Corporate culture and shareholder value in banking industry

Carretta, Alessandro and Farina, Vincenzo and Fiordelisi, Franco and Schwizer, Paola

University of Rome "Tor Vergata", University of Rome Tre, University of Parma

2006

CORPORATE CULTURE AND SHAREHOLDER VALUE IN BANKING INDUSTRY

Alessandro Carretta

Università di Roma Tor Vergata, Via Columbia, 2, 00133 Rome, Italy, tel: +39.06.7259.5921; fax: +39.06.2040.219; e.mail: carretta@uniroma2.it

Vincenzo Farina

Università di Roma Tor Vergata Via Columbia, 2, 00133 Rome, Italy,, tel: +39.06.7259.5911; fax: +39.06.2040.219; e.mail: vincenzo.farina@uniroma2.it

Franco Fiordelisi

Università di Roma Tre, Via Ostiense 139, 00154 Rome, Italy, tel: +39.06.5737.4256; fax: +39.06.5737.4207 ; e-mail: fiordelisi@uniroma3.it

Paola Schwizer

Università degli studi di Parma, Via Kennedy, 6, 43100 Parma, Italy,tel: +39. 0521.032021 ; e.mail: paola.schwizer@unipr.it

Abstract*

This paper analyses the casual relationship between corporate culture and shareholder value using a sample of large banks in the French, German, Italian and U.K. banking systems over the 2000 to 2003 period. Firstly, we measure shareholder value using an Economic Value Added estimated through a procedure tailored to account for banking peculiarities. Secondly, we measure corporate culture using language as its particular artifact and developing a cultural survey based on the application of a text-analysis model to a corpus of reference texts produced by the sample of banks. We posit six hypotheses regarding the relationship between corporate culture and bank profits and shareholder value. Our results noticeably show that bank profits and shareholder value benefit from different orientations of banking corporate culture.

JEL classification: G21, D24, M14

Keywords: Shareholder value, Economic Value Added (EVA), Corporate culture, Text analysis.

1. INTRODUCTION

This paper empirically investigates the relationship between bank performance and corporate culture in European banking using a sample of quoted banks over the 2001 to 2003 period. There is a substantial literature dealing with bank performance and shareholder value[1], but only few studies attempted to see to an empirical analysis of the relationship with business conditions that may lead to the creation of shareholder value.

A number of studies (Beccalli, Casu, Girardone, 2006; Fernández, Gascón, González, 2002; Eisenbeis, Ferrier, Kwan, 1999; Chu, Lim, 1998) have sought to link measures of bank productive efficiency to stock returns, generally finding a positive relationship. However these studies do not really tell us much about the determinants of shareholder value creation as cost of capital considerations are, typically, ignored. A second shareholder value determinant is customer satisfaction: the link between customer satisfaction and shareholder value creation has also been identified in the theoretical literature (Bauer, Hammerschimidt, 2005) and empirically investigated with respect to non-financial companies (Van der Wiele, Boselie, Hesselink, 2001) yet only one study (Loveman, 1998) provides evidence about how employee satisfaction and customer loyalty positively influence bank performance (using data from branches of a large U.S. regional bank). Others have investigated the relationship between operational risk and bank stock price reactions (Cummings, Lewis, Wei., 2004) and the role played by corporate risk management in the shareholder value creation process (Bartram, 2000 and 2002). Overall, however, it can be seen that the extant empirical literature on the determinants of shareholder value creation in banking is somewhat esoteric and limited.

Following Schein (1985), the corporate culture is defined as a set of shared norms and values expressed in terms of common language, shared coding procedures and shared knowledge. The hypothesis that corporate culture is a predictor of firm performance, allowing organizations to adapt to environment's constantly changing conditions, is investigated by different studies such as Barney (1986), Siehl and

---

[1] Studies analysing shareholder value usually focus on the development and comparison of new performance measures (O'Hanlon, Peasnell 1998; Garvey, Milbourn, 2000; Fernández 2002), the assessment of the value-relevance of different company items such performance measures, accounting information, etc. (Barth, Beaver, 2001; Holthausen, Watts, 2001), the modelling the link between market value and accounting values (Ohlson, 1995; Felthman, Ohlson, 1995; Morel, 1999; Dechow, Hutton, Sloan, 1999; Lo, Lys 2000; Ahmed, Morton, Schaefer, 2000; Liu, Ohlson 2000; Biddle, Chen, Zhang, 2001; Ota 2002).

Martin (1990), Gordon and Di Tomaso (1992), Alvesson (1993), O'Reilly and Chatman, (1996); Wilderom, Van den Berg (2000); Sorensen (2002); Van den Steen (2004).

Despite the importance of the link between corporate culture and bank performance, there is a small number of studies investigating this relationship in banking and most of them focus on cross cultural management and/or emerging markets (Davis, 2004; Moussetis, Rahma, Nakos, 2005). This paper presents a novel insight since it is the first one (as far as we know) to focus on shareholder value and assume (and empirically investigate) that bank profitability and shareholder value may have a different link with different corporate culture orientations. In detail, our study introduces a new instrument for assessing corporate culture since corporate cultural orientation in European commercial banking is measured using three different dimensions[2] according to a possible orientation towards results (labelled as result-oriented culture), the own power development (labelled as power-oriented culture) or the human aspect (labelled as human-oriented culture). For each of these three sets of corporate culture estimates, we measure the ability to explain variations in bank profitability and shareholder value, respectively.

---

[3] In order to ensure a greater comparability of results, these culture dimensions are consistent with those used in other studies (Hofstede, 1980; Hofstede, Neuijen, Ohayv, Sanders, 1990; Denison, Mishra, 1995; Wilderom, Van den Berg, 2000; Carretta, Farina, Schwizer, 2005).

2. THE RELATIONSHIP BETWEEN SHAREHOLDER VALUE AND CORPORATE CULTURE

Corporate culture can be viewed as the set of values and decisions that represent the manner in which individuals perform their activities within the organization, and define which behaviours may be considered appropriate (Schein 1985).

Speaking about the "organizational capital" of firms, Kaplan, Norton (2004) examine culture as the first of its four components; other components considered are leadership, alignment, and teamwork.

Hansen, Wernerfelt (1989) highlight how organizational factors explain about twice as much variance in profit rates as economic factors, concluding in their study that the intangible attributes of firms are crucial for their performance.

If it is true that a firm's growth and value creation are a matter of its broad organisational features and routines, unique to that firm, then corporate culture allows it to adapt to environment's constantly changing conditions.

The idea that culture is a predictor of a firm performance and overall value is emerged in response to the need to understand more a firm's dynamics than can be explained through financial measures alone, and is investigated by different studies following different perspectives (Burns, Stalker, 1961; Lawrence, Lorsch, 1967). In fact, while a few scholars consider attempts to measure corporate culture and its effects on firm performance as being highly problematic (Alvesson, 1993; Siehl, Martin, 1990), other studies view culture as a measurable characteristic with some effects in terms of organizational behaviour and processes (Barney 1986; Gordon, Di Tomaso,1992; O'Reilly, Chatman, 1996; Wilderom, Van den Berg, 2000; Sorensen, 2002; Van den Steen, 2004).

According to Burns, Stalker (1961) and Lawrence, Lorsch (1967), the linkage between corporate culture and firm performance could be the expression of a contingency approach: firms that display a fit between culture and strategy are likely to attain improved performances.

Based on this assumption good strategies may not be a sufficient condition for achieving good results: both strategies and their correct implementation are necessary. In fact, implementation requires organizational behaviours that are functional with respect to a firm's goals and its adaptability to environmental changes.

Kotter, Heskett (1992) argue that a firm culture should be consistent with its strategies in order to enhance its adaptability to external changes and constantly discover critical factors for competition. Furthermore,

Quinn, McGrath (1985) argue that one could get to an improved definition of a firm goals and performance through a fit between culture and pursued strategies.

In consequence thereof, corporate culture could be a source of competitive advantage mainly if environment is characterized by high competition, and the ability to formulate and to implement strategies is very important (Burt, Gabbay, Holt, Moran, 1994).

Consistently with these assumptions, Sorensen (2002) argues that the link between culture and performance depends on the ability to affect organizational learning in response to internal and external changes. In fact, he observes that, in stable environments, firms with a strong culture have a less variable performance. However, the relationship between what he defines strong culture and performance in a competitive environment is less evident. This phenomenon could be due to the consideration that, sometimes, a strong culture is an obstacle to organizational changes owing to a limited ability to renew its contents. Besides, this is consistent with Schein (1985), when he says that corporate culture may (or may not) enhance the acquisition of new values and norms required by changed competitive contexts, and with Hodgson (1996), when he says that culture supplies the basis for the development of new competencies.

Generally, when changes occur, firms still use cognitive models already in their possession in order to respond to new rules of competition but, in many cases, these models could prove inadequate.

Moreover, due to previous considerations, it has been observed that strong cultures determine a good performance only in the short run, while in the longer run the performance of non-changing cultures becomes negative (Denison, 1990).

According to this evidence, corporate culture may only be defined strong if, due to its flexibility and adaptability to changes, it generates superior performance even in the longer run (Kotter, Heskett, 1992). In strong cultures, norms and values are extremely widespread within the organization and their consequences may be summarized as follows (Gordon, Di Tomaso, 1992; Kotter, Heskett, 1992; O'Reilly, Chatman, 1996):

1) enhanced coordination and control of resources within firms;

2) improved goal alignment between a firm and its members;

3) increased individual efforts and motivation.

In general, with reference to the improved coordination and control of resources within firms and the goal alignment between a firm and its members, culture could enhance coordination and decision-making processes through its capacity to influence organizational mechanisms.

Following this perspective, Gordon, Di Tomaso (1992) argue that different performance levels in financial intermediation could be explained by different forms of organizational cultures and the combination of different key characteristics of culture.

Peters, Waterman (1982), studying the more frequent characteristics of successful firms, find that sharing basic values is a condition for performance improvement as it implies less coordination efforts.

Wilkin, Ouchi (1983) argue that the presence of "clans" and a considerable involvement of individuals in the performance of different tasks could be at the root of superior results compared with bureaucratic and power-based organizations.

Even Denison (1990) observes that the development of shared cooperative values within an organization could improve a firm return on investments and, in general, the corporate performance.

These effects of culture can be explained in terms of minimization of transaction costs and of maximization of individual motivations that result from sharing strong values and norms. Moreover, culture can be considered an informal control tool, based on social mechanisms (Berger, Luckmann, 1967). While formal control requires behavioural rules, codified procedures, and organizational routines, informal control is based on the observance of some type of norms and values, and for this is the reason why it is considered less expensive and more effective (Van Maanen, 1991).

Corporate culture could increase the effectiveness of the allocation of firm resources owing to a few key elements that succeeds in addressing individual efforts towards common goals (Carretta, 2001).

In short, Van den Steen (2004) observes that cooperative culture entails: i) increasing delegation mechanisms; ii) improving control mechanisms; iii) improving coordination mechanisms.

Moreover, with reference to increased individual efforts and motivation, it should be specified that the same culture could have different meanings for different people and, at the same time, it could generate commitment and efforts but also resistance and opposition to changes, with negative repercussions on performance (Weick, 1995).

In view of the above, it is important to analyze the type of involvement that derives from culture within an organization. On the one hand, there is a formalized involvement that, resorting to formal rules and

mechanisms, is unable to reflect collective values. On the other, there is a spontaneous involvement that, based on shared norms and rules, is the real expression of the corporate culture.

Another perspective, founded on the resource-based view of firms, considers the indirect linkage between culture and firm performance (Wilderom, Van den Berg, 2000).

Surveying the personnel of 58 local banking firms owned by one of the largest financial institutions in the Netherlands, they find that leadership is one of the elements that, influenced by culture, could explain performance.

Even Pennings, Lee, van Witteloostuijn (1998) argue that a firm culture is indirectly related to the firm performance and assume the existence of a relationship between human and social capital and differences in performance.

Siehl, Martin (1990) suggest that culture might affect financial performance through such variables as productivity, quality control, turnover or absenteeism and, implicitly, they recognize that culture does not provide a direct explanation of performance.

As regards this subject, Pettigrew (1979) observes that culture is a component of a much more complex system of relationships that views human agents playing a key role in the explanation of a firm performance.

However, the development of a real theory on the effects of culture is hindered by different problems: to-date, the literature lacks a generally accepted definition of culture, and the want of commonly accepted corporate culture measurement methodologies makes it hard to study its linkages with a firm performance.

In this sense, Van den Steen (2004) argues that it could be a superior performance that generates cohesion around a homogeneous cultural context rather than the other way around.

Moreover, studying the effects of corporate culture, Barney (1986) argues that forms of linkages with performance may only be possible if culture is rare, imperfectly imitable, non-substitutable and valuable. The main limit implicit in these conditions is that they are very difficult to operationalize.

Aware of these limits, we focus on a few dimensions that reflect special attitudes of corporate culture: power orientation (Hofstede, 1980; Denison, Mishra, 1995; Carretta, Farina, Schwizer, 2005); result orientation (Hofstede, Neuijen, Ohayv, Sanders, 1990) and human resource orientation (Wilderom, Van den Berg, 2000). Power-orientation in corporate culture pertains to the modalities of the organization, in

terms of propensity to share and cooperate, or in terms of importance of the hierarchy and according to individualistic criteria (Harrison, 1975). The result-orientation represents the relevance attached by the organization to the achievement of results. The human-orientation views the human resource contents as an explicit part of the organizational culture construct (Quinn, 1988; Gordon, Di Tomaso, 1992).

Moreover, this analysis refers the concept of culture to some important aspects of the banking industry. Consistently with Carretta, Farina, Schwizer (2005) and Martin (1992), a few aspects and themes of a firm, such as human resources policies, existing competences, ways to tackle competition, risk, disclosure and innovation, are related to a firm performance. We define each one of these representative concepts as a "key concept", and our study of corporate culture is based on them.

In assessing the relationship between corporate culture and bank performance, we measure bank performance by focusing on both profitability and shareholder value. We expect shareholder value creation or profit making to be fostered by a different corporate culture orientation. The shareholder value creation requires that the opportunity cost of invested capital be taken into consideration in any management decision, while profit may be made regardless of the risk involved in the bank activity. For example, banks may increase their profits by increasing the risk of their activities (e.g. providing poor quality loans or having a more aggressive security trading approach), while value-oriented banks would be concerned with the higher risk involved in these operations since shareholders may require a higher return so that the overall result may be a shareholder value destruction.

The power-oriented corporate culture is based on hierarchy and individualistic criteria. A high level of corporate power orientation means the absence of shared cooperative values (Wilderom, Van den Berg, 2000) and involvement within an organization and is expected to be negatively related to bank profits and shareholder value. The result-oriented corporate culture represents the relevance attached by the organization to the attainment of results. In this case, an out-and-out result orientation is assumed to be positively related to bank profits, while it may be unrelated to shareholder value since a result-oriented corporate culture may lead managers to increase revenues regardless of the risks involved in the bank activities. The human-oriented corporate culture considers human resources as a fundamental part of the organizational culture construct (Quinn, 1988; Gordon, Di Tomaso, 1992). According to this culture orientation, Pettigrew (1979) argues that human agents are central in achieving high performance and, therefore, we expect the human resources of a bank to play a key role in achieving performance. This

orientation is assumed to be positively related to bank profits and, especially, to shareholder value creation.

Based on our theoretical assumptions, we investigate empirically the following hypotheses:

- **Hypothesis 1 (H_1):** There is a negative link between power-orientated bank corporate culture and profits.

- **Hypothesis 2 (H_2):** There is a positive link between result-orientated bank corporate culture and profits.

- **Hypothesis 3 (H_3):** There is a negative link between human-orientated bank corporate culture and profits.

- **Hypothesis 4 (H_4):** There is a negative link between power-orientated bank corporate culture and shareholder value.

- **Hypothesis 5 (H_5):** There is a weakly positive link between result-orientated bank corporate culture and shareholder value.

- **Hypothesis 6 (H_6):** There is a negative link between human-orientated bank corporate culture and shareholder value.

3. METHODOLOGY

This section describes the methodological approaches used in this paper. Firstly, it illustrates how we measure corporate culture, secondly, it explains how we measure bank's profits and the shareholder value created over a period and, finally, it debates the model for linking bank performance and culture.

3.1 Measuring a bank corporate culture

Corporate culture is measured focusing on language as its special artefact and carrying out a cultural survey based on the application of a text-analysis model in order to obtain its profiles and orientations. The study of corporate culture through language is a relatively new approach in economic literature that, originating from cultural anthropology - the study of human behaviours based on the interpretation of symbols and artefacts -, has never been applied in the case financial institutions. Language may be considered a peculiar symbol and artefact of culture and, in consideration of the linguistic-textual differences when examining diverse cultural contexts, is a useful tool to understand them.

Geertz (1973) analyses culture in "semiotic" terms and suggests that it "is not an experimental science in search of laws, but an interpretational science in search of meanings". He asserts the possibility of analysing social phenomena and organizational processes and behaviours by considering them as the symbols and artefacts typical of a cultural system.

Schein (1985) identifies language as an artefact of the corporate culture and claims that it is possible to analyse the different cultures through their vocabularies. Wuthnow (1989) claims that some linguistic categories and lexical expressions typical of a certain context allow the analysis of different corporate cultures, because their definition is closely related to the vocabulary developed inside them.

Lastly, DiMaggio (1997 and 2002) considers language the result of both social interaction and individual cognition. He maintains that, through the empirical analysis of written texts, it is possible to determine the cultural aspects of a language. This means that when the members of an organization use a term drawn from the vocabulary of their organization, what they are really doing is making reference to an individual cognitive representation transformed into organizational behaviours shared by and common to the organization to which they belong (Rosa, Porac, 2002). As regards the role of vocabularies (Berger, Luckmann, 1967) of linguistic categories, it is further specified that - although in certain contexts it is

(theoretically) possible to develop cultural categories even without a language - vocabularies play a very important role in their development and sharing (Levinson, 2003).

All this implies that the analysis of culture is closely connected with the analysis of the type of vocabulary used by the members of an organization, a vocabulary that is used in all the forms of communication, be they oral or written, produced internally by that organization. Therefore, the distinctive characteristics of every organization are reflected in the documents it produces, and the language being used may represent a key for their interpretation.

In other words, if the organization leaves traces of its particular characteristics in the documents it produces, then it is possible to resort to text analysis to observe and "measure" these traces and determine their cultural implications.

Based on this assumption, various surveys have been carried out in literature aimed at gaining an insight into a series of issues concerning corporate culture, including the search for the leadership characteristics within organizations (D'Aveni, MacMillan, 1990), the determinants of corporate reputation (Fombrun, Shanley 1990), the measurement of the intensity of orientation to "corporate social responsibility" (Wolfe, 1991), the classification of the types of organization based on the existence and intensity of certain cultural values (Kabanoff, Holt, 1996). These studies share two objectives: i) to provide representations of the contents of the corpus of texts; ii) to extract information, i.e. several properties, from the corpus of texts through quantity-based measurements.

Compared with previous studies, this paper focuses on an evolutionary aspect of text analysis, concerning standardization in the treatment of data, combined with the use of standard vocabularies. This allows a greater comparability of the output of the various studies, enabling us to refine the methodology of analysis even further. The analysis model includes the definition of several key concepts that are at the root of the development of a bank culture (Carretta, 2001).

The study of corporate culture, in terms of power orientation, result orientation and human resource orientation, is based on linguistic categories drawn from the Harvard IV Psychosocial Dictionary (Zuell, Weber, Mohler, 1989) and the Lasswell Value Dictionary (Lasswell, Namenwirth, 1969). The different intensity of these categories, expressed in terms of "orientations", characterizes each concept and allows us to compare the corporate culture with various benchmark contexts.

For the text analysis, we used the Wordsmith 4 software developed by the Oxford University (Scott 1999) and the empirical assessment has been phased out as follows (figure 1):

- definition of the sample of banks to be analysed and selection of the corpus to be analysed;

- analysis of the context "occurrences", in respect of the key concepts of the culture of banks (this analysis allows to obtain of lists of words making up a text, accompanied by the number of times in which they occur);

- comparison of the context occurrences and the language categories extracted from the Harvard IV Psycho – Social Dictionary and the Lasswell Value Dictionary;

- determination of the predominant cultural orientation and of the relevant intensity.

<<< INSERT FIGURE 1 >>>

3.2 Shareholder value

We measured the shareholder value created by European banks using the Economic Value Added (EVA) measure, EVA expresses the surplus value created by a company in a given period, i.e. the firm profit net of the cost of capital. This measure is computed as the product of the difference between the return on invested capital (ROIC) and its composite financing cost (i.e. cost of capital - CC) and the capital invested (CI) at the beginning of the period (t-1).

(1) $EVA_{t-1,t} = NOPAT_{t-1,t} - (CI_{t-1} * CC_{t-1,t})$

In order to move the book values closer to their economic values, various accounting adjustments are made. The first adjustment is standard for all kind of companies and relates to Research and Development (R&D) costs and training costs: these expenses are designed to generate future growth and, therefore, represent intangible investments. Current assets do not benefit from these expenses and it would be incorrect to reduce operating income by the amount of these expenses. However, accounting standards require companies to treat all outlays for R&D as operating expenses in their income statement. As a result, this accounting distortion can be corrected by: (a) adding back these expenses in calculating NOPAT; (b) capitalising all R&D expenses and training costs in capital invested; (c) amortising these

capitalised expenses over an appropriate period: for example, according to Stern Stewart's statistics[3], five years is the average useful life of R&D expenses. Hence, investments in intangibles are treated in the same manner as investments in tangible assets.

Even the second adjustment is standard for all kind of companies and relates to operating lease expenses. These costs are usually considered as operating costs in companies' cost-income statement. However, operating leases are disguised financial expenses since companies acquire a productive asset (and, therefore, finance their future production) by paying periodic rent (i.e. operating lease expenses). In order to face this conservative accounting practise, it seems advisable to: (d) capitalise any operating lease expense in calculating NOPAT; (e) treat the present value of expected lease commitments over time as capital invested in the firm; (f) amortise these capitalised expenses over an appropriate period[4].

The other adjustments account for banking peculiarities and therefore apply specifically to banks[5]. The third adjustment concerns loan loss provisions and loan loss reserves. The loan loss reserve is a reserve conceived to cover any future loan losses; this is the reason why it should be equal to the net present value of all future loan losses. In any single period, this reserve is reduced by net charge-offs (i.e. the current period losses due to credit risk) and replenished by loan loss provisions (i.e. the provision made in the current period to adjust the reserves both for pre-existing loans and for estimated future loan losses related to newly originated loans). This convention is certainly commendable from a management perspective since it implies that all loan losses are pre-funded out of current earnings. However, loan loss provisions are commonly used to manage earnings: if a bank achieves high operating returns, bank managers tend to overestimate this provision, while they tend to underestimate it if operating earnings are poor. This accounting practice introduces an important distortion in the bank performance analysis since it smoothes earnings. Business is risky, and the volatility of profits is a manifestation of this risk: for purposes of economic performance evaluation, smoothing earnings is inappropriate. In order to face this conservative accounting practise, it seems advisable to: (g) add back loan loss provisions and deduct the

---

[3] Stern Stewart publishes annually a performance report for the 1000 largest companies. (see Stewart, 1991). In this paper, these capitalised expenses are amortised every year (i.e. from 1995 to 99) using a proxy defined by dividing the overall amount of R&D expenses over the 1995-99 period for 5 years.

[4] Since data availability limitations do not allow us to evaluate the present value of expected lease commitments over time, the present value of expected future lease commitments capitalised (every year between 1995 and 1999) is assumed equal to the overall amount of operating lease expenses over the period 1995-99. The amount amortised every year (i.e. from 1995 to 99 approaches the overall amount of R&D expenses over the 1995-99 period for 5 years.

[5] These adjustments have been originally suggested by Uyemura, Kantor, Pettit, (1996).

net charge-offs in calculating NOPAT; (h) capitalise the net loan loss reserve as capital invested. These adjustments are intended to limit the opportunities open to management of smoothing accounting profits.

The fourth adjustment regards taxes. Many banks show significant and persistent differences between book tax provisions and cash tax payments. Since these differences are quasi-permanent, deferred taxes should be considered capital and, similarly to loan loss provisions, taxes should be considered current period expenses for purposes of economic performance evaluation. This accounting conservatism can be faced by: (i) adding back loan book tax provisions and deducting the cash operating tax; (j) capitalising the deferred tax credits (net of the deferred tax debits) as capital invested. Similarly to the adjustments for loan loss provisions, taxation adjustments are intended to limit the opportunities open to management of smoothing accounting profits

The fifth adjustment concerns restructuring charges. Over the last decade, many banks have carried out restructuring plans in order to improve their operating efficiency. To the extent that such restructuring charges represent disinvestments, these costs should be treated as a capital reduction rather than costs (and therefore reduce NOPAT). Data availability limitations do not allow us to evaluate the extent of real disinvestments due to restructuring charges; these costs are omitted when adjusting NOPAT and capital invested.

The sixth adjustment concerns the general risk reserve of banks. This adjustment aims to correct the distortions resulting from the "general risk reserve", a standard feature in Italian banking. This provision is a reserve that covers future generic loan-losses of a bank: in any single period, this reserve is reduced by net charge-offs (i.e. the current period losses) and replenished by general risk provisions (i.e. the provision made in the current period to adjust the reserve according to the bank risks). Similarly to the loan loss reserve, this convention is certainly commendable from a management prospective, but it is used in an opportunistic manner. This accounting practice introduces an important distortion in the bank performance analysis since it smoothes earnings. In order to face this conservative accounting practice, it seems advisable to: (k) add back general risk provisions and deduct the net charge-offs in calculating NOPAT; (l) capitalise the general risk reserve as capital invested. These adjustments aim at limiting the opportunities open to management of smoothing accounting profits.

As for the definition of capital invested, this cannot be not measured using total assets (as for a non-financial company) and, consequently, the cost of invested capital is not estimated as Weighted Average Cost of Capital (WACC). While this solution is certainly accurate for non-banking companies, this procedure would be misleading for commercial banks. Since financial intermediation is the core business for banks, debts should be considered as a productive input in banking rather than a financing source (as for other companies). Hence, interest expenses represent the cost for acquiring this input and, consequently, should be considered as an operating cost rather than a financial cost (as for other companies). As a result, if the capital charge is calculated following a standard procedure (i.e. applying WACC on total assets), EVA will be biased since it will double count the charge on debt. Hence, the charge on debt should be firstly subtracted from NOPAT (the capital charge is calculated on the overall capital – i.e. equity and debt - invested in the bank and, consequently, it includes the charge on debt) and, secondly, it should be subtracted from operating proceeds in calculating NOPAT: interest expenses (i.e. the charge on debt capital) are in fact subtracted from operating revenues. In the case of banks, it seems reasonable to calculate the capital invested (and, consequently, the capital charge) focusing on equity capital[6] and measure the capital invested in the bank as the book value of shareholder equity. As for the cost of capital, the capital charge cannot be obtained by applying the bank's WACC on the capital invested because the latter is given by the equity capital and not by the overall capital (debt and equity). Consequently, a commercial bank's cost of capital invested should be measured by the cost of equity[7]. To support this view, Sironi (1999) identifies four differences (labelled as "the separation principle", "banks as providers of liquidity services", "capital ratios", "off-balance sheet pro") between a bank's cost of capital and that of a non financial company, and observes "with a capital structure exogenously determined by regulators, a marginal cost of debt close to that obtainable from the interbank market, and relatively similar to that of all other major banks, and an array of products that do not need any debt financing, banks should look at their cost of equity capital as a key variable"[8]. The cost of equity (k^e) is estimated using the Capital Asset Pricing Model (CAPM) looking at the investors' expected return. In this framework, there are three inputs for estimating the cost of equity: 1) Risk Free Rate: following a

---

[6] Otherwise, it would be necessary to differentiated borrowed funds assigned to finance banking operations from those representing a productive input.

[7] This point is also supported by Uyemura D.G., Kantor G.C., Pettit (1996, p. 102) and Di Antonio (2002, p. 103).

[8] Sironi (1999, p.6).

standard procedure[9], this is estimated taking the annual rate of return of a long term Government Bond; 2) Equity risk premium: the modified historical approach proposed by Damodaran (1998) has been applied[10]. Equity Risk Premium is obtained by adding up a country premium to the case premium for mature equity markets, such us the US[11]. The country premium is obtained by adjusting[12] the country bond spread: the latter has been obtained by comparing European government bond rates[13] with the US MORGAN Government Bond return indices over the period analysed (January 1995 – June 2003); 3) Beta: these coefficients have been estimated using daily data on an annual basis by regressing the bank's share returns against stock market returns[14]. These regression Betas have been successively adjusted following the Bloomberg procedure[15]. Figure 2 summarises our EVA calculation procedure.

<<< INSERT FIGURE 2 >>>

3.3 Model

To assess the relationship between bank corporate culture and bank performance, we examine which of our three bank culture measures (namely, power-orientated culture, result-oriented culture and human-oriented culture) best explains variations in bank profitability and shareholder value created over the study period. We use the following two multivariate regression models estimated using the Full Feasible Generalized Least-Squares (FGLS)[16] approach:

---

[9] See, for example, Damodaran (1999).

[10] Fama and French (2002) propose a different model using dividend and earnings growth rates to measure the expected rate of capital gain and estimate the equity risk premium: this model was labelled Earning growth model.

[11] Regarding the U.S. risk premium, the estimation provided by Damodaran (1998) has been adopted: 6.10%.

[12] Since one would expect the country equity risk premium to be larger than the country default risk spread, the country equity spread is obtained by adjusting the country bond spreads as follows:

$$\text{Country Equity Risk Premium} = \text{Country Bond Spread} \otimes x \; \frac{\sigma_{equity}}{\sigma_{bond}}$$

Where: 1) the volatility of the equity market (σ_{equity}) has been estimated focusing on *CAC 40, DAX 30, MIBTEL storico, FTSE 100*; 2) the volatility of the bond market (σ_{bond}) has been estimated focusing on the French-, Italian-, German-, British- J.P. MORGAN Government Bond return indices.

[13] Namely, the French-, Italian-, German-, British- J.P. MORGAN Government Bond return indices.

[14] Namely, CAC 40 for France, DAX 30 for Germany, MIBTEL *storico* for Italy and FTSE100 for UK.

[15] Namely: Beta = Regression Beta (0.67) + 1.00 (0.33).

[16] We employ the Full Feasible Generalized Least-Squares (FGLS), estimated using the Prais-Winsten estimator, since we observe a first-order autoregressive process in the OLS estimation (see Greene, 1997). In addition, independent variables do not suffer from scale effects and, consequently, it is not necessary to deflate independent variables.

$$(2) \quad \pi_i = \sum_{i=1}^{n} \alpha_i T_i + \sum_{k=0}^{m} \beta_k Z_k + \delta R_i + \chi TA_i + \varphi C_i + e_i$$

$$(3) \quad \psi_i = \sum_{i=1}^{n} \alpha_i T_i + \sum_{k=0}^{m} \beta_k Z_k + \delta R_i + \chi TA_i + \varphi C_i + e_i$$

where π_i is the variable representing bank profitability over the period t (measured by the ratio of net income and total assets at time t-1[17]), ψ_i is the variable representing shareholder value created over the period t (measured by the ratio of Economic Value Added (EVA$_{bkg}$) and capital invested at time t-1[18]), T_i are time effects capturing the effect of period t which is common across individual bank observations, Z is a set of dummy variables capturing country effects (namely, France, Germany, Italy, and the UK), R is the bank net income at time t-1 standardised by total asset at time t-2 for bank i and TA is the bank total assets at time t-1 (these terms are included to control the problem of a self-selection bias, i.e. banks of good performance in the previous year and/or large banks are more likely to invest in projects that aim at improving their performance); C is our measure for the bank's culture and $e_{i,t}$ is the random error term and sub-indices i and t refer to the individual bank and the time period, respectively. Both models 2 and 3 are repeated three times according to the different orientations of a bank corporate culture: namely, power-oriented, result-oriented and human-oriented corporate culture.

The analysis of the estimated regression coefficients in models 2 and 3 enables us to test our hypotheses about the relationship between different attitudes in corporate culture and shareholder value. In detail, the following hypotheses are verified if:

- **H$_1$** (i.e. There is a negative link between power-orientated bank corporate culture and profits): ϕ is negative and statistically significant.

- **H$_2$** (i.e. There is a positive link between result-orientated bank corporate culture and profits): ϕ is positive and statistically significant.

- **H$_3$** (i.e. There is a negative link between human-orientated bank corporate culture and profits): ϕ is positive and statistically significant.

---

[17] We lag the capital invested term by one period assuming that it will take at least a year for capital investments to feed through into additional net income.
[18] We lag the capital invested term by one period assuming that it will take at least a year for capital investments to feed through into additional EVA.

- **H₄** (i.e. There is a negative link between power-orientated bank corporate culture and shareholder value): ϕ is negative and statistically significant.

- **H₅** (i.e. There is a weakly positive link between result-orientated bank corporate culture and shareholder value): ϕ may be positive and weakly statistically significant.

- **H₆** (There is a negative link between human-orientated bank corporate culture and shareholder value): ϕ is positive and statistically significant.

4. DATA AND RESULTS

Our data set comprises the largest 35 commercial banks in France, Germany, Italy and the U.K. between 2001 and 2003 with financial information obtained from Bankscope and (to identify quoted banks) Datastream databases. We focused on large commercial banks since we wanted to concentrate on a homogenous set of comparable banks in Europe in an attempt to reduce biases due to other business conditions. Descriptive statistics of banks in the sample are shown in Table 1.

<<< INSERT TABLE 1 >>>

Consistently with the other text analysis applications[19], the selection of the corpuses involved public documents, such as financial reports and presentations.

<<< INSERT TABLE 2 >>>

Table 2 shows the outcome of our investigation of the relationship between bank profitability and corporate culture. According to these results, none of our hypotheses about the relationship between bank profitability and corporate culture is verified: estimated regression coefficients for power-oriented and result-oriented corporate cultures are not statistically significant (even at the 10% confidence level) showing that there is no statistically significant link between these two culture orientations and bank profits. Not even the third hypothesis is verified; while we expected positive and statistically significant regression coefficients for the human-oriented culture, we find a negative and statistically significant one at the 5% confidence level. The results are at odds with theoretical expectations and, therefore, provide a substantial contribution to the existing literature since they provide evidence of the fact that large European commercial banks cannot influence their profitability by strengthening/weakening their hierarchy and individualistic criteria (i.e. changing their power orientation is not related to profit making) and by strengthening/weakening the relevance attached to the attainment of results (i.e. changing their result orientation). Our finding about a human-oriented corporate culture are even more surprising: while

---

[19] For example, Bowman, (1984); D'Aveni, MacMillan, (1990); Kabanoff, Waldersee, Cohen, (1995); Carretta, Farina, Schwizer, (2005).

one would expected banks to increase profits by considering their workforce as a fundamental part of the organizational culture construct, we find that bank profitability is negatively influenced by this culture orientation. This result may signify that bank investment in human resources are costly in the short run (reducing the profitability over the same period) and/or profits may be made in other ways than empowering human resources (e.g. by increasing risks in banking activities). In all models, the estimated regression coefficients for net income at time t-1 result positive and statistically significant, showing that the most profitable banks have an advantage in achieving profits in the following year (and that there would be a self-selection bias omitting to consider this variable in the analysis of the relationship between bank profitability and corporate culture).

<<< INSERT TABLE 3 >>>

Table 3 shows the outcome of our investigation of the relationship between shareholder value and corporate culture. According to these results, hypotheses 4 and 6 are verified. It turns out that there is a statistically significant (at the 10% confidence level) negative link between a power-oriented corporate culture and the shareholder value created over a given time period (H_1). Namely, if a bank was to increase the power-orientation of their corporate culture by 10% (e.g. by 20% to 30%), the ratio between EVA and invested capital would decline by 1.49% in the following year. We have found that the estimated regression coefficient for the human-oriented corporate culture is positive and statistically significant (at the 5% confidence level) showing that banks with a human-oriented capital have an advantage in creating EVA (H_6): namely, if a bank was to succeed in increasing the human-orientation of its corporate culture by 10% (e.g. by 10% to 20%), the ratio between EVA and invested capital would rise by 2.44%. As for hypothesis 5, the estimated regression coefficient for the result-oriented corporate culture is slightly negative and non-statistically significant (even at the 10% confidence level). This result lives up to our expectation that bank with a result-oriented culture have no advantage in creating shareholder value, as it shows that when a bank requests its workforce to attain considerable results in the short run, it is bound to assume higher risk and the overall result is a shareholder value destruction. In all models, the estimated regression coefficients for net income at time t-1 are found positive and statistically significant showing that the most profitable banks have an advantage in creating shareholder value in the following year (and

that there would be a self-selection bias omitting to consider this variable in the analysis of the

relationship between shareholder value and corporate culture).

5. CONCLUSIONS

Does banking culture affect shareholder value? The answer is affirmative although selectively. Banking strategies are paying greater attention to the use of culture as a potential for leading change and enhancing innovation. In order to promote strategic change and match short term with long-term goals, organization restructuring involves hard and soft value drivers. A flexible and eclectic culture, built on such values as human resources' motivation and satisfaction, broad communication flows and information sharing, which is pervasive through an open leadership style, is likely to support integration needs following growth processes and diversification strategies and to create a competitive advantage.

Nevertheless, the link between culture, profitability and value creation in the banking sector has been poorly investigated in previous studies. This paper represents an initial attempt to assess the impact of a few cultural dimensions on European banks and their performance, measured through both bank profitability and shareholder value. The three dimensions of corporate culture are operationalized through a text analysis model, which has been applied only few times in economic literature.

The contribution of this paper concerns three aspects: two relate to contents, with important implications for banking management, and one relates to method, fostering further research on the topic.

Firstly, the results show a link between culture and shareholder value, while cultural orientation does not influence, in the short run, the profitability of the panel banks. Corporate culture is therefore a value driver that banks have to control in order to achieve a strategic change. The link seems to be consistent also over short time periods, even if cultural changes could require several years to become effective.

Secondly, in the light of the achieved results, the "old" banking culture, driven by bureaucratic and mechanical organizational models, can represent a barrier to change that must be replaced by a culture that is both people-centered and cooperation-based. A result-oriented corporate culture has instead a negative effect on shareholder value, showing that considerable pressure on short-term performance may lead to higher risk, up to the shareholder value destruction.

Thirdly, from a methodological point of view, the study confirms the importance of text analysis as a technique to formalize a few aspects of culture in order to introduce that dimension in statistical models and assess its contribution to firm strategy and performance. Therefore, it is expedient to develop this line of study. This may be done by testing the former hypothesis on different cultural dimensions and applying the model in question to increasingly "internal" corpuses of texts and firm-specific documents, such as

circular letters and internal service orders, organizational regulations and other material reflecting the day-to-day performance of corporate activities, with a view to drawing the survey method closer to the characteristics peculiar to ethnographical studies of culture.

REFERENCES

AHMED A.S., MORTON R.M. SCHAEFER T.F. (2000), *Accounting conservatism and the valuation of accounting numbers: evidence on the Felthman-Ohlson (1996) model*, Journal of Accounting, Auditing and Finance vol. 15, pp. 271-292.

ALVESSON M. (1993), *Cultural perspectives on organizations,* Cambridge University Press, New York.

BARNEY J. (1986), *Organizational culture*, Academy of Management Review, vol. 11, n. 3, pp. 656-665.

BARTH M.E, BEAVER W.H. (2001), *The Relevance of the Value Relevance Literature For Financial Accounting Standard Setting: Another View*, Journal of Accounting and Economics vol. 31, pp. 3-75.

BARTRAM S. (2000), *Corporate risk management as a lever for shareholder value creation*, Financial Markets, Institutions and Instruments, vol. 9, n. 5, pp. 279-324.

BARTRAM S. (2002), *Enhancing Shareholder Value with Corporate Risk Management*, Corporate Finance Review, vol. 7, n. 3, pp. 7-12.

BAUER H.H., HAMMERSCHMIDT M., (2005). *Customer-based corporate valuation*, Management decision, vol. 43, n. 3, pp.331-348.

BECCALLI E., CASU B., GIRARDONE C. (2006), *Efficiency and Stock Performance in European Banking*, Journal of Business, Acconting and Finance, vol. 33, pp. 218-235.

BERGER P. L., LUCKMANN T. (1967), *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*, Anchor.

BIDDLE G.C., CHEN P., ZHANG G. (2001), *When capital follows profitability: non linear residual income dynamics*, Review of Accounting Studies, vol. 6, pp. 229-265.

BOWMAN E.H. (1984), *Content analysis of annual reports for corporate strategy and risk*, Interfaces, vol. 14, n.1, pp. 61-71.

BURNS T., STALKER G. (1961), *The Management of Innovation*, Tavistock, London.

BURT R. S., GABBAY S. M., HOLT G., MORAN R. (1994), *Contingent organization as a network theory: The culture performance contingency function*, Acta Sociologica, vol. 37, pp. 346-370.

CARRETTA A. (2001), *Il governo del cambiamento culturale in banca. Modelli di analisi, strumenti operativi, valori individuali*, Bancaria Editrice, Roma.

CARRETTA A., FARINA V., SCHWIZER P., (2005), *Banking regulation towards advisory: the "culture compliance" of banks and supervisory authorities,* paper presented at 5rd Annual Conference of European Academy of Management. Munich.

CHU S.F., LIM G.H. (1998), *Share Performance and Profit Efficiency of Banks in an Oligopolistic Market: Evidence from Singapore*, Journal of Multinational Financial Management, vol. 8, pp.155-168.

CUMMINGS J.D., LEWIS C.M., WEI R. (2004), *The market value impact of operational risk events for U.S. banks and insurers*, Paper presented at the Conference "Implementing an AMA for Operational Risk", Federal Reserve Bank of Boston, May 18-20, 2005.

DAMODARAN A. (1999), *Applied corporate finance*, John Wiley & Sons, inc, New York

D'AVENI R., MACMILLAN I.C. (1990), *Crisis and the content of managerial communication: A study af the focus of attention of top managers in surviving and failing firms*, Administrative Science Quarterly, vol. 35, n. 4, pp. 634-657.

DAVIS S. (2004), *Excellence in Banking Revisited*, Macmillan/Palgrave.

DECHOW P.M., HUTTON A.P., SLOAN R.G., (1999), *An empirical assessment of the residual income valuation model*, Journal of Accounting and Economics, vol. 26, pp.1-34.

DENISON D.R. (1990), *Corporate Culture and Organizational Effectiveness*, Wiley, New York.

DENISON D.R., MISHRA A.K. (1995), *Toward a theory of organizational culture and effectiveness*, Organization Science, vol. 6, n. 2, pp. 204-223.

DI ANTONIO M. (2002), *Creazione di valore e controllo strategico nella banca*, Bancaria Editrice, Roma

DIMAGGIO P. (1997), *Culture and cognition*, Annual Review of Sociology, vol. 23, n. 1, pp. 263-288.

DIMAGGIO P. (2002), *Why cognitive (and cultural) sociology needs cognitive psychology*, in Cerulo, Karen A. (Ed.) *Culture in mind: Toward a sociology of culture and cognition*, Routledge, New York.

EISENBEIS R.A., FERRIER G.D., KWAN S.H. (1999), *The Informativeness of Stochastic Frontier and Programming Frontier Efficiency Scores: Cost Efficiency and Other Measures of Bank Holding Company Performance*, Federal Reserve Bank of Atlanta, Working Paper n. 99-23.

FAMA E.F., FRENCH R.K. (2002), *The Equity Premium*, Journal of Finance , vol. 57, pp. 637-659.

FELTHMAN G., OHLSON J.A. (1995), *Valuation and clean surplus accounting for operating and financial activities*, Contemporary Accounting Research, vol. 11, pp. 689-731.

FERNÁNDEZ A.I., GASCÓN F., GONZÁLEZ E. (2002), *Economic Efficiency and Value Maximization in the Banking firms*, Paper presented to the 7th European workshop on Efficiency and Productivity Analysis, Oviedo, Spain.

FERNÁNDEZ P. (2002), *EVA, Economic Profit and Cash Value Added do not measure shareholder value creation*, University of Navarra, IESE, Research paper n. 453.

FIORDELISI F., MOLYNEUX P. (2006), *Shareholder value in European Banking*. Palgrave-Macmillan, London, U.K.

FOMBRUN C., SHANLEY M. (1990), *What's in a name? Reputation building and corporate strategy*, Academy of Management Journal, vol. 33, n. 2, pp. 233-258.

GARVEY G.T., MILBOURN T.T. (2000), *EVA versus earnings: doe it matter which is more highly correlated with stock returns ?* Journal of Accounting Research, vol. 38, pp. 209-245.

GEERTZ C. (1973), *The interpretation of cultures*, Basic Books, New York.

GORDON G.G., DI TOMASO N. (1992), *Predicting corporate performance from organizational culture*, Journal of Management Studies, vol. 29, pp. 783-798.

HANSEN G.S., WERNERFELT B. (1989), *Determinants of firm performance: The relative importance of economic and organizational factors*, Strategic Management Journal vol. 10, pp. 193-206.

HARRISON R. (1975), *Understanding Your Organization's Character*, in *Harvard Business Review On Management*, Harper & Row, New York.

HERSKOVITS M.J.(1955), *Cultural Anthropology*, Knopf, New York.

HODGSON G. M. (1996), *Corporate Culture and he Nature of the Firm*, in John Groenewegen (Ed.), *Transaction Cost Economics and Beyond*, Kluwer Academic Press, Boston.

HOFSTEDE G. (1980), *Cultures consequences: International Differences in Work Related Values*, Sage Publications, Beverley Hills.

HOFSTEDE G., NEUIJEN B., OHAVY D.D., SANDERS G. (1990). *Measuring organizational cultures: A qualitative and quantitative study across twenty cases,* Administrative Science Quarterly, vol. 35, pp. 286-316.

HOLTHAUSEN R.W., WATTS R.L. (2001), *The relevance of the value-relevance literature for financial accounting standard setting*, Journal of Accounting and Economics, vol. 31, pp. 3-75.

KABANOFF B., HOLT J. (1996), *Changes in the espoused values of Australian organizations 1986-1990*, Journal of Organizational Behavior, vol. 17, n.3, pp. 201-219.

KABANOFF B., WALDERSEE R., COHEN M. (1995), *Espoused Values and Organizational Change Themes*, Academy of Management Journal, vol. 38, n. 4, pp. 1075-1104.

KAPLAN R.S., NORTON D.P. (2004), *Organizational Capital: Leadership, Alignment, and Teamwork*, Balanced Scorecard Report, Harvard University Press, Cambridge.

KOTTER J. R, HESKETT J. L (1992), *Corporate Culture and Performance*, Free Press, New York.

LASSWELL H.D., NAMENWIRTH Z.J. (1969), *The Lasswell Value Dictionary,* Yale University Press, New Haven.

LAWRENCE P., LORSCH J. (1967), *Organisation and Environment: Managing Differentiation and Integration*, Harvard University Press, Cambridge.

LEVINSON S. (2003), *Language and mind: Let's get the issues straight!* in Gentner D., Goldin-Meadow S. (Ed.), *Language in mind,* MIT Press, Cambridge.

LIU J., OHLSON J.A (2000), *The Feltham-Ohlson (1995) Model: Empirical Implications*, Journal of Accounting, Auditing and Finance vol. 15, pp. 321-331.

LO K., LYS T. (2000), T*he Ohlson Model: Contribution to Valuation Theory, Limitations, and Empirical Applications*, Journal of Accounting, Auditing and Finance, vol. 15, pp. 337-367.

LOVEMAN G.W. (1998)**,** *Employee Satisfaction, Customer Loyalty, and Financial Performance: An Empirical Examination of the Service Profit Chain in Retail Banking*, Journal of Service Research, vol. 1, pp. 18 – 31.

MARTIN J. (1992), *Cultures in organizations: Three perspectives*, Oxford University Press, New York.

Morel M. (1999), *Multi-lagged specification of the Ohlson model*, Journal of Accounting, Auditing and Finance vol. 12, pp. 147-161.

MOUSSETIS R.C., RAHMA A.A., NAKOS G. (2005), *Strategic behavior and national culture: the case of the banking industry in Jordan*, in Competitiveness Review, Summer-Fall.

O'HANLON J., PEASNELL K. (1998), *Wall Street's contribution to management accounting: the Stern Stewart EVA financial management system*, Management Accounting Research, vol. 9, pp. 421-444.

OHLSON J.A. (1995), *Earnings, book values, and dividends in equity valuation*, Contemporary accounting research vol. 11, pp. 661-687.

O'REILLY C.A., CHATMAN J. A. (1996), *Culture as Social Control: Corporations, Cults, and Commitment*, Researach in Organizational Behavior, vol. 18, pp. 157-200.

OTA K. (2002), *A Test of the Ohlson (1995) Model: Empirical Evidence from Japan*, International Journal of Accounting, vol. 37, pp. 157-182.

PENNINGS J.M., LEE K., VAN WITTELOOSTUIJN A. (1998), *Human capital, social capital and firm dissolution*, Academy of Management Journal, vol. 41, pp. 425-440.

PETERS T., WATERMAN R. (1982), *In Seach of Excellence*, Harper & Row, New York.

PETTIGREW A. (1979), *On Studying Organizational Culture*, Administrative Science Quarterly, vol. 24, pp. 570-581.

QUINN R.E. (1988), *Beyond rational management: Mastering the paradoxes and competing demands of high performance*, Jossey Bass, San Francisco, CA.

QUINN, R. E., MCGRATH, M. (1985), *Transformation of Organizational Cultures: A Competing Values Perspective*, in P. Frost (Ed.) *Organizational Culture*, Sage Publications, Beverly Hills, CA.

ROSA J., PORAC J. (2002), *Categorization bases and their influence on product category knowledge structures*, Psychology & Marketing, vol. 19, n.6, pp. 503-532.

SCHEIN E. H.(1985), *Organizational culture and leadership*, San Francisco: Jossey-Bass.

SCOTT M. (1999), *WordSmith tools*, Oxford University Press, Oxford.

SIEHL C., MARTIN J. (1990), *Organizational culture: A key to financial performance?,* in B. Schneider (Ed), Organizational climate and culture, pp. 125-140.

SIRONI A. (1999), *Estimating banks' cost of equity capital: evidence from an international comparison*, Quaderno NEWFIN, Università L. Bocconi, Milan.

SORENSEN J.B. (2002), The Strength of Corporate Culture and the Reliability of Firm Performance, Administrative Science Quarterly, vol.. 77, pp. 70-91.

STEWART B.G. (1991), *The quest for value*, Harper Business.

UYEMURA D.G., KANTOR G.C., PETTIT J.M. (1996), *EVA for banks: value creation, risk management and profitability measurement*, Journal of Applied Corporate Finance, vol. 9, n. 2, pp. 94-105.

VAN DEN STEEN E.J. (2004), *Culture Clash: The Costs and Benefits of Homogeneity*, Working paper.

VAN DER WIELE T., BOSELIE P., HESSELINK M. (2001), *Empirical evidence fort he relation between customer satisfaction and business performance*, Erasmus Reserahc instriture of Management, Report series, May, ERS-2001-32-ORG.

VAN MAANEN J. (1991), *The smile factory*, in P.J. Frost, L.F. Moore, M.R. Louis, C.C. Lundberg, J. Martin (Ed.), *Reframing organizational culture*, Sage, London.

WEICK K.E. (1979), *The social psychology of organizing*, Addison-Wesley Publishing, Reading, MA.

WILDEROM C., VAN DEN BERG P.T. (2000), *Firm culture and leadership as firm performance predictors: A resource based perspective*, Working Paper n. 2000-03.

WILKIN A.L., OUCHI W.G. (1983), *Efficient Cultures: Exploring the Relationship between Culture and Organizational Performance*, Administrative Science Quarterly, vol. 28, pp. 468-481.

WOLFE R.A. (1991), *The use of content analysis to assess corporate social responsibility*, in Post J. (Ed.), *Research in corporate social performance and policy*, JAI Press, Greenwich.

WUTHNOW R. (1989), *Communities of Discourse*, Harvard University Press, Cambridge.

ZUELL C., WEBER R., MOHLER P. (1989), *Computer Aided Text Classification for the Social Sciences: The General Enquirer III*, Mannheim: Zentrum Fur Methoden und Analysen.

Table 1 - Sample descriptive statistics (102 European commercial banks between 2001 and 2003)*

	Toatl Loans	Total Deposit	Total Assets	Return on Equity	Return on Assets	EVA on Invested Capital	Power Oriented corporate culture	Result Oriented corporate culture	Human Oriented corporate culture
Mean	17695.56	32100.81	52597.92	7.51%	0.52%	-1.10%	22.93%	35.37%	41.70%
Median	3216.90	4281.40	5876.20	5.81%	0.46%	-1.42%	23.21%	35.15%	41.70%
Std. Deviation	31144.07	68556.34	115751.67	5.80%	0.41%	3.44%	8.97%	7.13%	7.36%
Minimum	21.00	36.00	44.00	0.06%	0.00%	-10.05%	0.00%	17.65%	20.00%
Maximum	175187.00	335348.00	565367.00	27.88%	2.53%	8.63%	47.06%	55.56%	60.00%
Sum	1804947.00	3274283.00	5364988.00	765.71%	53.41%	-112.41%	2338.73%	3607.40%	4250.00%

* 30 British, 11 French, 30 German and 31 Italian commercial banks

Table 2 -The relationship between profits and corporate culture in European banks, respectively

$$\pi_{i,t} = \sum_{i=1}^{n} \alpha_i T_i + \sum_{k=0}^{m} \beta_k Z_k + \delta R + \phi C + e_{i,t}$$

Coefficients	Independent variables	Dependent variable Net income / Total Assets $_{t-1}$		
		(1) Power oriented Bank's culture	(2) Result oriented Bank's culture	(3) Human oriented Bank's culture
(Constant)	(Constant)	0.008*** (5.048)	0.007*** (3.446)	0.014*** (5.907)
α_1	Dummy variable for the year 2002 (T$_1$)	-0.003 (-0.107)	-0.013 (-0.116)	-0.004 (-0.144)
α_2	Dummy variable for the year 2003(T$_2$)	-0.051 (0.388)	-0.042 (0.372)	-0.061 (0.404)
β_0	Dummy variable for French commercial banks (Z$_1$)	-0.194 (0.084)	-0.216 (0.103)	-0.193 (-0.229)
β_1	Dummy variable for Italian commercial banks(Z$_2$)	-0.460 (0.005)	-0.478 (0.005)	-0.440 (-0.005)
β_2	Dummy variable for German commercial banks (Z$_3$)	-0.231* (-1.979)	-0.276** (-2.494)	-0.174 (-1.526)
δ	Net income at time t on Total Assets at time t-1	0.388*** (4.066)	0.372*** (3.943)	0.404*** (4.348)
χ	Total Assets at time t	-0.107 (-0.854)	-0.116 (-0.922)	-0.144 (-1.164)
ϕ	Bank's corporate culture	0.084 (0.863)	0.103 (1.131)	-0.229** (-2.364)
	Adjusted R-square	0.197	0.202	0.236

[*] In model (1), ϕ refer to Power oriented bank's culture at time t
       In model (2), ϕ refer to Result oriented bank's culture at time t
       In model (3), ϕ refer to Human oriented bank's culture at time t
The combined dummy effects for 2001 and UK commercial banks are incorporated in the constant term.
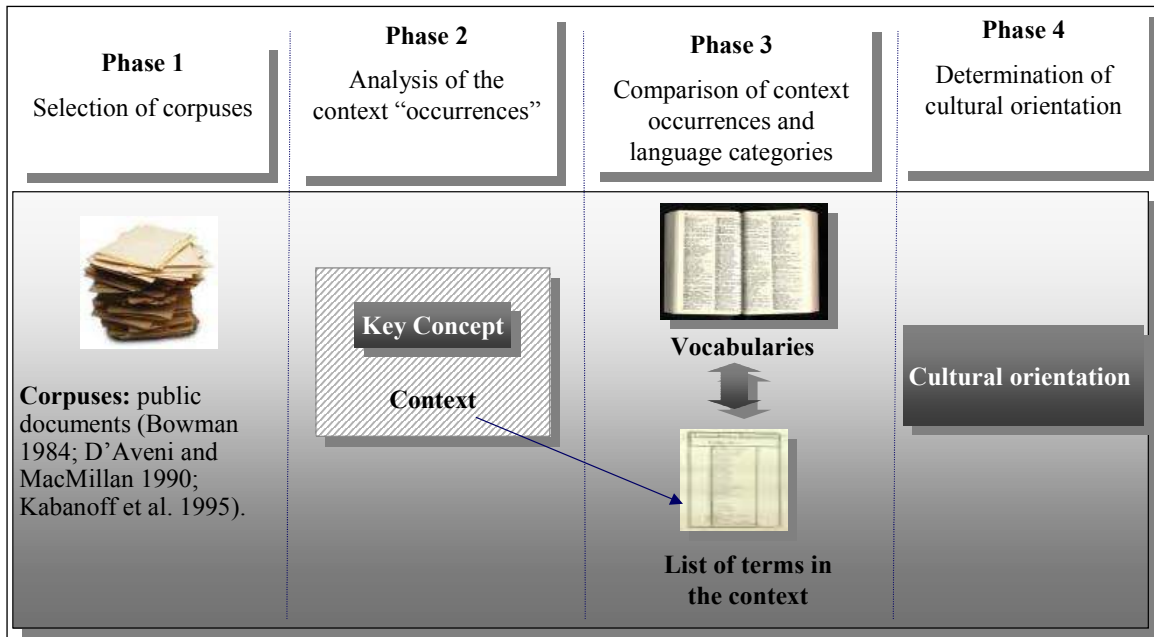
Table 3 -The relationship between shareholder value creation and corporate culture in European banks, respectively

$$\psi_{i,t} = \sum_{i=1}^{n} \alpha_i T_i + \sum_{k=0}^{m} \beta_k Z_k + \delta R + \chi TA + \phi C + e_{i,t}$$

Coefficients	Independent variables	Dependent variable(ψ) EVA / Invested capital$_{t-1}$		
		(1) Power oriented Bank's culture	(2) Result oriented Bank's culture	(3) Human oriented Bank's culture
(Constant)	(Constant)	-0.035** (-2.398)	-0.045** (-2.555)	-0.097*** (-4.328)
α_1	**D**ummy variable for the year 2002 **(T$_1$)**	-0.059 (-0.565)	-0.053 (-0.498)	-0.052 (-0.507)
α_2	**D**ummy variable for the year 2003**(T$_2$)**	0.073 (0.681)	0.065 (0.604)	0.080 (0.763)
β_0	Dummy variable for French commercial banks (Z$_1$)	0.209 (1.334)	0.236 (1.490)	0.217 (1.411)
β_1	Dummy variable for Italian commercial banks(Z$_2$)	0.333*** (2.729)	0.367*** (2.999)	0.335*** (2.811)
β_2	Dummy variable for German commercial banks (Z$_3$)	0.371*** (3.071)	0.455*** (4.106)	0.330*** (2.778)
δ	Net income at time t on Total Assets at time t-1	0.379*** (3.730)	0.380*** (3.676)	0.411*** (4.071)
χ	Total Assets at time t	0.097 (0.634)	0.097 (0.627)	0.150 (0.985)
ϕ	Bank's corporate culture	-0.149* (-1.673)	-0.033 (-0.347)	0.244** (2.325)
Adjusted R-square		0.196	0.167	0.212

[*] In model (1). ϕ refer to Power oriented bank's culture at time t
In model (2). ϕ refer to Result oriented bank's culture at time t
In model (3). ϕ refer to Human oriented bank's culture at time t
The combined dummy effects for 2001 and UK commercial banks are incorporated in the constant term.

Figure 1 – The four phases of our text-analysis method

| Phase 1 | Phase 2 | Phase 3 | Phase 4 |
| Selection of corpuses | Analysis of the context "occurrences" | Comparison of context occurrences and language categories | Determination of cultural orientation |

Corpuses: public documents (Bowman 1984; D'Aveni and MacMillan 1990; Kabanoff et al. 1995).

Key Concept

Context

Vocabularies

List of terms in the context

Cultural orientation

Figure 2 – Economic Value Added (EVA) for European commercial banks: our calculation procedure

$$EVA_{t-1,t} = NOPAT_{t-1,t} - (IC_{t-1} * K^e_{t-1,t})$$

Where: $NOPAT_{t-1,t}$ = EBIT (1 – tax rate) +
+ R&D Expenses
+ Training expenses
+ Operating Lease Expenses
+ Loan loss provisions – Net charge-off
+ Book tax provisions – Cash operating tax
+ General risk provisions – Net charge-off

IC_{t-1} = Book value of equity
+ Capitalised R&D expenses
+ Training expenses
– Proxy for amortised R&D expenses
– Proxy for amortised training expenses
+ Proxy for the present value of expected lease commitments over time
– Proxy for amortised operating lease commitments
+ Net Loan loss reserve
+ Deferred tax credits
- Deferred tax debits
+ General Risk Reserve