio and the banking book taxonomy alignment ratio. In this respect, respondents mentioned the EBA (2022) final draft (Implementing Technical Standards – ITS) on ESG risk disclosure, which aims to provide stakeholders with easily and comprehensible KPIs to evaluate and compare the ESG performance of banks. As

emerged from the analysis of the banks' sustainability reports, this increased attention towards ESG measures has also led to changes in the sustainability reporting of banks, which is a key tool for transparency on these issues. Particularly, Bank A and Bank B have adopted, in addition to mandatory reports (i.e. the Consolidated Non-financial Statement), an integrated and comprehensive set of sustainability reporting (on a voluntary basis) focused on demonstrating the ongoing evolution and performance on ESG themes. Examples of such reports include the Task Force on Climate-Related Financial Disclosure (TCFD) report and the Principles for Responsible Banking (PRB) report, in addition to the sustainability (green and/or social) bonds report that concerns ESG bond issuances. As one of the interviewees (Bank B, Respondent L) pointed out, in addition to regulators, institutional investors are paying closer attention to these reports, demanding more detailed information about the bank's positioning regarding ESG issues. This underscores the important role played by normative pressures from stakeholders in driving changes to banks' cybernetic controls.

The analysis of interviews also shows changes concerning the use of PMSs for sustainability. Notably, while such systems were used in the past to collect data on sustainability only for external reporting purposes, at present, these systems are also used to provide ESG measures and targets for the strategic planning process and to feed the staff remuneration and incentive systems. Additionally, the ESG metrics are included in various internal processes, particularly the risk management process. This has significant implications for banks' daily business operations, particularly in the areas of lending and finance. This involves, for example, the use of ESG metrics (such as carbon emissions, water usage, etc.) as part of the credit risk assessment aimed at identifying the risk profile of companies or sectors and, consequently, informing lending decisions (e.g. loan pricing). This extends to the finance area as well, with banks now engaging in a comprehensive evaluation of financial products, incorporating ESG factors alongside the traditional financial risk/return assessments. In other words, in both cases (lending and finance), the drivers to be considered now incorporate the ESG aspects. This is because of the need to include the ESG risk profile in investment decisions, whether it is for granting a loan or trading a financial product on the market. Intuitively, this is the renewed basis for the pricing policies and for meeting the expectations of customers, who are increasingly sensitive to sustainability issues. Nevertheless, it is important to underline that banks are called to assess the ESG profile of the financial products also to make their customers adequately informed and aware of the investment choices, together with the related risks, they undertake. It follows that the ESG factors increasingly constitute essential components of such activities, such as contributing to the assessment of their risk exposure as well as their pricing.

In this respect, respondents highlight the important role European banking authorities (i.e. coercive pressure) have played in fostering the process of integrating ESG factors in the bank's risk management and, consequently, in lending and finance operations:

> [. . .] In particular, regarding credit risk, the assessment of sustainability factors will become an integral part of the risk management process, thus leading to a process of change in the models and methodologies of credit and default risk analysis. In this regard, it is useful to recall the European Banking Authority guidelines, mentioned before, on granting and monitoring credit, which require banks to take ESG factors and related risks into account in their credit procedures and policies. (Bank B, Respondent C)

> As an example, in the past we employed specific search engines (e.g. Morningstar) to assess and compare different investment funds; at present, we rely also on ESG ratings that have become an integral part of our evaluation process. This change in the methodology can be primarily attributed to regulatory developments, particularly the updates to the MiFID discipline, the MIFID II, which now asks for the integration of ESG factors, risk and preferences into certain organisational requirements (i.e., reporting, processes and internal policies) underlying the provision of investment services. (Bank C, Respondent N)

> In the credit assessment, for example, we are working to incorporate physical and transition risks with a granular approach, in order to examine our counterparties from this new perspective. All of this will influence the financing directed towards our clients. As a European bank, regulation has been a key factor in this regard, just think about the ECB's Guide on climate-related and environmental risks. (Bank A, Respondent G)

However, it is noteworthy that in this area there is still room for improvement, as Banks B and C explain:

> The KPIs system is already in place and will become more and more sophisticated and analytical in future [. . .] The scoring, obtained with internal information in the company and by using external providers, will then be entered into the risk management and credit processes, because all these concepts that we are expressing must then be translated into evaluations, numbers and then on-off switches whether or not to implement certain operations. (Bank B, Respondent D)

> To date (2021), the process of fully integrating ESG factors into the Risk Appetite Framework (RAF) is still in progress, but we are progressively working towards integrating ESG risks and opportunities in lending policies and in the overall risk management framework to support corporate bodies in considering the impact of ESG factors. (Bank C, Respondent E)

4.3 Reward and compensation controls

The evolution process of MCSs further involved reward and compensation controls in line with the inclusion of ESG objectives in the strategic-plans of banks. As one of the respondents pointed out, managers' motivation towards sustainability is reinforced by linking reward and compensation to ESG objectives. This is crucial to facilitating the process of change towards sustainability and to guiding managers' adoption of sustainable behaviour and solutions:

> Staff competence and engagement are certainly the key enabling factors towards sustainability. In this perspective, it is crucial that each corporate actor is aware of its role and the impact it can have in the ESG sphere. Tying remuneration policy to ESG variables is instrumental in achieving this goal. (Bank C, Respondent F)

Particularly since 2020, all banks have started to include several ESG KPIs in the long-term incentive plan for all "material risk-takers" (i.e. the management team). In general, the weight of the ESG goal on the total variable remuneration linked to the achievement of the strategic plan goals ranges from 10% to 15%. This also applies to the short-term incentive, which is the annual bonus received by the staff members.

From the analysis of the latest (2022) banks' remuneration reports, some differences between banks emerge, especially those concerning the different ESG dimensions' weighting for the assessment of ESG performance and the nature (quantitative or qualitative) of ESG targets, as well as for the use of techniques for evaluating the performance of the employees regarding ESG targets and the associated variable rewards (i.e. bonus, stock option, etc.).

To illustrate, Bank B has included a specific ESG KPI for 2022 as a performance target assigned to top management. The assessment of such an ESG KPI takes place both at the group level and at the division level. It is based on a qualitative evaluation adopting a number of drivers, such as the bank's presence in the sustainability indices of specialised companies (i.e. number of appearances), the implementation of specific projects and actions in the ESG area (e.g. the increase of green loans and mortgages, as

well as the ESG products offered) and the achievement of a set of diversity and inclusion commitments.

Conversely, Bank C envisages a combination of quantitative objectives, such as the increase of women in managerial positions and the decrease of CO_2 emissions and social initiatives (hours). These objectives are measured by linear interpolation within a range that envisages a minimum level (floor) and a maximum level (cap) of achievement. This means that the bank has established clear and measurable targets for its ESG performance, allowing for an objective assessment as their achievement can be measured against specific criteria.

4.4 Administrative controls

We found changes in all banks regarding administrative controls to account for ESG issues in relation to organisational and governance structures, as well as to policies and procedures.

Firstly, organisational units were set up to deal specifically with ESG issues. Initially, these units engaged in sustainability data-collection and integrated reporting. However, currently, they are proactively involved in strengthening and implementing the integration of sustainability principles in the business, as well as in ensuring coordination among the different business units engaged in sustainability issues. For example, Bank C has set up a sustainability structure that, among other things, oversees the definition of the relevant ESG themes and the monitoring of ESG indicators, evaluates the sustainability impacts stemming from the group's initiatives and provides support to other corporate structures. It also drafts the consolidated non-financial statement and promotes the sharing of the ESG culture within and outside the group.

Bank B, on the other hand, created two organisational units, described as follows. One is the ESG and sustainability unit, which, among other things, is in charge of ESG and sustainability reporting and oversees the process related to the definition, approval and updating of the ESG and sustainability guidelines in line with the general strategies and objectives of the bank. The second is the ESG control unit, which is involved in the strategic proposition on ESG issues and in coordinating the most relevant ESG initiatives. It relies on 17 sustainability managers, identified in each area and division, who are tasked with coordinating the numerous ESG initiatives undertaken by the divisions and governance areas and assessing new opportunities and cross-cutting projects in the ESG sphere.

Secondly, all banks implemented several changes at the governance level, involving both the Board of Directors and the managerial levels. This becomes evident when analysing the banks' corporate governance reports over the past few years. Particularly since 2020, all banks have established a formal sustainability management structure, which in general consists of the CEO and other top managers and is entitled to provide oversight and strategic guidance on the definition and implementation of the ESG strategy. Further, a specific board committee has been established in all banks to support the directors in overseeing sustainability strategies. Notably, while Bank B has strengthened and expanded the responsibilities of an existing committee (i.e. the Risks Committee) to include ESG issues, and the committee has accordingly been renamed to include "Sustainability", Bank A and Bank C have taken a proactive step towards enhancing ESG governance by setting up a dedicated committee focused entirely on ESG matters. As two respondents explain, these changes at the corporate governance level are driven mainly by the need to further raise the level of responsibility on the topic within the bank and to make it more effective and integrated in the overall corporate strategy and business processes:

> [. . .] of course, our strongest ally is the CEO and the Board of Directors because if such issues come from the top, everyone below immediately moves. I mean, creating a management committee to oversee the ESG strategy was clearly an important and successful move because once we define the strategic road map for the next three years, an update of this strategic road map periodically has to be presented to the management committee, where the heads of all the apex functions have sitting. Well, since every manager has his/her boss in the management committee, it is quite obvious that before reporting to the boss and saying "sorry, we had so many other priorities that we did not take care of sustainability" they think about it not twice, but probably 15 times. no?! (Bank A, Respondent A)

> There have been numerous organizational changes to support and coordinate the objectives of the strategic plan. These changes are not just a change of "label", but mostly of contents, highlighting the increasing level of attention on these issues driven by the CEO and the board. (Bank B, Respondent I)

Finally, all banks have included ESG considerations in their existing policies and procedures with the aim of governing the socio-environmental implications. Including ESG themes in policies and procedures is crucial, for example, for the translation of sustainability principles into rules for all employees:

> It is clear that to function well, a bank must have fixed criteria, but then it must have applications that translate these criteria into immediate and easy-to-use rules for employees who then have to manage the relationship with the customer [. . .] What banks need to do, is to set up mechanisms that help employees understand this phenomenon and then to facilitate it. (Bank B, Respondent C)

These policies and procedures concern different organisational areas; however, among those most concerned with translating sustainability principles into policies and procedures, the most frequently mentioned is risk management, particularly in relation to credit risk. Indeed, to integrate the ESG factors into the risk management systems, all banks have started a review of the risk appetite framework and tolerance thresholds, as well as the monitoring of capital requirements and the overall risk exposure. This concerns, for example, establishing clear guidelines for setting the acceptable level of ESG risks banks are willing to take on their activities and the thresholds for when risks exceed these acceptable levels. This enables banks to monitor and manage their ESG risk exposure by identifying areas of high risk and taking appropriate mitigation actions. Similarly, banks are innovating their risk management tools and techniques, such as stress testing and scenario analysis, to identify and measure the potential impact of these risks on their financial performance, allowing for more informed decision-making in managing capital requirements and mitigating associated risks. That, in essence, is the real integration of ESG drivers into the risk management process. In this regard, coercive pressures emerge as the most significant enablers of the above changes, as banking authorities have required banks to implement appropriate controls and develop adequate practices for identifying, measuring, monitoring and managing ESG risks [5].

Further, banks have introduced various policies targeting sensitive sectors, such as the Oil and gas, coal and defence sectors, to ensure that lending practices align with broader ESG goals. In this way, banks can help to direct capital towards sustainable investments and away from activities that may harm the environment or violate social and governance principles. As an example, Bank B has recently updated the internal rules for lending in the coal sector, and introduced specific rules for the unconventional oil and gas sector. With reference to the latter, the corresponding policy introduces limits and exclusions in relation to "shale oil and gas", "tar sands" and "tight oil and gas" resources, which are obtained using unconventional techniques and whose extraction generates higher greenhouse gas

emissions than resources extracted with conventional techniques, resulting in greater environmental impact. Additionally, such policy excludes exploration and extraction in geographical areas characterised by fragile ecosystems, such as the Arctic or the Amazon Sacred Headwaters.

Finally, it is worth noting that all banks have developed specific frameworks for the issuance of bonds dedicated to the financing of social and environmental projects, i.e. green, social and sustainability bonds. These frameworks, set up according to the market principles established by the International Capital Market Association (ICMA) [6], detail criteria for the selection of green and social assets as well as for the management of proceeds from the issuance of these bonds.

4.5 Cultural controls

To examine changes in the participating banks' cultural controls, we follow Crutzen *et al.* (2017), who identify a number of signals [7] that indicate a company's sustainability engagement and, as such, could influence the organisational culture. Based on these signals, we found extensive evidence in all banks of various changes in cultural controls, which act as "[...] a facilitator, an accelerator, a catalyst for the process of change towards sustainability" (Bank A, Respondent B). The primary objectives of these controls are internal communication to employees that will promote a sustainability culture in the organisation and, consequently, direct their attention to activities supporting the banks' commitment to sustainability.

Among the multitude of signals observed, particularly remarkable is the introduction, in all banks, of specific training programs on ESG topics aimed at increasing employees' sensitivity to these issues. To illustrate, Bank C developed a mandatory training program for all employees at the end of 2020 with a view to further disseminating a culture focused on environmental protection and combating climate change. This course was attended by roughly 70% of the group's staff, for a total of 25,840 h. Similarly, Bank B provides the group's employees with specific ESG training aimed at supporting the dissemination of the sustainability culture and developing and strengthening core competencies for the implementation of corporate strategies geared towards ESG goals. This ESG training, which represented over 13% of total training in 2022, consisted of a basic level, cutting across the various topics and provided to all employees, as well as an in-depth or specialist level on individual topics, managed by the divisions and governance areas concerned. As two respondents point out, this type of cultural control is a key enabler for effectively integrating sustainability principles in practice:

> We believe this topic must be transversal for everyone in the bank. To achieve this, training programs on ESG issues are central to facilitate a better understanding of this phenomenon and to promote sustainable practices in the workplace. (Bank C, Respondent E)

> Developing skills in these areas is crucial, especially to engage pro-actively with customers. What I mean is that I need to know about hydrogen if a customer tells me his/her firm is investing in hydrogen infrastructures [...] I must be able to have, at least in the early stages, a technical conversation (Bank A, Respondent G).

Interestingly, in addition to training programs for employees, we observed several initiatives that target customers and are aimed at fostering and supporting their cultural change. For example, Bank B has developed platforms with dedicated ESG training for corporates and created ESG labs (physical and virtual meeting points) aimed at supporting companies in the sustainable transition. In a similar vein, Bank A, in collaboration with an

Italian university, provides a free training program for companies, non-profit organisations and institutions on ESG topics, aimed at fostering the growth of managerial culture and skills on the subject. In this respect, we refer particularly to external cultural controls that support and facilitate banks' customers in their actual transition to sustainability. In emphasising the importance of cultural change not only within the bank but also externally, Respondent C points out:

> [. . .] in the past, being a bank meant being a financial partner of companies, while today being a bank means being a partner which, in addition to being a financial supporter/partner, has to help corporates to understand the strong transformation related to sustainability (Bank B, Respondent C).

Finally, the interviews also emphasised the important role of symbol controls in determining initiatives aimed at making the banks' businesses even more sustainable. These controls involve all energy reduction and efficiency initiatives, such as using energy from certified renewable sources, choosing materials (e.g. paper and toner) sensibly, as well as defining sustainable mobility policies for staff (e.g. the use of electric cars).

5. Discussion and conclusion

Drawing insights from institutional theory (DiMaggio and Powell, 1983), this study explores how banks have reconfigured their MCSs in response to institutional pressures for sustainability. Our investigation, carried out at the three largest Italian banking groups, reveals that banks introduced numerous changes to their MCSs over the years to account for ESG issues (Table 4 summarises our main findings).

Notably, among the different institutional factors, the *coercive* pressures stemming from European authorities emerged as the most important ones to initiate MCS changes in banks. Indeed, as our results show, it was mainly in response to the banking authorities' commitment to sustainability that banks started, to some extent, to change their MCSs in accounting for ESG issues. This finding is consistent with prior studies in the banking industry that indicate supervisors and regulations as the main influential forces in shaping management practices, including MCSs (e.g. Hussain, 2003; Munir and Baird, 2016; Christensen *et al.*, 2018). The active role played by banking authorities in promoting sustainability was evident through the implementation of new regulatory standards that demand the integration of ESG factors into banks' strategies, business models and risk management practices.

The *normative* pressures from customers and institutional investors also played an important role in driving the incorporation of ESG issues in banks' decision-making processes and business operations (e.g. lending and finance). The increasing importance of ESG issues in the EU and global landscape has led to a shift in stakeholders' preferences, with a growing emphasis on sustainable practices and responsible corporate behaviour (Tan *et al.*, 2017; La Torre and Chiappini, 2020; Houston and Shan, 2022). Interestingly, our study did not find compelling evidence of *mimetic* pressures, suggesting that the pressure to adopt sustainability practices by imitating successful peers was not a significant driver for MCS changes in the banking industry. One possible explanation is that sustainability pressures are relatively recent, and full integration of ESG factors into the business practices of banks may not have been widespread enough to trigger mimetic behaviour.

Hence, our results show that banks were compelled to redesign their MCSs to comply with new regulatory standards and requirements and align with the changing preferences of their stakeholders, particularly investors and customers.

Firstly, our results show that the ESG theme has become one of the key pillars of the bank's strategic plan, being fully integrated into banks' global strategies and their

Table 4.
Summary of findings

MCS components	Results
Planning controls Long-range planning (the medium- and longer-term goals and actions); and Action planning (the short-term goals and actions)	Starting in 2019, all banks initiated the process of formulating *long-term plans* for their ESG objectives in response, particularly to heightened pressures from banking regulatory bodies. Notably, the ESG theme has become one of the key pillars of the banks' strategy, resulting in clear and explicit ESG objectives included in the most recent published strategic plans At present, there is limited integration of long-term ESG objectives into the *budgeting process*; only one bank (Bank A) currently endorses a written action plan to translate long-term ESG objectives into short-term goals
Cybernetic controls Budgets, financial measures, non-financial measures and hybrids that contain both financial and non-financial measures	All the investigated banks have *PMSs* in place for measuring and assessing the ESG performance, in addition to the financial one Following the growing demand from regulatory authorities and institutional investors, there has been a shift towards the adoption of more *quantitative and objective ESG metrics* (e.g. the green asset ratio), which are now used not only for *external reporting* purposes but also for the *strategic planning process* and the *remuneration and incentive systems* Additionally, these *ESG metrics* are included in various internal processes, particularly the *risk management process*, thereby affecting banks' daily business operations, particularly in the areas of lending and finance
Reward and compensation controls	In line with the inclusion of ESG objectives in the strategic-plan, since 2020, all banks have started to include several *ESG KPIs* in the *long- and short-term incentive plans* for all "material risk-takers" (i.e. the management team). In general, the weight of the ESG goal on the total *variable remuneration* linked to the achievement of the strategic plan goals ranges from 10% to 15%
Administrative controls Governance structures, organisational structure, policies and procedures	New regulatory requirements call for more formalised governance structures, appropriate controls and adequate practices to identify, measure, monitor and manage ESG risks In response, banks have set up different *organisational units* to deal specifically with ESG issues. In addition, banks have established a *formal sustainability management structure*, entitled to provide oversight and strategic guidance on the definition and implementation of the ESG strategy, as well as a *specific ESG board committee* to support the directors in overseeing the sustainability strategy Finally, ESG issues have been included in banks' *policies and procedures* (e.g. the *risk management framework*) to translate sustainability principles into rules for all employees
Cultural controls Value controls, symbol controls, clan controls	Cultural controls in the form of *value controls* (e.g. training) and *symbol controls* (e.g. energy reduction and efficiency initiatives) were used by banks to disseminate ESG values within the organisation and, consequently, to orient organisational behaviour towards sustainability Interestingly, banks also engage in *external cultural controls* by undertaking several initiatives (e.g. ESG training programs) aimed at disseminating and supporting customers, especially corporates, in their transition towards sustainability

Source: Table by the authors

strategic-management processes. In this respect, the literature highlights the importance of having a strategy for sustainability that is integrated with the overall strategy to foster sustainability principles across every business process and operation (Ditillo and Lisi, 2016; Galletta *et al.*, 2021). In fact, including ESG objectives in the global business strategy is crucial for guiding organisations' decisions and actions towards the achievement of those objectives, as it is a clear message to employees that sustainability is a key priority for the organisation (Holton *et al.*, 2010). These changes, concerning the planning controls, are aligned with the mounting pressures exerted by EU regulatory entities, the investor community and consumers alike, who are increasingly concerned about ESG issues and therefore expect banks to be proactively engaged in sustainable activities.

Secondly, following the integration of the ESG theme into the global business strategy, banks implemented several changes to administrative controls to account for ESG objectives. These changes involve, particularly, governance regarding ESG issues by constituting boards and managerial committees with specific ESG-related tasks, as well as the re-writing of policies and procedures in light of ESG considerations (e.g. risk management framework). In this respect, new regulatory requirements were institutional enablers of the above changes, as banks are required to establish appropriate controls and develop adequate practices to identify, measure, monitor and manage ESG risks (ECB, 2020; EBA, 2021). In addition to ensuring compliance with new regulatory requirements for managing ESG risks, changes in administrative controls were made to further raise the level of responsibility for ESG themes in the bank, making them more effective and integrated into the overall corporate strategy and business processes. Consistent with prior research (Cobb *et al.*, 1995; Kasurinen, 2002; Munir *et al.*, 2011; Christensen *et al.*, 2018), our findings indicate that administrative controls are vital for initiating and embedding substantive behavioural change. Therefore, they reinforce the priority of sustainability goals by allowing sponsorship for the approved targets, so that various bank departments feel substantially committed to achieving them.

Thirdly, banks also reconfigured their cybernetic controls to assess ESG performance by developing sustainability-related KPIs. This was done mainly in response to the growing pressures from regulatory authorities towards improved ESG metrics. In this respect, it is useful to recall the EBA (2022) final draft (Implementing Technical Standards – ITS) on ESG risk disclosure, which aims to furnish stakeholders with easily and comprehensible KPIs to evaluate, quantify and compare the banks' efforts in the sustainability area. Following these new regulatory requirements, banks also implemented changes in their sustainability reporting, starting to report voluntarily or going beyond the minimum sustainability reporting requirements. This also allows banks to meet new stakeholder expectations, especially institutional investors, who increasingly demand detailed information about the bank's positioning regarding ESG issues. Indeed, the dissemination of ESG information and its accessibility and comparability through KPIs not only provides an incentive for banks to enhance their sustainability profile but also serves as a strategic tool to mitigate the risks of "sustainability washing" (La Torre *et al.*, 2021; Traxler *et al.*, 2020; Khan *et al.*, 2021).

In addition to monitoring the achievement of sustainability objectives and thus evaluating the bank's sustainability performance, the ESG-related KPIs are used to include sustainability measures and targets in the internal processes and procedures (e.g. risk management, capital management, etc.), thereby providing direction to the daily business (Adams and McNicholas, 2007; Morsing and Oswald, 2009; Passetti *et al.*, 2014; Crutzen *et al.*, 2017). This is necessary to ensure that the bank's actions and decisions are aligned with ESG goals.

Further, our results show that to reinforce all material risk-takers' motivation and sensitivity towards sustainability, these sustainability indicators and targets are also included in the reward and compensation systems. This supports the argument that linking reward and compensation to sustainability objectives is crucial to ensure accountability, to affect the decision-making process and in general to promote sustainability commitment at all company levels (Norris and O'Dwyer, 2004; EBA, 2019; Corsi and Arru, 2020; Zalewska, 2023). This finding is particularly interesting given that prior research (e.g. Lueg and Radlach, 2016; Crutzen *et al.*, 2017) found that rewards and incentive systems are the least implemented of Malmi and Brown's (2008) five management control mechanisms. This is largely motivated by the overall complexity of assigning specific responsibilities that relate to particular sustainability objectives and the low priority given to sustainability objectives in comparison to the attention other business goals get.

Finally, the results show extensive evidence of changes in banks' cultural controls, which are largely acknowledged as important control mechanisms for orienting organisational behaviour towards sustainability. Consistent with prior studies (Merchant and Van Der Stede, 2003; Riccaboni and Leone, 2010; Ditillo and Lisi, 2014; Corsi and Arru, 2020), this finding indicates how crucial informal controls are in promoting the full deployment of sustainability principles in an organisation, thereby promoting desirable conduct. Interestingly, in addition to disseminating ESG values within the organisation, cultural controls in the form of training are used by banks to develop and strengthen ESG-related skills. This was considered vital not only for the implementation of ESG business strategies but especially to align with the changing demands of the banks' customers, notably corporates that are progressively seeking ESG-focused banking products. Furthermore, our results demonstrate that banks engage in external cultural controls (Svensson and Funck, 2019), as demonstrated by some initiatives (e.g. ESG training programs) undertaken to disseminate sustainability principles among their customers, especially corporates. This highlights the important role banks can play in helping customers understand the ESG phenomenon and, most importantly, support them in the transition towards sustainability (Ahmed *et al.*, 2018; La Torre *et al.*, 2021).

Our study's findings, taken together, support the theoretical assertion that institutional pressures influence the MCS design in banks (Munir and Baird, 2016; Christensen *et al.*, 2018; Rikhardsson *et al.*, 2021). Hence, this implies that MCSs are central to effectively responding to increased pressures from various stakeholders (Wijethilake *et al.*, 2017; Corsi and Arru, 2020; Rikhardsson *et al.*, 2021). In this respect, both formal and informal controls are necessary to develop banks' sustainability DNA and thereby ensure real engagement towards sustainability objectives (Riccaboni and Leone, 2010; Lueg and Radlach, 2016; Crutzen *et al.*, 2017; Wijethilake *et al.*, 2017; Corsi and Arru, 2020; D'Onza, 2022). The combination of formal and informal controls indeed creates a comprehensive framework for sustainability integration, enabling banks to effectively understand, plan and control the transition towards business models fully oriented to the integration of ESG issues.

Nevertheless, our results also reveal that additional efforts are still needed to enable the full integration of ESG issues in banks' MCSs. Consistent with prior empirical studies (BlackRock Financial Markets Advisory, 2021; EBA, 2021), we find that in the process of integrating ESG factors into the banks' internal processes (i.e. risk management) and procedures, there is still room for improvement, even if banks are working towards their progressive integration. One critical aspect in this regard pertains to the availability of data for developing increasingly precise risk management systems, which is vital to monitoring and driving this change. Indeed, the data availability is currently limited and fragmented, covering only large corporations; another concern is the absence of historical series to enable

certain controls. On this issue, while European regulatory authorities are actively working to ensure the availability of certified and reliable data, banks are proactively investing in new technologies and establishing partnerships with companies to acquire these data, especially those related to small and medium-sized enterprises. This underscores the imperative of addressing the data availability problem to ensure the full integration of ESG factors within risk management processes and procedures. Such integration is, in turn, crucial to effectively translating sustainability principles into management practices and day-to-day operations (Bebbington, 2007; Riccaboni and Leone, 2010; Corsi and Arru, 2020).

Moreover, the lack of action planning, which would be useful in operationalising the long-term ESG objectives (only one bank currently endorses a written action plan), represents one of the main challenges to be faced, as it can undermine long-term planning effectiveness (Durden, 2008; Battaglia *et al.*, 2016; Lisi, 2015; Lueg and Radlach, 2016). Certainly, if long-term plans are not accompanied by concrete action plans, there is the risk that most activities remain oriented towards achieving only conventional economic objectives or general sustainable goals.

5.1 Contributions, limitations and avenues for further research

Our study makes several contributions to a number of literature streams. First, we contribute to the management accounting literature (e.g. Gond *et al.*, 2012; Ditillo and Lisi, 2016; Crutzen *et al.*, 2017), addressing recent calls for research into how MCSs for sustainability are actually used and implemented (Ghosh *et al.*, 2019; Beusch *et al.*, 2022). Although a growing body of research has emerged over the past decade, current knowledge about how companies should design or use MCSs to integrate sustainability into their organisations is limited. This requires further investigation (Crutzen *et al.*, 2017; Corsi and Arru, 2020; D'Onza, 2022). Additionally, research on the actual use of MCSs for sustainability in the banking sector has been lacking (Gooneratne and Hoque, 2013; Mio *et al.*, 2022). Accordingly, our exploratory analysis provides rich insight into how banks engaged in sustainability design and implement MCSs to effectively support the formulation and implementation of a sustainability strategy. Specifically, consistent with prior research (e.g. Bouten and Hoozée, 2016; Crutzen *et al.*, 2017), our results show evidence of complementary relationships established between the different control mechanisms of the Malmi and Brown (2008) framework. This supports the argument that a combination of formal and informal controls can help banks translate their sustainability strategies into action by directing the actions of all organisation members towards achieving the ESG objectives in addition to the economic ones. Further, these controls assist in monitoring the organisation's progress towards ESG objectives and targets, and they help develop a sustainability culture in organisations.

This study also adds to the existing literature on MCS change in banks. An examination of MCSs changes and the institutional factors influencing them is important given that the literature suggests MCSs become redundant and lose utility if they cannot adapt to institutional environment change (Kaplan and Johnson, 1987; Munir *et al.*, 2013). An organisation's overall success is indeed dependent on its ability to adapt MCSs to reflect their current institutional environment (Burns and Scapens, 2000; Malina and Selto, 2004; Munir and Baird, 2016). However, prior research has focused only on economic conditions (e.g. the global financial crisis, increasing competition, etc.) as institutional factors that influence MCSs in banks (e.g. Munir *et al.*, 2013; Munir and Baird, 2016; Christensen *et al.*, 2018; Rikhardsson *et al.*, 2021). By examining the impact of institutional pressures on sustainability, we extend this line of research, showing how changes occurred in the MCSs of banks in terms of integrating ESG dimensions to make them more effective in meeting the

new business environment's challenges. In so doing, we also contribute to institutional theory by showing which of the three institutional forces (i.e. coercive, normative and mimetic) exerted the greatest influence in initiating changes in banks' MCSs to account for ESG issues. Indeed, while these three pressures often operate concurrently, Scott (2005) argued that their degrees of relevance may vary according to the specific context. Our study provides support to this argument, showing that, in the banking industry, coercive and normative pressures emerge as the primary drivers of MCS changes to incorporate ESG issues. This is particularly intriguing, given that the banking sector does not fall under the realm of environmentally and socially sensitive industries (e.g. Kassinis and Vafeas, 2006; Berrone *et al.*, 2013).

Finally, we contribute to the growing literature on sustainability in banking, which has examined, among other things, sustainability reporting evidence (e.g. Carnevale and Mazzuca, 2014; Oliveira *et al.*, 2019), the determinants of sustainability performance (e.g. Aras *et al.*, 2018; Galletta *et al.*, 2021), as well as sustainability performance implications (e.g. Broccardo *et al.*, 2016; Miralles-Quirós *et al.*, 2019). However, to date, scant attention has been devoted to the intra-organisational impact of sustainability in terms of how sustainability principles are incorporated in banks' decision-making processes and business operations (Yip and Bocken, 2018; Ehlers *et al.*, 2022). Notably, the extent to which MCSs support banks in their efforts towards sustainability has remained under-researched. By examining changes to banks' MCSs that emerge in response to institutional pressures for sustainability, we thus fill an important gap in the literature, shedding light on whether and to what extent banks integrate ESG factors in their MCSs to support their commitment to sustainability.

Our findings also provide practical contributions. Considering the recent institutional attention and regulatory pressures towards integrating ESG issues in organisational practices (EC, 2018; EP and EC, 2019; 2020; EBA, 2021), this research sheds light on how adequate MCSs can promote banks' "sustainable behaviours". In particular, identifying the approaches banks followed in reconfiguring traditional MCSs allows us to define best practices on how MCSs can be redesigned to support the integration of sustainability in the banks' way of doing business. This is necessary to ensure banks' real engagement towards ESG goals, which is key to improving their ESG performance. Moreover, our findings can contribute to the spread of best practices across the entire domestic banking industry. This is because the examined banks are the largest ones within the Italian banking system, and therefore, they are called to play a leading role in different fields, including the integration of ESG issues into the business and strategies. This leading role is crucial to sensitising other banks, particularly smaller ones, thereby promoting their evolutionary path in the ESG area (Dicuonzo *et al.*, 2022b).

Our study has some limitations that could be addressed in future research. One of the limitations of this study is linked to its exploratory nature, which restricts the external validity of the results. Further, the analysis was limited to three Italian banks. Future research could work with banks from other institutional settings (e.g. USA, China) to promote a better understanding of the approaches banks take in implementing MCSs to support their commitment to sustainability. This can also be useful for strengthening the generalisation of findings. Finally, future research could investigate the types of MCSs patterns (Crutzen *et al.*, 2017) identified within banks and examine how they relate to ESG performance or risk.

Notes

1. We use a broad definition of sustainability in accordance with the extant literature and recent sustainability-related initiatives (e.g. standards and guidelines), which advocate for a holistic conceptualization of sustainability, which embraces the ESG issues.

2. The names of the three banks are omitted for anonymity reasons and are referred to as "A", "B" and "C".
3. To qualify as significant, banks must fulfil at least one of the following criteria set out in the single-supervisor mechanism – SSM – Regulation and the SSM Framework Regulation: size (the total value of the assets exceeds €30bn); economic importance (for the specific country or the EU economy as a whole); cross-border activities (the total value of the assets exceeds €5bn and the ratio of the cross-border assets/liabilities in more than one other participating Member State to the total assets/liabilities is above 20%); and direct public financial assistance (the bank has requested or received funding from the European Stability Mechanism or the European Financial Stability Facility).
4. Specifically, the Bank of Italy identified four banks as O-SIIs for the year 2021. However, one of the four banks declined to participate in our research, resulting in three banks being investigated.
5. See, for example, the ECB (2020) Guide on climate-related and environmental risks. Supervisory expectations relating to risk management and disclosure; and the EBA (2021) Report on management and supervision of ESG risks for credit institutions and investment firms.
6. The ICMA represents financial institutions active in the international capital market worldwide. Its aim is to promote resilient well-functioning international and globally coherent cross-border debt securities markets, which are essential to fund sustainable economic growth and development.
7. These signals refer to the availability of an intranet platform that serves as a medium for discussing sustainability issues and distributing information on them and internal letters/e-mails dealing with sustainability; internal company events organized with social and environmental considerations in mind; opportunities to participate in community projects; shared values expressed by various managers in the interviews; social and environmental emphases in the Annual Report; and other visual sustainability symbols such as architecture (e.g. green buildings), examples set by CEOs (e.g. using public transportation) or symbols on letters (e.g. a line reading "consider the environment before printing this e-mail" in the e-mail signature).

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Appendix. Semi-structured interview guide

Section 1: demographic information

(1) What is your role in your bank?

(2) How many years have you been working for your bank? And how many years have you been in your current work position?

(3) Have you been directly involved in activities and/or initiatives related to sustainability in your bank? If yes, what is your role in these activities and/or initiatives?

Section 2: bank's commitment to sustainability

(4) What does sustainability mean for your bank?

(5) Could you briefly describe the history of your bank's commitment to sustainability?

(6) What have been the main sustainability initiatives in your bank in the past few years?

Section 3: institutional pressures and changes in management control systems

(7) Has your bank experienced external pressures towards sustainability in recent years? If yes, can you describe the main external pressures towards sustainability that your bank has experienced in recent years?

(8) How have these pressures influenced the way your bank addresses sustainability issues in relation to the following elements of MCSs:

- Strategic planning (Long- and short-term planning);
- Performance measurement systems;
- Reward and compensation systems;
- Administrative controls (e.g. governance structure, organisational structure, policies and procedures); and
- Cultural controls.

(9) How were these changes developed and implemented?

(10) In addition to specific changes in individual components of management control, are there interconnected changes or synergies among these components in response to sustainability pressures? Can you provide examples of such synergies or interconnected changes?

Section 4: Impacts and effectiveness assessment

(11) What are the challenges your bank encountered in implementing these changes? In your opinion, what additional changes or improvements could be made to the MCSs to more effectively address ESG issues in your bank?

(12) In light of the changes made in your bank's MCSs, how do you assess the effectiveness of these changes in promoting sustainability?

(13) Are there any other comments or information that you consider relevant to the research?

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