



Managers' workplace attitudes, tolerance of ambiguity and firm performance

The case of Greek banking industry

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Abstract

Purpose – The aim of the research is to investigate how managers' personal traits, emotions and attitudes shape their tolerance of ambiguity (TOA); and consequently, the influence of managers' ambiguity tolerance in organizations' financial performance.

Design/methodology/approach – Survey data were collected from 54 Greek banks. A total of 412 senior-level managers completed questionnaires examining TOA, personal traits, emotions and attitudes in the workplace. Principal components analysis and ordinary least-squares regressions were used to explore the hypotheses of the paper.

Findings – Three factors characterize managers' emotions in the workplace, namely pleasure, arousal and dominance; and, respectively, two factors their involvement, namely importance and interest. Further, *locus* of control, importance, job satisfaction, pleasure and organizational commitment critically affect managers' TOA, which, in turn, seems to influence positively organizations' profitability.

Research limitations/implications – Further research is required in Greek banking industry regarding the influence of managers' emotional and cognitive attributes in organizations' financial performance. Likewise, this research should be expanded to other industries.

Practical implications – The findings provide further support on the significance of emotional and cognitive attitudes in the workplace; the paper suggests policies to enhance managers' TOA, and thus, organizations' profitability.

Originality/value – The originality of this study lies in the finding that emotional and cognitive characteristics affect managers' TOA, which, in turn, influences significantly organizations' profitability. Another significant contributing factor is that the study is carried out in Greece, where few studies have been conducted in this area.

Keywords Attitudes, Emotions, Financial performance, Greek banks, Personal traits

Paper type Research paper

1. Introduction

If you don't like something, change it. If you can't change it, change your attitude
[. . .] – Maya Angelou.

The current business environment can be described as being in a continuous state of disequilibrium due to the intense competition, the complex consumer behavior,

The authors would like to thank the Greek banks administrations that facilitate the research and the managers for their participation.



the constant technological innovations and the increasingly greater globalization. Given such changing environmental conditions, managers' emotional and cognitive behaviour during complex and uncertain situations is a significant determinant of the overall success of an organization (Armenakis and Bedeian, 1999; Fiedler, 1996). In more detail, managers' tolerance of change uncertainty and ambiguity rises as a critical skill that may enhance organizations' quick responding and successful change (Nicolaidis and Katsaros, 2011; Sawyer, 1990). Nevertheless, several gaps remain in scholars' understanding regarding which workplace factors and attitudes actually affect managers' ambiguity tolerance and how firms may ultimately foster it. Additionally, there is a little consensus whether such actions (individual level) can influence positively and directly organizations' financial performance (organizational level).

The paper tries to address this theoretical gap by examining first, the influence of managers' personal traits, emotions and workplace attitudes in their TOA; and second, by investigating the influence of managers' ambiguity tolerance in organizations' financial performance. We chose senior level managers due to their major role in an environment where the rate and frequency of change increase (Wooldridge and Floyd, 1990) and their significant contribution to strategy implementation and organizational performance (Lee and Miller, 1999). Nevertheless, numerous researchers note the significance of the senior level managers' attitudes and perceptions for firms' performance (Bettis and Prahalad, 1995; Calof and Beamish, 1995; Hitt *et al.*, 2001; Suarez-Ortega and Alamo-Vera, 2005). Additionally, we chose banking industry because it constitutes the backbone of the Greek financial system and thus, it represents an exceptionally important sector for the "sick" Greek economy with extremely high change rates in terms of mergers, complexity, uncertainty, ambiguity and competition[1], [2].

2. Tolerance of ambiguity

TOA is a critical issue in personal development and individual performance, especially during uncertain economic times. That is, it represents the ability to accept complexity and lack of clarity as well as to be able to deal with this constructively. It is mainly defined as an individual's ability to respond positively to ambiguous situations (Teoh and Foo, 1997); and/or as a range of reactions to stimuli that are considered unfamiliar, complex, uncertain, or subject to multiple interpretations (McLain, 1993). The way an individual interacts with ambiguous situations (e.g. perceive, interpret, react, adjust) ultimately defines one's TOA level. More into the point, ambiguity tolerance is a variable that is often examined on a unidimensional scale. A person with low ambiguity tolerance experiences stress, reacts prematurely, and avoids ambiguous stimuli. At the other extreme, a person with high ambiguity tolerance perceives ambiguous situations as desirable, challenging, interesting and accepts their complexity or incongruity (Kirton, 1981).

In psychology and in management, levels of TOA are positively related to numerous personal, emotional, behavioral and working attitudes that may influence individual performance such as job satisfaction (Nicolaidis and Katsaros, 2011), organizational commitment (Judge *et al.*, 1999), creativity (Tegano, 1990), decision making (Wilkinson, 2006), critical thinking (Facione *et al.*, 1994), risk acceptance (Lauriola and Levin, 2001), emotional competences (George and Jones, 2001), entrepreneurship (Teoh and Foo, 1997) and effective leadership (Lane and Klenke, 2004). In this respect, individuals with TOA

consider several perspectives and opinions when looking at a problem and thus, they are able to find solutions that satisfy all the stakeholders. Overall, individuals' ambiguity tolerance is an extremely complex construct because it is affected by multiple personal variables such as perceptions, personality traits, emotions, values, attitudes (Benjamin *et al.*, 1996). The most important are presented below.

2.1 Personality traits, emotions and attitudes in the workplace

All of our behaviour is somewhat shaped by our perceptions, personalities, emotions, and experiences (Langton and Robbins, 2006).

Locus of control is a personal trait that refers to an individual's perception of the source of his or her fate (Langton and Robbins, 2006). Individuals with an internal *locus* of control (internals) believe that they control their destinies and thus, they are more likely to deal with a problem, once they come across it, during their effort to achieve a goal. On the other hand, individuals with an external *locus* of control (externals) believe that their lives are controlled by outside forces (e.g. luck, chance, destiny) and thus, they sense they have little control over their life (Rotter, 1975). A large amount of research has compared internals with externals. Internals exhibit greater performance when the work requires complex information processing, self motivation, initiative, independent action and offers incentive reward for greater productivity (Miner, 1992). In contrast, externals tend to be less satisfied and involved in their jobs, more stressed and anxious (Benassi *et al.*, 1988); and reluctant to take risks and work on self-improvement (Rotter, 1975). Within this context, Mamlin *et al.* (2001) suggest that generally managers appear to be more internals. Overall, managers with an internal *locus* of control seem to be more flexible, adaptable and emotionally competent. Consequently, the first hypothesis of the paper arises:

H1. Managers' *locus* of control is positively related to their ambiguity tolerance.

Emotions are generally viewed as key mechanisms that preserve personal values in ambiguous situations and signal the need for change (Lazarus, 1991). In this respect, emotions may intermediate as an adaptive mechanism during change by empowering employees (Nicolaidis and Katsaros, 2010). Literature suggests that positive emotions in workplace may enhance interpersonal collaboration and flexibility (Fredrickson, 1998); facilitate employees to set higher and more challenging personal goals (Locke, 1976); and thus, increase the level of ambiguity tolerance (Nicolaidis and Katsaros, 2011). Authors indicate that almost all emotions can be examined along a number of bipolar and independent dimensions. Literature suggests that the prevailing dimensions are pleasure, arousal and dominance – level of uncertainty (Russel and Mehrabian, 1974; Tiedens and Linton, 2001). Pleasure refers to a feeling that is felt to be different from preference, liking, positive reinforcement and approach avoidance (Bearden *et al.*, 1993). Most important, it is associated with objectives' fulfillment (Lazarus, 1991) and may enhance individual's urge to think, explore and expand personal boundaries and creativity (Fredrickson, 1998). Arousal is a feeling state that varies along a single dimension from sleep to frantic (Bearden *et al.*, 1993). As authors suggest, excessive arousal provoked by a high level of ambiguity may lead individuals to become reluctant to react (Liu and Perrewé, 2005) and initiate deterioration in cognitive performance (Kaufman, 1999). Thus, a moderate level of emotional arousal is likely to be associated with a high degree of ambiguity tolerance (Nicolaidis and Katsaros, 2011).

Dominance refers to the extent to which one feels unrestricted or free to act in a variety of ways during complex and ambiguous situations (Bearden *et al.*, 1993). It is positively related to job satisfaction, organizational commitment (Ashford, 1988), trust and organizational leaders' credibility (Schweiger and Denisi, 1991). On the whole, the dominance factor is determined by the level of ambiguity that any complex change engulfs. The above analysis signifies that pleasure arousal and dominance may influence TOA. Accordingly, it raises the second hypothesis of the paper:

H2. Managers' pleasure, arousal and dominance is positively related to their ambiguity tolerance.

Job satisfaction emphasizes on the task environment where an employee performs his/her work and the direct reactions to specific tangible aspects of the working environment (Mowday *et al.*, 1982). It is mainly defined as the emotional and cognitive attitude held by an employee about different aspects of his/her work (Wong *et al.*, 1998). More to the point, research has identified a positive relationship between job satisfaction and ambiguity tolerance (Wittenburg and Norcross, 2001) and suggests that job satisfaction plays a critical role in employees' acceptance of change ambiguity (Iverson, 1996; Lau and Woodman, 1995). Respectively, Wanberg and Banas' (2000) study showed that low levels of change ambiguity tolerance were associated with decreased job satisfaction and stronger intentions to quit. Overall, job satisfaction may facilitate managers' flexibility, adaptability and readiness to change. Therefore, it constitutes a significantly affecting factor of TOA. Consequently, one more hypothesis arises:

H3. Managers' job satisfaction is positively related to their ambiguity tolerance.

Organizational commitment is mainly examined in terms of workers' identification with the organizational goals (May *et al.*, 2002), and in terms of attachment and loyalty (Armstrong, 2001, p. 171). Generally, organizational commitment is defined as the relative strength of an individual's identification with and involvement in a particular organization (Mowday *et al.*, 1979). There is evidence that organizational commitment plays an important role in employee's acceptance of ambiguity in the workplace (Iverson, 1996). Relatively, Lau and Woodman (1995) argue that highly committed employees are more willing to accept organizational change ambiguity if it is perceived to be useful. That is, an individual committed to an organization accepts its values, is willing to exert effort on its behalf, and wishes to remain in the organization (Mowday *et al.*, 1979). However, they note that a highly committed employee may resist to change ambiguity if he/she perceives it as a threat for his/her own benefit or harmful to the organization. Further, relevant research in Greece indicates that motivated bank employees are more likely to exhibit greater job performance when they are committed, as a result of enforced HRM practices (i.e. organizational commitment acts as a mediator between work motivation and job performance; Trivellas, 2011). Concluding, every organizational change requires management's commitment since management's role is considered pre-eminent, essential and/or fundamental (Lascelles and Dale, 1990; Savolainen, 1998). Therefore, it emerges the following hypothesis:

H4. Managers' organizational commitment is positively related to their ambiguity tolerance.

Involvement is an employee's attitude regarding their willingness to support the organization even if additional time and effort are required (Madsen *et al.*, 2005).

Literature suggests that employees' involvement is a key component of organizational commitment (Eby *et al.*, 2000); relates to their cognitive support during change (Oswald *et al.*, 1994); may promote personal readiness for change (Armenakis *et al.*, 1993) and thus, enhance TOA. Scholars suggest that involvement can be examined along a number of bipolar dimensions that can be viewed as independent one from the other (Peter and Olson, 2002). Relevantly, McQuarrie and Munson (1991) support that involvement, can be examined by two prevailing bipolar dimensions namely, importance and interest. Importance refers to an important event, decision or problem that has a big effect or influence on people's lives or on future incidents (Longman Dictionary of Contemporary English, 2003). Relatively, Curren and Harich (1994) suggest that when individuals perceive an ambiguous situation as relatively important, they will transfer their own perceived feelings to the relevant event (i.e. managers will exhibit high involvement towards a change initiative). Interest concerns the personal interest that a person has in an event. Relatively, when someone is interested in an ambiguous situation, he/she will exhibit greater commitment, identification and involvement during its evaluation (McQuarrie and Munson, 1991). The above analysis signifies that managers' involvement may facilitate ambiguous situations appraisal and influence ambiguity tolerance. Consequently, two more hypotheses arise:

- H5. Managers' importance and interest is positively related to their ambiguity tolerance.
- H6. Managers' demographical characteristics; personal *locus* of control; emotions of pleasure, arousal and dominance; attitudes of job satisfaction, organizational commitment, and involvement; affect their ambiguity tolerance.

3. Organizational performance

Organizational performance has always been a controversial issue among organizational researchers (Barney, 1991). That is, it suffers from conceptual problems regarding its definition and measurement (Flood and Flood, 2000). Among else, it is defined as the organization's ability to attain its goals by using resources in an efficient and effective way (Daft, 2000) and it is linked with the well-known 3Es (economy, efficiency, and effectiveness; Mayne and Zapico, 1977). An alternative view suggests that performance should be broader by including effectiveness, efficiency, economy, quality, behavioral consistency and normative measures (Ricardo and Wade, 2001). According to Hansen and Wernerfelt (1984) there are two main streams of research on the determinants of organizational performance. The first stream is based on economic tradition and highlights the importance of external market factors (e.g. characteristics of the industry, organization's position relative to its competitors, resources' quality). Whereas, the second stream based on the behavioral and sociological paradigm, examines significant organizational factors (e.g. human resources policies, organizational culture, organizational climate, leadership style, job design, motivation; Chien, 2004). On the whole, the objectives of an organization may be financial (e.g. profit-making) or non-financial (e.g. customer service), thus organizational performance should be classified into two discrete categories, namely, financial and non-financial. The present paper focuses on organizations' financial performance.

Organizations' financial performance is widely measured through quantitative data that reflect its financial success in terms of profitability and efficiency

(Kotter and Heskett, 1992). These measures are nonbiased and particularly helpful for single-industry studies because of the uniformity in measurement across all organizations (Venkatraman and Ramanujam, 1986). In more detail, profitability is acknowledged as the most common measurement of financial performance in business organizations (Doyle, 1994); as the best indicator to identify whether an organization meets its financial objectives (Sinkey and Nash, 1993); and it reflects the effectiveness of the organization and managers' ability to increase sales while keeping the variable costs down (Davis *et al.*, 2000); Further, literature suggests that profit margin; return on assets (ROA) and return on equity (ROE) are among the most common measures of financial profitability (Robinson, 1982; Galbraith and Scendel, 1983). Relevantly, efficiency is defined as the outcome relative to the resources (Afonso *et al.*, 2005); is a predominantly quantitative indicator that refers to the productivity of tangible resources (Rey Garcia, 2008); and reflects the cost of producing a result in terms of resources or time required[3]. Further, authors propose efficiency ratio (Stannack, 1996); return on investment (ROI) (Farris *et al.*, 2010); and total asset turnover (Zane *et al.*, 2004) as common measures of organizational efficiency. Overall, no single measure of financial performance may fully clarify all aspects of the term (Doyle, 1994; Snow and Hrebiniak, 1980).

Although, it is widely accepted that managerial decisions and actions ultimately determine the long-run performance of a corporation (Wheelen and Hunger, 2001), there is a little consensus about the impact of individual-level factors to organizational performance. In the same vein, Schneider *et al.* (2003) propose that researchers' micro-orientation towards the job attitude-performance relationship is rather confusing. Within this context, Hitt *et al.* (2001) suggest that differences in firms' performances are due mainly to their unique resources and capabilities rather than structural characteristics of the industry. Thus, they claim that top executives and the leadership they provide are fundamental to the survival and performance of organizations. Initially, Argyris (1964), Likert (1961) and McGregor (1960) proposed that the way employees experience their work would be reflected in organizational performance. In the same vein, others researchers propose that certain individual-level factors (e.g. job satisfaction, commitment, motivation, citizenship behavior) positively affect organizational performance (Brewer and Selden, 2000; Kim, 2005). Within this context, Popovich (1998) links high-performance organizations with their employees' actual efficiency.

Further, change management literature suggests that with the acceleration of globalization and environmental dynamism, readiness to change (e.g. individual's attitude towards change; TOA represents its most significant dimension; Robbins, 2005) has a positive effect on firms' financial (i.e. profitability, costs) and organizational (i.e. efficiency, productivity) outcomes (Goldhar and Lei, 1995; Li, 2000; Li *et al.*, 2005; Rudd *et al.*, 2007; Tan and Peng, 2003). Further, empirical findings suggest that organizational members' ambiguity tolerance may influence positively their level of productivity (Tsirikas *et al.*, 2012). Similarly, other researchers claim that managers with high ambiguity/uncertainty tolerance may exhibit higher performance in new and complex situations (Jonassen and Grabowski, 1993; Sawyer, 1990); and in parallel, that their performance is a major determinant of the success of an organization (Fiedler, 1996; Thorlindsson, 1987). Thus, although a direct relationship between individual ambiguity tolerance and firm performance has not been fully demonstrated, the following hypothesis may arise:

H7. Managers' ambiguity tolerance is positively related to organizations' financial performance (profitability and efficiency).

4. Background of the research

Nowadays, Greek society is characterized by increased uncertainty, anxiety and insecurity as a result of the severe national economic crisis. Greece is required to slash spending, restructure large parts of its economy and take austerity measures to cut its bloated deficit and restore investors' confidence, in exchange for the €110 billion rescue plan funded by the International Monetary Fund (IMF), the European Union and the European Central Bank (23 April 2010). As a consequence, there are continuous strikes, rallies, work stoppages, protests and social conflicts. Further, according to the IMF, the Greek economy further shrank by 5.5 percent in 2011.

Regarding the Greek banking industry, the Annual Monetary Policy Report (Bank of Greece, 2011) noted that the banking system will face significant difficulties. That is, the total of non-performing loans have increased to €28 billion in 2010 (US\$37.8 billion) from approximately €18 billion in 2009 (US\$24.3 billion). Additionally, Greek savers have withdrawn deposits equal to more than €40 billion over the past year (about 14 percent of total deposits held in Greek banks) provoking to the Greek banks further funding problems (Financial Times, 15 April 2011). Further, it is estimated that during 2010 Greek banks have lost more than 53 percent of their capital stock value (Hellenic Bank Association, 2011). Most important, EU leaders decided a 50 percent haircut for Greek bond holders (26 October 2011; Greek banks hold \$62.8 billion in Greek debt). That is, for every €100, private investors are likely to get €15 in cash plus €35 in 30-year bonds with a 6 percent voucher in return for the debt. Within this context, Bank of Greece head Mr George Provopoulos told reporters after a meeting with the Greek President Mr Karolos Papoulias that:

[...] (Greek) banks are in a difficult phase because of the fiscal crisis. 2011-2012 will be a year of restructuring, mergers and cooperation [...] I believe that because of current conditions, it will not be long before mergers happen [...].

In any case, it should be noted that the extreme reliance on households debt (mortgage or consumer credit); the upcoming job cuts, disposals of non-core assets and sales of profitable banking networks in South-Eastern Europe; the intense structural transformations in the Greek banking industry (i.e. mergers and acquisitions) and overall, the unstable Greek economy; can potentially cause extreme ambiguity, intense uncertainty and painful organizational changes that may ultimately affect negatively Greek bank managers' overall performance.

5. Research

5.1 Purpose

Taking into consideration the severe Greek debt crisis, the importance of the banking industry to the Greek economy, the current difficulties that provoke intense changes, and the few relevant researches in Greece; the purpose of the research was first, to examine managers' personality traits, emotions and attitudes in the workplace; second, to investigate their influence on managers' TOA and finally, to examine the relationship between managers' TOA and organizations' financial performance. Hence, the following model aroused (Figure 1).

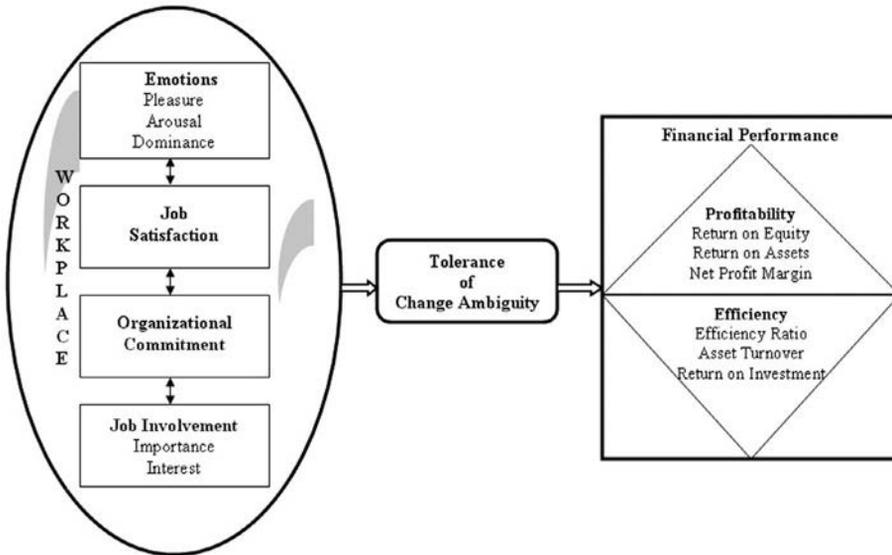


Figure 1. Research model

5.2 Methodology

The research was conducted, in close cooperation with Greek banks' administrations, the second semester of 2010. Survey data were collected from 54 Greek banks (i.e. 44 commercial banks, three investment banks, seven local co-operative banks). Their human resources departments proposed 741 senior level managers to participate in the research as key informants (i.e. in charge of or involved with their organizations' strategic decisions and implementations). Overall, a total of 412 senior managers replied to the structured questionnaires (response rate 55.6 percent). The "substantial" within-group agreement justifies the aggregation of the individual responses at the organizational level of analysis (Klein *et al.*, 1994). We calculated the rho-within-group (RWG) coefficient for this purpose, which estimates interrater reliability (on a scale of 0-1). The average value in this sample was 0.81, which indicates high level of within-group agreement (acceptable threshold is 0.70; Cohen *et al.*, 2001). The first two months a pilot test was conducted in order to examine the research's functionality. Further, for the purpose of our research we have created a relevant web page in order to receive data in electronic form. Consequently, we send a presentation of our research to all senior managers along with guidelines for the on line questionnaire. Throughout the research, we provided full support (i.e. personal meetings, phone or e-mail) to the senior managers. Table I summarizes the demographic characteristics of the participants in our research.

5.3 Measurement

Regarding the TOA measurement, we used the Tolerance-InTOA questionnaire developed by Budner (1962). The questionnaire includes 16 items and follows a scale from 0 to 100. A score between 44 and 48 is considered relevantly neutral, while scores below 44 indicate high tolerance to ambiguity and scores above 48 indicate a low one. *locus* of control was examined through the well known questionnaire developed by Spector (1998). The questionnaire includes 16 semantic different items scored on a 1-6 scale.

| MRR | | <i>n</i> | Frequencies (%) |
|---------------------------|-----------------------------------|----------|-----------------|
| 37,5 | | | |
| 450 | <i>Managers</i> | | |
| | Sex | | |
| | Male | 294 | 71.4 |
| | Female | 118 | 28.6 |
| | Age | | |
| | 25-34 years | 46 | 11.2 |
| | 35-44 years | 154 | 37.4 |
| | 45 + years | 212 | 51.5 |
| | Marital status | | |
| | Married | 342 | 83.4 |
| | Single | 68 | 16.6 |
| | Education | | |
| | Secondary | 72 | 17.5 |
| | University | 232 | 56.3 |
| | Master/PhD | 108 | 26.2 |
| | Working experience (pr. position) | | |
| | 1-5 | 160 | 38.8 |
| | 6-10 | 110 | 26.7 |
| | 11 + | 142 | 34.5 |
| | Total working experience | | |
| | 1-5 | 20 | 4.9 |
| | 6-10 | 26 | 6.3 |
| | 11 + | 366 | 88.8 |
| | Banks | | |
| | Public | 54 | 13.11 |
| | Private | 358 | 86.89 |
| | Firm life circle | | |
| | Initial | 2 | 0.5 |
| | Growth | 134 | 32.5 |
| Mature | 262 | 63.6 | |
| Decline | 14 | 3.4 | |
| Region | | | |
| Attica | 154 | 37.4 | |
| Central Greece | 118 | 28.6 | |
| Central Macedonia | 8 | 1.9 | |
| Crete | 12 | 2.9 | |
| East Macedonia and Thrace | 12 | 2.9 | |
| Epirus | 8 | 1.9 | |
| Ionian Islands | 6 | 1.5 | |
| North Aegean | 4 | 1.0 | |
| Peloponnese | 12 | 2.9 | |
| South Aegean | 20 | 4.9 | |
| Thessaly | 16 | 3.9 | |
| West Greece | 20 | 4.9 | |
| West Macedonia | 6 | 1.5 | |
| Cyprus | 16 | 3.9 | |

Table I.
Demographic
characteristics
of the sample

As far as the measurement of emotions in the workplace, we used the dimensions of emotions PAD questionnaire of Havlena and Holbrook (1986) (originally developed by Russel and Mehrabian, 1974). The PAD questionnaire is composed of 12 semantic different items scored on a + 4 to - 4 scale. There are three independent and bipolar dimensions

namely, pleasure, arousal and dominance which evaluate emotional attitudes. For the measurement of job satisfaction, we used the seven-item scale Michigan Organizational Assessment Questionnaire developed by Cammann *et al.* (1979), which contains a three-item overall satisfaction subscale (Spector, 1997). Regarding the measurement of organizational commitment we used organizational commitment questionnaire developed by Mowday *et al.* (1979) that is composed of 15 semantic different items, scored on a 1-7 scale. Finally, for the measurement of involvement, we used the McQuarrie and Munson's (1991) revised version of their revised personal involvement inventory (RPII). The questionnaire suggests that individual's involvement is based on the inherent needs, values and interests and it captures two independent and bipolar dimensions that appraise involvement namely, importance and interest (Bearden *et al.*, 1993).

For the measurement of organizations' financial performance we used six established accounting-based measures. In more details, we used three of the most important profitability indicators namely, ROE, ROA and net profit margin; and three widely used efficiency indicators namely, efficiency ratio, total asset turnover and ROI (McDonald *et al.*, 2008) (Table II).

Finally, regarding the control variables, we used five firm demographic characteristics (i.e. region, size, age, private/public and life circle) and five manager demographic characteristics (i.e. age, education, marital status, working experience in the present position and total working experience).

5.4 Results

We measure organizations' financial performance using a five year average return (2005-2010) rather than a return for a specific year (2010). We believe this provides a better measure of their ongoing performance because it helps to reduce short-term fluctuations due to temporary market conditions (e.g. liquidity conditions, inflation rates, non-performing loans, etc.). Organizations' balance sheet analysis examined their financial health (e.g. analysis of the assets, liabilities, equity), and revealed the severe financial reality that Greek banks experience in the current turbulent Greek economic environment (Table III).

Profitability

| | | |
|----------------------------|--|--|
| Return on equity (ROE) | Net income/ shareholder's equity | It measures an organization's profitability by revealing how much profit a company generates with the money shareholders have invested |
| Return on assets (ROA) | Net income/total assets | It measures how profitable an organization is with respect to its total assets; how efficient management is at using its assets to generate earnings |
| Net profit margin | Net income/ revenues | It measures how much out of every euro/dollar of sales an organization actually keeps in earnings |
| <i>Efficiency</i> | | |
| Efficiency ratio | Expenses/ revenues | It measures expenses as a percentage of revenue and analyzes how well an organization uses its assets and liabilities internally |
| Asset turnover | Revenues/total assets | It measures the amount of sales generated for every euro/dollar's worth of assets |
| Return on investment (ROI) | Net profit/ investment | It measures how efficiently an organization uses its capital to generate profit |

Table II.
Indicators of financial performance

Further, the descriptive statistical results revealed that the TOA index value is equal to 61.07. Thus, they reveal managers' significant intolerance of uncertainty and ambiguity in their business environment. Further, their *locus* of control degree is 3.97 (SD: 0.62) on a 1-6 scale. Hence, they consider that the upcoming evolutions depend more on their own behaviour and actions, rather than luck or chance. Additionally, managers' exhibit significant job satisfaction (mean: 5.55, SD: 1.07 – 1-7 scale) and organizational commitment (mean: 5.10, SD: 0.83 – 1-7 scale). Table IV summarizes the descriptive statistical results. Most important, two tailed *t*-tests regarding the mean value of the aforementioned factors and the mean value of their scale; suggest that there is a significant difference between them.

The principal component factor analysis results revealed three factors that constitute managers' emotions in the workplace. The three factors have eigenvalues greater than 1 and account for 77.65 percent of the total variance. These factors are:

- (1) pleasure (variance 54.21 percent);
- (2) dominance (variance 13.27 percent); and
- (3) arousal (variance 10.17 percent; one item was dropped due to low Crobach's coefficient α i.e. < 0.6).

High reliability also characterizes the three factors. The Crobach's coefficient α is 0.95, for the pleasure factor, 0.92 for the dominance factor and 0.64 for the arousal factor (moderate but acceptable level $\alpha > 0.6$ – see: Robinson *et al.*, 1991; Kerlinger and Lee, 2000). On the whole, managers' emotions are relevantly positive. The factor of pleasure, on a -4 to +4 scale, has a value equal to 0.17 (SD: 2.05); the factor of dominance has a value equal to 0.27 (SD: 1.88); and the factor of arousal has a value equal to 1.10 (SD: 1.21). Finally, the correlations among the three factors are in general medium to low degree ($0.496^{***} < r < 0.578^{***}$, $^{***}p < 0.01$) (Table V).

Table III.
Indicators of financial performance (average 2005-2010)

| | ROE (%) | ROA (%) | Net profit margin (%) | Efficiency ratio | Asset turnover | ROI (%) |
|------|---------|---------|-----------------------|------------------|----------------|---------|
| Mean | -0.50 | 0.41 | 3.10 | 0.95 | 0.06 | 3.18 |
| SD | 20.64 | 0.79 | 11.78 | 0.13 | 0.01 | 0.72 |
| Min. | -51.66 | -1.17 | -20.68 | 0.80 | 0.05 | 1.15 |
| Max. | 20.86 | 1.80 | 15.60 | 1.19 | 0.08 | -1.32 |

Note: Mean values (2005-2010)

Table IV.
Descriptive statistical results

| Index | Mean | SD | Scale | Coefficient α reliability | <i>t</i> -value | Managers |
|---------------------------|-------|------|-------|-------------------------------------|--------------------|-------------------------|
| Tolerance of ambiguity | 61.07 | 8.27 | 100-0 | 0.85 | 4.46 ^{**} | Low ambiguity tolerance |
| Locus of control | 3.97 | 0.62 | 1-6 | 0.74 | 2.08 [*] | Internal orientation |
| Job satisfaction | 5.55 | 1.07 | 1-7 | 0.73 | 3.18 [*] | Sufficiently satisfied |
| Organizational commitment | 5.10 | 0.83 | 1-7 | 0.83 | 2.77 [*] | Adequately committed |

Note: Significant at: ^{*} $p < 0.05$ and ^{**} $p < 0.01$

| Questions | I. Pleasure | II. Dominance | III. Arousal |
|---------------------|-----------------|-----------------|-----------------|
| CQ2 | 0.913 | | |
| CQ1 | 0.910 | | |
| CQ3 | 0.887 | | |
| CQ4 | 0.820 | | |
| CQ9 | | 0.866 | |
| CQ11 | | 0.847 | |
| CQ10 | | 0.841 | |
| CQ12 | | 0.805 | |
| CQ8 | | | 0.784 |
| CQ7 | | | 0.781 |
| CQ5 | | | 0.601 |
| Eigenvalue | 6.505 | 1.592 | 1.220 |
| Percent variance | 54.21 | 13.27 | 10.17 |
| Cronbach's α | 0.95 | 0.92 | 0.64 |
| Mean and SD | 0.17 \pm 2.05 | 0.27 \pm 1.88 | 1.10 \pm 1.21 |

Table V.
Emotions factor analysis results

The second principal component analysis results revealed two factors that describe managers' job involvement:

- (1) importance (variance 45.14 percent); and
- (2) interest (variance 18.36 percent).

The two factors had eigenvalues greater than 1 and accounted for 63.50 percent of the total variance. Further, high reliability characterizes the two factors. The Cronbach's coefficient α is 0.85 for the importance factor and 0.83 for the interest factor. On the whole, managers' involvement factors are considerably positive. The factor of importance, on a 1-6 scale, has a value equal to 5.66 (SD: 0.87) and the factor of interest has a value equal to 4.92 (SD: 0.99). Finally, the correlations between the two factors are in general medium to low degree ($r < 0.426^{***}$, $***p < 0.01$) (Table VI).

| Questions | I. Importance | II. Interest |
|---------------------|-----------------|-----------------|
| CQ3 | 0.829 | |
| CQ1 | 0.780 | |
| CQ2 | 0.779 | |
| CQ6 | 0.762 | |
| CQ10 | 0.746 | |
| CQ7 | | 0.818 |
| CQ8 | | 0.782 |
| CQ5 | | 0.744 |
| CQ4 | | 0.739 |
| CQ9 | | 0.691 |
| Eigenvalue | 4.514 | 1.836 |
| Percent variance | 45.14 | 18.36 |
| Cronbach's α | 0.85 | 0.83 |
| Mean and SD | 5.66 \pm 0.87 | 4.92 \pm 0.99 |

Table VI.
Involvement factor analysis results

5.5 Hypothesis testing

Ordinary least-squares (OLS) and stepwise regressions were run in order to examine the influence of managers' personality traits, workplace emotions and attitudes in managers' ToA and further, to investigate the relationship between managers' ToA and organizations' financial performance (profitability and efficiency). Regarding, the hypotheses of the paper.

On the one hand, *locus* of control emerged as significant predictor of ToA. That is, managers with internal *locus* of control exhibit significant tolerance towards ambiguity in their working environment ($b = -1.672^{**}$, $p < 0.05^{**}$) (*H1*). Similarly, the importance factor emerged as a significant predictor of ToA. Managers with high level of importance appear to have increased level of ambiguity tolerance in their working environment ($b = -2.395^{***}$, $p < 0.01^{***}$) (*H5*). On the other hand, organizational commitment is negatively related to ToA. Managers with high level of organizational commitment ($b = 1.139^{**}$, $p < 0.05^{**}$) exhibit intolerance towards ambiguity (*H4*). Finally, pleasure, arousal and dominance (*H2*) as well as, job satisfaction (*H3*) did not emerge as significant predictors of ToA.

Overall, one personality trait (i.e. *locus* of control), one emotion (i.e. pleasure), three attitudes (i.e. job satisfaction, organizational commitment and importance) and three demographical characteristics (i.e. age, marital status and education) emerged as significant predictors of managers' ToA (*H6*) (Table VII).

Further, three demographic characteristics emerged as significant predictors of ToA. Managers aged 35-44, singles, with significant educational background (e.g. Master or Phd), tend to have higher ToA.

Regarding *H7*, managers' ToA emerged as a significant predictor of organizations' ROA indicator (Table VIII). Thus, managers with high level of ToA appear to be more

| Variables | Dependent var.: ToA | | | | | |
|--|---------------------|-----------|-----------|-----------|-----------|-----------|
| | <i>H1</i> | <i>H2</i> | <i>H3</i> | <i>H4</i> | <i>H5</i> | <i>H6</i> |
| (Constant) | 67.711 | 60.991 | 62.790 | 55.328 | 70.653 | 75.816 |
| <i>Model variables</i> | | | | | | |
| Locus of control | -1.672** | | | | | -2.215*** |
| Pleasure | | 0.327 | | | | 0.614* |
| Arousal | | -0.132 | | | | |
| Dominance | | 0.221 | | | | |
| Job satisfaction | | | -0.309 | | | -0.895* |
| Organizational commitment | | | | 1.139** | | 3.686*** |
| Importance | | | | | -2.395*** | -1.042* |
| Interest | | | | | | |
| <i>Control variables (significant)</i> | | | | | | |
| Age 35-44 | | | | | | -2.528** |
| Marital status (single) | | | | | | -2.164*** |
| Education (Master) | | | | | | -2.461** |
| Education (PhD) | | | | | | -9.705** |
| <i>F</i> | 6.582** | 1.535 | 0.646 | 5.348** | 11.127*** | 4.564*** |
| <i>n</i> | 405 | 375 | 405 | 403 | 403 | 371 |
| <i>R</i> ² | 0.016 | 0.012 | 0.002 | 0.013 | 0.53 | 0.24 |

Table VII.
Regression analysis
results

Note: Significant at: * $p < 0.1$, ** $p < 0.05$ and *** $p < 0.01$

efficient at using organizational assets to generate earnings ($b = -1.878^{***}$, $p < 0.01^{***}$).

Figure 2 illustrates the factors that affect managers' TOA in the Greek banking industry and concurrently, the influence of managers' TOA in banks' profitability (ROA).

6. Discussion and implications

The research findings indicate that managers have low TOA in their working environment (ToA = 61.07). We assume that a possible cause is the national and business culture (norms and values). Hofstede (2001) research findings suggest, that within a sample of 56 nations, Greece has the highest uncertainty avoidance value (Greece: 112, nations mean average: 66.4; Anglo, Nordic, and Chinese culture countries exhibit low UAI). Uncertainty avoidance refers to a society's uncertainty and ambiguity tolerance; it ultimately refers to what extent its members feel either uncomfortable or comfortable in unstructured (unknown, surprising, different from usual) situations. Uncertainty avoiding societies are routine-oriented; adapt with difficulty to novel social and environmental evolutions and changes; and are less innovative (Shane, 1995). Further, consistent with the World Values Survey Cultural Map of the World

| Variables | ROE | ROA | Net profit margin | Efficiency ratio | Asset turnover | ROI |
|----------------|--------|-----------------------|-------------------|------------------|----------------|--------|
| (Constant) | 53.456 | 88.674 | 56.343 | 22.454 | 22.342 | 33.343 |
| ToA | 0.067 | -1.878 ^{***} | -0.454 | -25.674 | -51.056 | 10.445 |
| F | 1.243 | 4.564 ^{**} | 0.435 | 0.789 | 1.122 | 1.003 |
| n | 54 | 54 | 54 | 54 | 54 | 54 |
| R ² | 0.011 | 0.28 | 0.001 | 0.008 | 0.10 | 0.08 |

Note: Significant at: * $p < 0.1$, ** $p < 0.05$ and *** $p < 0.01$

Table VIII. Regression analysis results – H7

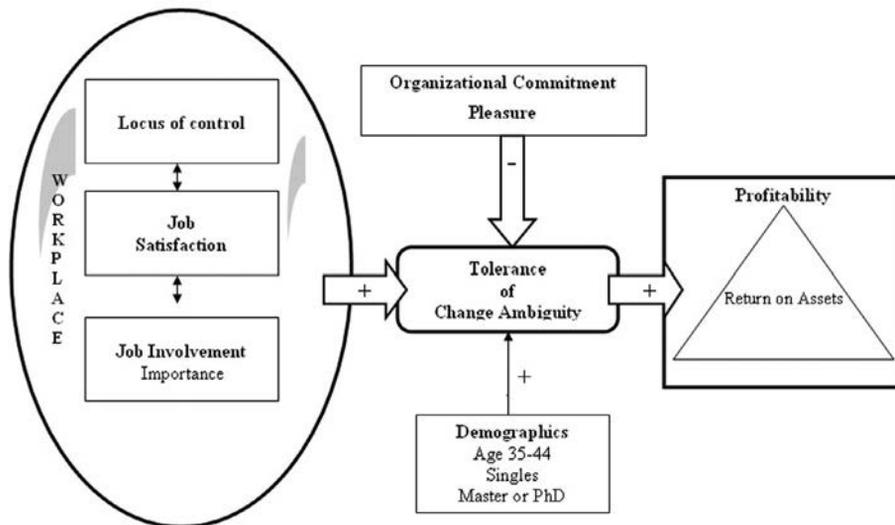


Figure 2. Greek banks' managers and financial performance

(Inglehart and Welzel, 2010), Greece has the 69th highest traditional/secular-rational value among 253 nations (Greece: 0.77, nations' mean average: -0.14). Traditional/secular-rational value characterizes societies that emphasize the importance of authority, absolute standards, and traditional family values; and concurrently, they value economic and physical security above all. Equally, other researches also support that high uncertainty (Adamides *et al.*, 2003; Nicolaidis, 1992) and ambiguity (Nicolaidis and Katsaros, 2011) intolerance characterize the culture of Greek firms in terms of risk evasion and change avoidance.

Within this context, according to Holland's (1997) occupational themes, we may also assume that bank managers have low TOA because of their actual occupation that values conservative views, reliability, consistency, and stability; and because of their quite conventional personality type. Middle-level bank managers seem to prefer highly ordered activities, do not seek leadership, feel comfortable working in a well-established chain of command, dislike ambiguous situations, and enjoy routine responsibilities/procedures (Holland, 1997).

The research also revealed a positive relationship between managers' age (35-44) and ToA. Likewise, Wiersema and Bantel (1992) suggest that younger senior managers are more likely to embrace strategic change and flexibility. Further, the findings stress that the managers with significant educational background (i.e. Master or Phd) exhibit higher tolerance to change uncertainty. Similarly, Wiersema and Bantel (1992) have suggested that a high level of education enhances a senior manager's receptivity to change in business strategy.

Most important, the research findings suggest that managers' TOA influence positively organizations' profitability (ROA indicator). In the same vein, it is suggested that the development of individual competencies is a priority for organizations that want to gain a sustainable competitive advantage (Vakola *et al.*, 2007). Hence, it is crucial for Greek banks administrations to further increase their managers' ToA degree. In our opinion, four main issues may contribute:

- (1) internal *locus* of control development;
- (2) increase of importance;
- (3) job satisfaction enrichment; and
- (4) influence of organizational commitment and emotion of pleasure.

In more detail.

The research findings, likewise Mamlin *et al.* (2001) revealed that managers have internal *locus* of control (ILOc) and also, a positive relationship between their ILoC and ToA. This provides further support to the international literature, which suggests that ILoC, may enhance performance in ambiguous situations (Begley and Boyd, 1987; Miner, 1992), flexibility and readiness to change (Benassi *et al.*, 1988). Thus, with respect to Nicolaidis and Michalopoulos' (2004) study on empowerment in Greek banks, we suggest that personal control (one of the five core dimensions of empowerment; Whetten and Cameron, 1995) may facilitate Greek banks administrations to increase their managers' ILoC. This could happen by applying a mix of the following three main practices:

- (1) fostering personal mastery experiences that may help managers to master experience over ambiguous challenges, problems or difficulties;

-
- (2) providing resources that refers to technical and administrative support to managers; and
 - (3) organizing teams that refers to managers' participation in teams to accomplish things beyond their personal abilities (i.e. share information, knowledge diffusion, formulation and choice of solutions which they can either implement personally or in cooperation with others).

Further, statistical results indicate that the factor of importance is positively related to managers' ToA. Respectively, theoretical and empirical studies suggest that it is impossible to influence ones' perception or attitude if he/she considers it as relevantly unimportant (Curren and Harich, 1994; Hague and Flick, 1989). Consequently, we argue, that Greek banks administrations should try to influence their managers' feeling of importance, by employing a collaboration/participation management style (Johnson and Scholes, 2002) that may:

- enable managers to act as a bond between senior management and employees during ambiguous situations by playing a variety of roles (e.g. role model, mentor, translator, instigator, guardian; Floyd and Wooldridge, 1994);
- employ job enrichment practices to augment managers' work incentives, feelings of significance and ultimately, raise their responsibilities and their abilities to evaluate ambiguity in their working environment (Hackman and Oldman, 1980); and
- establish formal processes of involvement development (e.g. reassuring managers, giving feedback, reducing close supervision, provoking compatibility between their values and organizational goals; Whetten and Cameron, 1995).

The paper suggests that managers' TOA can be further increased if they manage to empower their job satisfaction in their working environment. In a similar vein, literature suggests that job satisfaction is positively related to ambiguity tolerance (Nicolaidis and Katsaros, 2011). Thus, Greek banks administrations should:

- try to replace managers' negative emotions such as fear or anxiety with positive ones, e.g. excitement, passion, or anticipation that may influence ambiguity and make the work environment more attractive; and
- promote fair outcomes, treatment, and procedures in the workplace to develop trust and thus, further encourage their managers voluntarily engagement in behaviors that go beyond their formal job requirements (Langton and Robbins, 2006).

Additionally, our research has revealed a negative relationship between managers' ToA and their emotion of pleasure in the workplace as well as, their organizational commitment. As literature suggests, highly committed employees with positive emotions towards their current jobs may face ambiguity and uncertainty negatively if they perceive them as a threat for their own benefit or harmful to the organization (Mowday *et al.*, 1979; Vakola and Nikolaou, 2005). Consequently, we argue, that Greek banks administrations should try to influence their managers' emotional attitudes by delivering the right "message" to them (Armenakis and Bedeian, 1999). This "message" may address managers' TOA by emphasizing on changes' necessity, suitability and effective outcomes for them and the whole organization; as well as, by noting concurrently their continuous support to face it effectively.

Finally, it is worth noting that the research is subject to a series of limitations that mainly refer to the possible occurrence of the Hawthorne effect (Franke and Kaul, 1978). That is, the process where human subjects of a research change their behavior, simply because they are being studied. Additionally, there are no such earlier studies in order to evaluate the research findings through time. Further, in terms of methodology, since the data were collected through the use of a single survey at a single point in time, the results may be influenced by temporal and/or distinctive and/or unique settings. Further, indeed there are several others managerial abilities (e.g. leadership, motivation, interpersonal skills, technical skills, conceptual thinking) and performance indicators (e.g. return on sale, revenue growth, market share, stock price, sales growth, export growth, liquidity) that might have been used and need to be examined in the future. Nonetheless, it should be noted that further investigation needs to be conducted for the Greek banking and other industries, by examining concurrently other important perceptual, emotional and attitudinal variables (e.g. risk-taking, self motivation, emotional intelligence, organizational citizenship, trust, self-efficacy).

7. Conclusion

Nowadays, the increasing changes in the business and technological environment make the concept of ambiguity (i.e. complexity, insolubility and novelty) extremely critical. Within this context, the research findings note the importance of employees' perceptions, personality traits, emotions, and attitudes in the workplace. Further, they confirm that today tolerance for ambiguity and uncertainty is a major skill for leaders and managers that may positively affect individual and organizational performance. Thus, it is crucial for Greek banks to display greater concern for the role of their managers' emotional/cognitive behavior during ambiguous situations in an attempt to improve their financial performance.

Notes

1. The Bank of Greece, Report on Monetary Policy 2010-2011.
2. Highlights of the Greek Banking Sector, January 2011, Delloite S.A.
3. Glossary of United Way Concepts, 2006.

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