Online disclosure of intellectual capital: an analysis of the Iberian banks?

Maria de Lurdes Ribeiro da Silva  
Higher Management School, Polytechnic Institute of Câvado and Ave

Maria do Rosário Meireles Ferreira Cabrita  
UNIDEMI, Department of Mechanical and Industrial Engineering, Faculty of Science and Technology, FCT, Universidade Nova de Lisboa

Ana Maria Gomes Rodrigues  
Faculty of Economy, Universidade de Coimbra

María del Pilar Muñoz Dueñas  
Faculty of Economic Sciences and Business, Universidade de Vigo

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ABSTRACT

Based upon an empirical-positivistic methodology, and resorting to the content analysis of the webpages through the application of an innovative index of disclosure based on the European models Intellectus and InCas, built specifically to analyze the disclosure of intellectual capital in the banking sector, we studied the disclosure of intellectual capital of the eighty-six banks operating in Portugal and Spain in 2016. The empirical results revealed that the banks in Portugal and Spain have disclosed an average value of 0.2355 of information on intellectual capital through their webpages in 2016. Relational capital was the component these organizations most disclosed with an average of 0.4529, followed by the disclosure of structural capital, and lastly, human capital. The use of a particular index of disclosure about intellectual capital applied to the singularity of the banking sector that covers two peripheral countries in Southern Europe, reveal to be the most contribute to the literature.

KEYWORDS

Disclosure, Intellectual Capital, Banks, Portugal, Spain.
1. Introduction

Intellectual capital is a subject of growing interest for professionals, researchers from academia, and for accounting standard setters.

This present paper aims to analyse the extent of disclosure of intellectual capital through the webpages, as well as each of its components or categories, more specifically, human capital, structural capital and relational capital, of the banks operating in Portugal and Spain.

For that purpose, we have applied an index built specifically for the disclosure of information of intellectual capital, based on the most recent European models of measurement and report of intellectual capital. By using this particular disclosure index, which reflects what we consider to be the most relevant information in the field of intellectual capital in the banking sector, we aim to contribute to a wider analysis of this topic, in order to reach greater rigor, transparency and reliability in the disclosure of this singular sector, which is focus of attention of many stakeholders.

Furthermore, we believe that it is important to evaluate the tendency of the disclosure of intellectual capital via the webpages made by Iberian banking institutions, because of the increasing importance that the internet presently holds, due to its’ fast, economical and visible propagation of information. Given the similar economic and social characteristics of these two countries, the joint analysis of the banks operating in Portugal and in Spain allows us to have a better perception of the disclosure in this sector. We do not intend to make a comparison between these two countries, but rather to obtain a broader analysis to make up for the limitation of the small number of banks in each country. Thus, we aim to reveal how the banking sector views the disclosure of its intellectual capital through a means of communication that is available to all of its stakeholders.

The present research begins with a conceptual framework on intellectual capital and its’ application in the banking sector, followed by the presentation of the model applied, detailing its’ indicators of disclosure. Then it follows with a reference to the research methodology used, with the research issues applied, as well as the presentation of the banks studied. We followed with the presentation and analysis of the results obtained after applying statistical techniques, and we close with the main conclusions reached in the study.
2. Conceptual framework and review of the Literature

2.1. Intellectual capital in modern day organizations

In modern day organizations, there is a greater use of mental force, and change occurs at a very fast rate, and therefore intellectual and organizational capacities requiring more creativity, talent and competencies are more important than the control of physical resources. Businesses of the knowledge-based economy have changed the traditional organizational structure arriving at a new form of organisational design: the network (Stewart, 1997). Lev (2003) describes the “new economy” as an economy based on the globalization and introduction of new markets and the de-materialization of production, where information and communications technologies, especially the internet, play a very important role, creating a network economy with an intensive use of knowledge and innovation in the production of goods and services.

The dramatic growth of intangible factors is the result of the progress that occurred in the worldwide panorama in the last decades of the twentieth century, accounting for this situation, namely the large fusions and acquisitions operations, the growth in the services sector, the sophistication of technologies and of markets, and the strong client orientation (Rodrigues, 2006 and 2011).

Intellectual capital is categorized in literature into three components: human capital, structural capital and relational capital. Human capital has a particular characteristic, which is the impossibility of separating this type of intangible assets from the people undertaking them, it is the knowledge that employees take with them when they leave the company. Besides the knowledge acquired by each person, it includes other individual characteristics such as loyalty, polyvalence, or flexibility, that increment productivity and the value of the individual’s contribution to the organization (Cañibano et al., 2008).

Human capital represents, therefore, the source of innovation and renewal (Stewart, 1997), that is, the main source of heterogeneity of companies (Cabrita, 2009).

Structural capital is a strategic asset that contains a group of infrastructures, information systems, databases, patents, trademarks, routines, and administrative processes that represent the intellectual potential that exists in the organization (Cabrita, 2009). It is, therefore, a part of the knowledge that remains in the company at the end of the day (Cañibano et al., 2008).

Relational Capital is the value of an organization’s relationship with the entities with which it interacts, being from this relationship that capital is transformed into monetary...
means (Stewart, 1997), that is, it is the knowledge incorporated in the relationships with stakeholders (Cabrita and Vaz, 2006 and 2008). Satisfaction, the relationships’ longevity, loyalty and trust are attributes of the relations with third parties and form a knowledge base and a means of accessing numerous resources (Cabrita, 2009).

Stewart (1997) refers that intellectual capital is not created from discreet groups of human, structural, and client capital, but rather from the interaction that exists between them. There is therefore, a consensus that none of these components are of value on their own, and that the creation and the feeding of value is made through the efficient interaction between the three dimensions of intellectual capital (Cabrita and Bontis, 2008), classifying intellectual capital as a multi-dimensional concept.

2.2. Intellectual capital and the banking sector: a brief exposition

Intellectual capital’s influence upon the way the banking sector operates has not been adequately studied on a worldwide level, especially on what refers to the way in which organizations from this sector disclose information about the resources that give them their most competitive advantages.

The banking sector has undergone dramatic changes in the last few years through new strategies, new business models and forms of organizations. The many mergers and acquisitions that affect the sector also represent a constant challenge for the banking regulation organisms (Mention, 2011). These advances have forced banks to re-think their roles as financial intermediaries (Walter, 2009).

In this context, banks must have a proactive and innovative management in the development of new financial products and services, that is, a continuous application of knowledge as a valuable resource in this sector’s organizations. The truth of the matter is that bank activities involve close interactions with clients and depend largely on the integration of information and communication technologies for the development of new products and services, as well as for the automation of processes (Cabrita and Bontis, 2008 and Mention, 2011). While physical capital is essential for banks to operate, it is intellectual capital that determines the quality of the products and services supplied to its clients (Goh, 2005; Kamath, 2007; Wang et al., 2011).

This is also a sector that is highly regulated, due to the complexity of the operations, the great public interest and the need to protect the users and the financial system in general, thus requiring more transparency and trustworthiness. Furthermore, it has a great
inference on the economy and much potential for social impact since it influences a large number of stakeholders (Chen and Pan, 2011).

3. Study Design
The model upon which we defined the parameters to analyse in order to evaluate the disclosure of intellectual capital was constructed with basis on the following two models: *Intellectus*, developed by the Centro de Investigación sobre la Sociedad del Conocimiento - Instituto de Administración de Empresas de la Universidad Autónoma de Madrid (CIC-IADE), and InCaS (made in Europe), which were adapted and applied for the very first time to the subject matter of voluntary disclosure of information on intellectual capital in the banking sector in Portugal (Silva et al., 2011).

As Cabrita (2009) refers, the study model to be applied should be chosen taking into account the comprehension of the elements and the context in which the organization operates, that is, the indicators used for analysis in an organization or sector are not necessarily the ones that are suitable for other organizations (sectors), therefore those indicators should be as specific or particular as possible for evaluating the knowledge that is crucial for delivering each organization’s strategy. Based upon this premise, and due to the particularity of the financial sector, we believe that this index is the best support on which to underpin our research. We find that the detail and depth that result from the structuring presented by the *Intellectus* model in identifying the components of intellectual capital to be important, as well as the existence of studies carried out by the *Intellectus* working group on the application of this model to various Spanish financial entities for measuring intellectual capital. Equally, the recent applicability of the InCaS model to the organizational reality on a European level has added valuable contributions to our investigation, which aims to add to the literature about the existence of a rigorous and standardized report of intellectual capital for banks.

3.1. Construction of the indicators of disclosure of intellectual capital
Given the scope of the concept of intellectual capital, a generic analysis of the information disclosed may reveal to be of arguable usefulness. Therefore, more in-depth and detailed research is necessary by taking into account each of the components that make up the generic concept of intellectual capital. It is pressing to analyse the disclosure of human capital, structural capital and relational capital, all of which aggregate elements and
indicators of disclosure that we consider to be the most significant in banking sector, hoping to help encourage their disclosure by these entities.

Therefore, and given the small dimension of the banking industry in Portugal and Spain, we have identified the universe of these entities, and we propose to analyse their practices of disclosure of intellectual capital such as Firer and Williams (2005), Striukova et al. (2008), Sousa (2009), Lee (2010) and Mention (2011), focusing our study (as Cabrita et al., 2017) entirely on online disclosure and on the Iberian banking sector.

| HC Elements (3)                  | Variables (6)                                                                 | Disclosure Indicators (21)                                                                 |
|----------------------------------|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| HC1 – Professional skills        | CH 1.1 – Qualified employees                                                  | HC1.1.1 – Number of employees in each professional category  |
|                                  | HC1.2 – Continuous training                                                   | HC1.2.1 – Number of hours of training  |
|                                  | HC1.3 – Contract                                                             | HC1.2.2 – Themes of training   |
|                                  |                                                                                | HC1.2.3 – Number of employees in training  |
|                                  | **HC2 – Social competencies**                                                 | HC1.3.1 – Number of admissions per competencies  |
|                                  | HC2.1 – Social/cultural activities                                             | HC1.3.2 – Number of employees with working contracts  |
|                                  |                                                                                | HC1.3.3 – Number of employees working part-time  |
|                                  |                                                                                | HC1.3.4 – Number of employees in apprenticeship  |
|                                  | **HC3 – Motivation**                                                         | **HC2.1.1 – Internal social/cultural activities** |
|                                  | HC3.1 – Promotions and incentives                                             | **HC2.1.2 – Social/cultural activities involving the civil community** |
|                                  | HC3.2 – Stability                                                            | **HC3.1.1 – Number of employees promoted on a regional, national and international level** |
|                                  |                                                                                | **HC3.1.2 – Benefits and bonuses given to the employees** |
|                                  |                                                                                | **HC3.1.3 – Incentive plans to attract and keep talent** |
|                                  |                                                                                | **HC3.1.4 – Payment plans of variable salaries** |
|                                  |                                                                                | **HC3.1.5 – Plans for employee satisfaction (motivation questionnaires** |
|                                  |                                                                                | **HC3.2.1 – Rotation rate** |
|                                  |                                                                                | **HC3.2.2 – Absenteeism rate** |
|                                  |                                                                                | **HC3.2.3 – Average age of employees** |
|                                  |                                                                                | **HC3.2.4 – Identification of employees by average age** |

**Table 1. Elements, variables and human capital indicators**

Benefitting from the contributions of the mentioned models, the elements that make up these entities’ human capital (HC) provide orientations about their professional skills (HC1), social competencies (HC2), and motivation (HC3), as defined in table 1.
## Table 2. Elements, variables and structural capital indicators

In the same manner, the structural capital (SC) elements that are considered adequate for identifying the factors related to the organizational structure and the bank entities processes are them cooperate culture (SC1); the internal cooperation and transference of knowledge (SC2) and its technologies of information and explicit knowledge (SC3), as shown on table 2.

| SC Elements (3) | Variables (9) | Disclosure Indicators (24) |
|-----------------|----------------|-----------------------------|
| **Organizational Capital** | | |
| SC1 – Corporate Culture | SC1.1 – Mission and Strategic Objectives | SC1.1.1 – Disclosure of mission and strategic objectives |
| | SC1.1.2 – Description of the functional structure of the organization | |
| | SC1.1.3 – Processes of existing best practices | |
| | SC1.1.4 – Existence of codes of conduct, declarations of principles or of mission | |
| SC1.2 – Operational Objectives | SC1.2.1 – Definition of management by objectives systems | |
| | SC1.2.2 – Existence of evaluation of performance systems | |
| | SC1.2.3 – Information about the indicators of performance | |
| SC1.3 – Investigation and Development | SC1.3.1 – Expenses with Investigation and Development | |
| | SC1.3.2 – Existing projects of Investigation and development | |
| SC1.4 – Recognition | SC1.4.1 – Description of the context of the bonuses received and formal recognitions | |
| | SC1.4.2 – Market share | |
| **Technological Capital** | | |
| SC2 - Internal Cooperation and transference of knowledge | SC2.1 - Team work and cooperation between departments | SC2.1.1 - Number of projects that were realized in teams |
| | | SC2.1.2 - Programs and rate of internal mobility and working flexibility |
| | | SC2.1.3 - Plans of management of competencies and development of leadership |
| SC2.2 – Sharing of Tacit Knowledge | SC2.2.1 - Informal Activities of sharing of knowledge | |
| | SC2.2.2 - Programs and rate of internal mobility and working flexibility | |
| **SC3 – Technologies of the information and explicit knowledge** | SC3.1 – Internal systems of communication and control | SC3.1.1 - Existing internal communication channels |
| | SC3.1.2 – Existing external communication channels | |
| | SC3.1.3 – Systems of auditing and internal control | |
| SC3.2 – Protocols and partnerships with other organisms | SC3.2.1 - Existing technologies of the information and communication | |
| | SC3.2.2 – Information and communication technologies to be applied or in development | |
| SC3.3 – Quality evaluation | SC3.3.1 - Certificates obtained | |
| | SC3.3.2 – Methodologies and results of internal evaluation of the quality of the products/services | |
| | SC3.3.3 - Results of the external evaluation of the quality of the products/services |
Relational Capital (RC) elements seek to represent the variety of relations established; the relations with clients (CR1); the relations with investors (CR2), and the relations with stakeholders (CR3), as presented in table 3.

### 4. Disclosure theories, methodological procedures, sample and research issues

The requirement for transparency and reliability of banking sector organizations is reflected in a greater need of information, not only as a reflection of the larger demand of such information by the agents that are interested in it, and of its bigger usefulness towards decision-making, but also the organisations’ need to maintain or increase their legitimacy in the society(ies) in which they operate. In this manner, the foundations of the stakeholder (Freeman, 1994 and Donaldson and Preston, 1995) and legitimacy

| RC Elements (3) | Variables (8) | Disclosure Indicators (21) |
|-----------------|---------------|---------------------------|
| **RC1 – Customer relations** | RC1.1 – Accessibility and client support | RC1.1.1 – Number of branches/agencies and their localization |
|                  |               | RC1.1.2 – Online customer service channels |
|                  |               | RC1.1.3 – Other communication and customer service channels |
|                  |               | RC1.1.4 - Products/Services solutions for clients |
|                  | RC1.2 – Group relations | RC1.2.1 - Countries where the Group operates |
|                  |               | RC1.2.2 – Products supplied by the groups’ companies |
|                  |               | RC1.2.3 - Strategic Alliances of the Group |
|                  | RC1.3 – Client Satisfaction | RC1.3.1 – Number of Clients |
|                  |               | RC1.3.2 – Information regarding systems for handling suggestions and complaints |
|                  |               | RC1.3.3 – Client satisfaction measuring processes |
| **RC2 – Relations with investors** | RC2.1 – Future oriented information | RC 2.1.1 - Information about company growth |
|                  |               | RC 2.1.2 - Information about future projects |
|                  | RC2.2 – Importance of the Investor | RC2.2.1 - Information about Investor support networks |
|                  |               | RC2.2.2 - Information about the relationship with the investor |
| **RC3 – Relations with other stakeholders** | RC3.1 – Actions in social and environmental fields | RC3.1.1 - Identification of the organizations and the form of relationship |
|                  |               | RC3.1.2 – Social responsibility activities and human rights protection |
|                  |               | RC3.1.3 – Commitments regarding good environmental and energetic practice |
|                  | RC3.2 – Protocols and partnerships with other organisms | RC3.2.1 - Description of organisms with whom partnerships are maintained |
|                  |               | RC3.2.2 – Form of partnership developed or to be developed |
|                  | RC3.3 – Other stakeholders | RC3.3.1 - Identification of the stakeholders |
|                  |               | RC3.3.2 – Forms of communication and relationships |

Table 3. Elements, variables and relational capital indicators.

Electronic copy available at: https://ssrn.com/abstract=3218147
(Suchman, 1995 and Deegan, 2002) theories greatly influence these entities’ disclosure of information. In this paper, we have adopted a positivist approach applying quantitative methods and using the content analysis technique on banks’ webpages in order to analyse and process data with proper statistical tools. This text coding technique allows us to determine the meaning of the content of the information in a “systematic”, “objective”, “reliable” and “reproducible” manner (Krippendorff, 1990), to obtain valid and replicable inferences (Guthrie and Petty, 2000; Guthrie and Abeysekera, 2006).

The coding of the content to be analysed was based on a specific index of disclosure, made up of sixty-six disclosure indicators, where we used a mechanistic approach of content analysis by applying a dichotomous criterion in an expressive categorization: defining 1 as the existence of information about the indicator being analysed; defining 0 as the non-existence of information contained in that indicator (Bardin, 1996). The disclosure index is represented in the equation below.

\[
\text{Intellectual Capital Index} = \frac{\sum \text{disclosure items (1)}}{66}
\]

**Figure 1. Intellectual Capital Index**

An empirical analysis was carried out through descriptive statistics of the variable being explained (disclosure of information on intellectual capital), as well as average comparison tests to comparatively analyse intellectual capital’s elements.

In order to carry out this work, we identified a total of eighty-six banks that in August of 2016 were listed in the Bank of Portugal and in the Bank of Spain, and that at that date had active and autonomous webpages available in each of those countries’ languages, which we present in table 4.
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| 8 – Caixa-Banco de Investimento, SA | 22 – Novo Banco dos Açores, SA |
| 9 – Banco Comercial Português SA | 23 – Banco Privado do Atlântico - Europa, SA |
| 10 – Caixa Geral de Depósitos, SA | 24 – BNI – Banco de Negócios Internacional (Europa), SA |
| 11 – Banco Popular Portugal SA | 25 – Banco CTT, SA |
| 12 – Haitong Bank, SA | 26 – Banco LJ Carregosa, SA |
| 13 – Banco Finantia SA | 27 – Banco Primus SA |
| 14 – Banco de Investimento Global SA | 28 – Banco Credibom, SA |

**Banks operating in Espanha**

| 29 – Abanca Corporación Bancaria, SA | 58 – Bankia, SA |
| 30 – A&G – Banca Privada, SA | 59 – Bankinter, SA |
| 31 – Allfunds Bank, SA | 60 – Bankoa, SA |
| 32 – AndBank España, SA | 61 – Banque Marrocain du Commerce Exterieur International, SA |
| 33 – AresBank, SA | 62 – BNP Paribas España, SA |
| 34 – Banca March, SA | 63 – CaixaBank, SA |
| 35 – Banca Pueyo, SA | 64 – Cajasur Banco, SA |
| 36 – Banco Alcala, SA | 65 – Catalunya Banc, SA |
| 37 – Banco Bilbao Vizcaya Argentaria, SA | 66 – CecaBank, SA |
| 38 – Banco Caixa Geral, SA | 67 – Citibank España, SA |
| 39 – Banco Caminos, SA | 68 – Deutsche Bank, Sociedad Anonima Española |
| 40 – Banvo Cetelem, SA | 69 – Dexia Sabadell, SA |
| 41 – Banco Cooperativo Español, SA | 70 – EBN Banco de Negocios, SA |
| 42 – Banco de caja España de Inversiones, Salamanca y Soria, SA | 71 – Evo Banco, SA |
| 43 – Banco de Castilla-La-Mancha, SA | 72 – Ibercaja Banco, SA |
| 44 – Banco de Crédito Social Cooperativo, SA | 73 – KutxaBank, SA |
| 45 – Banco de Sabadell, SA | 74 – LiberBank, SA |
| 46 – Banco Europeo de Finanzas, SA | 75 – Nuevo Micro Bank, SA |
| 47 – Banco Finantia Sofinloc, SA | 76 – Nuevo Micro Bank, SA |
| 48 – Banco Inversis, SA | 77 – Popular Banca Privada, SA |
| 49 – Banco Mare Nostrum, SA | 78 – RBC Investor Services España, SA |
| 50 – Banco Mediolanum, SA | 79 – Renta 4 Banco, SA |
| 51 – Banco Occidental, SA | 80 – Santander Consumer Finance, SA |
| 52 – Banco Pastor, SA | 81 – Santander Securities Services, SA |
| 53 – Banco Pichincha España, SA | 82 – Self Trade Bank, SA |
| 54 – Banco Popular Español, SA | 83 – TargoBank, SA |
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| Bank Name | Bank Name |
|-----------|-----------|
| Banco Santander, SA | Unicaja Banco, SA |
| Bancofar, SA | Unoe Bank, SA |
| Bank Degroof Petercam Spain, SA | Wizink Bank, SA |

Table 4. Banks studied

Since it is possible to alter the information contained in webpages, these were analysed only once in the month of August of 2016, because we consider that it is the month containing more stable online information, since it is in that month that most vacation time is taken. In this analysis, we only considered the information contained in the navigator format, not taking into consideration the information contained in documents included in the webpages (such as word, pdf, power point, etc.) (Striukova et al., 2008).

The research issues that we propose to analyse are:
1st- What is the extent or magnitude of the disclosure of intellectual capital that the banks operating in the Iberian Peninsula present in their webpages and;
2nd- What is the disclosure of each of the components into which we subdivided intellectual capital (human capital, structural capital and relational capital), revealed by these entities.

The extent of the disclosure of information about intellectual capital will be analysed through the disclosure of each of intellectual capital’s components (human capital, structural capital and relational capital), and through the general level of the disclosure of intellectual capital (Guthrie et al., 2006).

5. Presentation and analysis of results

In order to respond to the research issues that we presented, we began by analysing the average of disclosure of intellectual capital revealed through the internet by the Iberian banks. However, the analysis of the disclosure of intellectual capital considered in an aggregated form may not respond to the rigour and usefulness aimed for in the studies on this subject, namely, to the demands of the various stakeholders. Therefore, and like most of the research carried out in this field, we consider that it is acute to separately analyse the disclosure of intellectual capital’s components or categories (human capital, structural capital and relational capital).
Table 5. Disclosure of intellectual capital

|                     | N  | Average | Minimum | Maximum | Standard deviation |
|---------------------|----|---------|---------|---------|-------------------|
| Intellectual Capital | 86 | 0.2355  | 0.0734  | 0.6032  | 0.1038            |
| Human Capital       | 86 | 0.0493  | 0.0000  | 0.2857  | 0.0634            |
| Structural Capital  | 86 | 0.2044  | 0.0417  | 0.6667  | 0.1117            |
| Relational Capital  | 86 | 0.4529  | 0.0952  | 1.0000  | 0.1885            |

An analysis of the results shown on table 5 allows us to verify that the average of disclosure of information about intellectual capital in the Iberian banks’ webpages is 0.2355, with a standard deviation (SD) of 0.1038, showing great variability of the values in relation to the average. Relational Capital presents the largest average of disclosure (with a value of 0.4529), followed by structural capital with an average value of 0.2044 and human capital with an average of disclosure of 0.0493.

Table 6. Comparison of the average of disclosure of the intellectual capital elements

|                     | N  | Average | Minimum | Maximum | Standard deviation |
|---------------------|----|---------|---------|---------|-------------------|
| HC1 - Professional skills | 86 | 0.0362  | 0.0000  | 0.2222  | 0.0576            |
| HC2 - Social competencies  | 86 | 0.0581  | 0.0000  | 0.0581  | 0.2089            |
| HC3 – Motivation        | 86 | 0.0613  | 0.0000  | 0.0613  | 0.0930            |
| SC1 - Corporate Culture | 86 | 0.2209  | 0.0000  | 0.6667  | 0.1226            |
| SC2 - Internal Cooperation and transference of knowledge | 86 | 0.0203  | 0.0000  | 0.8333  | 0.1171            |
| SC3 - Technologies of the information and explicit knowledge | 86 | 0.2151  | 0.0000  | 0.8333  | 0.1680            |
| RC1 - Customer relations | 86 | 0.5707  | 0.0000  | 1.0000  | 0.1840            |
| RC2 - Relations with investors  | 86 | 0.1977  | 0.0000  | 1.0000  | 0.2742            |
| RC3 - Relations with other stakeholders | 86 | 0.3785  | 0.0000  | 1.0000  | 0.3085            |

With regards to the elements that make up intellectual capital, we verify that information about relations with clients (RC1) has the highest average value of disclosure (value of 0.5707), followed by the information about the relations with other stakeholders (RC3), with an average of 0.3785. The thirst most disclosed element is corporate culture (SC1) with an average value of 0.2209, followed by information about technologies of the information and explicit knowledge (SC3), with an average value of 0.2151.
In order to analyse the disclosure of each of intellectual capital’s components in the webpages made by Iberian banks, we have also compared the average of disclosure between each of these components, through the statistical significance of the t-student test.

|          | N  | Average | Standard deviation | Average of the difference | t    | sig   |
|----------|----|---------|--------------------|---------------------------|------|-------|
| HC – SC  | 86 | -0.1552 | 0.1003             | 0.0108                    | -14.351 | 0.000 |
| SC – RC  | 86 | -0.2485 | 0.1425             | 0.0154                    | -16.166 | 0.000 |
| HC – RC  | 86 | -0.4086 | 0.1695             | 0.0183                    | -22.079 | 0.000 |

**Table 7. Comparison of the average of disclosure of intelectual capital’s components**

As we can verify from table 7, the values show statistical evidence confirming that there is greater disclosure of information about relational capital on the Iberian bank’s webpages than disclosure of information about human capital and about structural capital, followed by the disclosure of information about structural capital and the information about human capital.

Thus, webpages prove to be a preferential means of disclosure of information of commercial nature and of marketing, associated with the relations between customers and investors, as well as the relations with other stakeholders, however this means of communication is not the one that banks consider to be very important for disclosing their technological resources (structural capital). Clearly human resources present a derisory disclosure through this means of communication of information, generically identified as “taboo information”. The result presented in the disclosure of this component in the internet can be explained by three general reasons (Silva, 2012): this means of disclosure is associated to be being vulnerable and easily manipulated; the non-relevance of this information for the main users of webpages (mainly clients); and the scarce acknowledgment amongst the organizations of the importance given to human resources as a source of strategic value for those entities. The third reason does not seem to us to be the most probable, as an example let’s look at the results obtained in the studies by Antunes (2005 and 2006) and Antunes and Martins (2007), that aim to analyse managers’ perception of the concept of intellectual capital and its relationship with the performance of the organizations, showing that these associate intellectual capital to human capital, primarily investing in this component.
Thus, confirming that there is a high degree of heterogeneity in the quantity of information disclosed in each of intellectual capital’s components in the Iberian banks’ webpages. The results reveal a strategy to disclose, through the webpages, certain information that is more specific and directed at the main users of this means of information (essentially clients and the general public) (Gandía, 2002 and 2003; Branco et al., 2011).

In view of the above, we consider that the banks operating in the Iberian Peninsula show a strong preference towards the use of webpages as a channel of disclosure of relational capital, this being the information that meets the demands of the main stakeholders that use this channel of information.

6. Conclusion

The banking sector holds great intensity in intellectual capital, which reveals to be the most visible to a large number of stakeholders considering the importance of its’ activity upon the general economy. This is also the sector that should invest more intensely in the disclosure of its’ intellectual capital, using the most advanced information and communications technologies. Webpages are a privileged means for disclosing the management of organizational knowledge and they acquire great acuity in the field of disclosure of intellectual capital. Given this situation, and in light of the stakeholders and the legitimacy theories, in this study we proposed to analyse the disclosure practices on the webpages in August of 2016 of intellectual capital made by banks operating in Portugal and Spain.

By applying an index built specifically for the disclosure of intellectual capital of banking sector organizations, we aimed to analyse the extent and breadth of the online disclosure of intellectual capital and of each of its components, human capital, structural capital and relational capital, by Iberian banks.

The study revealed an average of disclosure of intellectual capital on webpages of 0.2355. As for the components that make up intellectual capital, the disclosure made by banks in Portugal and Spain of relational capital is higher than the disclosure of structural capital and of human capital. We can see that the results obtained reveal that there is an information management strategy made in accordance with the demands of its stakeholders, and webpages prove to be mainly suited for the disclosure of information for clients.
Intellectual Capital’s influence upon the operation of the banking sector has been little-studied on a worldwide level, especially in what regards to the way in which this sector’s organizations disclose information about the resources that give them their most competitive advantages. This factor was fundamental for carrying out this study, which hopes to contribute towards attributing more relevance to the disclosure of the main strategic resources of XXI century organizations.
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