

Competitiveness, resources, and capabilities: empirical evidence from retail banking

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Abstract This research aims to identify and measure bank employee perceptions of the determinants of competitiveness in terms of resources, skills, and capabilities within the retail banking sector. All the 40 branches of a leading Portuguese bank—the *Caixa Geral de Depósitos*—operating in two Portuguese districts were surveyed. Our results show that bank competitiveness differs according to performance evaluation, human resource (HR) planning, the system of incentives, and managerial motivation. They also demonstrate that human capital is a source of success in the business of banks, which relies heavily on stable and enduring relationships with customers. The study also provides recommendations for retail bank managers seeking to refine their HR strategies as a means of improving their competitiveness.

Keywords Competitiveness · Resources and capabilities · Skills · Competitive advantage · Human capital · Banking sector

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1 Introduction

Currently, there is growing concern among senior organizational management over just how to seek out greater efficiencies in performance through the training, skills development, and implementation of best practices with the ability to make working teams more competitive. Only firms deploying teams with these abilities and skills well developed remain competitive (Sirmon et al. 2011). According to Guthridge et al. (2006), firms get better results if they involve senior management in developing employee skills right from the earliest formulation of strategies. Those who believe they can develop skills misaligned with strategies lose the opportunity to align the behaviors and capabilities of human capital with the business priorities defined.

Business leaders must find ways to act so that middle managers take responsibility for developing the skills of the employees they supervise. They should consider staff development as an explicit annual goal. According to Porter (1985), leaders who believe in dynamic change as the predominant factor are capable of creating competitive advantage favorable to their business and, consequently, to their partners and the countries where the companies are located.

Moreover, many firms encourage the notion that the greatest source of competitive advantage lies in the human resources (HR) they detain. The role of HR managers should be to pinpoint the strategy able to achieve the organization's goals. The models and techniques deployed are highly significant to all managers in dealing with their employees under all the circumstances that organizations may encounter. HR development is an extremely relevant factor in improving productivity and bringing about organizational effectiveness and efficiency (Burke 2006). Management development is a process of training and growth in which management staff grasp, understand, and deploy the personal managerial supply skills, knowledge, attitudes, and insights to manage their organizational roles efficiently so that its goals are achieved.

Many firms still consider that the management of HR capabilities is a short-term issue, while the strategic management of the business represents a long-term goal. Grounded in the resource-based view (RBV) of the firm, the theory suggesting that resources influence firm performance is largely supported empirically (Barney 1991; Ghemawat 1991; Grant 1991; Sirmon et al. 2011). Nevertheless, those authors show that this influence is the result not only of possessing the resources but also of how managerial action engages with structuring the firm's portfolio of resources and bundling them into capabilities able to realize competitive advantage.

Guthridge et al. (2008) consider that, in order to manage HR capabilities, the heads of firms should recognize that strategies cannot only focus on the capabilities of business leaders as reality is made up of different people with different genders, ages, and nationalities. Thus, successful HR management needs to place the entire workforce at the heart of the business strategy, and this requires not only the acquisition of further and improved skills by all involved, but also continuous monitoring, motivation, and support by management in general, and HR managers, in particular.

The debate about the strategic value of HR and analysis of its impact on business competitiveness has aroused great interest among researchers and theorists in the

field (Saá-Pérez and García-Falcón 2002; Déniz-Déniz and Saá-Pérez 2003; Lengnick-Hall et al. 2009; Newenham-Kahindi 2011). The reasons are many and varied, although increased global competition and the search for sources of sustainable competitive advantage are certainly two of the strongest drivers. According to Dyer and Reeves (1995), this attempt to identify the foundations for sustained competitiveness given the competitive challenges posed by globalization, first the price level and, both then and now, the quality of customization, service, and the speed of innovation have been variables around which competitive advantage has been based. However, when factors such as capital and technology became available to virtually everyone and everywhere, the search for sources of sustained competitive advantage is increasingly oriented toward organizational capabilities (Ulrich and Lake 1990), and more specifically toward the strategic value of HR (Cappelli and Singh 1992; Wright and McMahan 1992; Newenham-Kahindi 2011). As noted by Pfeffer (1994), people and how they are run acquire ever-greater importance because many other sources of competitive success are less powerful than they once were. This recognition that the very basis of competitive advantage has changed is essential to developing a framework for dealing with different aspects of management and strategy.

Hence, HR requires additional capabilities as well as support for developing their role and placing them at the heart of the business strategy. This study focuses in particular on analysis of the determinants of competitiveness of a specific company type (agency) in a particular sector (retail banking). Since the 1980s, the banking environment has experienced various changes to its competitive market environment worldwide and with direct consequences for both the nature and the level of competitiveness (Ministério das Finanças 1991; Proença 1992; Banco de Portugal 2003; Canhoto 2004; Cabrita and Bontis 2008). Historically, several factors have been referred to and including market deregulation, the development of capital markets, and the reduction in demand for corporate loans, technological innovation, and the competition deriving from various financial systems (Ennew et al. 1990; Trethowan and Scullion 1997; Canhoto 2004; Chi 2010; Li 2010).

Indeed, Portugal represents no exception. Correspondingly, the Portuguese financial system (banking in particular) has changed dramatically over the past 20 years having gone through phases of profound revolution in conjunction with the country's political situation. After regime change on April 25, 1974 and through to the early 1980s, the Portuguese financial system was limited to a small number of state banks, with competition virtually nonexistent and the banking sector prospering off an excess of liquidity while supporting firms largely due to political and social reasons.

By the early 1990s, however, Portuguese banking was operating entirely under the regulatory framework established by the 1993 single European market for financial services, and the Second Banking Directive in accordance with other European Union member states (Barros and Modesto 1999; Canhoto 2004). The structure of Portuguese banking experienced profound changes during that period. The number of institutions operating in Portugal increased exponentially following the removal of entry barriers. This high-profile development was due both to the founding of new private Portuguese banks and to the expansion of the network of

foreign credit institutions. In this new atmosphere, banking competitiveness emerges as a key topic for research (Pinho 2000; Canhoto 2004). As far as Portugal is concerned, empirical research on banking competitiveness is still at an early stage as is easily indicated by the heavy regulatory apparatus that prevailed in the sector until recent years (Lopes 1994; Barros and Leite 1996; Barros 1999; Barros and Modesto 1999; Pinho 2000).

The overall goal of improving global competitiveness is the imperative by which managers currently strategically guide their organizations (Stroh and Caligiuri 1998). The competitive environment in which banks work has long been of interest to researchers and policymakers. Most of the early literature on competitiveness in the banking sector was based on the structure–conduct–performance paradigm (Gilbert 1984; Goddard et al. 2001; Berben et al. 2004). Few empirical studies have been undertaken, and there are gaps in field surveys on the determinants of competitiveness at the level of resources, skills and capabilities, and especially as regards how the banking sector, particularly banks, apply models, tools, techniques, and practices to be competitive and gain competitive advantage. The centrality of resources and their management to competitive advantage, and consequently to firm performance, clearly point to the significance of carrying out additional research on these factors (Sirmon et al. 2011).

Within this context, this research aims to identify and measure bank employee perceptions of the determinants of competitiveness in terms of resources, skills, and capabilities within the retail banking sector. It is on this premise that this research is undertaken and striving to answer the following research question: what variables influence bank branch competitiveness? Thus, this study seeks to understand, first, employee perceptions on the determinants of bank competitiveness, levels of good practice, customer relationships, and the selling of products, and second, identify which factors influence competitiveness. The empirical study focused on the Portuguese bank branches belonging to Caixa Geral de Depósitos (Portugal), the leading Portuguese financial institution with a predominant position in the Portuguese banking sector (Canhoto 2004; Cabrita and Bontis 2008).

This article is structured as follows: Section II provides a literature review on business competitiveness at the level of resources, skills, and capabilities before detailing the research hypotheses. Section III explains the methodologies, the sample, data collecting and variable measurement processes. Section IV presents and discusses the research results before Sect. V sets out the main study findings and highlights some implications for management as well as some limitations and future lines of research.

2 Literature review and research hypotheses

The concept of competitiveness has been much discussed in the literature and many definitions can be found with some controversial (Porter 1990, 1991; Roquebert et al. 1996). We can refer to competitiveness in general terms, but we can also specify the concept in linking it with other concepts, such as region, country, firm, or individual (e.g. Storper 1997; Freeman 2000; Cooke 2001).

One of the earliest references relating to the definition of competitive advantage was put forward by Ansoff (1965) who perceives it as one of the four components of strategy (product/market matrix, growth vector, synergies, and competitive advantage). According to Ansoff (1965), the term competitive advantage refers more to market trends than other competitors. In the 1970s, the subject returned to the literature of authors involved with business practices and teaching strategy (Andrews 1971; Newman and Logan 1971, Schendel and Hatten 1972; Uytterhoeven et al. 1973; Ackoff 1974; Glueck 1976, Mintzberg 1979; Schendel and Hofer 1979). During that decade, American companies struggled with rising foreign competition and especially Japanese companies that competed on different bases. While U.S. productivity stopped growing after 1976, the Japanese valued strategically different operations in the production process (Wheelwright 1981; Hayes and Wheelwright 1984).

In the 1970s and 1980s, the term competitive advantage is also used in several research outputs but with a wider connotation involving the entire business unit and not just a product (Ohmae 1978; Morrison and Lee 1979; Gluck et al. 1980; Hambrick 1980; Porter 1981; Mintzberg and McHugh 1985; Henderson 1989). Allen (1978) describes the need for strategic planning and competitive focus. South (1980) identified competitive advantage as the key pillar to prevailing strategic thinking. Thus, competitive advantage in the early 1980s began to become known not only in business but especially also within the academic world, where the need for a consensual definition of the concept became obvious.

Porter (1980, 1985) and Rothschild (1984a, b) put the competitive edge at the center of strategy, consolidating the practical vision developed in the late 1970s. Furthermore, Aaker (1984) states that business strategy should have two core elements: the decision on where to compete and in which product/market; and the development of sustainable competitive advantage. Thus, the ability to attain or otherwise sustainable competitive advantage becomes a key factor in choosing a successful strategy.

The world of work and organization has become increasingly challenging and turbulent (Burke and Cooper 2004; Burke 2006). According to Ulrich (1997), the eight major challenges currently facing organizations are globalization, responsiveness to customers, increasing revenues and decreasing costs, building organizational capability, change and transformation, implementing new technologies, attracting and developing human capital, and ensuring fundamental and long-lasting change. Hence, levels of competitiveness among organizations have increased. Most organizations are today able to copy technology, modern processes, products, and strategy; however, HR management practices and organization are far more difficult to copy (Barney 1991; Pfeffer 1994, 1998; Palacios-Marques et al. 2011) and thereby form a distinctive competitive advantage. Training can influence performance by improving skills and capacities relevant to employee tasks (Harel and Tzafrir 1999) and may positively influence manager performance levels (Burke and Day 1986; Kamoche and Mueller 1998). Upgrading employee skills and knowledge both enables them to produce high-quality products and services in the most cost-effective way (Pfeffer 1994; Kamoche and Mueller 1998) and reinforces the competitive advantage in industries that are constantly innovating (Palacios-Marques et al. 2011).

Porter (1991) identifies three trends that seek to explain how positions of success emerge out of models based on games theory,¹ on commitment² under uncertainty and the Resource-Based View (RBV).

Support for the RBV is proposed in the research studies of Penrose (1959), Wernerfelt (1984), Barney (1991), and Peteraf (1993), which set out foundations important to understanding how competitive advantage is attained and performed within the firm and how it requires sustaining over time. The RBV is based on the fact that resources are valuable, rare, and difficult to imitate endowing companies holding them with a competitive advantage. This RBV approach does not try to discard conventional strategic analysis based on the industrial economy but simply reflects the fact that sources of competitive advantage have been subject to continuous change over time (Barney 1991).

Stated briefly, Table 1 presents a compilation of the positions of the leading RBV researchers.

Recently, several researchers have extended the RBV focus to HR management research to explore the broader concept of intellectual capital rather than focus only on human capital. As referred to by Youndt et al. (1996), intellectual capital can generally be defined as the sum of the entire knowledge an organization is able to leverage in the process of conducting business to gain competitive advantage. More particularly, intellectual capital is involved in three forms of capital (Youndt et al. 1996; Burke 2006)—human (it refers to individual employee capabilities, their knowledge, skills, and abilities), social (it reflects knowledge in groups and networks of people), and organizational (it refers to institutionalized knowledge and codified experiences stored in databases, routines, patents, manuals, structures, and the like).

However, despite the great interest generated by the RBV, researchers do not agree as to the nature of the relationship between resources and company performance (Barney 1991; Ghemawat 1991; Grant 1991; Amit and Schoemaker 1993). More recently, the Dynamic Capabilities Theory (DCT) has taken a step forward with criticism of the fundamentals to the RBV maintaining that it ignores the factors that constitute the resource in assuming that they simply exist (Eisenhardt and Martin 2000). Considerations about how resources are developed, how they are integrated and used within the firm have all simply been ignored by the literature on RBV (Helfat et al. 2007). The defenders of DCT attempt to build a bridge between the existence of limited resources and how they are actually used in business processes and seek to explain the relationship between available resources and the changing business environment.

The DCT helps the firm adjust its resources and thereby maintain the sustainability of the firm's competitive advantage, which may otherwise be swiftly

¹ Games theory emerged in the 1930s especially after the 1944 publication of *The Theory of Games and Economic Behavior*. It is a branch of applied mathematics that studies situations where players choose different actions in efforts to obtain the best result (Neumann and Morgenstern 2007).

² An important aspect in the characterization of the competitive dynamics of capitalism is the discussion on the process of decision making under uncertainty with its origins in the study of Keynes, and the implications in terms of the dynamic company strategy. This is approached as the of strategic commitment dilemma by the Theory of Resources and Capabilities, a key element to explaining the difference in performance between firms over time (Eisenhardt and Martin 2000).

Table 1 Determinants of sustained competitive advantage

Determinants: Attributes of resources	Dierickx and Cool (1989)	Reeds and DeFillippi (1990)	Barney (1991)	Grant (1991)	Peteraf (1993)	Hill and Deeds (1996)
Potential for value creation			X			
Rarity (scarcity) of resources			X			
Not expandable					X	
Specific		X				
Imperfect imitation			X			
Not imitable	X	X				X
Not transparent				X		
Not replicable				X		
Limitations on <i>ex-post</i> competition					X	
Not replaceable	X		X			
Durable	X			X		
Not transferable				X		
Unmarketable	X					X
Imperfect mobility					X	
Limitations <i>ex-ante</i> to competition					X	

destroyed. Thus, while the RVB values the choice and selection of appropriate resources, the DCT emphasizes the development and renewal of resources (Barney 1991; Teece et al. 1997; Eisenhardt and Martin 2000).

In addition, the debate on the strategic value of HR and the analysis of their impacts on business competitiveness have also generated great interest among strategic management researchers and theoreticians. Again, the reasons that led to the emergence of this interest are many and varied but certainly the increased global competitiveness and the search for sources of sustainable competitive advantage are two of the strongest motives. As noted by Pfeffer (1994), people and how they are managed are becoming increasingly important because many other sources of competitive success are less powerful than they once were. The recognition that the foundations of competitive advantage have changed is essential to developing a different framework of reference for dealing with management and strategic issues. Traditional sources of success, product and process technologies, protected or regulated markets, access to financial resources, and economies of scale still provide competitive leverage, but less so now than in the past. The implication is that today research needs to foreground what might be called the cultural benefits of an organization's HR—i.e., the competitive advantages derived from the way in which people are managed or manage themselves.

This growing interest in analyzing the competitive impact of HR has allowed for the development of a new field of study: strategic HR management. To be

successful in the future, organizations will have to build organizational capability (Pfeffer 1996; Beatty et al. 2003) and HR professionals and HR management practices will be essential to creating value by improving organizational competitiveness (Applebaum and Batt 1999; Ferris et al. 1999; Applebaum et al. 2000).

This analysis of resources and capabilities also has implications for HR managers themselves. In general, it alerts HR managers to the importance of certain rules in managing these resources, especially for those with high potential to maintain a sustainable competitive advantage. More specifically, this analysis provides guidelines for managing the HR function in ways more susceptible to generating competitive advantage (Barney and Clark 2007; Peris-Ortiz 2009).

Studying the central structuration theory concept provides, on the one hand, analysis of actions taken by individuals and, on the other, insight into the impact of structures (businesses, public services, etc.) over those same individuals, and highlighting the fact that the structures themselves restrict and facilitate action, ensuring individuals change behaviors and making plausible a continuous process of social change. Thus, human action cannot only be restricted by the circumstances in which it occurs as it may also be developed (Giddens 1979, 1984). Therefore, the structures and circumstances to which humans are exposed partially determine what they think and do, leaning on these same structures and circumstances and reinventing them through action.

Thus, thinking about human action in businesses, such as construction, or in social phenomena involves joint analysis of the action itself, as well as the effects of certain structural properties on that action whether restricting and/or facilitating it (Giddens 1984).

In working contexts, actions are conditional and therefore the building and the development of skills is directly linked to improved organizational performance (Heene and Sanchez 1997). According to these researchers, the concept of competence refers to the ability that a firm has to sustain the coordinated allocation of resources to help its business to reach its goals. Thus, the firm may face two types of strategic decisions: (i) skills development, where companies allocate resources without causing qualitative changes in the assets, capabilities, and means of coordinating resources, and (ii) the construction of skills, in which companies acquire and employ new and qualitatively different assets and capabilities and means of coordinating resources.

Based on theory of structuration, George and Jones (2002) argue that the ability of a firm to produce the products and services in demand among customers lies in the behavior of all company members of staff. Competitive advantage derives from behavior, in (i) the top managerial team and in their organizational strategy plans, (ii) middle managers as they manage and coordinate the human and other available resources, and (iii) first-line supervisors and production employees.

A firm seeking to gain a competitive advantage must have the ability to overcome competitors or other companies that have similar products and services through the pursuit of the following objectives (George and Jones 2002): (i) boost efficiency; (ii) build quality, (iii) develop innovation and creativity, and (iv) raise awareness about customer needs. However, competitive advantage cannot be understood by looking at the business as a whole. Competitive advantage is rooted in the different activities a firm performs in the production, marketing, distribution, and support of its product

(Porter 1985). The chain of value disaggregates a firm into its strategically relevant activities so that we can understand the behavior of costs and existing sources as well as the potential for differentiation. The chain of value concept is deployed as a tool for explaining the creation of competitive advantage (Porter 1985, 1990). A firm gains competitive advantage by performing these strategically important activities in a cheaper or better way than its competitors.

According to Walters (2006), the margin in the value chain may be understood as a measure of the value of the product/service; however, it neither fully reflects the satisfaction that customers derive (and which, in turn, confirms and potentially expands that value), nor does it provide accurate feedback with regard to what constitutes the firm's optimal organizational solution, nor what would provide the best sustainable return on shareholders' investment. Additional information is required if the firm is to accurately map both its markets (both statically and dynamically) and its competitive environment and, in particular, to be able to foresee both its potential to compete and the benefits it might derive from collaborating with other firms via association or partnership.

Hines (1993), for example, shows a reconfigured value chain, constructed in accordance with an emerging strategic map bridging the 1990s and into the twenty-first century. These changes in the value chain (showing an integrated chain of value) came to lead to a reversal in the orientation of the original value chain, which then became directed from the market to the firm (contrary to the traditional direction) as it is the former setting the value of the product/service, and not exactly the latter (Campbell-Hunt 2000; Mintzberg and Rose 2003).

Thus, analysis of the value chain represents the most appropriate way of examining competitive advantage (Porter 1985; Barney 1991; Roquebert et al. 1996).

Based on the literature review thus far, we are able to set out the following research hypotheses:

Best practices	H _{01.1} : The quality of the service offered positively influences the bank branch competitiveness in the development of new business ideas
	H _{01.2} : The quality of the service offered positively influences bank branch competitiveness in the organization of working activities
	H _{01.3} : Constant requests by the manager negatively influence bank branch competitiveness in the organization of working activities
Customers	H _{01.4} : The quality of employees in the banking sector positively influences bank branch competitiveness in terms of customer preference
	H _{01.5} : The effort expended in responding to customers positively influences bank branch competitiveness, in terms of customer preference
Products	H _{01.6} : The chain of value (primary and support activities) positively influences bank branch competitiveness in terms of the success rate of new market product launches

2.1 Critical competitive factors

Remaining within the scope of structuration theory, research is today concerned with a different aspect, as defended by Guthridge et al. (2008). These researchers

believe that it is of the greatest importance for companies to discover the most competent professionals (the most talented—*A Players*), through recruitment and then retain them. For these researchers, highly competent professionals are twice as likely to improve productivity, sales, and results. As a result, they argue that these workers deserve compensation of 40% higher than the average of the other professionals (*B Players*) on other levels of the workforce pyramid.

Therefore, firm directors should focus on selecting competent persons for all segments of the pyramid—customer service teams, technical experts, and even for teams working in support activities such as those working with suppliers, contractors, and business partners. Like the *A players*, these are all considered essential for success.

Guthridge et al. (2008) also consider that when approaching the inner realities of work teams, these should be perceived as a set of competent professionals with ability to create or support knowledge. Correspondingly, well-established firms ensure that team work performances generate expectations of success.

The function of organization strategy and HR management in organization performance is being rethought (Burke and Cooper 2005). Rather than considering the HR function as cost, a HR management system that supports an organization's strategy must be seen instead as an asset, a strategic lever for the organization in creating value (Beatty et al. 2003). Organizational capability is the key, and both HR professionals and managers should strive together to attain this. Pfeffer (1998) connects the reasons why a HR-based strategy pays dividends: high performance management practices lead to results (innovation, productivity, performance, etc.), which being hard to copy thereby maintain long run profitability. HR management practices furthermore influence employee capabilities through the acquisition and improvement of human capital (Stewart 1997; Wright et al. 1994; Alpkkan et al. 2010).

Moreover, for Nonaka and Takeuchi (1995), human capital is deemed the main factor in the intellectual capital of a firm and the largest source of sustainable competitive advantage. Bontis and Fitzenz (2002) found a correlation between employee commitment and company performance. According to these researchers, the general feeling of employees—depending on their satisfaction, commitment and motivation, significantly influences creativity and the sharing of knowledge and is a key factor in employee retention, resulting in a positive impact on business performance. Thus, Guthridge et al. (2008) and Quinn et al. (1996) both argue that organizations should be able to attract qualified employees, manage the professional intellect and transform productive knowledge (intellectual capital) into added value to the customer. These HR management practices influence the intensity of motivation through the adoption of performance assessments, pay-for-performance incentives and merit based internal promotions systems (Brown et al. 2003) and can also influence the design of work so that highly motivated and skilled employees best apply what they know in performing their jobs (Wright and Boswell 2002).

Hence, for Cabrita and Bontis (2008), in the specific case of banking, human capital is a source of bank business success as this relies heavily on stable and enduring relationships with customers. This means bank performances depend heavily on their employees who are potentially a versatile resource. Employee

performance is therefore a critical factor able to differentiate between banks with the quality of customer relationships depending on employee capabilities regarding their perception of customer needs.

Given this context, we subsequently present the following research hypotheses:

Critical factors of competitiveness	H _{02.1} : Bank competitiveness differs according to the commercial branch to which respondents belong
	H _{02.2} : Bank competitiveness differs according to the evaluation of performance
	H _{02.3} : Bank competitiveness differs according to the planning of HR activities
	H _{02.4} : Bank competitiveness differs according to the incentive schemes in effect
	H _{02.5} : Bank competitiveness differs according to manager motivation

3 Methodology

The empirical study is focused on analysis of the 40 branches comprising the *Caixa Geral de Depósitos* financial institution network for the Centro region in Portugal. The questionnaire methodology was chosen for data collection and sent to several employees out of the universe of 20 bank branch employees in each of the two districts totaling 327 employees with different functions. The questions fall mainly into two categories: closed multiple choice questions in which answers follow a pre-selected grid scale (Likert scale). In order to survey the factors or determinants of performance and the variables that influence bank competitiveness a Likert scale from 1 (strongly disagree) to 7 (strongly agree) was applied. This scale was proposed by Cabrita and Bontis (2008), and it comprises 30 variables (see Table 6 in Appendix). Analysis of the internal consistency of each variable revealed clearly acceptable alpha values for all factors, which confirms their robustness (Field 2005).

After minor adjustments to the questions proposed that raised issues in the pre-test, we sent out the questionnaires by mail to the respective CGD bank branch managers. Thus, 327 questionnaires were dispatched with 164 valid responses obtained with three invalid (incomplete questionnaires), which amounts to a response rate of 50.2%. We observed that 57.3% of responses came from the Castelo Branco district CGDs and 42.7% from Guarda district CGDs. This final sample has a statistical error margin of $\pm 7.58\%$, with a 95.5% confidence interval (Malhotra 1993). Table 2 below details the main sample characteristics.

3.1 Sample

In the general profile of those replying to the questionnaire, data on the key elements relating to the acquisition of knowledge-based skills were as follows.

Table 2 Survey data collection

Geographic area	Centro region of Portugal
Sector	Retail banking
Analysis unit	Branches of the CGD
Data recollection	Questionnaire
Response rate and sampling error	327 sent questionnaires 164 valid questionnaires 3 invalid questionnaires Response rate: 50.2%
	Margin error (for $p = q = 0.5$ and a confidence level of 95%): 7.58%
Date of the questionnaire	May 2009

As regards age, ten respondents (6.1%) are aged ≤ 25 years, 26 respondents (15.9%) are aged between 26 and 35 years, 60 respondents (36.5%) are between 36 and 45 years, 49 respondents (29.9%) are in the 46–55-year-old age group, and 19 respondents (11.6%) are aged ≥ 56 years of age. In terms of educational qualifications, the majority had completed secondary education and gone on to gain a higher education degree, in some cases at postgraduate level. The minority had either completed 9th grade only, or had a secondary education diploma but no higher education degree. As for professional experience profiles, we found the most representative group were having 7–16 years of professional experience (52 respondents) and 17–26 years (63 respondents), followed by the other groups.

4 Results

4.1 Measuring factors of competitiveness

To address our research question—what variables influence bank branch competitiveness—we decided to test hypotheses by examining the Spearman³ correlation coefficient of posts, as a non-parametric correlation. Thus, we aim to establish partial correlations between variables to reveal whether some variables increase, decrease or eliminate the relationship between the two variables. To this end, we deploy the Spearman Rho as we are not dealing with normal data (Malhotra 1993). Table 3 presents the conclusions of the statistical tests.

Clearly, in relation to best practices, the quality of the service offered positively influences bank branch competitiveness in terms of new business ideas, albeit

³ Unlike the Pearson correlation coefficient, analysis by the Spearman correlation coefficient does not require either the assumption that the relationship between the variables is linear or that the class interval variables are measured. Correlational analysis indicates the relationship between two variables and values will always be between -1 and $+1$. The sign indicates the direction of whether the correlation is positive or negative, with the size of the variable testifying to the strength of the correlation. 0.70 is understood to approximately represent a strong correlation: between 0.30 and 0.7, whether positive or negative, suggests a moderate correlation with 0–0.30 displaying a weak level of correlation (Malhotra 1993).

Table 3 Results of Spearman test

Variables		Spearman's correlation
Best practice	The influence of work quality on bank competitiveness of bank in the development of new business ideas	0.624*
	The influence of work quality on bank competitiveness in organizing working activities	0.723*
	The influence of constant managerial demands on bank competitiveness in organizing working activities	-0.143*
Customers	The influence of banking sector employee quality on bank branch competitiveness in terms of customer preference for branches	0.479*
	The influence of efforts expended on responding to customers on bank competitiveness	0.319*
Products	The influence of the value chain on the success rate of new product launches	0.349*

* $p < 0.05$

moderately as the C–S returns a value of 0.624 for a significance level of below 5%. Thus, $H_{01.1}$ is not rejected.

For the hypothesis, $H_{01.2}$, within the level of best practice, the test carried out demonstrated a strongly positive influence between work quality and the organization of bank branch working activities with a C–S value in excess of 0.7 for a significance level of below 5%. Thus, given the observed values, we do not reject the null hypothesis $H_{01.2}$.

The hypothesis $H_{01.3}$ falls within the scope of this question: in order to obtain perceptions on managers being constantly involved in the daily business of the bank and the resulting impact on the organization of bank branch working activities. In fact, the C–S statistical results demonstrate there is a weak negative influence on bank competitiveness deriving from the organization of working activities as, for a C–S significance level of below 5%, we obtain the result of -0.143.

The hypothesis, $H_{01.4}$, was proposed due both to its importance in the context of employee motivation and as a means for enhancing business performance and customer satisfaction. Guthridge et al. (2008) and Quinn et al. (1996) argue that companies should strive to attract the best employees to produce added value for the firm (through proper management of the accumulated professional intellect) and the client. Correspondingly, these statistical results find that there is indeed a positive influence (moderate), for a significance level of below 5%, we obtained a C–S value of 0.479. Thus, this is in accordance with the position advocated by Guthridge et al. (2008) and we similarly do not reject hypothesis $H_{01.4}$.

Furthermore, we also sought to ascertain the perception of respondents on the competitiveness of the bank branch and returning a good response for bank customer requests (services and product sales). According to Cabrita and Bontis (2008), employee performance is a critical differentiator in the business of banks and the quality of customer relationships depends on the capabilities of employees to perceive these customer needs. In fact, in accordance with our statistical results, for a significance level of below 5%, we obtained a C–S value of 0.319, and thus, we may conclude that responses to customer requests (services and sales products),

moderately influence their preferences. In this case, we did not reject the hypothesis $H_{01.5}$.

According to Barney (1991), resources are the basic components of the value chain and are organized them into three groups: physical, human, and organizational. Some resources are tangible and physical, such as infrastructures and equipment; others are intangibles, for example, the brand. However, all resources are of major importance, and companies differ in how they go about planning resource utilization with direct implications on their performance. Moreover, competitive advantage is rooted in the different activities (e.g., the value chain) that a firm performs in the production, marketing, distribution, and support of its product (Porter 1985). Thus, we sought to ascertain respondent opinions on the extent the organizational value chain influences competitiveness in terms of launching new products onto the market.

Following statistical analysis, for a significance level of below 5%, we obtained a C-S value of 0.349 from which one can conclude that the value chain has a (moderate) positive influence on the success rate of new product launches. $H_{01.6}$ is thus not rejected.

Following this approach to the data on the first research question, we will now deal individually with the hypotheses formulated with the objective of answering the second research question.

4.2 Variables influencing bank branch competitiveness

In order to identify what variables influence bank branch competitiveness, we used the nonparametric Kruskal–Wallis test as the sample does not follow assumptions of normality and homogeneity in terms of its variance, as already mentioned. This test verifies whether the distributions share the same location parameter (Malhotra 1993).

Based on the Kruskal–Wallis test results (Table 4), it appears that the critical determinants of bank competitiveness which, with a significance level of below 5% and therefore indicating the branch type, do influence, are (1) developing new business ideas, (2) the organization of working activities, and (3) customer satisfaction. Thus, given the restricted number of determinants influencing the type of bank branch, it is legitimate to conclude that bank branch competitiveness probably does not differ according to the branch type variable. Thus, in this case, we reject $H_{02.1}$.

For the hypothesis, $H_{02.2}$, we observe above that for a significance level of below 5%, the critical determinants of bank branch competitiveness, which reveal the influence resulting from the type of employee evaluation in effect for respondents, are (1) the development of new business ideas, (2) the organization of working activities, (3) responses to competitors, (4) customer preferences versus/competition, and (5) customer satisfaction. However, when taking into account a significance level of below 10% in addition to the previous determinants, we also note the influence of the employee evaluation type on the success rate of new products launches and operating costs.

Thus, it is reasonable to consider not rejecting hypothesis $H_{02.2}$, i.e., bank branch competitiveness differs according to the bank employee performance evaluation of variable.

Table 4 Results of Kruskal–Wallis test

Determinants	Hypotheses											
	H _{02.1}		H _{02.2}		H _{02.3}		H _{02.4}		H _{02.5}		p	
	χ^2	p	χ^2	p	χ^2	p	χ^2	p	χ^2	p		
Developing new business ideas	5.771	0.016*	52.966	0.000*	32.119	0.000*	38.608	0.000*	31.383	0.000*	0.000*	
Reducing time per operation	1.086	0.297	7.439	0.282	10.663	0.058**	11.178	0.083**	18.403	0.005*	0.005*	
Organization of working activities	7.549	0.006*	40.795	0.000*	32.499	0.000*	33.736	0.000*	32.873	0.000*	0.000*	
New product success rate	0.292	0.589	10.653	0.100**	11.617	0.040*	12.357	0.054**	23.773	0.001*	0.001*	
Different products to the competition	0.197	0.657	6.794	0.340	4.082	0.538	16.089	0.013*	5.899	0.435	0.435	
Response to competitors	2.600	0.107	43.625	0.000*	19.354	0.002*	26.178	0.000*	29.170	0.000*	0.000*	
Customer preference versus competition	0.144	0.705	13.410	0.037*	19.810	0.001*	19.802	0.003*	14.656	0.023*	0.023*	
Customer satisfaction	7.097	0.008*	16.544	0.011*	6.186	0.289	22.970	0.001*	21.340	0.002*	0.002*	
Operating costs	0.168	0.682	12.085	0.060**	8.263	0.142	10.840	0.093**	18.135	0.006*	0.006*	

* $p < 0.05$, ** $p < 0.1$

Regarding the hypothesis, $H_{02.3}$, we observe that, for a significance level of below 5%, the critical determinants of bank branch competitiveness in terms of the influence of HR planning activities are the following: (1) developing new business ideas, (2) the organization of working activities, (3) the success rate of new products, (4) responses to competitors, (5) customer preferences versus/competition. However, considering a significance level of below 10%, we also observe that HR activity planning also influences the reducing the time per operation factor.

Thus, safely we accept not to reject the hypothesis, $H_{02.3}$, i.e., the competitiveness of bank branches differs according to the variable planning of HR activities.

Regarding the hypothesis, $H_{02.4}$, according to the data set out in Table 4, and considering a significance level of below 5%, the critical determinants of bank branch competitiveness displaying the influence of incentive systems are as follows: (1) developing new business ideas, (2) the organization of working activities, (3) product differentiation as regards the competitors, (4) responses to competitors, (5) customer preferences versus competition, and (6) customer satisfaction. Furthermore, when considering a significance level of below 10%, the factors reducing the time per operation, the success rate of new products and operating costs of operation, also prove to be influenced by the incentive systems in effect at the bank.

In conclusion, we do not reject hypothesis $H_{02.4}$, i.e., that bank branch competitiveness differs according to employees' perceptions of the incentive systems in operation.

Finally, in relation to the $H_{02.5}$ hypothesis, the Kruskal–Wallis test reports that, given a significance level of below 5%, the determinants of the branch competitiveness derived from the respondents' perceptions concerning the managers' motivation are (1) developing new business ideas, (2) reduced times per operation, (3) the organization of working activities, (4) the success rate of new products, (5) responses to competitors, (6) customer preferences versus competition, (7) customer satisfaction, and (8) operating costs.

Thus, compared to the $H_{02.5}$ hypothesis, bank branch competitiveness differs according to the manager motivation variable and we can legitimately maintain that the hypothesis proposed is not rejected.

In conclusion, the results obtained from the statistical test analysis of our research hypotheses are put forward in Table 5.

5 Conclusions

Business organizations, particularly banks, go through periods of great instability and competitiveness that demand major changes, both in terms of internal management and in the products and services provided. Financial institutions that want to survive and prosper in the market must be prepared for the high levels of competition and assertively prove its ability to differentiate themselves from other competitors. Moreover, when defining competitive advantage, we are also accepting the existence of a potential competitive disadvantage (or negative competitive advantage), which needs to be identified by these organizations.

Table 5 Hypotheses results

Hypotheses	Description	Result
H _{01.1}	The quality of the service offered positively influences bank branch competitiveness in the development of new business ideas	Not rejected
H _{01.2}	The quality of the service offered positively influences bank branch competitiveness in the organization of working activities	Not rejected
H _{01.3}	Constant requests by the manager negatively influence bank branch competitiveness in the organization of working activities	Not rejected
H _{01.4}	The quality of employees in the banking sector positively influences bank branch competitiveness in terms of customer preference	Not rejected
H _{01.5}	The effort expended in responding to customers positively influences bank branch competitiveness, in terms of customer preference	Not rejected
H _{01.6}	The chain of value positively influences bank branch competitiveness in terms of the success rate of new market product launches	Not rejected
H _{02.1}	Bank competitiveness differs according to the commercial branch to which respondents belong	Rejected
H _{02.2}	Bank competitiveness differs according to the evaluation of performance	Not rejected
H _{02.3}	Bank competitiveness differs according to the planning of HR activities	Not rejected
H _{02.4}	Bank competitiveness differs according to the incentive schemes in effect	Not rejected
H _{02.5}	Bank competitiveness differs according to manager motivation	Not rejected

Understanding the process of business evolution and growth and attaining the ability to predict changes become crucial in the contemporary environment as the cost of responding increases in proportion with the sheer need for change and the firm that acts first of course gains in competitive advantage over the remaining firms.

The following considerations are holistic in nature and not intended to show conclusive opinions on the issues and findings of the resent research. Rather, they are intended to indicate some fruitful ways of observing organization-based sources of competitive advantage and how they might make competitiveness sustainable.

Regarding the research question—what variables influence bank branch competitiveness, we confirmed that regarding best practice—quality working positively influences bank branch competitiveness in terms of developing new business ideas and the organization of working activities. We further found that constant requests by the team manager negatively influence (moderately) bank branch competitiveness in the organization of working activities. In the case of customer relationships, the quality of banking sector employees and the effort expended in responding to customer requests positively influences the level of bank branch competitiveness in terms of customer preferences. Finally, the chain of values (primary and support activities) positively influences the bank branch competitiveness through the success rate of new product launches.

Thus, the context of respondent perceptions on quality work supports the view of Porter (1990) who notes the importance of administrative and organizational practices being better adjusted to the sources of competitive advantage for industrial

success. Furthermore, as noted in the literature review, a firm seeking to gain competitive advantage must have the ability to overcome competitors and other companies with similar products and services through the pursuit of the following objectives: (i) develop efficiency, (ii) build quality, (iii) develop innovation and creativity, and (iv) enhance sensitivity to customer needs. This perspective is supported by the results obtained.

Moreover, our findings confirm that human capital is a source of success in the business of banks, which relies heavily on stable and enduring customer relationships. Thus, bank performance depends heavily on its employees with their performance being thus a critical factor that differentiates between banks, with the quality of customer relationships in turn depending on employee capabilities in perceiving customer needs. Furthermore, it is also clearly demonstrated that respondents perceive human capital as bearing an influence on bank competitiveness in terms of best practices, customer relationships, and the launch of new products.

In addition, we observed that (i) the competitiveness of banks does not vary significantly among branches; (ii) the competitiveness of bank branches does, however, vary according to performance evaluation; (iii) the competitiveness of bank branches differs according to HR planning and management; (iv) it also differs according to the incentive system; and (v) it varies according to branch managers' degree of motivation.

In fact, the results obtained in testing the competitiveness of banks differ according to the commercial branch because we adopted a sampling universe with a fairly similar economic and socio-cultural identity and which may report different levels in bank branch competitiveness between the regional bank management structures. These results suggest that the private customers and business remain unsophisticated, with a small domestic market and the low level of the Portuguese international economic profile, particularly of business customers, who have only recently embarked on more active and international strategies; all of these combine to hinder the competitiveness of the national banking sector.

Moreover, other assumptions made in the context of obtaining answers to the second research question highlight the role now attributed to corporate human capital. As mentioned above, human capital is considered as the main factor in the intellectual capital of a firm and the largest single source of sustainable competitive advantage.

Working teams should be thought of as a set of competent professionals able to create or support knowledge. In this case, a well-established firm ensures that the performance of working teams generates expectations of success. Obviously, these expectations turn out to result in higher performance evaluations, matching incentive systems, and ensuring more motivated staff and, correspondingly, more competitive teams, since these factors have a direct influence and determine bank competitiveness, as demonstrated above.

We therefore come out in support the arguments of several authors (Lado and Wilson 1994; Pfeffer 1994; Wright et al. 1994; Ulrich 1997) in the sense that their findings suggest that organizations are seeking to improve their HR relationships, and turn them into strategic assets, and back the common belief that HR management represents an influential tool for improving competitiveness. However,

the organizations must (i) attribute the proper and specific human capital value and strategic importance HR deserve; (ii) encourage the use of HR policies and practices that enhance the internal development of staff through regular evaluation, internal evaluation based promotions and on the job training and, above all, creating a sense of commitment to the organization; (iii) foster HR competitiveness through investing in a policy of continuous training and specific training and internal promotion policies to fill vacancies in key positions; and (iv) promote compensation policies not only investing in financial rewards but also including extraordinary compensation packages as well as numerous opportunities for internal promotion and development able to retain highly qualified human capital and capabilities.

Any study has its limitations that inevitably vary dependent on the choices made, whether voluntary or involuntary. In general, we can point to the following limitations: (i) despite the large sample studied, information was collected on a limited number of bank branches, and so the generalization of these results should be approached with some reservations; and (ii) there was occasional impartiality in the answers given by respondents as respondents answered a questionnaire that had previously been approved by bank management, which could have influenced the type of response.

In spite of limitations, this study has important implications for both practical and academic HR management models. Thus, from a practical standpoint, the main conclusions of this research are related to the future savings potential deriving from conceiving the HR relationship as a determinant of competitive advantage. In this sense, we argue that managers have to improve their knowledge on managing an increasingly personalized, better qualified, and versatile workforce, and prove its ability to foster the communication and motivation required of new incentive systems incorporating the assessment of long-term customer relationships. As a result, it is also necessary to stimulate a culture with a clear vocation of service.

From an academic standpoint, this study also makes an important contribution to the literature on strategic management in putting forward empirically based research on resources and capabilities. From the point of view of researchers in the strategic management field, this approach provides a conceptual framework for examining the role of HR in competitive success within which HR, and its knowledge are seen as key sources of sustained competitive advantage. These findings are particularly important to policymakers, especially in the framework of the current financial crisis, in which, among the governmental measures taken to halt and reverse the current economic distress, is the financial support for the banking sector.

Future research should extend the scope of this study by introducing new competitiveness variables alongside other new advances in the field. Furthermore, we would advocate the application of this methodology either within a larger and more diverse sample of financial institutions or extending the study to firms in other sectors. Finally, combining this type of quantitative methodology with qualitative data, using the interview technique, might prove highly beneficial as a future research option.

Appendix

See Table 6.

Table 6 Dimensions, variables, and indicators

Dimensions	Variables	Indicators	
Market $\alpha = 0.90$	Market positioning	Trends in market share Commercial management	
	Clients	Client loyalty Confidence in future client preferences	
	Environment	Employees aware of market/client profile Competitive strengths and weaknesses Information on competition Competition as a source of innovation	
	Chain of values	Importance of business support activities	
	Level of sector competition	Responses to competition in the sector	
	Information on the sector	Traditional banking values	
	Corporate culture as perceived by the market	Bank cultural traditions nurtured by the sharing of information between national and international entities Longevity of client relationships	
	Bank Branch $\alpha = 0.90$	Efficiency	Bank branch bureaucracy Service (attending the public) with added value Revenue/employee ratios
		Performance	Competitive teams Sharing ideas among team members Market leading bank branch Evaluation of the work carried out Productive team The team influences the management
		Resource heterogeneity	Creative and brilliant co-workers The best employees in the sector Different branches, clients and products
Information		Sharing of information on clients Information technology system (data) Importance attributed to client requests Efforts spent on meeting client responses	
Layout		Layout of bank branch inappropriate	
Decision making processes and management actions		Hierarchical structure encourages proximity between team members Perfectly defined hierarchy	
Team spirit		Discussion of group divergences Sensitivity to feelings and wellbeing of team members	
Targets (objectives)		Employees attain their objectives	
Planning of activities		Planned management	

Table 6 continued

Dimensions	Variables	Indicators	
HR $\alpha = 0.95$	Evaluation	Evaluation of HR performances	
	Recruitment	Recruitment of HR	
	Competences		Creation and development of new competences
			Perceived competences
			More competent employees allocated to key services
	Training		Competent team
			Learning based upon acquired knowledge
			HR training management
	Task/function implementation		Academic qualifications
			Employee cooperation capacities
			Quality of working
	Individual action on the structure		Team results
			Autonomous working teams
		Productive employee involvement	
		Meeting of requests	
		Constant managerial demands	
Branch management		Absent management	
		HR activity planning	
Incentive packages		Incentive system	
Motivation		Fostering inter-group relationships	
		Employee satisfaction	
		Lack of motivation in task implementation	
		Employees express opinions	
		Managers are motivated	
The value and role of members of staff		Mutual undervaluation of employees	
Bank branch competitiveness $\alpha = 0.90$	Best practices	Management leadership in developing new business ideas	
		Reduced operating times	
	Products	Organization of working activities	
		Success rate of new product launches	
		Differentiated products to the competition	
	Client relationships	Responses to competitor campaigns	
		Client preferences	
	Bank efficiency	Client satisfaction	
		Operating costs	

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