



Examination of Influential Factors Which Mitigate the Impact of Crisis on Employee Performance

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Abstract:

Organizations & employees in Greece are affected by the on-going financial crisis which has far-reaching negative impacts on many aspects of the economic life. This paper examines the impact of the financial crisis on employee performance in Greece. Data is collected from a heterogeneous sample of employees from public and private sector. Participants report their job satisfaction and organizational commitment, the change of their working conditions and the problems they have experienced during the last six years since the crisis has started. Results show that pay and extrinsic satisfaction, as

well as, job security and affective commitment are the factors influencing employee perception about the deterioration of working conditions. Furthermore, the findings indicate that employees in the public sector feel less satisfied with their payment, but equally insecure with private sector's employees. Permanent and open-ended contract staff, as well as, full time employees are more secure and satisfied with their payment and more affective committed than people with more flexible type of employment. The results of this study indicate that it is important for managers to develop management policies to improve employee satisfaction and commitment as these relate to performance increase.

Keywords: *job satisfaction, organizational commitment, crisis management, Greece.*

Introduction

Greek financial crisis that began in 2008 has far-reaching negative impacts on many aspects of the economic life. Organizations, employees and Greek society as a whole are affected by the on-going crisis. Intuitively, one expects the human capital to be significantly affected by a crisis. Specifically, employee performance, which is a crucial factor for the sustainability of a firm, can be determined by the severity of an economic crisis. Work-related behaviors, such as employee performance, productivity, creativity and turnover are influenced by job attitudes like job satisfaction and organizational commitment

(Jaros 2007, Judge & Kammeyer-Mueller, 2102, Judge et al. 2001, Markovits, Boer & Dick, 2013). Work related attitudes, like all attitudes, are not stable and can change due to external stimuli and social upheaval. Existing studies find that crises can have significant repercussions on work-related attitudes (e.g., Markovits, Boer, & Dick, 2013; Lee, Wang, & Ip (2011); Mehri et al., 2011).

The aim of this research is to study the influence of the Greek economic crisis on employee performance. More specifically, this study explores the extent to which the crisis can affect two of the most researched attitudes in



organizational behavior namely, job satisfaction and organizational commitment.

A review of the existing literature reveals that a number of studies examine Greek economic crisis and its impacts, while others explore the importance of work related attitudes. Only one research, Markovits, Boer & Dick (2013) examines the effect of the crisis on employee work related attitudes, but via changes in regulatory focus. This study contributes to the literature through the combined research of the direct effect of the Greek crisis on job satisfaction and organizational commitment six years after the onset of the crisis. To the best of the researchers' knowledge there is no other study to date which examines the effects of a crisis on work-related attitudes in a developed country.

This study uses data taken from questionnaires from an adequate sample of Greek employees (both from the public and private sector). The questionnaire was distributed through internet to a large number of employees. An adequate sample was gathered and the data thoroughly analyzed. The descriptive and inferential statistics reveal interesting findings.

Employee performance

Judge & Kammeyer-Muller (2012) define performance as “employee behaviors that are consistent with role expectations and contribute to organizational effectiveness” (p.357). In the literature, performance usually has two facets: in-role performance (known as task performance) and extra-role performance (known as organizational citizenship behavior or contextual performance). In-role performance is defined as the achievement of tasks that are required by the formal job description, while extra-role performance is defined as the behavior that goes beyond formal job requirements and is beneficial to the organization (e.g., helping colleagues at work, working extra hours) (Riketta, 2008). Judge & Kammeyer-Muller (2012) mention two more dimensions of performance: withdrawal/counterproductivity (behaviors that are reactions to dissatisfaction and that often go against organizational interests or rules) and creative performance.

Measuring employee performance is a difficult task. One method is employee self-evaluation, but the results may be subjective. The other method, which is more objective, is to collect the supervisors' assessment of the employee performance (Schleicher, Greguras & Watt, 2004). However, data of this kind are difficult to be obtained by a researcher because employers are not keen to provide data pertaining to their employee performance.

This study attempts to measure and evaluate employee performance by using the two most important job attitudes; namely, job satisfaction and organizational commitment. Both are well-documented factors determining behaviors such as employee performance, productivity, creativity and turnover (Jaros 2007, Judge & Kammeyer-Mueller 2102, Judge et al. 2001, Harrison, Newman & Roth, 2006, Markovits, Boer & Dick, 2013, Riketta, 2008). Harrison, Newman & Roth (2006) come to the conclusion that overall job attitude (i.e. job satisfaction and organizational commitment) is fundamentally important for understanding work behavior. Riketta (2008) highlights that the results of his meta-analysis provide some support for the common assumption that job attitudes influence performance. Judge & Kammeyer-Mueller (2102) note characteristically that if one wants to understand broad phenomena like overall total working conditions or job performance, broad attitudes such as overall job satisfaction and organizational commitment should be examined.

Job Satisfaction

According to Spector (1997:2), job satisfaction is defined as “how people feel about their jobs and different aspects of their jobs. It is the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs” (as cited in Markovits, Boyer & Dick, 2013).

The relationship between job satisfaction and job performance is one of the most well established research traditions in industrial-organizational psychology; it has been described as ‘Holy Grail’ of industrial psychologists (Judge et al. 2001). According to Judge & Kammeyer Mueller’s (2012) meta-analysis, there is indeed a

substantial relationship between job satisfaction and job performance. There are several studies that have investigated this relationship (e.g. Shore & Martin 1989, Riketta 2008, Judge & Kammeyer-Mueller 2012), while others treat them as separate variables with no direct relationship to one another (Greenberger et al. 1989, as cited in Judge et al. 2001). The present study bases its analysis on the premises that there is a strong link between job satisfaction and job performance. Job satisfaction comprises of two facets relating to the intrinsic and extrinsic characteristics of the job; intrinsic satisfaction and extrinsic satisfaction (Markovits, Boyer & Dick, 2013).

Intrinsic Satisfaction

Intrinsic job satisfaction indicates employee's satisfaction from the non-monetary, qualitative features of the work, such as creativity, opportunity to develop, ability utilization, feelings of personal achievement and accomplishment, etc. These aspects are internal to a particular work and are considered and felt individually and differently by each employee (Markovits, Davis & Van Dick, 2007). Judge & Kammeyer-Mueller (2012) emphasize that of the facets, satisfaction with the work itself (i.e. intrinsic satisfaction) has the strongest correlations with global measures of satisfaction.

During the economic crisis working conditions have drastically deteriorated. The austerity measures adopted by Greek governments have strongly affect employee income and job security notions, i.e. factors of extrinsic satisfaction (Markovits, Boer & Dick, 2013). The satisfaction derived from the work itself, i.e. intrinsic satisfaction, should not be influenced in a great level.

Hypothesis 1 (H₁): Intrinsic satisfaction is not a predictor of change in working conditions during an economic crisis.

Extrinsic Satisfaction

According to Zopiadis, Constanti & Theocharous (2013) extrinsic satisfaction is derived from external stimuli, such as remuneration, management policies, supervision, job security, etc. Markovits, Boer & Dick (2013) emphasize that during an economic

crisis, employment conditions deteriorate; the general frustration experienced should have an adverse effect on employee extrinsic satisfaction.

Hypothesis 2 (H₂): Extrinsic satisfaction is a predictor of change in working conditions during an economic crisis.

Pay Satisfaction

Pay satisfaction in one of the factors of extrinsic satisfaction. There are studies that focus specifically on employee satisfaction with organizational practices such as compensation.

Meta-analysis reveals that comparisons of one's own pay to others have very strong correlations with pay satisfaction, whether the target of comparisons is internal to the organization or external to the organization (Judge & Kammeyer-Mueller 2012).

The economic crisis and the measures that Greek governments have adopted mostly affect wage levels. Therefore, this study examines pay satisfaction as a separate variable.

Hypothesis 3 (H₃): Pay satisfaction is a predictor of change in working conditions during an economic crisis.

Furthermore, this research explores the way that pay satisfaction is influenced by the demographic variables.

Hypothesis 8 (H₈): Employee level of education does influence employee perception about pay satisfaction.

Hypothesis 9 (H₉): The employment status does influence employee perception about pay satisfaction.

Hypothesis 10 (H₁₀): The working sector that employees work in does influence their perception about pay satisfaction.

Job Security

During the last decades because of the increase in global competition and the rapid development of technology, the nature of work has dramatically changed. An impact of these changes is the increase of job insecurity. It has been argued that employees can no longer expect lifelong and safe employment relationships (Astarlioglu, Kazozcu & Varnali, 2011). Economic crisis has deteriorated this situation even more. Therefore, this study explicitly investigates job security as a separate

variable, although it is considered a facet of extrinsic:

4 (H₄): Job security is a predictor of change in working conditions during an economic crisis. Hypothesis 11 (H₁₁): The type of employment does influence employee perception about job security.

Hypothesis 12 (H₁₂): The employment status does influence employee perception about job security.

Hypothesis 13 (H₁₃): The working sector that employees work in does influence their perception about job security.

Organizational Commitment

The other important work-related attitude is organizational commitment. Judge & Kammeyer-Mueller (2012) define organizational commitment as “an individual’s psychological bond with the organization, as represented by an affective attachment to the organization, internalization of its values and goals, and a behavioral desire to put forth effort to support it.” (p. 349). It is commonly accepted that committed employees will also work harder and be more likely to put an extra effort to achieve organizational objectives (Meyer & Allen, 2004). Many studies have established relationships with other work-related attitudes and with behavior such as job performance and turnover (Markovits et al. 2010).

The three component model of commitment developed by Allen & Meyer (1990) undoubtedly dominates organizational commitment research. This model has been used by researchers to predict valuable employee outcomes such as citizenship behavior, turnover, absenteeism and job performance (Jaros, 2007). Commitment can be characterized by different mindsets: desire, cost and obligation, which are labeled as affective, continuance and normative commitment, respectively (Allen & Meyer, 1990).

Affective Commitment

Affective commitment is defined as the emotional attachment to the organization, the identification with and involvement in organization. Employees with strong affective commitment enjoy membership in the organization and remain in it because they want

to (Allen & Meyer, 1990). It appears that affective commitment is a better and more valid predictor of organizational behaviors such as absenteeism, citizenship and job performance (Jaros 2007, Judge & Kammeyer-Mueller 2012). Research consistently shows that employees, who have a high level of affective commitment, i.e. want to stay in the organization, tend to perform better than those who do not (low affective commitment) (Meyer & Allen, 2004). However, an economic crisis has negative effects on affections, resulting in a decline in employee affective commitment (Markovits, Boyer & Dick, 2013).

Hypothesis 5 (H₅): Affective commitment is a predictor of change in working conditions during an economic crisis.

Furthermore, affective commitment is affected by the various demographic variables.

Hypothesis 14 (H₁₄): The type of employment does influence employee perception about their affective commitment to their organizations.

Hypothesis 15 (H₁₅): The employment status does influence employee perception about their affective commitment to their organizations.

Continuance Commitment

Continuance commitment is related to the costs associated with leaving the organization. It has to do with the costs or investments an employee faces: these are the profits and losses that may occur should an employee stay or leave the organization (Markovits, Boyer & Dick, 2013). According to Meyer & Allen (2004) employees who have to stay mainly to avoid losing something valuable (e.g. benefits or seniority) frequently have no or little incentive to do anything more than is required to retain their job. Most of the times, high level of continuance commitment does not mean or lead to higher performance.

In time of economic crises continuance commitment is expected to increase, since the ‘sidebets’ are important and the alternatives are few. Therefore, the costs associated with leaving or losing a job could be harmful to the employee (Markovits, Boyer & Dick, 2013). Nevertheless, continuance commitment should not affect working conditions significantly, but it should be

influenced by demographic variables, such as working sector.

Hypothesis 6 (H₆): Continuance commitment is not a predictor of change in working conditions during an economic crisis.

Hypothesis 16 (H₁₆): Total years of employment do influence employee perception about their continuance commitment to their organizations.

Hypothesis 17 (H₁₇): The working sector that employees work in does influence employee perception about their continuance commitment to their organizations.

Normative Commitment

Normative commitment can be described as an obligation to stay in the organization for moral or ethical reasons, i.e. employees feel they ought to remain in the organization (Zopiadis, Constanti & Theocharous, 2014). Wiener (1982) (in Allen & Meyer, 1990) proposes that normative commitment can be influenced by the individual's experiences both prior to and following entry into the organization, i.e. the familial and cultural socialization and organizational socialization, respectively.

Markovits, Boyer & Dick, 2013 consider that normative commitment should not be affected by an economic crisis, both positive and negative, since it remains stable because it is a deeply rooted moral obligation. Nevertheless, should be a significant predictor of the change in working conditions.

Hypothesis 7 (H₇): Normative commitment is a predictor of change in working conditions during an economic crisis.

Judge & Kammeyer-Mueller, 2012 emphasize the importance of job attitudes "Job attitudes matter because job matter-to people's identities, to their health and to their evaluation of their lives". Two of the most important job attitudes are job satisfaction and organizational commitment. Researchers have shown that that these job attitudes have a significant influence on employee behaviors, such as turnover, absenteeism, citizenship behavior and particularly in job performance (Jaros 2007, Judge & Kammeyer-Mueller, 2102, Judge et al. 2001, Markovits, Boer & Dick, 2013). In the next

section is presented the impact of the economic crisis on these job attitudes.

Crisis and Employee Performance the Case of Greece

The term 'crisis' helps capture extraordinary phenomena which include among others pandemic viruses, volcanic ash clouds, oil spills, natural disasters, terrorist bombings, policy failures and institutional fiascoes. Crises are episodes which disorganize and threaten established patterns of operations and main assumptions about the way aspects of society and organizations operate. They can threaten lives, property, markets, public services, policy agendas and even governing paradigms (McConnell, 2011).

An organizational crisis is a high-impact event that put in peril the organization's survival and is characterized by ambiguity of cause, effect and means of resolution, as well as by a belief that decisions must be made promptly (Carmeli & Schaubroeck, 2008). Spillan & Hough's (2003) definition of crisis consider the crisis a turning point where firms' activities are at risk of abrupt deterioration hurting the sustainability of the firm itself. Moreover, they note that a crisis can test the capabilities of an organization's staff and its leaders. Carmeli & Schaubroeck (2008) highlight that crisis events are often critical turning points in a business's life that have a great impact on employees and their work. Bell & Blanchflower (2011) examine the effects of the financial crisis and the ensuing recession on world labor markets and conclude that crisis influence employment, personal approaches in life and attitudes to employment and work situations. According to Markovits, Boer & Dick (2013), economic crisis influence individual work related attitudes, such as satisfaction and organizational commitment which in turn have an impact on employee performance.

Evidence from Middle East and Asia indicates that crisis have negative effects on job motivation, security levels and job satisfaction. In particular, Lee, Wang & Ip (2011) find in their study that Taiwanese atypical workers (i.e. workers with low educational levels and with low incomes) have experienced due to the global

financial crisis an increase in the instability of their employment and a decrease in their job satisfaction. Mehri et al. (2011) conduct a research in Iran to find out the impact of financial crisis on the job security and motivation of employees working in the financial sector. Their findings suggest that the employees who worked before crisis and after crisis believe that the crisis has affected their motivation level in an adverse manner and feel that their job security has been significantly threatened. On the other hand, the employees having only post crisis job experience do not feel so insecure and have responded positively regarding job motivation and job security.

The study of Brockner et al. (1987) reveals that employees who managed to remain in their jobs after layoffs had lowered organizational commitment. According to Markovits, Boyer and Dick (2013) economic crisis would increase employee continuance commitment, while normative commitment should not have been significantly affected.

Financial crises disturb the way society and economy work and result in an unsteady and threatening environment. Attitudes are unsteady and can be easily influenced by the external environment (Judge & Kammeyer-Muller, 2012). Markovits, Boer & Dick (2013) argue that an economic crisis is a threat that influence to a great extent job attitudes, like job satisfaction and organizational commitment, which subsequently affect employee performance. Greece is in the middle of an ongoing crisis and is a suitable example to explore the impacts on these attitudes.

The case of Greek Economic Crisis

Greece is facing a difficult financial and debt crisis, which has caused steep increases in the unemployment rate, cuts in wages and pensions, and deterioration of the living and working conditions. The data derived from Hellenic Statistical Authority (EL. STAT. hereafter) are disappointing.

- Greece has the highest unemployment rate in Europe. In the 4th quarter of 2013 the number of unemployed amounted to 1.363.137,

increased by 1,3% compared to the previous quarter. The annual average rate of unemployment, displayed in Table 1, is 27,5% in the 4th quarter of 2013. A closer observation reveals that the highest unemployment rate is recorded among people in the age of 15-24 years (57%), while for young women this rate is 62,5%.

Table 1. Annual Average Unemployment Rate

2008	2009	2010	2011	2012
7,7%	9,5%	12,5%	17,7%	24,2%

- The seasonally adjusted Index of wages of the 4th quarter 2013 recorded a decrease of 9,3% compared with the corresponding index of the 4th quarter of 2012. Greece and Cyprus are the only countries that presented a negative annual variation (%) in the index of wages in the European Union.
- Statistics on income and living conditions revealed that in 2012, 23,1% of the total population was at risk of poverty, while 55,5% of the poor population declares having great difficulty in making ends meet with their total monthly income.

How the Crisis is Managed

Greece is in the middle of an ongoing financial crisis that unfolded in mid-2008. Since 2010 one austerity program follows another and the deliberations between Greek governments and the troika have been the cause of political and social turbulence in the country. According to

Kotios et al. (2011), Greek crisis' management has proven to be almost a complete failure. The main responsibility for the debt crisis rests with the Greek governments and their actions before and after the crisis (Kouretas & Vlamis, 2010, Kotios et al. 2011, Arghyrou & Tsoukalas, 2010).

At the beginning of 2010 the Greek government designed and adopted a fiscal consolidation program in order to reduce the public debt. The main elements of the austerity programs focused on: reduction on total salary payments to employees in the public sector, increase on

several types of indirect taxes, recruitment freeze in the public sector (Kouretas & Vlamis, 2010, Markovits, Boyer & Dick, 2013). Moreover, government imposed a number of measures focused on competitiveness, which targeted the private sector: reduction in statutory minimum wage, abolition of collective wage agreements and the liberalization of a number of professions (Christopoulou & Monastiriotis, 2014). Unfortunately, as Mitsakis (2014: 255) highlights “Greek government’s measures still remain sluggish or in a wrong way” causing a vicious cycle of depression and an even worse crisis.

In this hostile and unsteady environment Greek organizations struggle to survive. Employers and HR departments have to manage effectively all these changes and to increase productivity and performance while reducing costs. In the research of Epitropaki (2011) the findings are indicative: 43% of the investigated companies have dismissed employees, 15% have reduced salaries and a great percentage has reduced extra benefits (i.e. bonuses). More and more employers develop flexible employment status like part time and fixed term contract work (Mitsakis, 2014). Some are forced to change structure (for e.g., closure of departments, mergers or outsourcing). Although these changes may produce gains in the short term, in the long term they cause administrative incapacity, decrease in performance and productivity (Bouas & Katsimardos 2012). Bourantas & Papadakis (1996) argue that Greek HR delays the adoption of scientific methods and techniques and cannot reach a level of modernization that can assist managers in making the right decisions. Additionally, Theriou (2004) argue that most Greek organizations have a short term HR approach; however, recently at least the biggest corporations attempt to become HR long-term oriented.

The Impact of Economic Crisis in Greece

The economic crisis in Greece first started as a result of the global economic crisis and the crisis of the European financial system and subsequently resulted to a general financial, social, cultural and political crisis (Kotios et al,

2011). A research conducted by Epitropaki (2011) revealed that 52,4% of the investigated Greek companies have been negatively affected (8% of them dramatically) by the crisis, while the respective percentage in 2009 was 17%. The sectors that seem to be more affected are constructions, trade, tourism, services and the banking sector. Many of the Greek organizations cannot face competition in the modern world and remain stuck in the past (Mitsakis, 2014). The difficulties that Greek companies face have significant repercussions not only for private sector employees, but also for public sector employees. The impact of the crisis on the whole population is obvious through the drastic reduction of wages, the tremendous raise of unemployment rate, the closure of businesses and consequently the limited opportunities for employment (Markovits, Boer & Dick, 2013). The inequality of income distribution is rising and this is an important factor, since unequal societies are more likely to face dept crises (Berg & Ostry, 2011). The working conditions in Greece during the last six years have deteriorated in many ways, reduction in income, increase in working hours, delays in payment are some characteristic examples. The consequences are numerous; Greek employees are feeling depreciated, worthless, they lack zeal and desire to work and they have bad psychology due to stress.

One of the most significant impacts of economic crisis in Greece is the soaring unemployment rate. An increasing number of people are confronted with the danger of financial ruin. There is no formal system to help the unemployed train for other jobs and to re-enter the job market (Mitsakis, 2014). An alarming consequence of the insecure and unsteady Greek working environment is the rising emigration figure. A great number of young well educated Greeks are emigrating into other European countries in their attempt to find jobs with better remuneration and more qualifications. No wonder why Gallup surveys show that Greek citizens are the most pessimists in the world about their future (Manchin, 2012). Unfortunately, the latter is confirmed by the raise of suicides in Greece; according EL. STAT.

the number of suicides in 2012 was 508 increased by 36% compared to 2008.

How the Crisis should be Managed

When large sections of the population face such hardships, the result is dissatisfaction, desperation and increasing uncertainty, and this, in turn, be a vicious cycle lowering further productivity, and employee creativity and performance. Doing something and doing it quickly is imperative (Markovits, Boyer & Dick, 2013). Crisis management can provide the tools to both the companies and the government to overcome the difficult situation that the Greek economy faces. Crisis management requires that strategic actions are taken both to avoid unpleasant developments and to develop a desirable resolution to the problem (Burnett, 1998). Managers should develop organizational systems that are able to detect early warning signals and enable them to be better prepared for crisis events. The dynamics of crisis preparations may have positive results in the performance of a company. In addition, learning is a significant component of crisis management. A manager is important to recognize and establish new behavioral patterns deriving from learning through failures; and it is equally important to 'unlearn' previously learned behaviors (Carmeli & Schaubroeck, 2008). Healthy leadership is also a factor with great significance during crises, for both the organizations and the country. Leaders play a critical role in their companies since their actions affect personally and financially their organizations. The employees of the organization consider the leader as an example they should follow. As a result, morale, performance and loyalty can be highly influenced (Grant & Mack, 2004).

In the case of Greece, neither the Greek government nor many of the Greek companies were prepared and capable to deal with this economic crisis. According to Arghyrou & Tsoukalas (2010) Greek authorities failed to recognize the message from the markets and as a result no corrective action was taken. In order to reach a final resolution of the Greek crisis Mitsakis (2014) propose a serious effort to rebuild the country through reforms in almost all

levels of economy, society and politics. Kotios et al (2011) explain that attention must be paid to the external aspects of development (exports, foreign investments), as well as to the internal factors (favorable economic and political environment, utilization of public property). Finally, they articulate a reasonable question: how can the highly politicized state that led the country into bankruptcy manage the crisis?

Greek organizations should proceed in numerous changes to deal with the crisis. They need to upgrade human capital and exploit technology to restructure business processes. Bouas & Katsimardos (2012) suggest that HR strategy should promote a dynamic, adaptable and quality-oriented employment and service management. A promising finding of Epitopaki's research (2011) is that a number of Greek companies should try to use tactics that decrease costs and retain good working climate, such as internal promotions, internal talent exploitation, emphasis in moral appraisal and in communication, etc. For Markovits, Boyer & Dick, (2013) it is extremely important for managers to improve levels of morale by treating employees with respect, being fair and responsive.

Crisis may Produce Gains and Opportunities

Most people's first reaction in the question whether crisis may create opportunities or gains, is negative. Nevertheless, studies have shown that companies and people can experience positive transformation from a crisis. Burnett (1998) indicates that crises can also bring about possible gains, such as acceleration of changes, disclosure of latent problems, evolvment of new strategies and development of early warning systems. Clair & Dufresne (2007) explain the principle of 'changing poison into medicine' during crises. It is an attempt of the leader and the manager to turn the damage from a crisis into substantial learning and improved performance. A crisis offers the opportunity to reassert or reshape organizational mission, values and objectives. This can lead to positive outcomes, such as motivation of employee commitment and solidification of relationship

with costumers. Furthermore, crisis may lead to renovation of deep-rooted organizational structures; managers could rebuild the company so as to be more effective and efficient. Crisis may also provide the opportunity to gain insight into organizational vulnerabilities; organizational decisions that affect negatively individuals, communities or the environment, employees may be poorly treated, overworked and underappreciated. Crisis can reveal risks that managers and leaders had not recognized and also indicate behaviors that need to be changed. Clair & Dufresne (2007) provide useful advices for the companies, managers and leaders so that they can experience positive transformation from a crisis. Their conclusion is revealing: The way to hardiness is paved much before a crisis when an organization makes commitment to practices of personal transformation, interpersonal engagement and experimenting with learning procedures.

From the employee and Greek society's point of view, crisis generates only negative effects. But, despite the traumatic consequences, crisis may offer opportunities to people in similar ways with companies. Crisis can help people to reassert their values, to detect their vulnerabilities and to view their life from another perspective. It is an opportunity to reevaluate concepts like family, health, companionship and to pay more attention to really important aspects of life. Clair & Dufresne (2007) believe that experiencing a crisis can provide an invaluable opportunity to attempt new behaviors and habits which are crucial to future health, happiness, success and prosperity. Furthermore, increasing unemployment and working competition impel Greek people to be more competitive. More and more employees or unemployed attempt to enrich their knowledge and skills. They take language courses; attend seminars on subjects related or not to their current job and try to obtain a higher degree. Economic crisis is a threatening circumstance that has an impact on individuals' evaluation of their life and working conditions (Markovits, Boer & Dick, 2013). During the last six years Greece is facing the hardest ever economic crisis. Markovits, Boyer & Dick (2013) express an essential observation;

to deal with the crisis organizations should improve employee productivity and performance. The latter have been shown to be influenced by satisfaction and commitment and these are two factors that managers should pay attention to.

Methodology

Deductive approach

The deductive approach is most commonly accepted as typical of the 'scientific method' (Hayes, 2000). According to Bryman & Bell (2011), the researcher on the basis of what is already known about a particular subject deduces Hypothesis that must be subjected to empirical and critical examination. In this research the deductive approach is being used. One reason is that the deductive process seems to be very linear and one step follow the other in a clear, logical particular order (Bryman & Bell, 2011). The process of this study follows exactly the steps of the deductive approach, which allows the researcher to examine whether the predictions (Hypothesis) are confirmed when they are checked out in reality.

Quantitative research

According to Bryman & Bell (2011) the deductive method is associated with a quantitative research approach. The latter define quantitative research as a research strategy that highlights quantification in the collection and analysis of data and that entails a deductive approach to the relationship between research and theory and the emphasis is placed on the testing of theories. In the contrary, qualitative research can be defined as a strategy that emphasizes words more than quantification in the collection and analysis of data. It entails an inductive approach to the relationship between research and theory in which the emphasis is placed on the generation of theories (Bryman & Bell, 2011).

The characteristics of quantitative approach best fit with this study; more structured data collection techniques, emphasis on reliability and validity of measures used and relatively objective

results (Hair et al, 2011). Therefore, in this study the quantitative research is used in this study.

Case study

The term case study is commonly associated with a geographical location, such as a country, a workplace or organization. Bryman & Bell (2011) also highlight the difference of case study from other research designs; it is focus on a bounded situation or system, an entity with a purpose and functioning parts. There is a tendency to associate case study with qualitative research, but there are also numerous quantitative studies that use case study (Gray, 2014). This research uses the case study and specifically the instrumental which focus on using the case as a vehicle to understand a broader issue or allowing generalizations to be challenged (Bryman & Bell, 2011). This study uses the case of Greece as a vehicle to examine the impact of crisis in general on employee performance.

Primary and secondary research

The relationship of the researcher to the sources determine the nature of the data; whether they are considered primary or secondary. If the data were gathered by the researcher, are consider primary data. If the data were collected by one researcher but used by another, they are considered secondary data (Gray, 2014). There are several methods of primary data collection, such as face to face interviews, telephone surveys, questionnaires and electronic conversations over the internet (Hair et al, 2011). According to Bryman and Bell (2011) there are two main types of secondary analysis; the analysis of data collected by other people for commercial or research purpose and the analysis of official statistics, i.e. data collected by governments or other official institutions.

Primary analysis is mainly used in this research. All primary data are collected from questionnaires. Gay (2014) highlights the advantages of this analysis: primary data are collected for the purpose of the specific study and they are recent and more complete.

Furthermore, the researcher is more confident about their quality and their accuracy. Secondary

analysis is also used in this study, but to a small degree.

Data Collection

This research explores whether and in what way the recent crisis in Greece has affected employee performance. To do so, questionnaire responses from Greek employees have been collected. Daoutopoulos (2005) identifies some of the advantages of this kind of research method. First, the time and the cost required to gather the information is less comparing other methods. Second, statistical results using data collected from random sampling can be used for generalizations to the whole population. Finally, information from people who live and work in a wide geographical space can be gathered more easily. (Daoutopoulos, 2005)

The data had been collected through questionnaires during the period from January 2014 until March 2014. Participants are employees both in private and public sector and come from the geographical region of North Greece (Macedonia and Thrace). The questionnaire was designed using the Google Drive. The sample is random and for the distribution the method of snowball was used.

Questionnaire

According to Daoutopoulos (2005), a questionnaire is the mean for the successful gathering of data in sample surveys. There are several elements of a questionnaire which require the attention of the researcher; these are the form, the type of the questions, questionnaire's precheck, the participants understanding of the purpose of the study, the distribution and reminder.

Form of the questionnaire

The author of the questionnaire should categorize the questions in sections and place them in a logical sequence. Questions must be short, easy to be answered and drafted in a simple language (Daoutopoulos, 2005). The first section of the questionnaire in this study includes the demographic information. Participants have to indicate information about their gender, age, marital status, etc. Second section includes questions regarding job

satisfaction and especially job security: pay satisfaction, extrinsic and intrinsic satisfaction. Job satisfaction was assessed with items based on the Minnesota Satisfaction Questionnaire MSQ (1977), Markovits (2011) and Markovits, Boer & Dick (2013). In the third section, the questions pertain to organizational commitment, affective, continuance and normative. Organizational commitment, with emphasis in affective and continuance commitment, was assessed with items based on the TCM Employee Commitment Survey Users Guide (2004) by J. Meyer and N. Allen and Markovits (2011). The final section includes several questions regarding the crisis in Greece, working conditions, problems that Greek employees are facing and the techniques that Greek organizations have adopted to overcome the crisis.

Type of questions

The questionnaire includes three types of questions:

- open questions,
- multiple choice questions (with one or more answers),
- questions with an answering scale (a 5-point Likert scale was used with endpoints 1= 'completely disagree' and 5= 'completely agree')

Questionnaire's pre-check

After completing the draft of the questionnaire, it was sent by e-mail to ten carefully selected participants. This part is essential in order to ensure that the questionnaire is accurate and easy to be answered. The pre-check revealed that some questions were obscure and needed further clarification. Taking into account the participants' comments the questionnaires have been revised and amended accordingly. Two questions were rephrased and the required clarifications were given. The questionnaire was sent for a second check to five different selected participants. After the last reevaluation questionnaire was distributed to all participants.

A significant element of this research has been the distribution of the questionnaire to a large number and range of people. This was essential

in order to collect sufficient and representing data. The questionnaire was designed using the Google Drive. An e-mail containing the research link was sent to friends, family and colleagues. They were also encouraged to forward this e-mail to their family and acquaintances. The questionnaire was also distributed in printed form, in order to gather data from people, especially older, who are not familiar with internet. After two weeks a first reminder was sent to the sample. After one month participants were contacted via e-mail and telephone for a second reminder to reassure their participation. A total number of 203 correctly answered questionnaires are gathered (14 questionnaires were rejected because they were not properly completed). 176 of them were electronically answered and 27 were printed.

Limitations

The main limitations in data collection are two. The first is time. Because the questionnaires are collected for the research, the time period for answering the questionnaire was limited (two months). The second is the fact that the sample is not representative of the total Greek population. It would be impractical to gather an adequate sample from all over Greece and this is the reason why the region of Macedonia and Thrace is selected. This particular region can be considered representative because of the size and the population living there. The size of the sample used in this study is small; however, such sample sizes are typical in this strand of organizational research (Markovits, 2013).

Demographic Characteristics

The demographic characteristics of the sample are presented below. The sample consisted of 93 (45,8%) men and 110 (54,2%) women. The majority of the participants are 31-40 years old (40,9%), while 23,6% are 21-30 years old and 20,7% are 41-50 years old. 30% of the sample has a university diploma, while 28% have higher education. Public sector's employees participate with 39% and private sector with a percentage of 61%. The majority in the sample is full-time employees (84%) and permanent officials (45%). Regarding the type of employee employment's contract, most of them are permanent officials

(45%), but there is a sufficient number of participants with other types of working contracts. Finally, the majority of the sample works between 6 and 15 years (60%), as expected since most of the participants are 31-40 years old. It is noticeable that 32% of the participants work in the current organization for less than 5 years.

Descriptive statistics

Descriptive statistic is the first level of organizing and describing research's findings.

In this level a researcher organizes and describes data in order to have a first indication about their characteristics and there are no predictions or conclusions. (Roussos and Tsaousis, 2011).

Descriptive Statistics of Job Satisfaction

Questionnaire's second section taps into overall job satisfaction and also its facets job security pay satisfaction, extrinsic and intrinsic satisfaction. The descriptive statistics of these variables are presented in the following tables.

Table 2. Job Security

	completely disagree				completely agree	MEAN	SD	N
	1	2	3	4	5			
My job offers me safety and security	10,8%	21,7%	23,2%	34,5%	9,9%	3,11	1,177	203
The organization has a safe and secure future	15,3%	15,8%	40,4%	20,7%	7,9%	2,90	1,135	203

In the two questions above, the answers to which are presented in Table 2, participants are asked how safe and secure they feel in their work. In the first question, regarding job safety and security the mean was 3,11 while in the

second question the mean was slightly lower (2,9). It is noticeable that 40% of the responders are undecided and unaware about the future of their organization.

Table 3. Pay Satisfaction

	completely disagree				completely agree	MEAN	SD	N
	1	2	3	4	5			
The money I receive is fair concerning the work I offer	19,2%	35,0%	22,2%	20,7%	3,0%	2,53	1,109	203
The money I receive is similar to this offered for similar jobs by other companies	14,3%	27,1%	31,5%	21,2%	5,9%	2,77	1,116	203

Here the participants were asked to indicate the level of agreement or disagreement regarding to the pay they receive, taking into consideration the last six years (Table 3). The mean in both questions is low (2,53 and 2,77 for the first and for the second question respectively). In particular, more than 50% of the responders feel that the money they receive is not fair with respect the work they offer.

Extrinsic Satisfaction

Table 4 shows the results of the three questions, regarding three factors that affect extrinsic satisfaction: personnel policies, chances for promotion and relationship with co-workers. In the first two questions a relatively low mean is observed (2,8 and 2,7 respectively). These findings show that Greek employees are quite dissatisfied with the personnel policies and they

feel that they have few opportunities to be promoted and advanced. On the contrary, more

than 60% of the responders feel satisfied with the personal relationships with their co-workers.

Table 4. Extrinsic Satisfaction

	completely disagree				completely agree	MEAN	SD	N
	1	2	3	4	5			
The management's personnel policies are fair and equal for all employees	14,3%	29,6%	25,1%	24,1%	6,9%	2,80	1,162	203
The organization I work for offers me chances for promotion and advancement	17,7%	25,6%	31,0%	19,7%	5,9%	2,70	1,148	203
The personal relationships with my co-workers do not satisfy me (R)*	3,9%	12,3%	17,7%	36,9%	29,1%	3,75	1,115	203

Note: data have been reversed

Intrinsic Satisfaction

Table 5 presents the findings of the three questions regarding the factors that influence intrinsic satisfaction. The means here are relatively higher (3,5, 3,32, 3,27 respectively), when compared with the results of extrinsic satisfaction. More than 60% of the participants feel that their job helps them feel accomplished. In addition, more than 50% believe that in their work they have opportunities to use the skill they

possess. In the third question results are not so clear, because almost 45% of the participants feel that their job helps them raise their social status. The questions in the second section of the questionnaire concerned job satisfaction and the descriptive statistics are presented in the above four tables. A first evaluation of the results is not optimistic. The majority of Greek employees feel dissatisfied with the pay they receive and with the personnel policies that their management is using.

Table 5. Intrinsic Satisfaction

	completely disagree				completely agree	MEAN	SD	N
	1	2	3	4	5			
My job offers me a feeling of accomplishment	4,9%	13,8%	19,7%	49,3%	12,3%	3,50	1,036	203
My job offers me opportunities to use the abilities I possess	5,9%	19,2%	19,7%	47,8%	7,4%	3,32	1,053	203
My job offers me the chance to be 'somebody' in the community	3,9%	16,7%	35,0%	36,9%	7,4%	3,27	,960	203

Descriptive Statistics of Organizational Commitment

In the third section of the questionnaire organizational commitment is measured with the scales developed by Allen and Meyer (1990). The

descriptive statistics of the variables affective commitment, continuance commitment and normative commitment are presented in the following tables.

Table 6. Affective Commitment

	completely disagree				completely agree	MEAN	SD	N
	1	2	3	4	5			
I would be very happy to spend the rest of my career with this organization.	7,9%	19,2%	30,5%	28,1%	14,3%	3,22	1,149	203
I enjoy discussing about my organization with people outside it.	4,9%	15,3%	31,0%	38,4%	10,3%	3,34	1,019	203
I do not feel like 'part of the family' at my organization (R)*	4,4%	15,3%	22,7%	34,5%	23,2%	3,57	1,134	203
I really feel as if this organization's problems are my own.	8,9%	27,6%	24,1%	32,0%	7,4%	3,01	1,119	203

Note: *data have been reversed

Affective commitment indicates the degree to which employees remain at their current organization because they want to (Zopiadis, Constanti and Theocharous, 2014). Table 6 presents the descriptive statistics of our findings for the variable 'affective commitment'. Approximately 40% of the participants would like to stay in their current organization whose problems they feel as if they are their own. In addition, almost 50% of the responders enjoy discussing their company with people outside it. In the reversed question about the degree of 'belonging' in their organization, more than 55% answered that they do feel like they are 'part of the family'.

The results of the descriptive findings for the variable 'continuance commitment' are presented in the Table 7. For more than 60% of the participants staying with their company is a matter of necessity as much as desire. They also feel they have too few options to consider leaving their current workplace. More than 50% of the responders consider very hard to leave their organization right now, even if they wanted to. A disappointing finding, indicative of the intense feeling of uncertainty in Greek society, is the result of the third (reversed) question presented in Table 7. The vast majority of the sample, more than 75%, is feeling afraid of what might happen if they leave their job without having another one lined up.

Table 7. Continuance Commitment

	completely disagree				completely agree	MEAN	SD	N
	1	2	3	4	5			
Right now, staying with my organization is a matter of necessity as much as desire.	2,0%	9,9%	26,6%	42,4%	19,2%	3,67	,962	203
It would be very hard for me to leave my organization right now, even if I wanted to.	8,9%	14,8%	22,7%	36,0%	17,7%	3,39	1,195	203
I am not afraid of what might happen if I quit my job without having	4,4%	8,9%	11,3%	32,5%	42,9%	4,00	1,141	203

another one lined up (R)*								
I feel that I have too few options to consider leaving this organization	3,4%	19,7%	16,3%	34,0%	26,6%	3,61	1,174	203

Note: *data have been reversed

Normative commitment

Table 8 presents the descriptive statistics of the variable ‘normative commitment’. From this study's results we come to the conclusion that Greek employees do not really feel they should remain in their company because they feel obligated to their current employer. The results are close to the mean value and one in three

participants is undecided regarding the sense of obligation to their employers.

In conclusion, the research's findings indicate that the majority of Greek employees stay in their current employee not because they want to or feel obliged, but because they need to. The economic uncertainty and the unsteady working environment in Greece can explain this phenomenon.

Table 8. Normative Commitment

	completely disagree				completely agree	MEAN	SD	N
	1	2	3	4	5			
I do not feel any obligation to remain with my current organization (R)*	9,9%	26,1%	29,1%	21,7%	13,3%	3,02	1,188	203
I feel that I owe a great deal to my organization	14,8%	25,1%	29,1%	25,1%	5,9%	2,82	1,142	203

Descriptive Statistics of the section ‘Crisis in Greece’

In the final section of this section, the results to questions relating to the crisis in Greece are presented. The participants are asked several questions about the change in their working conditions during the last six years, about companies' actions as well as their actions for increasing competitiveness. In this section two open questions are also included where responders can express their opinion about what companies should do to deal with the crisis and what are the opportunities created by the crisis.

In the following tables the frequencies, the means and the standard deviations from the questions of the last section are reported.

In the first question of this section participants had to indicate the degree of their agreement or disagreement with the statement relating to their working conditions. This question is very important because the answers reflect the responders' opinion about the overall situation in Greece. It is indicative that only 8% of the responders believe that their working conditions have improved. The answer 2 ‘disagree’ gathered the larger percent 56,2% (Table 9).

Table 9. Working Conditions

	completely disagree				completely agree	MEAN	SD	N
	1	2	3	4	5			
According to your opinion, the working conditions in your job during the last six years have been improved?	10,8%	56,2%	25,1%	7,4%	,5%	2,31	,781	203

Table 10. Ways of Deterioration and Working Sector Crosstabulation

		Working sector						Total
		Private sector		Public sector		DEKO		
Ways of deterioration	Reduction in income count % within working sector	67	33,80%	67	51,10%	4	44,40%	138
	Increase in working hours without overtime pay count % within working sector	44	22,20%	24	18,30%	0	0,00%	68
	Increase in working hours with overtime pay count % within working sector	4	2,00%	2	1,50%	1	11,10%	7
	Delays in payment count % within working sector	32	16,20%	5	3,80%	1	11,10%	38
	Unpaid labor count % within working sector	10	5,10%	3	2,30%	0	0,00%	13
	Increase in job requirements count % within working sector	41	20,70%	30	22,90%	3	33,30%	74
Total		198		131		9		338

Note: Percentages and totals are based on responses

Questions 31a & 31b

These two questions were addressed only to the responders who believed that their working conditions have deteriorated. Here the participants could choose more than one answer. In these type of questions only frequencies can be calculated. In addition, crosstab tables are reported, as they appear to be the most appropriate for the presentation of findings from multiple response questions.

Table 10 shows the answers to the question relating to the ways that working conditions have deteriorated. The vast majority of the responders (82,6%) answered that one of these ways is the reduction in income. ‘Increase in job commitments’ and ‘Increase in working hours without overtime pay’ are the next two choices that gathered 44% and 41% respectively. The following crosstab table (Table 11) presents the findings of this question relating the working sector of the participants.

Table 11. Ways of Deterioration Frequencies

	Responses		Percent of Cases
	N	Percent	
Reduction in income	138	40,8%	82,6%
Increase in working hours without overtime pay	68	20,1%	40,7%
Increase in working hours with overtime pay	7	2,1%	4,2%
Delays in payment	38	11,2%	22,8%
Unpaid labor	13	3,8%	7,8%
Increase in job requirements	74	21,9%	44,3%
Total	338	100,0%	202,4%

Table 11 highlights some differences between the working sectors of the sample and especially between private and public sector. The 51% of the public’s sector employees have responded that reduction in income is one way that the deterioration of their working conditions

materialize, while the respective percentage in the private sector is 34%. In addition, 16% of the employees in the private sector face the problem of delays in payment when only 4% of the public servants face the same problem.

In question 31b participants who believe that their working conditions have deteriorated indicate what are the problems that they face (Table 12). Most of the responders (60%) consider bad psychology due to stress as a significant problem. Also, near 50% of the responders do not have zeal and desire for work and feel worthless, because of all these changes

in the working environment during the last six years.

The following Table 13 presents the cross tabulation of the problems from deterioration in working conditions and the sectors. It is noticeable that more employees in private sector (30%) are feeling lack of zeal and desire for work, while in the public sector the percentage is 19%. On the contrary, a greater percent of public servants (26%) are facing difficulties from deficiencies in logistics, when in the private sector the percent is only 5%.

Table 12. Problems from Deterioration and Working Sector Crosstabulation

		Working sector						Total
		Private sector		Public sector		DEKO		
Problems from deterioration	Feeling worthless count % within working sector	36	21,1%	42	24,4%	3	25,0%	81
	Lack of zeal and desire for work count % within working sector	52	30,4%	32	18,6%	2	16,7%	86
	Bad psychology due to stress count % within working sector	60	35,1%	35	20,3%	4	33,3%	99
	Deficiencies in logistics count % within working sector	9	5,3%	44	25,6%	2	16,7%	55
	Update problems count % within working sector	14	8,2%	19	11,0%	1	8,3%	34
Total		198		131		9		338

Note: Percentages and totals are based on responses

Table 13. Problems from Deterioration Frequencies

	Responses		Percent of Cases
	N	Percent	
Feeling worthless	81	22,8%	49,4%
Lack of zeal and desire for work	86	24,2%	52,4%
Bad psychology due to stress	99	27,9%	60,4%
Deficiencies in logistics	55	15,5%	33,5%
Update problems	34	9,6%	20,7%
Total	355	100,0%	216,5%

Questions 32 & 33

The next two questions provided interesting findings about the actions that companies have taken to deal with the crisis. Responders could choose more than one answer. Tables 14 and Table 16 presents the frequencies of these answers.

In Question 32 responders specify what their organization has done, in terms of remuneration, to deal with the crisis. Tables 14 highlights that the vast majority of the companies (73,5%) has reduced salaries. Layoffs were the second tactic (28%) that organizations have used to overcome their difficulties.

Table 14. Tactics Relating Remuneration Frequencies

	Responses		Percent of Cases
	N	Percent	
Salaries reduction	147	46,7%	73,5%
Layoffs	56	17,8%	28,0%
Voluntary retirement	49	15,6%	24,5%
Flexible forms of employment	38	12,1%	19,0%
No tactic	25	7,9%	12,5%
Total	315	100,0%	157,5%

Table 15. Tactics Relating Remuneration and Total Number of Company's Employees Crosstabulation

		Total number of company's employees								Total
		1-10		11-50		51-250		251 and more		
Tactics relating remuneration	Salaries reduction count % within total number of company's employees	19	38,0%	30	50,0%	8	36,4%	23	39,0%	80
	Layoffs count % within total number of company's employees	10	20,0%	14	23,3%	5	22,7%	6	10,2%	35
	Voluntary retirement count % within total number of company's employees	5	10,0%	0	0,0%	2	9,1%	22	37,3%	29
	Flexible forms of employment count % within total number of company's employees	6	12,0%	10	16,7%	5	22,7%	7	11,9%	28
	No tactic count % within total number of company's employees	10	20,0%	6	10,0%	2	9,1%	1	1,7%	19
Total		50		60		22		59		191

Note: Percentages and totals are based on responses

The above Table 15 shows a cross tabulation of the actions relating remuneration and the total number of company's employees. A significant difference is that large enterprises attempt to deal with the crisis using voluntary retirement (38%), when the percentage of the other categories is from 0 to 10%. On the contrary, layoff is a tactic used more often by small and medium sized companies (near 23%) and less by large enterprises (10%).

In Question 33 participants are asked about the actions relating to the structure, that their organization has done to deal with the crisis. As Table 16 presents, all the categories received an adequate percentage; 'mergers' received the highest (39%). It should be noted, however, that the answer 'No action' has received also a large percentage (39%).

Table 16 Actions Relating Structure Frequencies

	Responses		
	N	Percent	Percent of Cases
Closure of departments/divisions	74	28,7%	38,1%
Mergers	75	29,1%	38,7%
Outsourcing	34	13,2%	17,5%
No action	75	29,1%	38,7%
Total	258	100,0%	133,0%

Table 17 presents the actions relating to the structure that the companies have taken categorized according to staff headcount. It is indicative that these kinds of actions, such as closure of departments (37%) and mergers (32%) are undertaken by large enterprises. The vast majority of micro and small enterprises,

approximately 70%, have not chosen these methods.

Table 17. Actions Relating Structure and Total Number of Company's Employees Crosstabulation

		Total number of company's employees								Total
		1-10		11-50		51-250		251 and more		
Actions relating structure	Closure of departments count % within total number of company's employees	4	10,8%	4	10,0%	3	25,0%	22	38,6%	33
	Mergers count % within total number of company's employees	3	8,1%	7	17,5%	2	16,7%	18	31,6%	30
	Outsourcing count % within total number of company's employees	3	8,1%	2	5,0%	2	16,7%	14	24,6%	21
	No action count % within total number of company's employees	27	73,0%	27	67,5%	5	41,7%	3	5,3%	62
Total		37		40		12		57		146

Note: Percentages and totals are based on responses

Questions 34 & 36

Questions 34 and 36 are questions with a 5-point Likert answering scale. Responders have to indicate the degree of their agreement or disagreement in two statements relating the crisis in Greece (Table 18).

The question 34 is about the degree of agreement with the changes that the companies might have done. In this question answers are

gathered only from employees that their organizations have undertaken changes regarding the remuneration or structure. More than 50% of the responders do not agree with the actions of their organizations. Also, a great percentage is undecided (38,5%). Another indicative finding is that less than 20% of the participants agree with the statement that 'Crisis creates opportunities. Near 45% believe that no positive outcome can come from a crisis.

Table 18. Degree of agreement about changes and opportunities during crisis frequencies

	completely disagree				completely agree	MEAN	SD	N
	1	2	3	4	5			
If the organization you work for have made change, do you agree with them	17,9%	34,6%	38,5%	7,3%	1,7%	2,40	,921	179
Crisis creates opportunities! Indicate in what degree do you agree with this statement	16,7%	27,6%	36,5%	15,3%	3,9%	2,62	1,057	203

Questions 37

Table 19 presents the findings of Question 37, regarding the actions that the responders have taken during the last years in order to increase their competitiveness. The greater percentage of the responders (40%) attends seminars on subjects related to their current job, a factor which illustrates their efforts to improve and develop in their current working area. Education is also essential and 22% of the responders have made an effort to obtain a masters or doctorate degree. On the contrary, a great portion of the responders (34%) do not take any action to increase their competitiveness.

Table 19. Actions for competitiveness frequencies

	Responses		Percent of Cases
	N	Percent	
Taking language courses	36	12,5%	17,7%
Taking courses for computer license	22	7,7%	10,8%
Attend seminars on subject related to my current job	81	28,2%	39,9%
Attend seminars on subject not related to my current job	16	5,6%	7,9%
Attend classes to obtain a first degree	18	6,3%	8,9%
Attend classes to obtain a master/doctorate	44	15,3%	21,7%
I take no action	70	24,4%	34,5%
Total	287	100,0%	141,4%

Table 20. Actions for Increasing Competitiveness and Age Crosstabulation

		Age										Total
		Below 20		21 - 30		31 - 40		41 - 50		51-60		
Actions for increasing competitiveness	Taking language courses count % within age	4	57,1%	9	13,2%	14	11,5%	8	12,3%	1	4,2%	36
	Taking courses for computer license count % within age	0	0,0%	5	7,4%	9	7,4%	7	10,8%	1	4,2%	22
	Attend seminars on subject related to my current job count % within age	0	0,0%	18	26,5%	39	32,0%	21	32,3%	3	12,5%	81
	Attend seminars on subject not related to my current job count % within age	0	0,0%	6	8,8%	7	5,7%	3	4,6%	0	0,0%	16
	Attend classes to obtain a first degree count % within age	3	42,9%	7	10,3%	5	4,1%	3	4,6%	0	0,0%	18
	Attend classes to obtain a master/doctorate count % within age	0	0,0%	11	16,2%	24	19,7%	9	13,8%	0	0,0%	44
	I take no action count % within age	0	0,0%	12	17,6%	24	19,7%	14	21,5%	19	79,2%	70
Total	7		68		122		65		24		287	

Note: Percentages and totals are based on responses

Table 20 is a Crosstabulation between actions to increase competitiveness and age. As it is expected, most of the responders below 20 years old study in the university (43%) and take

language courses (57%). In addition, the majority of the responders between 31 and 50 years old attend seminars related to their current job (64%) and classes to obtain a masters or

doctorate degree (33%). It is noticeable that the vast majority of employees between 51 and 60 years old (73%) have taken no action to improve their competitiveness, and as the age decreases the rate is reducing. A first evaluation of the findings relating to job satisfaction is not optimistic. More than 50% of the participants believe that the money they receive is not fair based on the work they do and 40% are not confident about the future of their organization. Job security's indexes are near the mean value, a representative indication about the insecure and unsteady economic environment of Greece for the last six years (Argyrou and Tsoukalas, 2010). The results of extrinsic and intrinsic satisfaction, reveal that the participants are less satisfied with the extrinsic factors.

Research's findings relating to organizational commitment reveal that a large proportion of Greek employees remains in their current work not because they want to or because they feel obliged to do so, but because they need to. Near 40% of the responders would be very happy to spend the rest of their career with this organization. More than 60% feel that staying with their company is a matter of necessity as much as desire and one in three employees are undecided about the obligation to their organization. The most indicative finding is that more than 75% of the responders are feeling afraid of what might happen if they leave their job without having an alternative.

In the last section of the questionnaire participants are asked to describe the working environment in Greece during the last six years. The findings of the research are indicative of the working conditions in Greece after six years of severe economic crisis. Less than 8% of the sample believes that their working conditions have improved, when almost 68% have an opposite opinion. Less than 20% of the participants agree that crisis creates opportunities. Employees who believe that their working conditions have deteriorated indicate the problems that they face because of this deterioration. In the multiple response question, 83% of the responders answered that one way of deterioration is reduction in income and 60% bad psychology due to stress. The cross

examination of these responses with the working sector reveals that 51% of the employees in public sector have suffered from a reduction in income, while the respective percentage in the private sector is 34%. The next multiple response question revealed the same finding; 73% of the responders indicate salaries reduction as one of the tactics that organizations employ to deal with the crisis. A cross examination of these answers with the categories of the companies according to the staff headcount is revealing. All organizations of different sizes in the sample have reduced salaries; the highest percentage is being noticed in small enterprises. Large enterprises are using voluntary retirement more often (38%) instead of layoffs (10%). Small and medium sized enterprises proceed with layoffs in a percentage of 23%. Another important finding from the next question is that large enterprises proceed with closure of departments and mergers (38% for both actions), while 70% of the micro and small enterprises do not take these kind of actions to deal with the crisis. More than 50% of the participants of this study do not agree with the changes that their organizations have made. In the last question relating to the actions that the employees have taken to increase competitiveness, findings presented that 34% of the responders have taken no action (the percentage of this answer in the group of 51-60 years old is 73%). Almost 40% of the participants attend seminars in subjects related to their current job. Specifically, the 37% of the workforce between 31-40 years old attends seminars and 20% make an effort to obtain a masters or doctorate degree in order to increase their competitiveness.

Inferential statistics

Inferential statistics is used to draw conclusions for a population depending on data collected from a sample (Roussos and Tsaousis, 2011). In this study three different statistical methods were chosen to analyze the collected data: Analysis of Variance (ANOVA), t-test and Multiple Regression Analysis.

Analysis of Variance (ANOVA) & T-TEST

Analysis of Variance (ANOVA) and t-test are two of the most common used statistical criteria. T-test is chosen when the researcher wants to study phenomena which include comparisons between two groups, while ANOVA refers to differences between mean values of two or more groups (Roussos and Tsaousis, 2011). For this study multiple ANOVA and ttest are conducted, using SPSS (version 21). The purpose of this statistical approach is to detect the differences in the mean values of the variables in relation to the various demographic groups. All the variables (job security, pay satisfaction, extrinsic

satisfaction, intrinsic satisfaction, affective commitment, continuance commitment and normative commitment) are tested with regard to the demographic features (e.g. level of education, working sector, etc.). The most interesting findings are presented below.

T-test & ANOVA for Job security

Job security & Type of employment

H_0 : The type of employment does not influence employee perception about job security.

H_{11} : The type of employment does influence employee perception about job security.

Table 21. Group Statistics for Job security & Type of employment

Type of employment		N	Mean	Std. Deviation	Std. Error Mean
Job security	Full-time employment	170	3,106	1,0522	,0807
	Part-time employment	33	2,485	,8704	,1515

Table 22. Independent Samples Test for Job security and Type of employment

	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2tailed)	Mean Difference	Std. Error Difference
Equal Job variances security assumed	1,686	,196*	3,184	201	,002	,6210	,1951

Note: *Sig=0,196<0,05: Equality of variance

Table 22 shows the results of the t-test for the variables job security and type of employment. From the results we reject the null Hypothesis because Sig=0,002<0,05. The conclusion is that employee job security is affected by the type of employment. Full time employees feel more secure than part time (Table 21).

Job security & Status of employment

H_0 : The employment status does not influence employee perception about job security.

H_{12} : The employment status does influence employee perception about job security.

Table 23. ANOVA for Job security and employment status

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	28,466	5 197	5,693	5,795	,000
Within Groups	193,529		,982		
Total	221,995	202			

Note: Levene's test Sig=0,168>0, 05: Homogeneity of variance Eta squared (η^2) = 0,128

Table 23 presents the results of Analysis of Variance (ANOVA) for the variables job security and employment status (permanent, contract staff, seasonal employment, etc.). Since $F=5,795 > 2,21$, the null Hypothesis is rejected. Greek employee feeling of job security is affected by their employment status. As Table 24 shows permanent employees and open-ended contract staff are feeling more secure than seasonal workers. It is noticeable that the level of the impact is great, since $\eta^2 = 0,128$, according to Kirk (Roussos and Tsaousis, 2011).

Table 24. Descriptives of Job security & employment status

Employment status	Mean	N	Std. Deviation
Permanent	3,066	91	1,0599
Open-ended contract staff	3,328	61	,9304
Fixed-term contract staff	2,788	33	,9685
Project contract	2,300	10	1,0055
Seasonal employment	1,600	5	,5477
Undeclared work	1,667	3	,2887
Total	3,005	203	1,0483

Job security & Working sector

H_0 : The working sector that employees work in does not influence their perception of job security.

H_1 : The working sector that employees work in does influence their perception about job security.

Table 25. Descriptive of Job Security & Working Sector

Working sector	Mean	N	Std. Deviation
Private sector	2,960	124	1,0680
Public sector	1,103	74	,9894
DECO	2,750	6	1,4053
Total	3,005	203	1,0483

Table 26. ANOVA for Job Security & Working Sector

	Sum of Square	df	Mean Square	F	Sig.
Between Groups	1,342	2	,671	,608	,545
Within Groups	220,653	200	1,103		

An interesting finding is presented in Table 26 According to the results of ANOVA for the variables job security and working sector the null hypothesis has to be accepted ($F=0,608 < 3,00$). The difference in the mean values of employees in private and in public sector, relating to job security (Table 25), is not statistically significant.

ANOVA for Pay Satisfaction

Pay satisfaction & Level of education

H_0 : Employee level of education does not influence employee perception about pay satisfaction.

H_1 : Employee level of education does influence employee perception about pay satisfaction.

Table 27. Descriptive of Pay Satisfaction & Level of Education

Level of education	Mean	N	Std. Deviation
High school	3,1061	33	,89055
Institute of vocational training	2,6667	15	,95743
Technological education institute	2,6351	37	,92533
University	2,5820	61	,97117
Postgraduate degree (Master)	2,5319	47	,78991
Doctorate (PhD)	2,2000	10	,71492
Total	2,6527	203	,91404

Table 28. ANOVA for Pay Satisfaction & Level of Education

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9,837	5	1,967	2,439	,036
Within Groups	158,929	197	,807		
Total	168,766	202			

Note: *Levene's test Sig=0,286>0,05: Homogeneity of variance Eta squared (η^2) = 0,058

The results of ANOVA, presented in Table 28, shows that the alternative Hypothesis has to be accepted ($F=2,439>2,21$). Employees with higher education feel less satisfied than employees with high school degree (Table 27).

Pay satisfaction & Employment status

H_0 : The employment status does not influence employee perception about pay satisfaction.

H_1 : The employment status does influence employee perception about pay satisfaction.

Table 29. Descriptive of Pay Satisfaction & Employment Status

Employment status	Mean	N	Std. Deviation
Permanent	2,6319	91	,89392
Open-ended contract staff	2,9672	61	,93483
Fixed-term contract staff	2,4242	33	,77178
Project contract	1,9000	10	,96609
Seasonal employment	2,1000	5	,41833
Undeclared work	2,8333	3	,76376
Total	2,6527	203	,91404

Pay satisfaction & Working sector

H_0 : The working sector that employees work in does not influence their perception about pay satisfaction.

H_{10} : The working sector that employees work in does influence their perception about pay satisfaction.

Table 30. ANOVA for Pay Satisfaction & Employment Status

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15,087	5	3,017	3,868	,002
Within Groups	153,679	197	,780		
Total	168,766	202			

Note: *Levene's test Sig=0,136>0,05: Homogeneity of variance Eta squared (η^2) = 0,089

Descriptive statistics of the variable pay satisfaction for every level of the employment status are displayed in Table 30. The results of ANOVA for these variables, presented in Table 30, indicate that the null Hypothesis has to be rejected ($F=3,868>2,21$). The differences of the mean values are statistically important. Permanent and undeclared employees are more satisfied with their pay comparing with seasonal and project contract employees (Table 29).

Table 31. Descriptive of Pay Satisfaction & Working Sector

Working sector	Mean	N	Std. Deviation
Private sector	2,7742	124	,91143
Public sector	2,4384	73	,88170
DEKO	2,7500	6	1,03682
Total	2,6527	203	,91404

Table 32. ANOVA for Pay Satisfaction & Working Sector

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5,241	2	2,620	3,205	,043
Within Groups	163,525	200	,818		
Total	168,766	202			

Note: *Levene's test Sig=0,87>0,05: Homogeneity of variance Eta squared (η^2) = 0,031

Table 32 shows the results of Analysis of Variance for the variables pay satisfaction and

working sector. Since $F=3,205 > 3,00$ the alternative Hypothesis has to be accepted. Table 31 reveals that employees working in public sector and DEKO are more satisfied with their payment than private sector employees.

T-test & ANOVA for Affective commitment Affective commitment & Type of employment

H_0 : The type of employment does not influence employee perception about their affective commitment to their organizations.

H_{14} : The type of employment does influence employee perception about their affective commitment to their organizations.

T-test for the variables affective commitment and type of employment (Table 34) indicate that the alternative Hypothesis has to be accepted ($Sig=0,03 < 0,05$). Full-time employees are more affectively committed than part-time (Table 33).

Table 33. Descriptives of Affective Commitment & Type of Employment

Type of employment	Mean	N	Std. Deviation
Full-time employment	3,3647	170	,85446
Part-time employment	2,8712	33	,89731
Total	3,2845	203	,87847

Table 34. Independent Samples Test for Affective commitment & Type of Employment

	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	Df	Sig. (2tailed)	Mean Difference	Std. Error Difference
Equal variances assumed	,020	,887*	3,012	201	,003	,49349	,16386

Note: $Sig=0,087 > 0,05$: Equality of variance

Affective commitment & Employment status

H_0 : The employment status does not influence employee perception about their affective commitment to their organizations.

H_{15} : The employment status does influence employee perception about their affective commitment to their organizations.

Table 35. Descriptives of Affective Commitment & Employment Status

Employment status	Mean	N	Std. Deviation
Permanent	3,4643	91	,85519
Open-ended contract staff	3,3689	61	,74667
Fixed-term contract staff	2,7803	33	,99953
Project contract	3,4000	10	,62583
Seasonal employment	2,2500	5	,50000
Undeclared work	3,0000	3	1,14564
Total	3,2845	203	,87847

Table 36. ANOVA for Affective Commitment & Employment Status

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	17,492	5	3,498	4,980	,000
Within Groups	138,392	197	,702		
Total	155,884	202			

Note: Levene's test Sig=0,158>0,05: Homogeneity of variance Eta squared (η^2) = 0,112

Table 36 shows the results of ANOVA for affective commitment and employment status. The conclusion is that null Hypothesis has to be rejected, since $F=4,98 > 2,21$. Permanent employees and open-ended contract staff want to stay in their current organization more than fixed-term contract staff and seasonal employees (Table 35). According to Kirk (Roussos and Tsaousis, 2011), the value of eta squared $\eta^2=0,112$ reveals that the effect of the employment status on the affective commitment is great.

ANOVA for Continuance commitment

Continuance commitment & Total years of employment

H_0 : Total years of employment do not influence employee perception about their continuance commitment to their organizations.

H_{16} : Total years of employment do influence employee perception about their continuance commitment to their organizations.

The results of the ANOVA for continuance commitment and total years of employment (Table 38) draw to the conclusion that the null Hypothesis has to be rejected, $F=2,622 > 2,61$. Table 37 shows indicative that as the years of employment increase, employees feels more that they need to stay in their current job.

Table 37. Descriptives of Continuance Commitment & Total Years of Employment

Total years of employment	Mean	N	Std. Deviation
Less than 5	3,4821	28	,68017
6-15	3,6209	122	,79852
16-25	3,8191	47	,69490
More than 26	4,2917	6	1,06556
Total	3,6675	203	,77772

Table 38. ANOVA for Continuance Commitment & Total Years of Employment

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4,645	3	1,548	2,622	,052
Within Groups	117,535	199	,591		
Total	122,180	202			

Note: Levene's test Sig=0,462>0,05: Homogeneity of variance Eta squared (η^2) = 0,063

Continuance commitment & Working sector

H_0 : The working sector that employees work in does not influence employee perception about their continuance commitment to their organizations.

H_{17} : The working sector that employees work in does influence employee perception about their continuance commitment to their organizations.

Table 39. Descriptives of Continuance Commitment & working sector

Working sector	Mean	N	Std. Deviation
Private sector	3,5121	124	,75966
Public sector	3,9075	73	,75405
DEKO	3,9583	6	,71443
Total	3,6675	203	,77772

Table 40. ANOVA for Continuance Commitment & working sector

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7,708	2	3,854	6,734	,001
Within Groups	114,472	200	,572		
Total	122,180	202			

Note: Levene's test Sig=0,072>0,05: Homogeneity of variance Eta squared (η^2) = 0,038

Table 40 presents the results of the Analysis of variance of continuance commitment and working sector. Since $F=6,734 > 3,00$ the alternative Hypothesis has to be accepted. Servants in the public sector feel they have to remain in their organization more than employees in the private sector (Table 39)

Multiple Regression Analysis

Multiple regression analysis is used to calculate or predict the values of the dependent variable (or else criterion variable) from the values of the independent variables (predictors). Regression analysis is a very important tool for social science because it can examine more than the degree of correlation of variables (Roussos and Tsaousis, 2011). In this research multiple regression analysis is used to examine whether a set of independent variables (job security, pay satisfaction, extrinsic satisfaction, intrinsic satisfaction, affective commitment, continuance commitment and normative commitment) strongly contribute to the explanation of the dependent variable, which is the change in working conditions.

Table 41. Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,533 ^a	,284	,281	,662	,284	79,878	1	201	,000
2	,612 ^b	,374	,368	,620	,090	28,768	1	200	,000
3	,654 ^c	,427	,419	,595	,053	18,377	1	199	,000
4	,684 ^d	,468	,457	,575	,041	15,177	1	198	,000
5	,695 ^e	,484	,471	,568	,016	5,956	1	197	,016

- a. Predictors: (Constant), Affective commitment
- b. Predictors: (Constant), Affective commitment, Pay satisfaction
- c. Predictors: (Constant), Affective commitment, Pay satisfaction, Extrinsic satisfaction
- d. Predictors: (Constant), Affective commitment, Pay satisfaction, Extrinsic satisfaction, Normative commitment
- e. Predictors: (Constant), Affective commitment, Pay satisfaction, Extrinsic satisfaction, Normative commitment, Job security

f. Dependent Variable: Change of working conditions

Table 41 presents the first results of multiple regression analysis. The independent variables that contribute, at a statistically significant level, to the prediction of the dependent variable are: affective commitment, pay satisfaction, extrinsic satisfaction, normative commitment and job security. All these variables interpret in total 48,4% of the dependent variable's total variance. In more detail:

- the variable affective commitment interprets the 28,4%,
- the variable pay satisfaction the 9%,

- the variable extrinsic satisfaction the 5,3%,
- the variable normative commitment the 4,1%
- the variable job security the 1,6%.

Thus, study's Hypothesis have been confirmed, i.e.:

Hypothesis 2 (H₂): Extrinsic satisfaction is a predictor of change in working conditions during an economic crisis.

Hypothesis 3 (H₃): Pay satisfaction is a predictor of change in working conditions during an economic crisis.

Hypothesis 4 (H₄): Job security is a predictor of change in working conditions during an economic crisis.

Hypothesis 5 (H₅): Affective commitment is a predictor of change in working conditions during an economic crisis.

Hypothesis 7 (H₇): Normative commitment is a predictor of change in working conditions during an economic crisis.

The results of the multiple regression analysis show that the variables 'intrinsic satisfaction' and 'continuance commitment' are not statistically significant predictors of the change in working conditions.

Hypothesis 1 (H₁): Intrinsic satisfaction is not a predictor of change in working conditions during an economic crisis.

Hypothesis 6 (H₆): Continuance commitment is not a predictor of change in working conditions during an economic crisis.

In Table 42 are presented the regression coefficients for every model of the multiple regression analysis. The standardized coefficients β (beta) reveal the sign and the importance of every predictor estimate. The most significant independent variable is pay satisfaction ($\beta=0,255$). This result is interpreted statistically as: when the variable pay satisfaction change by one standard deviation, the value of

the variable change in working conditions increase by 0,255 degrees of standard deviation. Next is normative commitment ($\beta=0,224$), extrinsic satisfaction ($\beta=0,212$), affective commitment ($\beta=0,187$) and last is job security ($\beta=0,144$). The last two columns of Table 6.22 present the Collinearity statistics. These indexes control the phenomenon of multicollinearity which can lead to unreliable results. The results show that there is no multicollinearity, since Tolerance is greater than 0,1 and VIF is less than 10. According to the above results, type of employment (full-time, part-time) influences the variables job security and affective commitment. Employment status (permanent, contract staff, seasonal, etc.) is an important factor which has an impact on job security, pay satisfaction and affective commitment. Level of education and working sector both influence pay satisfaction. Working sector also plays an important role in continuance commitment, but not in job security as it was expected. Total years of employment have a medium impact on continuance commitment. Multiple regression analysis examines whether the independent variables contribute to the explanation of the criterion variable. For the purposes of this research the dependent variable is 'change in working conditions', i.e. whether Greek employees feel that the last six years their working conditions have improved or not. The most significant predictors are affective commitment, pay satisfaction, extrinsic satisfaction, normative commitment and job security. An expected finding is that pay satisfaction has the greatest importance in the prediction and explanation of the change in working conditions.

Next is normative commitment, extrinsic satisfaction, affective commitment and last is job security. In the following section an analysis of the findings is presented.

Table 42. Coefficients^a

Model 5	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-,274	,194		-1,411	,160		
Affective commitment	,166	,061	,187	2,726	,007	,559	1,789

Pay satisfaction	,218	,047	,255	4,634	,000	,862	1,160
Extrinsic satisfaction	,185	,055	,212	3,393	,001	,672	1,488
Normative commitment	,183	,051	,224	3,581	,000	,672	1,487
Job security	,107	,044	,144	2,440	,016	,749	1,335

Note: a. Dependent Variable: Change of working conditions

Factor Analysis

At this stage, for a better analysis, a factor analysis proceeds the regression analysis:

Factor Structure of job satisfaction and organizational commitment

Exploratory factor analysis (EFA-Principal Component) was performed to identify latent factors within job satisfaction and organizational commitment scales and to verify the reliability and validity of the emerging dimensions (Tables 43 & 144). The Bartlett sphericity testing the degree of correlation between the variables is significant. Furthermore, the Kaizer– Meyer– Olkin value (KMO) verified the appropriateness of the sample for performing factor analysis, as

it exceeds the 0.5 acceptable limit (Hair et al, 1998; Kaizer, 1974). Three factors with eigenvalues greater than one were extracted from the data, accounting for 65.2% of the total variation for the job satisfaction scale (Kaizer, 1974). Similarly, two factors were emerged, explaining 68.5% of the total variation for the commitment scale. Normalized varimax rotation was applied to bring about a simple interpretable structure (Kaizer, 1958). A cut-off of 0.45 was used for item scale selection. Following an examination of the items' loadings on each factor, the 3 distinct factors of satisfaction were labelled as: intrinsic satisfaction, job security and pay and extrinsic satisfaction. Alike, the affective and continuance aspects of organizational commitment emerged.

Table 43. Factor Analysis of the Job Satisfaction Construct

	Intrinsic satisfaction	Job security	Pay & extrinsic satisfaction
Q11-Job security	0.270	0.841	0.136
Q20-job security	0.146	0.895	0.061
Q12-pay satisfaction	0.187	0.329	0.694
Q13-pay satisfaction	-0.010	-0.031	0.830
Q14-extrinsic satisfaction	0.415	0.062	0.574
Q15-intrinsic satisfaction	0.624	0.309	0.222
Q16-extrinsic satisfaction	0.706	0.266	0.226
Q17-intrinsic satisfaction	0.851	0.014	0.029
Q19-intrinsic satisfaction	0.706	0.189	0.083
Eigenvalues	3.601	1.170	1.094
Percent of total variation	40.012	12.999	12.159
Cumulative Percent of total variation	40.012	53.011	65.170

Note: Rotation: Varimax normalized, factor loadings above 0.45 are highlighted, Valid N: 203

Table 44. Factor analysis of the organizational commitment construct

	Affective commitment	Continuance commitment
Q21-affective commitment	0.707	0.358
Q22-affective commitment	0.840	0.168
Q23-affective commitment	0.791	-0.033
Q24-affective Commitment	0.773	0.025

Q25-Continuance commitment	0.443	0.556
Q26-continuance commitment	0.192	0.667
Q27-continuance commitment	0.048	0.695
Q28-continuance commitment	-0.055	0.760
Eigenvalues	3.150	1.490
Percent of total variation	39.378	18.629
Cumulative Percent of total variation	39.378	68.517

Note: Rotation: Varimax normalized, factor loadings above 0.45 are highlighted, Valid N: 203

Reliability

Inter-item analysis was used to verify the job satisfaction and organizational commitment dimensions for internal consistency or reliability. More specifically, the Cronbach's alpha coefficients (Cronbach, 1960), which was

calculated for each scale ranged between 0.602 and 0.805 (Table 45). Cronbach's alpha values within 0.5 to 0.7 are considered acceptable for internal consistency, and Cronbach's alpha value over 0.7 represent a good level of reliability (Altman, 1991; Nunally, 1978; Streiner & Norman, 2008).

Table 45. Reliability Analysis

	Mean	Std. dev.	Number of items	Cronbach alpha	KMO*
Job satisfaction					0.791
Intrinsic satisfaction	3.20	0.807	4	0.768	
Job security	3.00	1.048	2	0.785	
Pay & extrinsic satisfaction	2.70	0.845	3	0.602	
Organisational commitment					0.828
Affective	3.28	0.878	4	0.805	
Continuance	3.67	0.778	4	0.640	

Note: *The Kaiser–Meyer–Olkin (KMO) indicator was calculated to assess sample size adequacy. The minimum acceptable level is 0.5.

Table 45 contains the items, the scale composite reliability (Cronbach α), and factor loadings for the rotated factors. The first factor, which included items measuring employee's satisfaction from the non-monetary, qualitative features of the work, was labelled Intrinsic satisfaction (four items, $\alpha = 0.768$). The second factor, labelled Job security, included items measuring the employee feelings of security in their works (two items, $\alpha = 1.048$). The third factor, labelled Pay & extrinsic satisfaction, included three items ($\alpha = 0.845$) measuring employee satisfaction which is derived from external stimuli, such as remuneration, management policies, etc. For the Organisational commitment the first factor, labelled

Affective commitment, included four items ($\alpha = 0.878$) measuring the employee emotional attachment to the organization. The second factor, labeled Continuance commitment, included items measuring employee costs associated with leaving the organization (four items, $\alpha = 0.778$). All these factors had significantly high scale composite reliability (Cronbach α) and were included in the analysis model.

Regression Analysis

Table 46 reports the results of regression analysis. Seven control variables were included in the analysis namely gender, age, working experience, employee in the private sector, marriage status, education level (university degree, post-graduate studies). The effects of job

satisfaction and commitment as a whole were significant, since the 49,8% of the total variance was explained, indicating that it was related significantly to the improvement of working conditions. All dimensions were proved to have positive statistically significant direct effects on the dependent variable. Those are intrinsic satisfaction (std. beta = 0.150, p,0.05), job security (std. beta= 0.193, p,0.01), pay & extrinsic satisfaction (std. beta= 0.317, p,0.001), affective commitment (std. beta=0.229, p,0.01) and continuance commitment (std. beta=0.129, p. ,0.05). No significant relationship was confirmed between the control variables and changes in working conditions.

Table 46. Results of Regression Analysis

	Improvement of working conditions		
	Std. beta	Sig.	VIF
Control Variables			
Gender	0.042	0.426	1.050
Age	-0.066	0.470	3.163
Working experience	-0.024	0.769	2.620
Private sector	0.008	0.894	1.490
Married	-0.073	0.235	1.417
Graduates	0.021	0.758	1.729
Post-graduates	-0.007	0.923	1.822
Job satisfaction			
Intrinsic satisfaction	0.150	0.044	2.074
Job security	0.193	0.002	1.380
Pay & extrinsic satisfaction	0.317	0.000	1.530
Organisational Commitment			
Affective	0.229	0.003	2.119
Continuance	0.129	0.026	1.244
Adjusted R²	0.498	0.000	

Note: Durbin-Watson: 1.814

The results of multiple regression analysis are exhibited in Table 46 by presenting the relevant standardized beta, adjusted R² and significance levels. When testing for multicollinearity between the independent variables, the Variance Inflation Factors (VIF) are far below the 3 points limit as suggested in Social Sciences literature. Moreover, the data was examined for outliers, skewness, kurtosis, and multivariate normality.

Discussion

The multiple regression analysis reveals a number of interesting findings. This study has examined the impact of crisis on the performance of Greek employees. Using Greece as a means for addressing the main Hypothesis, this research comes to conclusions that can be generalized to other countries facing economic crisis. The relative absence of related literature makes this study's results difficult to compare. Greece constitutes a unique laboratory to address these Hypothesis, as it is a developed country.

Hypothesis 1 (H1): Intrinsic satisfaction is not a predictor of change in working conditions during an economic crisis.

Markovits, Boyer and Dick (2013) in their research conclude that intrinsic satisfaction has not directly been influenced by the crisis. This research comes to the expected finding that satisfaction with work itself does not influence employee opinion about the change in their conditions.

Hypothesis 2 (H2): Extrinsic satisfaction is a predictor of change in working conditions during an economic crisis.

In the research of Markovits, Boyer and Dick (2013) the level of employee extrinsic satisfaction during economic crisis is significantly lower. Lee, Wang, & Ip's (2011) study shows important negative effects of the global economic crisis on employee job satisfaction of Taiwanese atypical workers. This study reveals that extrinsic satisfaction affects in a great level employee perception about the improvement or the deterioration of their working conditions.

Hypothesis 3 (H3): Pay satisfaction is a predictor of change in working conditions during an economic crisis.

According to the results of multiple regression analysis the most significant independent variable is pay satisfaction. The meaning of this finding is interesting: the reduction of employee income is the most important factor that affects negatively their working conditions.

Markovits, Boyer and Dick's (2013) Hypothesis "Employees facing an economic crisis are less satisfied regarding pay, than the employees not experiencing an economic crisis" is also confirmed in their research.

Hypothesis 4 (H4): Job security is a predictor of change in working conditions during an economic crisis.

The findings of Mehri's et al.(2011) research suggest that the employees who worked before and after crisis feel that their job security has been significantly threatened. On the other hand, the employees having only post crisis job experience do not feel so insecure. The result of Markovits, Boyer and Dick's (2013) study is similar. The results of this research indicate that job security plays a significant role on employee perception about the impact of the crisis. However, it is the factor with the least significance. This is an unexpected finding regarding the unsteady and insecure environment of Greek economy.

Hypothesis 5 (H5): Affective commitment is a predictor of change in working conditions during an economic crisis.

According to Brockner et al. (1987) employees who remained in their jobs after layoffs had lowered organizational commitment. Similarly, Markovits, Boyer and Dick (2013) conclude that employee affective commitment was strongly reduced during crisis compared to employees before crisis. This research shows that employees who feel less affective commitment during the economic crisis believe that their working conditions have been deteriorated more.

Hypothesis 6 (H6): Continuance commitment is not a predictor of change in working conditions during an economic crisis

Markovits, Boyer & Dick (2013) in their research come to the conclusion that employees facing an economic crisis are more continuance committed with their organizations than employees not experiencing an economic crisis. The findings of this study show that continuance commitment is statistically non-significant

predictor of the change in working conditions during an economic crisis.

Hypothesis 7 (H7): Normative commitment is a predictor of change in working conditions during an economic crisis.

This research concludes that normative commitment is a factor that influence employee perceptions about the effects of the crisis. Likewise, the study of Markovits, Boyer and

Dick's (2013) show that during crisis employees showed somewhat lower normative commitment compared to employees before the crisis.

Conclusions and Limitations

Job attitudes are important as job selection relates to people's identities, health and lives (Judge & Kammeyer-Mueller, 2012). Two of the most essential job attitudes are job satisfaction and organizational commitment. Studies have proven that they have a significant influence on a number of employee related behaviors, such as turnover, absenteeism, citizenship behavior and particularly on job performance (Jaros 2007, Judge & KammeyerMueller, 2102, Markovits, Boer & Dick, 2013). Job attitudes are unstable and can be influenced by social and economic changes. The economic crisis in Greece that unfolded in 2008 has affected negatively all the aspects of Greek society and its economy, and has undoubtedly influenced work related attitudes. The consequences of the ongoing crisis are numerous: a number of businesses have gone bankrupt, many organizations struggle to survive, unemployment rate has increased dramatically, wages and pensions are reduced and the living and working conditions have deteriorated. The organizations try to deal with the crisis using salaries reduction, layoffs, and flexible forms of employment, as well as closure of departments and mergers. Employees face more and more difficulties every day, reduction in income, increase in working hours and delays in payment. All of these result in greater uncertainty, lack of desire for work, bad psychology and employees who feel worthless and underappreciated.

This study examines how the economic crisis in Greece influences employee performance. To satisfy the purpose of the study a questionnaire has been distributed to a large number of Greek employees. Data was collected from a heterogeneous sample of employees from public and private sector. Participants reported their job satisfaction and organizational commitment, the change of their working conditions, and the problems they face taking into consideration the last six years. An evaluation of the descriptive statistics is not optimistic. More than 50% of the participants believe that the money they receive is not fair concerning the work they offer and 40% are not confident about the future of their organization. Comparing the results of extrinsic and intrinsic satisfaction we notice that the participants are more satisfied regarding the intrinsic factors. The majority of Greek employees feel accomplished and able to use their abilities in their job. On the contrary, more than 40% of the participants feel that organization's management treats them unfairly and that they do not have chances for promotion. Research's findings relating to organizational commitment reveal that a large proportion of Greek employees remains in their current work not because they want to or because they feel committed, but because they need to. More than 60% feel that staying with their company is a matter of necessity as much as desire and one in three employees are undecided about the degree of commitment to their organization. The most indicative finding is that more than 3 out of 4 responders are feeling afraid of what might happen if they leave their job without having an alternative.

Inferential statistics show that pay satisfaction is the factor that influences the most employee belief about the deterioration of working conditions. Next is normative commitment, extrinsic satisfaction, affective commitment and last is job security. Intrinsic satisfaction and continuance commitment have statistically no significance in the prediction and explanation of the change in working conditions. Furthermore, the findings reveal that employees in the public sector feel less satisfied with their payment, but equally insecure with private sector's employees.

Permanent and open-ended contract staff as well as full time employees is more secure and satisfied with their payment and more affective committed than people with more flexible type of employment.

Regarding the limitations of this study the sample size is one of them. The sample is clearly not representative of the total Greek population. The region of Macedonia and Thrace is selected since it can be representative because of the size and the population. Small sample represent a limitation, but on the other hand these sample sizes are typical in this type of organizational research (Markovits, 2013).

The second limitation is time. The timeframe for the distribution and collection of the questionnaires was limited (two months). Another noteworthy limitation is the use of job attitudes as measures for the employee performance. Judge et al. (2001) argue that some studies treat job satisfaction and performance as separate variables that have not direct relationship to one another. Job performance is difficult to be measured. One method is to pose questions to the employees about their self-evaluation, but the results may not be objective (Schleicher, Greguras & Watt, 2004). Another method is to use executives' evaluations about the performance of their employees. However, this is impractical since organizations do not provide this kind of information. In spite of the objections, job satisfaction and organizational commitment have both well-documented influences on behaviors such as employee performance and productivity (Jaros 2007, Judge & KammeyerMueller, 2102, Judge et al. 2001, Schleicher, Greguras & Watt, 2004, Markovits, Boer & Dick, 2013).

Despite the limitations, the findings of this study are interesting and indicative. The responses of the participants reveal the real difficult situation that Greek employees face every day. The results of this research indicate that it is important for managers to do what they can and do it the soonest to improve employees satisfaction and commitment since they affect people's performance. Dissatisfaction, uncertainty and low commitment can result in low productivity

and performance and this may follow a vicious cycle. The difficulty in capturing perceptions and the complexity of human behavior requires constant research, as this way we will be able to improve our knowledge on topics including job satisfaction and employee performance. Other proxies for work-related behaviors, such as absenteeism, turnover, etc can be employed and other interesting aspects of this topic can be revealed. Moreover, evidence from other countries will help researchers generalize the results.

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