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Materiality matrix: a comparison between relevant indicators for banks and stakeholder*

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Abstract

Purpose. This work analyzes the elements that Italian banks identify as strategical to increase their relational and reputational capital and to be in consonance with the stakeholders expectations. We aim to investigate the width and the depth of the phenomenon to detect the banks attention on critical topics for their stakeholders.

Methodology. The present study examines a set of indicators defined starting from the materiality matrix published in the non-financial reports of banks. In particular, we used the reports published by 56 banks operating in Italy on their websites, which can be considered representative of the universe of entities that form that sector with regard to market shares held.

Findings. The materiality matrix gives the possibility to enrich the reports aimed at communicating in an accurate way to the various super-systems, in addition to their perfomances, the propension in the creation of shared value over time, following a course that leads to the identification of relevant matters on which strategies and sustainability goals have to be founded.

Practical implications. The materiality matrix does only not come with conceptual reflections: the possibility to create a multi-stakeholder context by which it is possible to involve in the decision-making process the main representative of relevant super-systems in order to identify virtuous paths that are useful for the co-creation of value and for the creation of a sustainable society becomes fundamental.

Originality. The originality of the study is twofold: first, there are no similar studies regarding banking firms; second, the heterogeneity of indicators, identified as material for both banks and stakeholders, has been traced back to the relevant stages of Corporate Social Responsibility (Carroll, 1991).

Keywords
materiality, materiality matrix, value co-creation, corporate social responsibility

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1. Introduction

It is well-known that companies which operate in the current competitive arena create shared value, if they are careful to understand, detect and satisfy the expectations of the stakeholders. Expectations that go beyond the sole economic-financial performances, to reinclude all the highly variable factors that have the capability to influence strategic decisions, behaviours and performances of organizations, as well as the actions adopted by the stakeholders, as they are considered as real drivers for socially responsible, ethical and sustainable behaviours. Such aspects, so called material, have to be monitored with great attention by the management as they may bring opportunities and threats to the survival of the company. To reach this goal, according to D'heur (2015), it becomes necessary a "shared value opportunity analysis" or "materiality analysis" analyzing the risks and opportunities of sustainability for the company and the relevance of potential areas for action. As a part of a collaborative dialogue, the shared value opportunity analysis delivers a sound appraisal and overview of the hot spots, in which a company should become involved in terms of sustainable value creation to contribute and differentiate itself from the competition". Such process implies the recourse to specific competences and resources to effectively identify the relevant aspects that originate from and/or are based on different interests though not disregarding the declared value system as well as the obligations (also regulatory ones) that derive from super-systems and that fall on the company activity. All this implies a significant and systematic capability of listening to and confronting with different stakeholder categories which, by overcoming the limits of self-referentiality, gives the organization the opportunity to generate mutual advantages and reduce risks. The analysis of materiality, by enriching the non-financial reports arranged by companies, increases their level of transparency regarding social, environmental and economic impacts of their activity as well as their legitimacy in the relationships with the stakeholders, to the point that it affects their evaluations and decisions in a substantial way. Thus, the requests coming from the external environment are highlighted and evaluated, promoting a growing integration of sustainability in banking activities.

Taking the cue from such considerations, we intend to compare the relevance of the indicators identified by the banks with the weight that is attributed to the same indicators by the stakeholders. To reach the predetermined goal, we have examined all social, integrated, and sustainability balance sheets/papers published by Italian banks on their websites.

The paper is structured as follows: after an in-depth presentation of the literature, the methodological framework will be described. Successively, the descriptive statistics will be presented and the results obtained will be discussed. Final considerations, managerial implications and suggestions for future research will close the work.

2. Literature review

It should be immediately pointed out that while the concept of Materiality appears to be entirely new for business economists, this is not the case for jurists: in fact, according to authoritative doctrine, this principle is rooted in Roman law, according to which "minima non curat praetor". It is emphasized that the principle of materiality, linked to the drafting and revision of the financial statement, has an Anglo-Saxon derivation (dating back to the legal-accounting models of English-spoken economic realities). At the same time, however, it is necessary to highlight how little has been written on this topic before World War II, although this was an already well-known theme among professionals. Moreover, the evolution of the concept did not happen uniformly in space and time: it emerges, in fact, with different dynamics regarding the Anglo-Saxon region and that of Continental Europe. It is emphasized

that the concept was initially widespread in the context of English common law: it was the English Court to introduce the term "material" for the first time in 1867, translating it with "relevant, not negligible". In fact, the Court was asked to judge the false accounting of the Central Railways of Venezuela, where it was established “in a prospectus no misstatement or concealment of any material fact ought to be permitted” (Holmes, 1972). Therefore, it is noted that the first reference to the fact that no fraud or material error should be allowed within the accounting information dates back to the end of the nineteenth century. It is necessary to wait almost twenty years to find again explicit quotations to materiality concept. It was, in fact, the Lord Davey’s Committee in 1895 in a resolution to update the British Companies Act to pronounce that: “Every contract or fact is material which would influence the judgment of a prudent investor in determining whether he would subscribe for the share or debenture offered by the prospectus” (Holmes, 1972). Only in 1967, after nearly a century, it was for the first time a professional accounting organism, the Institute of Chartered Accountants in England and Wales (ICAEW), to deal more in depth with the Accounting Recommendation 2.301 (ICAEW, 1967). The latter commented in the first paragraph of the guide “The interpretation of ‘material’ in relation to accounts”: “In an accounting sense … a matter is material if knowledge of the matter would be likely to influence the user of financial or other statements under consideration. The use of the word ‘material’ in relation to accounting matters is intended to allow scope for different interpretations according to the variety of circumstances which can arise. It is not possible or desirable therefore to give a definition of material in the sense of a formula which can be applied mechanically” (Blakemore and Pain, 1998). Therefore, it can be concluded that, according to this organization, the materiality assessment can have different interpretations, depending on the different circumstances found in the concrete case: the judgment of the accounting professionals will determine whether the knowledge of the topic could affect recipients of financial reports (Etzion and Ferraro, 2010; Ortar, 2016). One of the first materiality definitions is found in Regulation SX, published in 1940, where it was established: “The term material, when used to qualify as a requirement for furnishing information as to any subject, limits the information requie to those matters about which an average prudent investor should reasonably be informed.” (Code of Federal Regulations: 1985-1999). It should be noted that according to this definition all the information an investor needs to make his purchase decision are material (Calabrese et al., 2015). Information that does not appear to be useful for this purpose will therefore be considered as non-material (Deegan and Rankin, 1997). In the following years, the Financial Accounting Standard Board (FASB) dealt with this theme and the materiality principle was analyzed in the “Criteria for Determining Materiality” memorandum. However, the discussion was suspended because of the impossibility of obtaining valid operational definitions of the concept. The discussion was subsequently recovered in 1980 with SFAC No.2, which stated: “The magnitude of an omission or misstatement of accounting information that, in the light of the surrounding circumstances, makes it probable that the judgment of a reasonable person relying on the Information would have been changed or influenced by the omission or misstatement” (FASB, 1980). This definition is the one that has had more impact and spread in the matter of accountancy: it states that an information aspect has to be regarded as material if an omission or an error in its communication is capable of influencing the judgment of a reasonable subject; it also states that the real circumstances in which the decision is made have to be considered. It can therefore be concluded that in Anglo-Saxon experience the fundamental feature of materiality is the relevance that the information must have for the recipient, evidencing the possibility that the information can condition the decision-making process of the subject. Analyzing the contributions that the doctrine has provided, it is also apparent that these are in line with the practice discussed above. In this regard, they are mentioned the studies of some authors that

seem to better define the concept. Dohr, in his interesting study, defines the principle of materiality with the following expression: "A statement, fact, or item is material, if it is in the time, it is of such a nature that its disclosure, or the method of treating it, would be likely to influence or make a difference in the judgment and conduct of a reasonable person. The same tests apply to such words as significant, consequential, or important" (Dohr, 1950). The concept expressed by the author seems to be perfectly in line with the above cited definitions, stressing that the definition of materiality has to be related to the concrete circumstances and to the subjects to which the statement refers.

Another interesting contribution is that provided by Rappaport, which deals with the observance of the materiality principle in the financial report and draws the following observations:

"1. Are the misleading inferences likely to be drawn from the amount shown as net income?
2. Are the classifications of dollar amounts set out in the financial statements reasonably informative and not misleading?" (Rappaport, 1964).

Traditionally, materiality has always been defined and observed through the financial reporting lens. However, with the recognition that there are significant financial, economic and social implications, arising from social aspects, there is the need to expand its definition to non-financial information (Hicks, 1964; Pentland and Singh, 2012). Materiality is no longer a concept associated with economic aspects, but it becomes necessary to meet the investor's informational needs, applying this concept to all the capital that influences the organization activities and results (Iskandar and Iselin, 1999. To highlight the importance of this principle, it is underlined that this is a pillar of the integrated reporting since it allows to draw up a report that focuses only on the most critical issues for investors and stakeholders, allowing the organization to understand the main aspects of its business. In addition, following this principle, it is possible to bring the information back in a concise and interconnected manner, thus facilitating the understanding. Particularly enlightening is Carroll's thinking that creates a sort of priority pyramid that firms should consider in defining their own behaviors and in pursuit of their goals (Carroll, 1979; 1991). If at the base of the pyramid are placed the economic responsibilities - unavoidable priority of a company - and after the legal ones - central prerequisite to act in a society - for the first time two additional areas of responsibility are introduced, which include the ethical and the discretional. A company understood as socially responsible has to agree on all these aspects: if maximizing profit and respecting the law have always been indispensable, now the same is for equal and ethically correct behaviors, beyond the legal obligations (Farook et al., 2011). From this theorization, which replaces the concept of responsibility with that of social "sensitivity", develops in the following years new research fields that will form the basis of the current debate.

In particular, the Freeman's Stakeholder theory dates back to the early 1980s. With Freeman, all "stakeholders" acquire dignity, becoming active subjects that relate to the enterprise and influence its action (Freeman, 2010). In the following, they are presented the various materiality definitions within the three best known frameworks for the preparation of a Sustainability Report (Siano, 2012; Jones et al., 2016). Specifically, they will be analyzed the definition within the AA1000, the Global Reporting Initiative (GRI) and the Integrated Reporting (<IR>) (Whitehead, 2016). Here is reported the classic definition of materiality: "Information is material if its omission or misstatement could affect the economic decisions of users taken on the basis of the financial statement" (IASB, 1989). The definition that appears in AA1000 seems, however, to be related to that offered in the IASB (Bhaduri and Selarka, 2016). In fact, AccountAbility states that: "Materiality is determining the relevance and significance of an issue to an organization and its stakeholders. A material issue is an

issue that will influence the decisions, actions and performance of an organization or its stakeholder" (AccountAbility, 2008). Another definition, always expressed by AccountAbility, states that: "A meaningful definition of 'materiality' must effectively identify information that, if omitted or misstated, would significantly misrepresent the organization to its stakeholder and thus influence their conclusions" (Zadek and Merme, 2003). After reporting these definitions, it is important to point out how both the definitions provided by IASBs and AccountAbility refer to material aspects such as those topics that can affect user decisions. At the same time, it is easy to see how the elements that characterize the classical definition of materiality have widened if it is considered the contribution offered by AA1000.

The materiality definition found in the GRI framework is as follows: "The report should cover those aspects that:

- reflect the organization's significant economic, environmental and social impacts;
- substantively influence the assessments and decisions of stakeholders (GRI, 2013).

Therefore, there are two characteristics to be considered to assess the materiality of an aspect:

- it reflects significant economic, social or environmental impacts;
- it could substantially affect the evaluations or decisions expressed by the stakeholders.

The GRI states that significant impacts include: "those that are a subject of established concern for expert communities, or that have been identified using established tools such as impact assessment methods or life cycle assessments" (GRI, 2013). It is interesting to note that in GRI the concept of materiality is associated with that of threshold, as it is expressed by many institutions in the economic-financial perspective. In fact, it is stated that: "materiality is the threshold at which aspects are sufficiently important to be reported" (GRI, 2013). Based on this definition, it is shown that the primary interest is to identify what to communicate in the report. Materiality in this context only seems to have the function of establishing the boundaries of the report. Finally, the IIRC defines information as a material if: "A matter is material if it is of such relevance and significance that it could materially affect the assessments and decisions of the highest governing body of the organization, or change the assessment and decisions of the intended Users with regard to the organization's ability to create value over time" (IIRC, 2012). From this definition clearly emerge the characteristics that one aspect should possess to be considered material: significance and significance. These levers are also targeted by the AA1000 as fundamental characteristics for the assessment of materiality. Lastly, it is emphasized that integrated reporting is predominantly addressed to meet the information needs of financial capital providers, in order to support them in their investment choices, although it is well known that their interest is perfectly aligned with that of public. Indeed, in both cases the focus will be on creating value both in the long run and in short term. In addition, the IIRC states that: "In providing the information needs of providers of financial capital, the report may also provide insight into the organization's relationship with its key stakeholders, and how and in what extent the organization understands, considers and responds to their needs and concerns." (IIRC, 2013). In addition, it is emphasized that the definition given by the IIRC recalls that a material aspect may influence the user assessment of the report. In particular, this is an assessment based on the company's ability to create value over time (Font et al., 2016). So, unlike the current definition in the financial field, it is noted that the decision-making process referred to an economic decision is not mentioned here. In fact, an item will be material not if it only affects the decision to purchase or sell shares or bonds, as it is strictly interpreted in most financial contributions, but if the issue has effects on the evaluation of the value creation of the business (Nandy and Lodh, 2012). This divergence in the definition may be linked to the fact that an integrated report has as its purpose the representation of value creation, but the term "value" is not only understood as

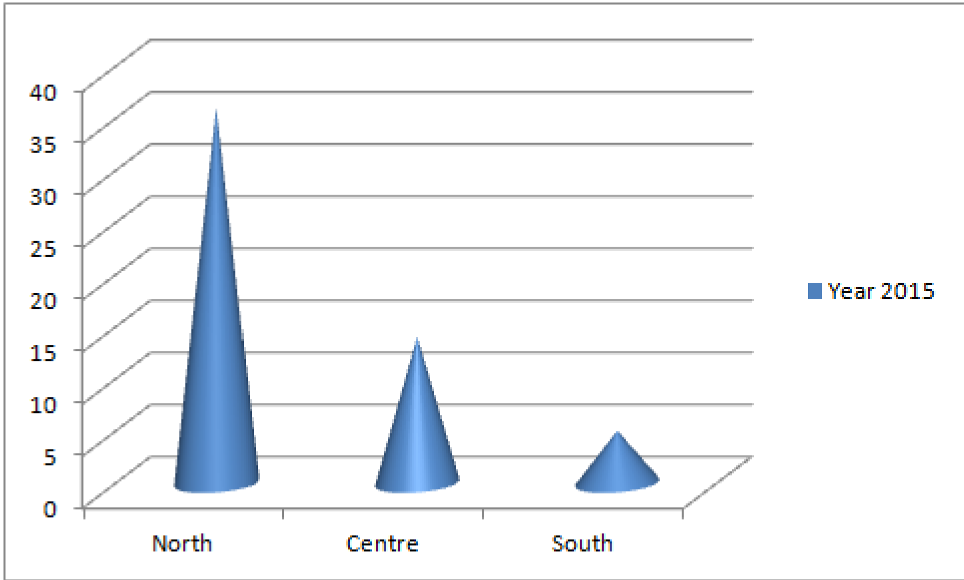
financial flow, but includes all the capital that the company possesses and influences (Nandy and Lodh, 2012).

3. Method, findings and discussion

In order to analyse the differences in significance attributed to materiality aspects by banks and stakeholders, the present study examines a set of indicators defined starting from the materiality matrix published in the non-financial reports of banks. In particular, we used the reports published by 56 banks operating in Italy on their websites, which can be considered representative of the universe of entities that form that sector with regard to market shares held.

By examining the typology of bank which included the materiality matrix in its non-financial report, what emerges is that they are almost exclusively entities that belong to groups (55 units), whose 36 are geographically positioned in the North. The Centre follows with 14 units and the South with 5 units (Figure 1). Only in one case the bank belongs to cooperative credit.

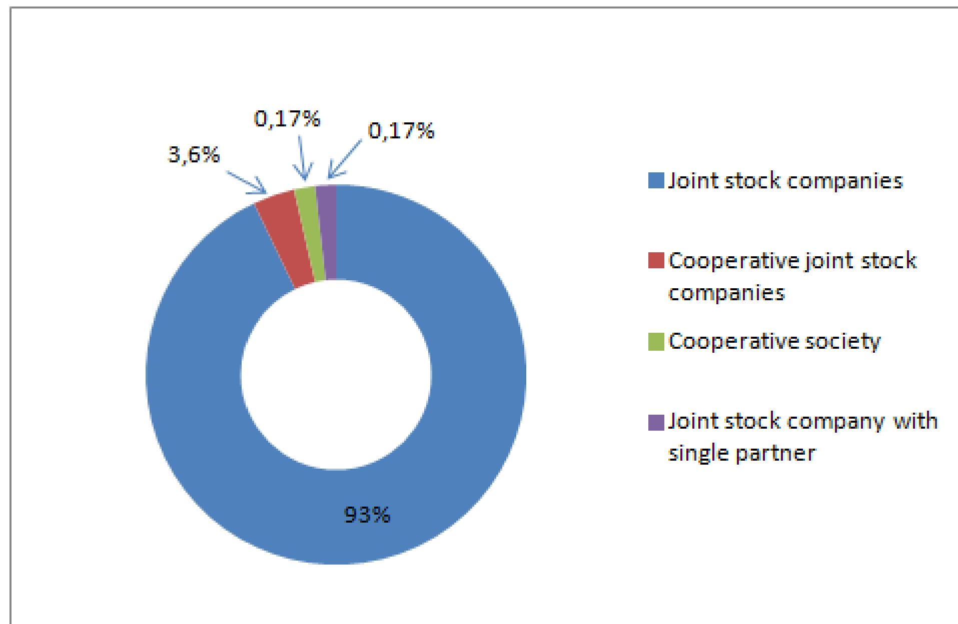
Figure 1. Geographical area of banking groups



Source: own elaboration

Banking groups present the legal status of joint stock companies in 52 cases, while the remaining four are divided as follows: 2 cooperative joint stock companies, 1 joint stock company with single partner and 1 cooperative society (Figure 2).

Figure 2. Legal status of banking groups



Source: own elaboration

The reports are relative to 2015 (the most possible up-to-date data at the time of collection) because in that year the highest number of publications containing the needed information for the analysis was observed. The set includes 265 indicators belonging to four macro-categories, as reported in the Table 1. The classification of materiality indicators has been defined starting from the taxonomy defined in Carroll's study (1991).

Indicators express the aspects connected to the shared value creation with *stakeholders* and they are classified according to their priority order for each macro-category examined. The first macro-category includes the indicators associated with the *economic* scope and with the relevance of operating in accordance with criteria of maximization of profits and shared profits. The second macro-category includes the indicators that pertain to the *legal* scope, which measure the capability of the bank to operate in accordance with law, on a super-national, national and local level. Moreover, the *ethical* component recognizes the capability of the bank to operate according to ethical and moral criteria, which go beyond the normative dimension. Lastly, the *philanthropic* macro-category reflects behaviours that are consistent with charity and volunteering activities in favour of the local community.

Starting from the indications contained in the materiality matrices of the reports, we have attributed weights that banks and stakeholders assigned to each single indicator listed in Table 1. To move accordingly, the materiality matrix (banks and stakeholders) has been subdivided in three areas: high relevance, medium relevance and low relevance. Then we have attributed a priority to every indicator, depending on the positioning found in the aforementioned level. Then, the indicators have been summarized in an Excel table, according to the position held in the materiality matrix. The Likert scale used to express the weight of each indicator assumes values included between 1 and 3, where a weight of 1 is equivalent to low relevance, whereas a weight of 3 is equivalent to high relevance.

In the Table 1, the weights assigned to each indicator by banks and stakeholders are reported. It is possible to observe that banks attribute a weight that is averagely similar to the one of stakeholders: the long-term approach for the definition of investments, the bank digitalization and the fight against wastefulness (including the amount of paper used in

offices) are perceived as lowly relevant by the bank and, on the contrary, as highly relevant by the stakeholders. Vice versa, the increase in normative complexity, the indicators pertaining to the welfare scope (welfare and safety, well-being in the company and worklife balance) are considered as highly relevant by banks and lowly relevant by stakeholders. The same happens regarding some aspects that have long-term effects on value creation for banks: business development, reputation enhancement and protection of family capital over time.

Table 1 – Relevance of indicators for banks and stakeholders
The table reports the average value of weights attributed by banks and stakeholders to single indicators.

Indicator	Category	Stakeholders	Banks
Suitability of financial products offered	Economic	2	2
Suitability of products offered to clients	Economic	2	3
Long-term approach for the definition of company goals and investment choices	Economic	3	1
Attention to the non-economic consequences of financial activities	Economic	3	3
Attention to members	Economic	2	3
Attraction of talents and human capital development	Economic	2	2
Innovative bank	Economic	2	3
Brand reputation	Economic	3	3
Client centrality	Economic	3	3
Clear approach to markets	Economic	3	3
Fair and responsible competition	Economic	2	3
Behaviour for the purchase of goods and services	Economic	2	2
Personalized consultancy	Economic	2	2
Internal control and risk management (caution, risk culture)	Economic	3	3
Fairness in the selling of products and services	Economic	2	2
Fairness to suppliers	Economic	1	2
Value creation	Economic	3	3
Business growth	Economic	1	3
Debt crisis and instability of financial markets	Economic	2	3
Control culture and risk management	Economic	2	3
Risk culture	Economic	1	2
Customer satisfaction	Economic	2	2
Customer satisfaction and customer service	Economic	3	3
Digital banking	Economic	2	3
Banking digitalization	Economic	3	1
Pay equity	Economic	2	2
Evolution of service model	Economic	2	2
Customer retention	Economic	2	3
Training	Economic	2	3
Training of employees	Economic	2	2
Training and competences	Economic	2	2
Training and development of partners	Economic	2	3
Training and development of private bankers	Economic	3	3
Training and development of the staff	Economic	3	3
Professional training and development	Economic	3	3
Training and enhancement of the staff	Economic	3	3
Risk management	Economic	3	3
Management of supply chain	Economic	2	2
Management of relationships with employees	Economic	2	1
Responsible management of debt collection and dispute	Economic	3	2
Total managemnt of quality	Economic	2	2
Fair remuneration and incentives	Economic	3	3
Governance and company integrity	Economic	2	1
Administration and risk management	Economic	3	3
Company identity	Economic	2	2
Innovation	Economic	2	3
Business innovation	Economic	3	3
Business innovation for digital clients	Economic	3	3
Innovation and product safety	Economic	3	2
Innovation in services to clients	Economic	2	3
Innovation in customer service	Economic	3	2
Innovation, quality and listening	Economic	3	3
Internet and home banking	Economic	3	3
Job rotation of partners	Economic	2	3
Relation of the group with the agency network	Economic	1	3
Foresight in management of company capitals	Economic	2	2
Marketing and transparent communication	Economic	3	3

Responsible marketing	Economic	1	1
Intelligent branch model	Economic	2	3
Integrated multichannel system	Economic	2	2
Employment	Economic	2	3
Employment and labour relations	Economic	3	3
Supply of a quality service for clients and management of environmental impacts	Economic	3	3
Supply of a value service	Economic	3	3
Locally established operations	Economic	3	3
Transparent and uncomplicated organization	Economic	2	3
Orientation to value creation	Economic	3	3
Partnership	Economic	2	2
Binding partnerships	Economic	3	3
Economic performance	Economic	3	3
Economic-financial performances, protection and risk control	Economic	3	3
Economic-financial performance	Economic	2	3
Financial performance and financial solidity	Economic	3	3
Performance management	Economic	1	2
Performance management and pay system with bonuses	Economic	2	2
Forward-looking staff policy	Economic	3	3
Policies for right-sizing and enhancement of the staff	Economic	3	3
Governance processes and decision processes	Economic	3	3
Suitable and transparent products	Economic	3	3
Proximity to client	Economic	3	3
Service quality	Economic	3	3
Customer experience quality	Economic	3	3
Quality and customer satisfaction	Economic	3	3
Service quality and transparency	Economic	2	2
Quality and value	Economic	3	3
Reinforcement of the trust relationship with stakeholders and management of relational capital	Economic	3	3
Relationships with business partners	Economic	2	2
Profitability of the activities of the group	Economic	3	3
Relationships with trade unions	Economic	3	2
Reputation	Economic	3	3
Product responsibility	Economic	3	3
Research and innovation	Economic	2	3
Risk management and cautious approach	Economic	3	3
Health and safety at work	Economic	2	2
Simplicity and transparency	Economic	3	3
Services and support for clients, service quality and complaint management	Economic	3	3
After-sales customer service	Economic	2	3
Safety	Economic	2	3
Safety and management of client portfolio	Economic	3	3
Systems for the professional growth of employees	Economic	2	3
Bank solidity	Economic	3	3
Solidity and profitability	Economic	3	3
Financial solidity	Economic	3	3
Financial solidity and profitability	Economic	3	3
Support for development and internationalization of SMBs	Economic	3	3
Support for entrepreneurs and people	Economic	3	3
Financial stability	Economic	3	3
Supply chain management	Economic	2	1
Support for families and for the entrepreneurial system	Economic	3	3
Support for entreprises	Economic	3	3
Development of employees	Economic	2	2
Development of human capital	Economic	2	3
Development of welfare	Economic	1	2
Development of commercial networks and quality of the services offered	Economic	3	3
Development of resources	Economic	2	3
Development of human resources, training and enhancement of competences and talents	Economic	3	3
Development of communication and interaction	Economic	3	2
Development of products and services	Economic	2	3
Development of profitability	Economic	2	3
Development, staff participation and company welfare	Economic	2	3
Talent and performance management	Economic	3	3
Transparency and language simplicity in communications	Economic	3	3
Transparency in commercial relationships	Economic	3	3
Transparency in business management	Economic	2	3
Future trends	Economic	2	3
Client protection	Economic	3	3
Protection of the solidity and profitability of the group	Economic	3	3
Protection of financial solidity	Economic	2	3
Enhancement of partners	Economic	3	3

Enhancement of employees	Economic	3	3
Enhancement of relationships with suppliers	Economic	2	2
Enhancement of reputation	Economic	1	3
Proximity to clients	Economic	2	3
Company welfare and health and safety at work	Economic	3	2
Welfare and safety	Economic	1	3
Access to credit and financial inclusion	Ethical	2	3
Responsible purchases	Ethical	2	2
Purchase and consumption of sustainable products	Ethical	1	2
Listening to clients	Ethical	3	3
Absence of speculative derivatives	Ethical	3	2
Business activities with specific social and environmental purposes	Ethical	2	3
Responsible operational activities	Ethical	3	3
Actions of communication, engagement and internal listening, company welfare	Ethical	3	3
Well-being in the company	Ethical	1	3
Climate changes and natural disasters	Ethical	3	3
Demographic and social change	Ethical	3	3
Climate change	Ethical	2	2
Engagement of employees and promotion of a shared culture	Ethical	3	3
Engagement of the members in governance and strategy	Ethical	3	3
Engagement and development of the community	Ethical	1	2
Engagement in local communities	Ethical	3	3
Fair company behaviour	Ethical	2	3
Complete and transparent commercial communication and fair contractual conditions	Ethical	3	3
Communication and engagement of people	Ethical	2	2
Communication and exchange	Ethical	3	3
Water consumption	Ethical	2	2
Paper consumption	Ethical	2	2
Power consumption and CO2 emissions	Ethical	2	3
Ethical contamination of institutions and financial sector	Ethical	1	1
Contribution on a social level	Ethical	3	3
Corporate governance	Ethical	2	3
Employment creation	Ethical	3	2
Responsible credit	Ethical	3	3
Responsible credit and access to credit	Ethical	3	3
Human capital growth	Ethical	3	2
Exchange and internal communication	Ethical	3	3
Diversity and inclusion	Ethical	2	3
Diversity and equal opportunities	Ethical	3	2
Diversity and equal opportunities, well-being initiatives	Ethical	3	2
Diversity, inclusion and equal opportunities	Ethical	3	2
Financial education	Ethical	2	2
Financail education of client/consumer/SMB	Ethical	3	3
Financial education and education for responsible use of money	Ethical	2	2
Energy and climate change	Ethical	2	1
Balance between private and professional life	Ethical	1	2
Ethical and management transparency	Ethical	3	3
Responsible finance	Ethical	2	3
Responsible finance and SRI investments	Ethical	2	2
Management of environmental impacts	Ethical	2	2
Management of diversities and equal opportunities	Ethical	2	3
Management of environmental impacts of BPER Banca	Ethical	2	3
Sustainable management of suppliers	Ethical	3	3
Sustainable credit management	Ethical	3	3
Structured management of CSR and of the communication with stakeholders	Ethical	3	3
Company identity and responsible business	Ethical	3	3
Environmental impacts of the bank	Ethical	1	1
Environmental impact	Ethical	2	2
Financial inclusion	Ethical	2	2
Financial inclusion and economic empowerment	Ethical	3	2
Integrity of company conduct	Ethical	3	3
Integrity and strictness of company conduct	Ethical	3	3
Responsible investments (ESG investing)	Ethical	2	2
Fight against wastefulness	Ethical	3	1
Minimization of environmental impacts	Ethical	3	2
Sustainable mobility (means of transport for employees)	Ethical	1	1
Monitoring of sustainability goals	Ethical	2	2
Supply of products and services modeled after sustainable development	Ethical	3	3
Equal opportunities	Ethical	1	3
Equal gender remuneration	Ethical	2	2
People care	Ethical	2	2
Policies for the protection of employment	Ethical	2	3

Policies regarding supply and supplier evaluation	Ethical	2	2
Employment protection and banking aggregation centre	Ethical	2	3
Products and services with social and environmental value	Ethical	2	1
Green products and services	Ethical	2	2
Ethical products	Ethical	3	3
Local promotion of ethical finance by the members	Ethical	3	2
Promotion of legality	Ethical	2	3
Promotion of the fight against lawlessness	Ethical	3	3
Protection of family capital over time	Ethical	1	3
Public Policy and collaboration with the institutions	Ethical	3	2
Quality of life in the company	Ethical	2	3
Recycling	Ethical	2	2
Responsible relationship of supply chain	Ethical	1	2
Reduction of direct environmental impacts	Ethical	3	2
Reduction of paper in the offices	Ethical	3	1
Reduction and optimization of environmental impacts	Ethical	1	2
Reduction environmental impact	Ethical	3	2
Health and well-being of employees	Ethical	2	2
Responsible selection of suppliers	Ethical	2	2
Insurance solutions stimulating responsible sustainable behaviors	Ethical	2	1
Support for entrepreneurial system	Ethical	3	2
Support for entrepreneurial tissue	Ethical	3	3
Support for and protection of employment	Ethical	2	2
Environmental sustainability and local environment protection	Ethical	2	2
Support for and development of local entreprises	Ethical	3	3
Transports and logistics	Ethical	1	2
An environmentally-friendly company	Ethical	3	3
Enhancement of diversities and equal opportunities	Ethical	2	2
Enhancement and well-being of people	Ethical	3	3
Enhancement and growth of people	Ethical	3	3
Assessment of working conditions applied by suppliers of goods and services and of their impact on the community and environment	Ethical	1	1
Social or environmental evaluation of investments	Ethical	2	2
Proximity of areas	Ethical	2	2
Work-life balance	Ethical	1	3
Communication and support for the development of the local environment	Philanthropic	3	3
Social initiative in favour of the local environment	Philanthropic	2	3
Investments for the community	Philanthropic	3	3
Local presence and investments for the community	Philanthropic	1	2
Relationship with the community	Philanthropic	1	2
Relationships with the reference community	Philanthropic	2	2
Support for the local and national community	Philanthropic	1	1
Support for third sector	Philanthropic	2	1
Support for communities	Philanthropic	3	3
Cultural development of the local community	Philanthropic	2	2
Increase in regulatory complexity	Legal	1	3
Compliance	Legal	3	3
Compliance and communication with regulators	Legal	3	3
Human rights	Legal	2	2
Responsible management of personal data (data security)	Legal	2	3
Fight against corruption	Legal	3	2
Mechanism to protest the working conditions applied	Legal	1	2
Prevention of corruption	Legal	3	3
Prevention of frauds, laundering and auto-laundering	Legal	3	3
Privacy, security and data protection	Legal	3	3
Strictness of company conduct	Legal	2	2
Respect for human rights and labour rights	Legal	2	2
Raising the awareness about regulatory compliance	Legal	2	2
Security of the computer-based system and privacy protection	Legal	3	2
Transparency	Legal	2	3
Transparency and clarity	Legal	3	3
Transparency and clarity of stock and governance structures	Legal	3	2
Transparency toward the market and authorities	Legal	2	2
Protection of rights	Legal	2	3
Protection of human capital	Legal	2	2

Source: own elaboration

In the light of the foregoing results, the Table 2 shows the difference tests of averages concerning the four categories, on the basis of the weights assigned to the single indicators. In

each case the result is that banks attribute a higher and significantly different weight compared to the one of the stakeholders. In particular, the indicators belonging to the economic, ethical and philanthropic scopes are those with the more substantial differences, while regarding the aspects connected to stakeholders they attribute a more similar relevance to that of the banks. This indicates that the banks included in the sample, with regard to legal aspects, are very consonant to the stakeholders as they are oriented to answer their needs in an adequate manner.

Table 2 – Test of difference of averages

The table reports the average weights assigned by banks and stakeholders to the indicators belonging to the single categories listed. The *ttest* verifies the null hypothesis H_0: average (bank - stakeholder)=0. *** indicates 1% significance and * indicates 10% significance.

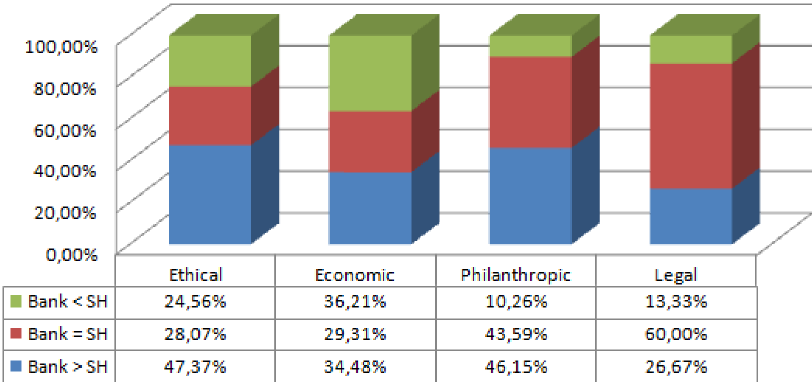
Category	Banks	Stakeholders	ttest	
Economic	2.74	2.61	4.44	***
Ethical	2.54	2.39	3.52	***
Philanthropic	2.26	1.87	3.81	***
Legal	2.57	2.41	1.84	*

Source: own elaboration

In Figure 3, we can observe the percentages of indicators for which the bank reports a weight, respectively higher, lower, or equal to that perceived by the stakeholders. As it is possible to notice, the percentage of cases for which the banks attribute a higher weight is observed with regard to ethical (47%) and philanthropic aspects (46%). The higher level of cases wherein the subjects deemed relevant by the stakeholders coincide with the weight assigned by the banks, can be observed regarding the legal (60%) and the philanthropic aspects (43%). Concerning economic aspects, percentages are equally distributed among the three cases.

Figure 3. Percentages of indicators

The figure shows the percentages of indicators for each category to which the bank attributes a relevance that is higher, lower or equal in comparison to the stakeholders.



Source: own elaboration

4. Conclusions, managerial implications and suggestions for future research

The debate around the materiality matrix has become more and more intense and stimulating over the last years, as the certainties regarding the possibility to produce a unique analysis of banking as viable systems gradually vanished, and a lack of preparation concerning the social and environmental matters emerged. In particular, we intend to assert that, following the developments in communication forms of company performances, the nature of the bank acting has changed, and as the divulgation of results is connected with acting, it is possible to deduce that the change in bank acting needs new interpretive schemes. This not only in the sense that new schemes have concretely expanded the scope of cases to which current methodologies have to be applied, but in the sense that the substantial originality of certain models, like in the case of the materiality matrix, has opened an entirely new dimension regarding the relevance of the various stakeholders, which was not expected according to the examination and investigation perspective exclusively based on traditional tools. As a consequence, the first goal was to verify in which way the materiality matrix affects the modus operandi of banks, changing it; to what extent their use makes the actions of the banks different from the past. As banks, during the time, were never devoid of techniques, a further question deals with the technical difference of the materiality matrix in comparison with all previous schemes. This last consideration can be seen as the essence of the ongoing evolution, as the materiality matrix, unlike the previous interpretive schemes, gives the possibility to enrich the reports aimed at communicating in an accurate way to the various super-systems, in addition to their perfomances, the propension in the creation of shared value over time, following a course that, starting from the identification of priority stakeholders, leads to the identification of relevant matters on which strategies and sustainability goals have to be founded.

The materiality matrix does only not come with conceptual reflections: the possibility to create a multi-stakeholder context by which it is possible to involve in the decision-making process the main representative of relevant super-systems in order to identify virtuous paths that are useful for the co-creation of value and for the creation of a sustainable society becomes fundamental. We can plausibly think of these matters like a new evolutionary stage for the banking system. The organization of the banking system is defined through its connectivity, every further level must be conceived as a futher stage of development. If banks were able, thanks to the new available technologies, to involve the stakeholders in real time, an additional level would be introduced within the banking system, an aspect that would make difficult the definition of bank itself as we currently know it. That would expand the operational way and establish a further stage in the evolutionary course of the bank as a viable system.

Lastly, we point out that the results obtained through the aforementioned research can be considered not as an arrival point, but as the start for further developments. This is deemed useful by virtue of the quick development that the materiality matter of non-financial information and the related issues is going through. In particular, it is interesting to analyse the variables that affect materiality by considering a larger sample, taking as reference the same type of report for all companies that will be analysed - preferably an integrated report written according to a particular framework - as well as considering a longer period of time.

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