

## **Accounting for stress: a comparative analysis of corporate reporting on work-related stress by UK, German and Greek companies**

### **Abstract**

Work-related stress seems to be on the rise in recent years, and the contemporary prolonged financial uncertainty appears to have further contributed to it. However there seems to be a lack of studies investigating associated corporate disclosures. This paper attempts to contribute to this area by exploring the reporting on work-related stress, by some of the largest companies in the UK, Germany and Greece, through an investigation of their annual and 'stand-alone' reports and websites. Although it was expected that the inherent cultural differences among the investigated organisations would trigger some diversity in their stress-related reporting, a, by and large, complete absence of such reporting is found, with organisations from all countries limiting their references to, utmost, lip-service. The paper moves on to suggest potential reasons for this profound lack of relevant disclosure and highlights ways forward.

## **Introduction**

Work-related stress is one of the biggest health and safety challenges the whole world faces. In surveys carried out every five years by the European Foundation for the Improvement of Living and Working Conditions (EFILWC) and the European Agency for Safety and Health at Work (EASHW), stress is the second most frequently reported work-related health problem, affecting 22% of workers from the EU 27 (in 2005), only second to reported musculoskeletal problems (EASHW, 2009). Across the Atlantic, reviewed surveys by the American Institute of Stress (AIS) suggest that work-related stress tends to be the most important health problem in the US, with 40% of workers reporting their job was very or extremely stressful (AIS, 2010). This is not a problem limited to Europe neither the US, as a 1992 United Nations Report labelled work-related stress "The 20th Century Disease" and a few years later the World Health Organization said it had become a "World Wide Epidemic" (AIS, 2010). Stress also has a great cost: EASHW (2009) reports that over half of the 550 million working days lost annually in the U.S. from absenteeism are stress related, whilst the annual economic cost of work-related stress in the EU15 was estimated at EUR 20,000 million. The recent recession and prolonged financial uncertainty seem to have further contributed to an increase to the levels of work-related stress as redundancies have also resulted in bigger workloads for people still in jobs (Saner, 2010). This is, however, yet to be reflected in the findings of the latest international relevant surveys (e.g. EASHW, 2009; HSE, 2009), which, nevertheless, have not published data for the, approximately, last two years.

Although studies investigating social aspects of corporate communications abound, with a number of them also discussing Health and Safety (H&S) disclosures (e.g. Grey *et al.*, 1995; Adams *et al.*, 1998; Spanos and Mylonakis, 2007; Chen and Bouvain, 2009; Skouloudis *et al.*, 2010), there seems to be a lack of studies focusing on stress reporting. The aim of this paper is to contribute to this literature, by exploring the reporting on work-related stress, by some of the largest companies in the UK, Germany and Greece, through an investigation of

their annual and 'stand-alone' reports and websites. The paper thus also attempts to contribute to the limited European comparative literature (Adams and Kuasirikum, 2000). Given the preliminary stage of the research, the paper is largely split into two sections, a review of the relevant literature and a findings and discussion part, with some details on the adopted methods also discussed in between the two sections.

### **Literature review**

This part of the paper attempts to discuss some of the key literature on work-related stress; to explore how this issue has been investigated so far in accounting studies; and to identify previous social (in this study, this term also pertaining to 'environmental' and 'ethical') accounting investigations in the three countries under research and consider relevant legislation.

#### *Work-related stress: an overview*

It was quickly realised that to review the literature on work-related stress was a daunting task given its enormous size - in business studies alone, there are approximately 38 journals investigating issues pertaining to psychology (Harvey *et al.*, 2010)! A number of studies (e.g. Cox, 1993; Jordan *et al.*, 2003; EASHW, 2009) and dedicated websites (e.g. those of EASHW, and AIS), nevertheless, provide good overviews of the field and have principally informed this section. Abundant literature on stress reflects different understandings of the concept. Researches have traditionally perceived it either as an independent (the environmental cause of ill health) or dependent variable (a physiological response to a threatening environment), with more recent approaches focusing on the "dynamic interaction between the person and their work environment" (Cox, 1993, p. 8). Although, as a consequence, a number of definitions are available in the literature, EASHW has argued that "work related stress is experienced when the demands of the work environment exceed the workers' ability to cope with (or control) them" (2009, p. 14). National legislators seem to also adopt similar definitions (see e.g. HSE, 2001; Jordan *et al.*, 2003; AIS,

2010). The below figure, as adopted by EASHW (2009) reflects the dynamic character of the concept and summarises some of its main aspects:

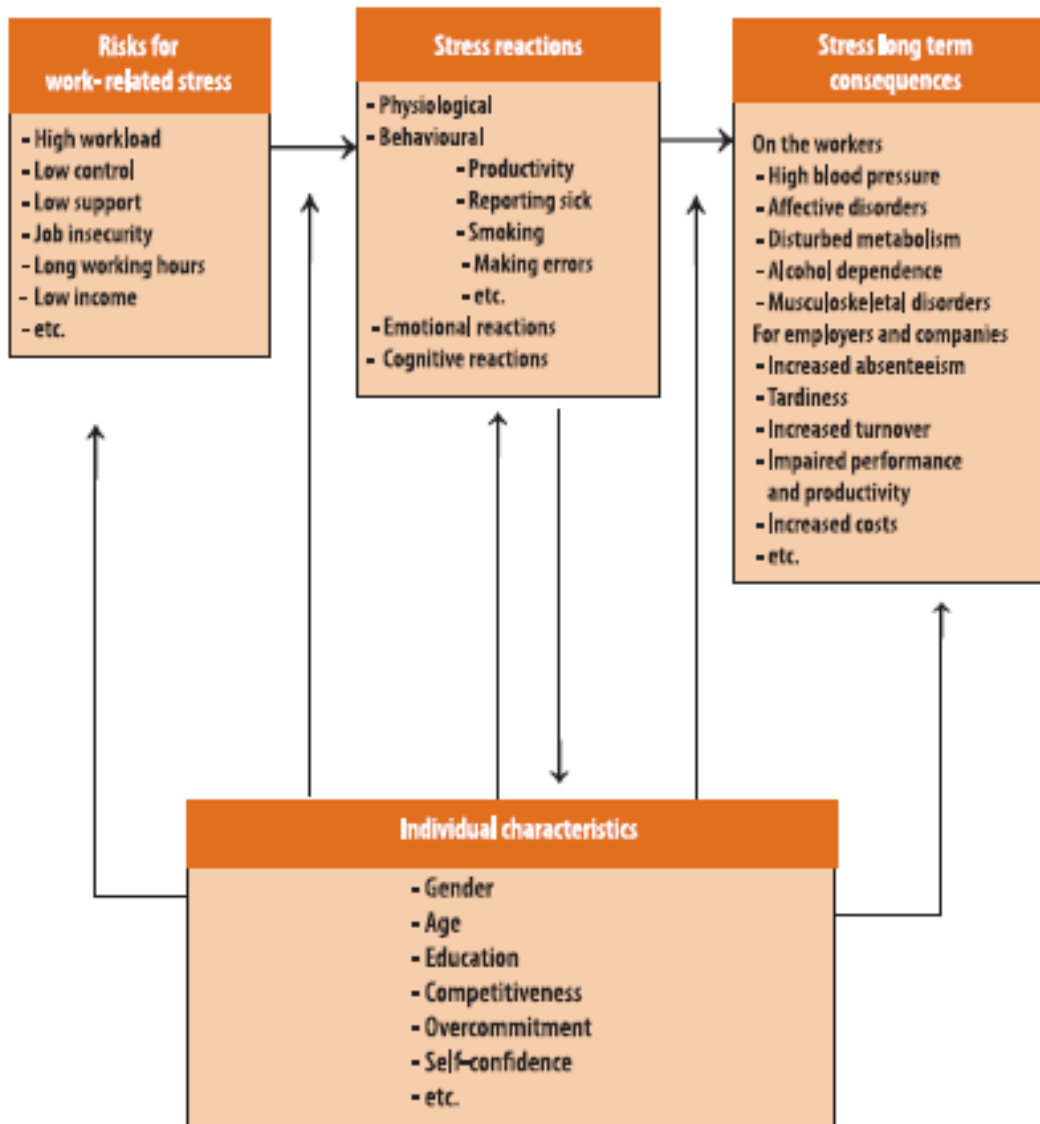


Figure 1 Model of causes and consequences of work-related stress (source: EASHW, 2009, p. 16)

The changing world of work is making increased demands on workers. Downsizing and outsourcing; greater need for flexibility in terms of function and skills; increasing use of temporary contracts; increased job insecurity; higher

workloads and pressure; poor work-life balance; lack of job control; and violence and harassment, are all factors which contribute to work-related stress (Cox, 1983; EASHW, 2009). Although a number of 'coping' strategies have been suggested (Cooper and Catwright, 1997), it seems that organisations mostly provide access to specific services, such as counselling, instead of addressing the issue right at the selection stage (Adkins *et al.*, 2000; Schabracq *et al.*, 2001; Jordan *et al.*, 2003). There are strategies that the individuals could also adopt to address stress, such as relaxation, meditation, exercise, good time management, and cognitive-behavioural therapy; and strategies that could be considered as pertaining at an individual/organisational level, such as co-worker support groups, clarification of role issues, and participation and autonomy (Jordan *et al.*, 2003; Mackay *et al.*, 2004; Seymour and Grove, 2005). When such combined strategies are adopted, it has been found that they significantly reduce the levels of stress and increase job satisfaction (Kerr *et al.*, 2009).

When demands exceed an individual's ability to cope with them, a stress response is triggered off at physiological, psychological and behavioural levels (EASHW, 2009). Physiological reactions include changes in the cardiovascular system (e.g. accelerated heart beat), the respiratory system (e.g. accelerated breathing rate), the musculoskeletal system (e.g. hypertonia), the immunological system, and others. Psychological reactions mostly take the form of negative emotions, such as anger, anxiety, irritation and depression. Among these, depression and anxiety appear to be the most common related complaints presented to general practitioners, and are reported to affect twenty percent of the working population in the United Kingdom and one in every six Americans (Quick *et al.*, 2001; Jordan *et al.*, 2003). Psychological reactions are then accompanied by changes in cognition including, among others, decreased self-esteem and perception of the social world as hostile. Behavioural reactions may include declining production or ability to perform tasks, alcohol and cigarette dependency, proneness to mistakes, accidents and absences (Cox, 1993; EASHW, 2009). Stress symptoms further substantially burden the community as

well as the productivity within organisations. Most prominently, stress appears to be one of the highest causes of absenteeism, costing the world economies billions of dollars every year (Cooper, 1980; Cox, 1993; Levi, 1996).

Ultimately, it is the individual characteristics which determine the magnitude of the risk factors and stress reactions. Demographic factors seem to particularly influence stress. According to data from 2005, stress was most often reported by European workers in the 40-54 age group (24%); physical violence is most often reported by workers in the 25-39 age group; whilst harassment and unwanted sexual attention is most common amongst the youngest (<24) workers. 37% of men and 31% of women believed that work affects their health, with mental symptoms, such as overall fatigue and irritability to be the ones slightly more frequently reported by men. Occupational issues have also been identified to influence stress, with the highest levels of reported stress in the last surveys found in teachers, nurses and farmers (Smith *et al.*, 2000; EASHW, 2009). Indeed, a variety of health outcomes have been found to be dependent on many different aspects of work, including effort-reward, job demands, decision latitude and social support (Stansfield *et al.*, 2000; Jordan *et al.*, 2003), as well as employment status (EASHW, 2009).

#### *Relevant accounting studies*

To identify potentially related studies, a systematic review of the accounting literature was conducted and has informed the discussion in this section (see details under the methods subheading). Given the general lack of directly related studies, a broader perspective was taken during the review so studies that *could* be considered as more relevant to work related stress were considered.

Most studies seem to focus on the 'role-stress' of workers in the broader accounting sector (e.g. Davidson, 1966; Benke and Rhode, 1980; Strawser *et al.*, 1982; Choo, 1987; Smith *et al.*, 1993), and particularly the elements of 'role conflict' (this incurs when a person perceives opposing communications about

what constitutes 'good performance') and 'role ambiguity' (this exists when a person perceives uncertainty in what others consider to be 'good performance') - but note that Cox (1993) identifies a third contributing factor to role stress, 'role insufficiency' (referring to the organisational failure to make full use of the individual's abilities and training), which does not seem to have been considered in the reviewed accounting literature. Studies find that role ambiguity and conflict are associated with the influence of superiors, subordinates, peers and directors (Collins *et al.*, 1984), leadership styles (Collins *et al.*, 1987), perceived organisational climate (Senatra, 1980), and personality traits (Choo, 1987). It is also found that e.g. stress in auditing is subject to the degree of structure of the audit approach (Bamber *et al.*, 1989) and negatively related to skill variety, autonomy and feedback (Fogarty and Kalbers, 2000); that job-related stress is associated with heavy work demands (Collins and Killough, 1992), tasks outside one's competence, interference with one's personal life and unrealistic expectations of others (Haskins *et al.*, 1990). Interestingly, mentoring is found to reduce role ambiguity but increase role conflict (Viator, 2001).

There have also been some essays written over the relationship of work-stress with accounting. Weick (1983) comprehensively reviews some other related studies and discusses a number of the phenomenon's aspects, such as its definition, nature, impacts and predictability, giving advice on stress management and calling for further research on the issue. Libby (1983) gives credit to Weick's (1983) work, suggesting that the stress concept may provide a useful structure for analysing a wide variety of accounting issues. Weick also notes that, in 'bad' times, accountants are more stressed, which in turn has a negative impact on the soundness of accounting practices. Hakansson (1983) however, does not agree with this proposition, arguing that bad times in general provoke questionable practices, due to the limited available resources.

In some studies, the term 'organisational stress' refers to 'financial distress' (e.g. Kane *et al.*, 1996; O'Reilly *et al.*, 2006). Others have looked at the stress of

accounting students, finding that they are more likely to succeed in the questions about topics covered earlier than later in the syllabus (Belkaoui, 1975). Interestingly, there seems to be a lack of relevant studies focusing on the stress of accounting academics, particularly given the surveys findings about education seemingly being the most stressful sector in Europe (Smith *et al.*, 2000; EASHW, 2009).

Nearly all the above studies have been published in the 'leading' accounting journals, which are perceived to focus on the "technocratic aspects of the economic functioning of accounting" (Unerman and O'Dwyer, 2010, p. 19), and (with the exception of the indicated essays) all have a strong quantitative orientation. Journals, such as *Accounting, Auditing and Accountability Journal* (AAAJ) and *Accounting Forum* (AF) have published special issues on accounting for healthcare and have taken a predominantly qualitative approach. In the AAAJ special issue, Chua and Preston (1994) raise a number of questions about the increased penetration of accounting in health; Oakes *et al.* (1994) look at the way in which cost benefit studies are conducted in treatment regimes; Arnold *et al.* (1994) examine the use of the term 'health care cost' in different set of texts and note a number of imbalances in its use; Laurence *et al.* (1994) in turn investigate the role of international consulting firms in the New Zealand reforms; and Laughlin *et al.* (1994) focus on general medical practitioners, nurses and practice managers in the UK. AF's special issue also focuses on Accounting for healthcare: its reform and outcomes (Haslam and Lehman, 2006); its relationship with global trade (Arnold and Reeves, 2006); attempts to cost schizophrenia (Smark, 2006); the English patient choice (Dent and Haslam, 2006); on Scottish GP's experiences (Hannah *et al.*, 2006); and on reviewing the complexities of the UK healthcare (Haslam and Marriott, 2006). Previously, Hopwood (1990) and Van Peurseem *et al.* (1995) also discussed issues related to accounting for health care and suggested ways forward. None of these studies, however, seems to specifically focus on work-related stress, nor focuses on related corporate disclosures.



### *The specific countries' context*

Reviewing country-specific data for work-related stress could perhaps later assist in understanding the relevant disclosure patterns, as social expectations literature (particularly employing legitimacy theory, see most recently Cho and Patten, 2007; Islam and Deegan, 2008; O'Sullivan and O'Dwyer, 2009) would suggest that the greater the levels of stress, the greater would be the pressure to organisations to take action and communicate relevant information to stakeholders. In the latest survey conducted by EFILWC and EASHW, in 2005 across all 27 member states, the highest levels of stress were reported in Greece (55%), followed by Slovenia (38%), Sweden (38%) and Latvia (37%). The lowest levels were noted in the United Kingdom (12%), closely followed by Germany, Ireland and the Netherlands (16%). Figure 2 summarises the findings of that survey for the EU15 countries (for which comparative data are available):

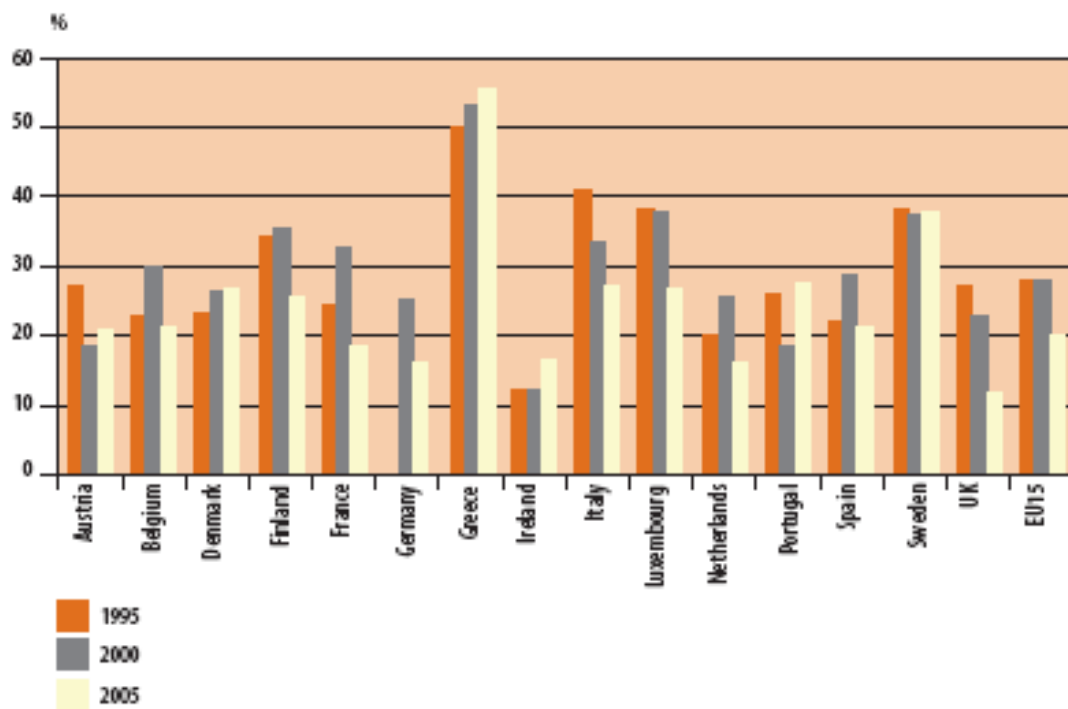


Figure 2 Work-related stress for the EU15 countries (source: EASHW, 2009, p. 22)

Evidently, work-related stress in the UK and Germany appears to be decreasing, whereas in Greece is increasing (and the recent debt crisis would suggest that this upward trend will be sustained). A contributing factor to Greece's high stress is the long working hours: the average working week is 45.4 hours long, compared to the 38.4 hours average of the 27-member EU. Figures from the agriculture sector show that as many as 72% of Greek workers suffer from work-related stress – in 2005 this was the highest reported stress per sector across the EU27. In Germany, the sector with the highest reported work-related stress appears to be construction, whilst in the UK higher rates are indicated in public administration and defence, financial intermediation and education (EASHW, 2009; HSE, 2009). In an earlier study, Kirkcaldy and Cooper (1992) found that German managers adopted better most coping strategies, displaying a significantly better mental health than their British counterparts; as the latest surveys, however, indicate work-related stress appears to be lower in the UK, with a considerably lower cost: in Germany the annual cost of psychological disorders was estimated to be EUR 3,000 million, whilst in the UK this was approximately £530 million (EASHW, 2009).

Cultural differences may also explain differences in the noted stress levels. Often studies adopt Hofstede's (1984) notions of power distance and uncertainty avoidance. Joiner (2001) investigates Greek managers' work-related stress and finds that this is subject to their organisational and cultural values. Increases in decentralisation are associated with role ambiguity stress and work overload stress, suggesting that the devolvement of decision-making authority to higher-power distance/strong uncertainty avoidance Greek middle managers creates confusion and anxiety over their work roles. When Adams and Kuasirikum (2000), however, employed Hofstede's (1984) notions, as adopted by Gray (1988), they found that these could not sufficiently explain their noted differences in social disclosure, highlighting the complexity of the differing contexts surrounding relevant disclosures per country.

Many studies in the reviewed (English) literature have concentrated in investigating social reporting in the UK (perhaps too many to quote, but see Gray *et al.*, 1995, for the most renowned and comprehensive survey) and a considerable number of studies have also concentrated in Germany (e.g. Lessem, 1977; Brockhoff, 1979; Dierkes, 1979; Schreuder, 1979; Ullmann, 1979; Hahn and Scheermesser, 2006). In Greece, social reporting is still in its infancy, with relevant research appearing to have only started recently (see e.g. Bichta, 2003; Mandaraka and Kornoutou, 2007; Spanos and Mylonakis, 2007; Skouloudis and Evangelinos, 2009; Panayiotou *et al.*, 2009; Skouloudis *et al.*, 2010). Although there are a number of studies looking at social disclosure differences across countries (e.g. Cowen *et al.*, 1987; Guthrie and Parker, 1990; Adams *et al.*, 1998; Adams and Kuasirikum, 2000; KPMG, 2002; 2008), there aren't many looking at differences among UK, Germany and Greece. Most often comparisons of reporting practices between organisations in Germany and the UK are conducted (e.g. Lessem, 1977; Adams *et al.*, 1998; Adams and Kuasirikum, 2000; Chen and Bouvain, 2009; Engels, 2009; Jackson and Apostolakou, 2010). Studies do not seem to be entirely consistent in their findings (e.g. Adams *et al.* find that German companies disclose on average more information than the UK ones, whereas Chen and Bouvain's, and Jackson and Apostolakou's, findings would suggest the opposite), although this might be due to the e.g. sampling, timing, and analysis, choices.

A number of reasons have been discussed in the literature to explain the variations in social reporting across the two countries, with particularly Adams *et al.* (1998) pointing to different motivations for disclosure. High levels of particularly employee disclosure amongst German companies may in part be explained by Germany's relatively long history of employee involvement in company management (Brockhoff, 1979; Dierkes, 1979; Bebbington *et al.*, 2000), whilst high environmental disclosure may be explained because Germany has perhaps the most active Green movement of any country in Europe (Adams *et al.*, 1998). On the other hand, UK has a long history of trade-union involvement

and an ever-expanding ethical investment movement; in addition, UK companies may also use social reporting to demonstrate that further relevant legislation is not needed.

The 'free-market' ideology that prevails in the UK has been also suggested as an explanation for the identified differences in disclosure in some, more recent, studies. Engels (2009) considers this to be a reason for UK companies' early adoption of European Emissions Trading Scheme (ETS), as UK companies "were able to tie the new challenges to past experiences with market based mechanisms" (pp. 497-498), in contrast to the German companies, which engaged in lobbying activities to oppose ETS. Chen and Bouvain (2009) explain the identified differences in the coverage of social issues between UK and German companies, and also attribute the fact that third party assurance is seemingly more frequently used in the UK rather than Germany, to that UK capital is more dispersed, with organisations thus having to appear to a wider public audience (and, potentially, advertise their social responsibility [Adams *et al.*, 1998]). Jackson and Apostolou (2010), in the only identified comparative study also involving Greece, find that UK companies are clear European leaders in CSR, whereas German companies seem to be lagging behind the UK, and explain these findings by pointing to the minimal state intervention in the UK economy, allowing organisations to essentially compete on their stakeholder engagement. As expected, in Jackson and Apostolou's (2010) survey, Greek companies seem to disclose, on average, considerably less social disclosure from their British and German counterparts.

In general, it seems that most studies seem to find considerably greater differences in the coverage of employee-related issues, as opposed to the environmental ones. Hahn and Scheermesser (2006) findings reveal the shift from the early employee disclosure focus of German companies (as evident in e.g. Brockhoff, 1979; Dierkes, 1979) to environmental reporting (as the findings of Jackson and Apostolou, 2010, also confirm) and they attribute this to

possible changes in societal pressures. Gray *et al.* (1995) particularly associate their identified growth in H&S disclosure in the UK with the rise in the number of major, widely publicised accidents, involving loss of life. Similar reasons may also be behind the H&S focus of Greek disclosure, identified by a number of studies (Mandaraka and Kormoutou, 2007; Spanos and Mylonakis, 2007; Skouloudis and Evangelinos, 2009; Skouloudis *et al.*, 2010). It should be stressed however that, the majority of (the investigated in the aforementioned studies) stand-alone reports are still being issued by multinational companies operating in Greece, and thus, it might be that corporate and industry specific factors are primarily behind this identified disclosure focus (as suggested by e.g. Adams *et al.*, 1998).

Although there seems to be a lack of accounting legislation explicitly asking organisations that operate in these countries to disclose information pertaining to work-related stress, there seems to be a wide array of compulsory legal frameworks and voluntary initiatives in place prompting organisations to take action to address their employee's stress, at both national and European levels, that could potentially also affect relevant disclosures. Work-related stress is not specifically mentioned in European legislation (unlike e.g. the cases of Scandinavia and Italy – Cox, 1993; Cousins *et al.*, 2004). However, the main document referring to this issue, the EU Health and Safety Framework Directive 89/391/EEC, says that the employers have a legal obligation to ensure the safety and health of workers in every aspect related to their work, and that prevention should include avoiding risks, combating the risk at source, and assessing risks. Other relevant framework agreements (committing the members of signatory organisations) include the Framework agreement on work-related stress, the Framework agreement on harassment and violence at work, and the European Pact for Mental Health and Well-being. Other EU documents related to stress at work include the Display Screen Directive 87/391/EEC, the Organisation of Working Time Directive 93/104/EC, and the international standards ISO 10075 (EASHW, 2009).

In the UK, organisations are also legally obliged to take action against work-related stress (HSE, 2001). Under the Health and Safety at Work, etc. Act 1974 and Management of Health and Safety at Work Regulations 1999, employers have a duty to safeguard worker health, including taking measures to assess risks and ensuring employees are not subjected to stress (Jordan *et al.*, 2003; Cousins *et al.*, 2004). Initially, the 'duty of care' concerned only physical well-being, but with the increasing recognition that the experience of stress at work was having a negative impact on employees, there has been a shift in the interpretation to include both physical and mental well-being (Cousins *et al.*, 2004). Apart from specific Acts of Parliament, common law cases have also highlighted the employer's duty to protect employees from personal injury resulting from psychiatric damage, and of potential legal liability if they fail to fulfil their obligations (Earnshaw and Cooper, 2001; Jordan *et al.*, 2003).

Likewise, in Germany, organisations are responsible for their employees' health safety at work. They have a duty to implement the necessary measures, taking into account the circumstances which affect employees' health and safety. Employers must review the effectiveness of the measures and, if needs be, adjust them to changes in the prevailing conditions. It is also part of their duty to strive to improve employees' safety and the protection of their health. Employers must appoint safety specialists and company physicians to support them and advise them on OSH questions (EASHW, 2010).

Whilst UK and Germany have formulated national strategies for H&S at work, in Greece there seems to be a lack of such a planned, centrally coordinated, approach to address this important issue (Libner *et al.*, 2010). Although work-related stress is, similarly to the UK and Germany, not specifically mentioned in national legislation, the Greek general law on 'health and safety for workers' and several ensuing presidential decrees have achieved harmonisation to European Union legislation. Recently, work-related stress featured high on the national general collective agreement 2008 – 2009 (this is a general multi-industry

agreement which is usually signed in the early months of each year and applies throughout Greece), with three out of the fourteen pages of the document dedicated to it (see GSEE, 2008). Detailed references were made to the description, origins, and ways of prevention of work-related stress, and it was recommended for both employers and employees to comply with the Display Screen Directive 87/391/EEC. The document also encouraged future occupational risk assessments, national law and other *ad hoc* measures targeting specific factors contributing to work-related stress, consulting employees and educating managers, as well as the adoption of communication strategies, such as formulating clearer job descriptions, and creating consultation and other support groups. The inclusion of such a detailed section in the collective agreement could be potentially attributed to the increased pressure from the public, given the aforementioned considerable proportions of reported stress. However, the latest national general collective agreement (2010-2012), signed after the recent debt crisis struck the country, focuses on ensuring some of the workers' financial benefits and makes no mention to the issue (see GSEE, 2010), revealing the need for a nationally-wide long term strategy to be adopted.

## **Methods**

A systematic review of the accounting literature was conducted to inform the relevant section of this paper. This design is well established in health care research (e.g. Egger *et al.*, 2001; Jefferson *et al.*, 2003; Price *et al.*, 2004) and is increasingly employed in social accounting studies (see e.g. Deegan and Soltys, 2007; Unerman and O'Dwyer, 2010). The purpose of a systematic literature review design, "is to evaluate and interpret all available research evidence relevant to a particular question" (Glasziou *et al.*, 2001, p. 1), and as regards data collection this either involves detailed keyword searches (as in Unerman and O'Dwyer, 2010) or exhaustive reviews of selected publications (as in Deegan and Soltys, 2007). In this study all (35) journals listed on the UK's Association of Business Schools *Academic Journal Guide* (Harvey *et al.*, 2010) under the 'accountancy' subject, were considered. Exhaustive contents and abstract

reviews were conducted for the below seven journals, typically publishing, more frequently than the rest, social accounting studies (in brackets, the year from which electronic contents were available):

*Accounting Auditing and Accountability Journal* (1988 -)

*Accounting Forum* (1999 -)

*Accounting Horizons* (1999 -)

*Accounting, Organizations and Society* (1976-)

*British Accounting Review* (1993-)

*Critical Perspectives on Accounting* (1990-)

*European Accounting Review* (1992-)

For the rest, keyword searches of titles and abstracts, using the word 'stress' as keyword, were conducted. Although, as in Unerman and O'Dwyer (2010), it should be acknowledged that keyword searches may not provide good proxies for the overall focus of the reviewed articles, it was likewise expected that "for only a very small number of articles (if any)... the title, keywords **and** abstract would not reflect the key focus of the article" (p. 6, emphasis in original).

An interpretive research framework, drawing on the works of Chua (1986) and Laughlin (1995) has been adopted in this study. A largely qualitative approach to Content Analysis (CA) was employed, considering not only the differences across organisations in the measured levels of relevant disclosure, but also what was the message conveyed by each disclosure (see e.g. Adams and Harte, 1998; Unerman, 2003). The sampling units of the analysis cover a wider range of reports than just the annual report, similarly to e.g. Zéghal and Ahmed (1990) and Unerman (2000, 2003). More specifically, the Annual Reports (ARs), stand-alone reports and websites of the FTSE100 in the UK, DAX30 in Germany and ASE20 in Greece were reviewed – these are the indices including the top companies in capitalisation per considered country. As in Adams *et al.* (1998), it is acknowledged that "Restricting the sample to these large companies means



that the level of disclosure found is probably significantly greater than would be the case if smaller companies had been examined” (p. 5). However, this was intentional, as minimal relevant disclosure was expected to be identified – and was indeed found, as the next section illustrates.

### **Findings and discussion**

Preliminary analysis findings suggest an almost complete absence of stress-related disclosures in the considered companies annual and standalone reports and websites, regardless of the country of origin. Given the limited number of relevant disclosures, no quantitative data are provided at this stage (although in later stages of the analysis, some data indicating the frequency of references to e.g. employee opinion surveys or absenteeism data maybe included).

Out of the 30 German companies investigated, only four (13%) make a direct reference to their employees’ work-related stress. One company (Metro Group) makes an indirect reference to mental pressure and another one (BMW) makes a reference to the stress of customers, in order to promote its products:

Drivers nowadays are subject to more stress than ever before. Distractions are aimed at them from every direction: The cell-phone rings, the navigation system shows you the way, the kids in the back seat are yelling while the driver is going over the minutes of the last business meeting in his head - and still has to concentrate on an ever-increasingly complex transportation system (BMW, Automobiles, website)

German companies typically provide absenteeism data and make references to their opinion surveys, without specifying questions asked or even providing ‘satisfaction’ measures:

Regular employee opinion surveys such as E.ON has been conducting since 2004 form an important part of our corporate culture. As an effective management tool, these surveys enjoy high acceptance and recognition among management and employees alike. This is documented not least by the annual participation rates, which average out at between 75 and 80 percent. The most recent survey, a random sample survey conducted in the fall of 2009, had a Group-wide participation rate of 78 percent (E-ON, Energy, website).

A number of companies also mention that their H&S practices follow the international standard OHSAS 18001 (which, however, does not appear to provide any guidance on stress-management). Some also appear to promote H&S measures which may ultimately reduce stress, albeit still without making any explicit reference:

Health is also of central importance to us, since a healthy employee is also an asset for the company. Therefore we want to promote the health of our employees and health awareness in the long-term. In this respect, we encourage participation in sporting activities in our employees spare time, e.g. through an allowance for membership in a fitness studio (Deutsche Börse, Financial sector, website).

Companies making direct reference to stress seem to be employing diverse strategies in its management. Some focusing on 'educating' employees:

We seek to promote our employees' good health and ensure their long-term capacity to work through targeted programs, medical health check-ups and other worldwide activities for health support... In addition to physical health programs, workplace health promotion places growing emphasis on how to cope with rising workloads and stress, in order to avoid the new illnesses that are appearing in our society (Henkel, Home and personal care, website).

Others seem to have developed more comprehensive strategies and specific measures to address the issue, albeit without providing quantitative, comparable data to illustrate their progress:

With the aid of frequent surveys, Commerzbank is closely monitoring the mood of employees during the integration process, and where necessary it introduces appropriate measures... A changing working world means that occupational health management is having to deal with more and more instances of mental pressure. The "Im Lot – Ausgeglichen bei der Arbeit" project ("Sorted – work / life balance"), a joint initiative of the Bank and the Works Council, has developed a healthy work model and identifies the factors causing our employees mental stress and strain. (Commerzbank, Financial sector, website).

The Siemens spa programs are designed in accordance with recognized scientific and therapeutic principles. They combine adequate exercise with

nutrition and incorporate stress management and relaxation techniques (Siemens, Electronics, website).

Metro Group has been gradually building up an operative health management system. In selected stores and operations, the company has been testing ways of improving the physical and mental fitness of employees. The GO Pilot Project of the Metro Cash & Carry wholesale store in Cologne-Godorf received the German Employer's Liability Insurance award. With actions including ergonomics consultations or health classes at the workplace, the store team won first prize in the "Healthy employee – healthy company" category (Metro Group, Retail, website)

Only a single company, SAP, makes a reference to an approach which appears to be focusing on generating quantitative findings. Still, these are not made available in its examined corporate communications:

SAP's health management service has developed a holistic and comprehensive program to meet the needs of our employees. Our extensive employee health program is focused on the needs of employees with sedentary, highly demanding intellectual jobs. The Business Health Culture Index measures the stress/satisfaction balance of employees, indicating organizational health and readiness to meet strategic objectives (SAP, Software, 2009AR, p. 67)

Similarly to Germany, only two out of the 20 investigated Greek companies make a direct reference to work-related stress (10%). The examined Greek companies also typically discuss their H&S activities (with most appearing to follow the international standard OHSAS 18001), albeit they do not frequently refer to employee opinion surveys, as German companies appear to be doing. Instead, they solely focus on providing data on absenteeism/sick days, without relating them to stress:

With regard to absenteeism, the majority of working lost days in 2008 was due to accidents. The total rate of employees' absenteeism reached as Group level 2% of the scheduled working days. No day was lost due to stops or strikes last year (Titan, 2008CSR, p. 22)

Both organisational references to work-related stress come from banks. They, however, reveal considerably different approaches to stress management. Whilst

Piraeus bank seems to acknowledge the need for an on-going support to its employees:

Piraeus Bank has instituted and provides Support and Internal Employee Support Programs for the health and the well-being of its employees since 2007. These programs include prevention, information - awareness and also management - confrontation of critical issues (e.g. work stress, psychological and physical illnesses, traumatic events etc), which can affect the psychosocial health and professional performance of employees... Specifically, concern for health and well-being is implemented through information and awareness program for active management of health and well-being issues to all employees...; critical incident stress management programs; counselling and guidance programs for all employees. Employee Support Programs are based on the value of pro-active action as a lever for sustainable and healthy development of the Group's employees (Piraeus bank, Financial sector, website),

National bank of Greece seems to address the issue on an 'ad hoc' basis:

Psychological support of employees in the event of robbery: Cases of bank robberies increased in 2008 and accordingly the Bank decided to launch a psychological support programme for employees who have been through the traumatic experience of a bank robbery. According to the psychologist who runs the programme, victims involved in such incidences may suffer from post-trauma stress for one or two months, while the intensity of the symptoms may depend, for instance, on the degree of danger to which victims were exposed. In 2008, and whenever it was deemed necessary, a specialized psychologist visited the Bank's units with the assistance of its officers (National bank of Greece, Financial sector, 2008CSR, p. 70).

In both cases, there is no evidence of comprehensive approaches to stress management, involving generating comparative data to identify progress. This, however, seems to also be the case for the UK. Out of the 100 companies investigated only five (5%) seem to be making direct references to work-related stress. UK companies' disclosure patterns seem to be more similar to those of Germany. Companies also typically conduct opinion surveys and communicate the results to their employees (e.g. 3i). They further often disclose employee satisfaction survey findings and the contents of the questionnaires employed (e.g. Admiral). Some organisations argue as having frameworks that could assist in combating stress, although these are not explained comprehensively:

Our wellbeing framework tackles significant issues such as attendance and stress management, as well as helping our people understand the importance of work-life balance and the benefits of healthy lifestyles. Many of our local markets run programmes which aim to keep their employees healthy and free from stress, including flexible working initiatives. Flexible working enables employees to balance work and family commitments better and helps us to attract and retain the best people, as well as use space more efficiently (Vodafone, Telecommunications, website)

We have wellbeing programmes in place across Xstrata's managed operations, which aim to improve the overall health and lifestyle of employees. The programmes address a number of topics which are prioritised according to risk, including obesity, smoking, alcohol abuse, stress, diabetes, sleep disorders, living or working in extreme heat or extreme cold, cancer, HIV and AIDS, malaria and tuberculosis (Xstrata, Mining, website).

References to commitment to the international standard OHSAS 18001 seem to be less frequent. Unilever makes such a reference and then additionally explicitly discusses the potential financial, as well as health benefits of taking action to address work-related stress:

We believe that healthy employees contribute to a healthy company. We now have a global framework of health and well-being benefits that each Unilever operating company is encouraged to make available to all of its employees. This framework, called Lamplighter, involves coaching employees individually on their exercise, nutrition and mental resilience, and monitoring their progress through an initial check-up and six-monthly follow-ups...Our challenge is to encourage employees to change their behaviour and sustain new habits, whether it is improving or increasing their exercise, being mindful of their eating habits or adapting how they manage daily pressures both in and out of the work environment...Programmes such as Lamplighter have important short- and long-term business as well as health benefits. In the short term we expect to see healthier, more motivated and productive employees, with lower levels of absence due to ill health. The long-term benefits are in lower healthcare costs for companies and society. An earlier study we conducted in the UK, which was published in the 'American Journal of Health Promotion', estimated that the return on investment for these kinds of employee well-being programmes is in the region of £3.49 for every £1 invested (Unilever, Home, personal care and food, website).

There seems to be some further evidence of well informed organisational practices, using specific stress-related guidance from the local legislators. Although BT apparently collects comparable, quantitative data, it still does not disclose any findings on its progress:

We consider stress as part of the Mental Health framework and have a dedicated section on our Health and Wellbeing intranet site. We use guidance from the Chartered Institute of Personnel and Development and the UK regulator, the Health and Safety Executive, to help managers support their people and manage work-related stress. Our online stress risk assessment tool and accompanying management training tool help identify people who need support and improve coping skills. We encourage BT people to complete the risk assessment yearly, and the training is mandatory for all people managers. Our Employee Assistance Programme provides advice and counselling for stress-related issues, whether they relate to work or personal life. It also provides support for managers dealing with stress-related issues in their people. We are running an Executive Stress workshop about the stress senior manager's experience as well as the impact of their behaviour on those they manage throughout our lines of business. Our businesses develop local initiatives as well as using these central programmes (BT, Telecommunications, website).

WPP also dedicate a section on their website on discussing their stress-management approach. In addition to giving examples of their initiatives to combat work-related stress, the Company also interestingly seems to indicate that employees might be reluctant to openly discuss with their managers stress-related issues:

Promoting a healthy workforce benefits our business by increasing productivity and reducing the costs of people taking time off work due to illness. We have identified two main risks to health and wellbeing associated with office workplaces, where most of our people are based. These are work-related stress and injuries connected to workstation ergonomics. Our companies seek to create an environment where people feel able to discuss any issues, including stress, with their manager or human resources department. Our companies also assess the risk of work-related stress through regular staff surveys and by monitoring issues raised via our Right to Speak helpline, Employee Assistance Programs and during exit interviews (WPP, Communication services, website).

It seems, therefore, that, although some very tentative differences across organisations have been identified, the vast majority of these large organisations appear not to address their work-related stress and thus also ignore the guidance provided by national and international frameworks on the issue. They do so, despite that most of them also appear to regularly conduct employee surveys (which they could adapt to incorporate stress-related issues and start monitoring their relevant impacts at no great extra cost). A very small number of organisations are found to make any reference to stress, and even that minimal disclosure identified seems to be, more often, lacking of substance.

This finding is not surprising. A number of studies on work-related stress suggest that, when compared to the attention afforded to other organisational activities such as budgeting and equipment, employers have not invested sufficiently to reduce stress in the workplace (Cooper *et al.*, 2001; Jordan *et al.*, 2003). Indeed, even the organisations that made comprehensive references to their stress management programmes, appear to be focusing on addressing the outcomes of work-related stress rather than its sources, i.e. helping individuals to develop their coping strategies without modifying or eliminating stressors from the workplace, which would suggest e.g. addressing the issue right from the selection stage (Adkins *et al.*, 2000; Schabracq *et al.*, 2001).

Although there is a notable similarity in non-disclosure across companies in all investigated countries, this does not necessarily imply that the motivations for non-disclosure are the same. Motivations for disclosure (or, as in this case, demotivations) may vary across organisations from different countries, or within the same country, or even within the same company across time, as the findings from a number of social accounting studies indicate (e.g. Adams *et al.*, 1998; Solomon and Lewis, 2002; Unerman, 2003; Spence and Gray, 2007). As the present findings suggest, some organisations have realised, by doing own research, the potential financial as well as health benefits of combating work-related stress, which have been stressed by a number of related studies (e.g.

Jordan *et al.*, 2003; Tasho *et al.*, 2005). For the remaining organisations, perhaps an ‘education’ strategy, involving ‘sharing good practice’ and disseminating findings from related research could be effective (Solomon and Lewis, 2002).

The greatest de-motivation, however, might be the apparent organisational reluctance to disclose such ‘sensitive’ information (Solomon and Lewis, 2002). As the findings indicate, even in the cases where measurable comparative data are collected, these are not disclosed (unlike e.g. employee satisfaction results). Employees might not want to discuss their stress-related issues and organisations might not want to ‘compete’ and advertise their relevant performance in this case (as they seemingly do for other aspects of their social and environmental impacts – Adams *et al.*, 1998), as this might implicitly or explicitly be considered a ‘taboo’ issue to discuss. Kiesel (2010), for example, notes that, although stigmatisation has somewhat declined, it still remains a factor contributing to the recent increase of mental disorders in Germany, as employees seem to be reluctant to attend special courses to make them more mentally resilient. Presenteeism seems to be especially prevalent when workers face problems with stress and mental health, and it may be the result of a high level of job insecurity or fear of being labelled as ‘mentally ill’ and stigmatised (EASHW, 2009). Future research could focus on such motivations for non disclosure by e.g. conducting interviews or surveys (an obvious next step) or, by extending the present analysis in other countries, perhaps starting from Scandinavia, where more comprehensive, explicitly related to work-place stress, legal frameworks exist.

## References

Adams, C A and Harte, G. (1998), “The Changing Portrayal of the Employment of Women in British Banks’ and Retail Companies’ Corporate Annual Reports”, *Accounting, Organizations and Society*, Vol. 23, No 8, pp. 781-812.



- Adams, C A, and Kuasirikum, N. (2000), "A comparative analysis of corporate reporting on ethical issues by UK and German chemical and pharmaceutical companies", *The European Accounting Review*, Vol. 9, No 1, pp. 53-79.
- Adams, C A, Hill, W-Y, and Roberts, C B. (1998), "Corporate social reporting practices in western Europe: legitimating corporate behaviour?" *British Accounting Review*, Vol. 30, pp. 1-21.
- Adkins, J A, Quick, J C and Moe, K O. (2000), "Building work-class performance in changing times", in L R Murphy and C L Cooper (eds) *Healthy and productive work: an international perspective*, London: Taylor & Francis.
- AIS (The American Institute of Stress), (2010), *American's No 1 Health Problem*, available from: [www.stress.org](http://www.stress.org) [accessed 29 August 2010].
- Arnold, P J, and Reeves, T C. (2006), "Global trade and the future of national health care reform", *Accounting Forum*, Vol. 30, No 4, pp. 325-340.
- Arnold, P J, Hammond, T D, and Oakes, L S. (1994), "The Contemporary Discourse on Health Care Cost: Conflicting Meanings and Meaningful Conflicts", *Accounting, Auditing and Accountability Journal*, Vol. 7, No 3, pp. 50-67.
- Bamber, E M, Snowball, D and Tubbs, R M. (1989), "Audit Structure and Its Relation to Role Conflict and Role Ambiguity: An Empirical Investigation", *The Accounting Review*, Vol. 64, No 2, pp. 285 – 299.
- Bebbington, J, Gray, R and Larrinaga, C. (2000), "Editorial: environmental and social accounting in Europe", *The European Accounting Review*, Vol. 9, No 1, pp. 3-6.
- Belkaoui, A. (1975), "Learning Order and Acceptance of Accounting Techniques", *The Accounting Review*, Vol. 50, No 4, pp. 897-899.
- Benke, R L, and Rhode, J G. (1980), "The job satisfaction of higher level employees in large certified public accounting firms", *Accounting, Organizations and Society*, Vol. 5, No 2, pp. 187 – 201.
- Bichta, C. (2003), "Corporate Socially Responsible (CSR) Practices in the Context of Greek Industry", *Corporate Social Responsibility and Environmental Management*, Vol. 10, pp. 12-24.

- Brockhoff, K. (1979), "A note on external social reporting by German companies: a survey of 1973 company reports", *Accounting, Organizations and Society*, Vol. 4, No ½, pp. 77-85.
- Chen, S and Bouvain, P. (2009), "Is Corporate Responsibility Converging? A Comparison of Corporate Responsibility Reporting in the USA, UK, Australia, and Germany", *Journal of Business Ethics*, Vol. 87, pp. 299-317.
- Cho, C H and Patten, D M. (2007), "The Role of Environmental Disclosures as Tools of Legitimacy: A Research Note", *Accounting, Organizations and Society*, Vol. 32, No 7-8, pp. 639-647.
- Choo, F. (1987), "Accountants' Personality Typology and Perceptions of Job-Related Stress: An Empirical Study", *Accounting and Finance*, Vol. 27, No 2, pp. 13-23.
- Chua, W F. (1986), "Radical Developments in Accounting Thought", *The Accounting Review*, Vol. 61, No 4, pp. 601-632.
- Chua, W F and Preston, A. (1994), "Worrying about Accounting in Health Care", *Accounting, Auditing and Accountability Journal*, Vol. 7, No 3, pp. 4-17.
- Collins, F, Seiler, R E and Clancy, D K. (1984), "Budgetary Attitudes: The Effects of Role Senders, Stress and Performance Evaluation", *Accounting and Business Research*, Vol. 14, No 54, pp. 99-111.
- Collins, F, Munter, P and Finn, D W. (1987), "The Budgeting Games People Play", *The Accounting Review*, Vol. 62, No 1, pp. 29-49.
- Collins, K M and Killough, L N. (1992), "An Empirical Examination of Stress in Public Accounting", *Accounting, Organizations and Society*, Vol. 17, No 6, pp. 535-547.
- Cooper, C L. (1980), "Cumulative Trauma and Stress at Work", *Accounting, Organizations and Society*, Vol. 5, No 3, pp. 357-359.
- Cooper, C L and Catwright, S. (1997), "An intervention strategy for workplace stress", *Journal of Psychosomatic Research*, Vol. 43, No 1, pp. 7-16.
- Cooper, C L, Dewe, P J and O'Driscoll, M P. (2001), *Organisational stress: a review and critique of theory, research, and applications*, Thousand Oaks, CA: Sage Publications.

- Cousins, R Mackay, C J, Clarke, S D, Kelly, C, Kelly, P J and McCaig, H. (2004), "Management Standards' and work-related stress in the UK: Practical development", *Work and Stress*, Vol. 18, No 2, pp 113-136.
- Cowen, S, Ferreri, L and Parker, L. (1987), "The Impact of Corporate Characteristics on Social Responsibility Disclosure: A Typology and Frequency-Based Analysis", *Accounting, Organizations and Society*, Vol. 12, No 2, pp. 111-122.
- Cox, T. (1993), *Stress Research and Stress Management: Putting Theory to Work*, HSE Contract Research Report No. 61/1993, Sudbury: HSE books.
- Davidson, H J. (1966), "Discussion of Professional Responsibilities – An Empirical Suggestion", *Journal of Accounting Research*, Vol. 4, No 3, pp. 181-182.
- Deegan, C, and Soltys, S. (2007), "Social accounting research: An Australasian perspective", *Accounting Forum*, Vol. 31, pp. 73-89.
- Dent, M, and Haslam, C. (2006), "Delivering patient choice in English acute hospital trusts", *Accounting Forum*, Vol. 30, No 4, pp. 359-376.
- Dierkes, M. (1979), "Corporate Social Reporting in Germany: Conceptual Developments and Practical Experience", *Accounting, Organizations and Society*, Vol. 4, No ½, pp. 87-107.
- Earnshaw, J and Cooper, C L. (2001), *Stress and employer liability*, London: Chartered Institute of Personnel and Development.
- EASHW (European Agency for Safety and Health at Work), (2009), *Stress at work – facts and figures*, Luxembourg: Office for Official Publications of the European Communities.
- EASHW, (2010), *The German Occupational Safety and Health system*, available from: <http://osha.europa.eu/en> [accessed 26 August 2010].
- Egger, M, Davey Smith, G and Altman, D G. (eds.) (2001), *Systematic Reviews in Health Care: Meta-Analysis in Context*, 2<sup>nd</sup> Ed., London: BMJ Publishing House.

- Engels, A. (2009), "The European Emissions Trading Scheme: An exploratory study of how companies learn to account for carbon", *Accounting, Organizations and Society*, Vo. 34, pp. 488-498.
- Ferris, K R. (1977), "Perceived Uncertainty and Job Satisfaction in the Accounting Environment", *Accounting, Organizations and Society*, Vol. 2, No 1, pp. 23-28.
- Fogarty, T J and Kalbers, L P. (2000), "An empirical evaluation of the interpersonal and organisational correlates of professionalism in internal auditing", *Accounting and Business Research*, Vol. 30, No 2, pp. 125-136.
- Glasziou, P, Irwig, L, Bain, C and Colditz, G. (2001), *Systematic Reviews in Health Care*, Cambridge: Cambridge University Press.
- Gray, R, Kouhy, R and Lavers, S. (1995), "Corporate social and environmental reporting: A review of the literature and a longitudinal study of UK disclosure", *Accounting, Auditing and Accountability Journal*, Vol. 8, No 2, pp. 47-77.
- Gray, S J. (1988), "Towards a theory of cultural influence on the development of accounting systems internationally", *Abacus*, Vol. 24, No 1, pp. 1-15.
- GSEE (2008), *National General Collective Agreement 2008 and 2009*, available from: <http://www.gsee.gr/> [accessed 26 August 2010].
- GSEE (2010), *National General Collective Agreement 2010, 2011 and 2012*, available from: <http://www.gsee.gr/> [accessed 26 August 2010].
- Guthrie, J E and Parker, L D. (1990), "Corporate Social Disclosure Practice: A Comparative International Analysis", *Advances in Public Interest Accounting*, Vol. 4, pp. 159-176.
- Hahn, T and Scheermesser, M. (2006), "Approaches to Corporate Sustainability among German Companies", *Corporate Social Responsibility and Environmental Management*, Vol. 13, pp. 150-165.
- Hakansson, N H. (1983), "Comments on Weick and Ross", *The Accounting Review*, Vol. 58, No 2, pp. 381-384.
- Hannah, G, Dey, C, and Power, D. (2006), "Trust and distrust in a network-style organisation", *Accounting Forum*, Vol. 30, No 4, pp. 377-388.

- Harvey, C, Kelly, A, Morris, H and Rowlinson, M. (Eds), (2010), *The Association of Business Schools Academic Journal Quality Guide*, version 4.
- Haskins, M E, Baglioni, A J, and Cooper, C L. (1990), "An investigation of the sources, moderators, and psychological symptoms of stress among audit seniors", *Contemporary Accounting Research*, Vol. 6, No 2, pp. 361-385.
- Haslam, C, and Lehman, G. (2006), "Accounting for healthcare: Reform and outcomes", *Accounting Forum*, Vol. 30, No 4, pp. 319-323.
- Haslam, C, and Marriott, N. (2006), "Accounting for reform: Funding and transformation in the four nation's hospital services", *Accounting Forum*, Vol. 30, No 4, pp. 389-405.
- Hofstede, G. (1984), "Cultural dimensions in management and planning", *Asia Pacific Journal of Management*, Vol. 1, No 2, pp. 81-99.
- Hopwood, A G. (1990), "Accounting and Organisation Change", *Accounting, Auditing and Accountability Journal*, Vol. 3, No 1, pp. 7-17.
- HSE (2001), *Tackling work-related stress: a manager's guide to improving and maintaining employee health and well-being*, Health and Safety Executive, Sudbury: HSE Books.
- HSE (2009), *Health and Safety || Statistics 2008/09*, Health and Safety Executive, Sudbury: HSE Books.
- Islam, M A and Deegan, C. (2008), "Motivations for an Organisation within a Developing Country to Report Social Responsibility Information", *Accounting, Auditing & Accountability Journal*, Vol. 21, No 6, pp. 850-874.
- Jackson, G and Apostolakou, A. (2010), "Corporate Social Responsibility in Western Europe: An Institutional Mirror or Substitute?" *Journal of Business Ethics*, Vol. 94, pp. 371-394.
- Jefferson, T, Price, D, Demicheli, V and Bianco, E. (2003), "Unintended Events Following Immunization with MMR: A Systematic Review", *Vaccine*, Vol. 21, pp. 3954-3960.
- Joiner, T A. (2001), "The influence of national culture and organizational culture alignment on job stress and performance: evidence from Greece", *Journal of Managerial Psychology*, Vol. 16, No 3, pp. 229-242.

- Jordan, J, Gurr, E, Tinline, G, Giga, S, Faragher, B, and Cooper, C. (2003), *Beacons of excellence in stress prevention*, research report 133, Health and Safety Executive, Sudbury: HSE books.
- Kane, G D, Richardson, F M, and Graybeal, P. (1996), "Recession-Induced Stress and the Prediction of Corporate Failure", *Contemporary Accounting Research*, Vol. 13, No 2, pp. 631-650.
- Kerr, R, McHugh, M, and McCrory, M. (2009), "HSE Management Standards and stress-related work outcomes", *Occupational Medicine*, Vol. 59, pp. 574-579.
- Kiesel, H. (2010), *Experts urge employers to focus on mental health*, Deutsche Welle, 6 April, available from: <http://www.dw-world.de/dw/article/0,,5409088,00.html>, [accessed 7 July 2010].
- Kirkcaldy, B D, and Cooper, C L. (1992), "Cross-cultural differences in occupational stress among British and German managers", *Work and Stress*, Vol. 6, No 2, pp. 177-190.
- KPMG (2002), *KPMG International survey of corporate sustainability reporting 2002*, De Meern: KPMG Global Sustainability Services.
- KPMG (2008), *KPMG International Survey of Corporate Responsibility Reporting 2008*, Amsterdam: University of Amsterdam and KPMG Global Sustainability Services.
- Laughlin, R. (1995), "Empirical Research in Accounting: Alternative Approaches and a Case for 'Middle Range' Thinking", *Accounting, Auditing and Accountability Journal*, Vol. 8, No 1, pp. 63-87.
- Laughlin, R, Broadbent, J and Willig-Atherton, H. (1994), "Recent Financial and Administrative Changes in GP Practices in the UK: Initial Experiences and Effects", *Accounting, Auditing and Accountability Journal*, Vol. 7, No 3, pp. 96-124.
- Laurence, S, Alam, M and Lowe, T. (1994), "The Great Experiment: Financial Management Reform in the NZ Health Sector", *Accounting, Auditing and Accountability Journal*, Vol. 7, No 3, pp. 68-95.

- Lessem, R. (1977), "Corporate Social Reporting in Action: An evaluation of British, European and American Practice", *Accounting, Organizations and Society*, Vol. 2, No 4, pp. 279-294.
- Levi, L. (1996), "Spice of life or kiss of death?" in C L. Cooper (ed), *Handbook of stress, medicine and health*, Boca Raton, Florida: CRC Press Inc., pp. 1-10.
- Libby, R. (1983), "Comments on Weick", *The Accounting Review*, Vol. 58, No 2, pp. 370-374.
- Libner, L, Reihlen, A, Hocker, H, Elo-Schafer, J, and Stautz, A. (2010), *Comparative analysis of national strategies for safety and health at work*, Research Project F 2234, Dortmund: Federal Institute for Occupational Safety and Health.
- Mackay, C J, Cousins, R, Kelly, P J, Lee, S and McCaig, R H. (2004), "Management Standards' and work-related stress in the UK: Policy background and science", *Work and Stress*, Vol. 18, No 2, pp. 91-112.
- Mandaraka, M and Kornoutou, M. (2007), "Contents and Structure of Corporate Social Responsibility (CSR) Reports Published in Greece", *Proceedings of the 10<sup>th</sup> International Conference on Environmental Science and Technology*, Kos island, Greece, 5-7 September.
- Oakes, L S, Considine, J and Gould, S. (1994), "Counting Health Care Costs in the United States; A Hermeneutical Study of Cost Benefit Research", *Accounting, Auditing and Accountability Journal*, Vol. 7, No 3, pp. 18-49.
- O'Reilly, D M, Leitch, R A, and Tuttle, B. (2006), "An Experimental Test of the Interaction of the Insurance and Information-Signaling Hypotheses in Auditing", *Contemporary Accounting Research*, Vol. 23, No 1, pp. 267-289.
- O'Sullivan, N and O'Dwyer, B. (2009), "Stakeholder Perspectives on a Financial Sector Legitimation Process", *Accounting, Auditing & Accountability Journal*, Vol. 22, No 4, pp. 553-587.
- Panayioutou, N A, Aravossis, K G, and Moschou, P. (2009), "Greece: A Comparative Study of CSR Reports", in S O. Idowu and W. Leal Filho (eds.), *Global Practices of Corporate Social Responsibility*, Berlin: Springer, pp. 149-164.

- Price, D, Jefferson, T and Demicheli, V. (2004), "Methodological Issues Arising from Systematic Reviews of the Evidence of Safety of Vaccines", *Vaccine*, Vol. 22, pp. 2080 – 2084.
- Quick, J C, Nelson, D L and Quick, J D. (2001), "Occupational stress and self-reliance: development and research issues", in J. Dunham (ed), *Stress in the workplace: past, present and future*, London: Whurr Publishers.
- Roberts, J. (2003), "The manufacture of corporate social responsibility: constructing corporate sensibility", *Organization*, Vol. 10, No 2, pp.249-265.
- Saner, E. (2010), "How to survive workplace stress in the recession", *Guardian*, 17 May, available from: [www.guardian.co.uk](http://www.guardian.co.uk) [accessed 07 July 2010].
- Schabracq, M, Cooper, C, Travers, C and van Maanen, D. (2001), *Occupational health psychology: the challenge of workplace stress*, Leicester: British Psychological Society.
- Schreuder, H. (1979), "Corporate Social Reporting in the Federal Republic of Germany: An Overview", *Accounting, Organizations and Society*, Vol. 4, No 1/2, pp. 109-122.
- Senatra, P T. (1980), "Role Conflict, Role Ambiguity, and Organizational Climate in Public Accounting Firm", *The Accounting Review*, Vol LV, No 4, pp. 594-603.
- Seymour, L and Grove, B. (2005), *Workplace Interventions for People with Common Mental Health Problems*, London: British Occupational Health Research Foundation.
- Skouloudis, A and Evangelinos, K. (2009), "Sustainability Reporting in Greece: Are We There Yet?" *Environmental Quality Management*, Autumn, pp. 43-60.
- Skouloudis, A, Evengelinos, K, and Kourmoussis, F. (2010), "Assessing non-financial reports according to the Global Reporting Initiative guidelines: evidence from Greece", *Journal of Cleaner Production*, Vol. 18, pp. 426-438.
- Smark, C. (2006), "Costing Schizophrenia", *Accounting Forum*, Vol. 30, No 4, pp. 341-358.



- Smith, A, Brice, C, Collines, A, Mathews, V and McNamara, R. (2000), *The scale of occupational stress: a further analysis of the impact of demographic factors and type of job*, Health and Safety Executive, Sudbury: HSE books.
- Smith, K J, Everly, G S, and Johns, T R. (2003), "The Role of Stress Arousal in the Dynamics of the Stressor-to-Illness Process among Accountants", *Contemporary Accounting Research*, Vol. 9, No 2, pp. 432-449.
- Solomon, A, and Lewis, L. (2002), "Incentives and Disincentives for Corporate Environmental Disclosure", *Business Strategy and the Environment*, Vol. 11, No 3, pp. 154-169.
- Spanos, L , and Mylonakis, J. (2007), "Internet Corporate Reporting in Greece", *European Journal of Economics, Finance and Administrative Sciences*, No 7, pp. 131-144.
- Spence, C and Gray, R. (2007), *Social and Environmental Reporting and the Business Case*, ACCA research report No 98, London: Certified Accountants Educational Trust.
- Stansfield, S, Head, J, and Marmot, M. (2000), *Work related factors and ill health: the Whitehall II study*, Health and Safety Executive, Sudbury: HSE Books.
- Strawser, R H, Kelly, J P, and Hise, R. (1982), "What Causes Stress for Management Accountants", *Management Accounting*, March, pp. 32-35.
- Tasho, W, Jordan, J and Robertson, I. (2005), *Case study: establishing the business case for investing in stress prevention activities and evaluating their impact on sickness absence levels*, research report 295, Health and Safety Executive, Sudbury: HSE books.
- Ullmann, A. (1979), "Corporate Social Reporting: Political Interests and Conflicts in Germany", *Accounting, Organizations and Society*, Vol. 4, No 1/2, pp. 123-133.
- Unerman, J. (2000), "Methodological Issues: Reflections on Quantification in Corporate Social Reporting Content Analysis", *Accounting, Auditing and Accountability Journal*, Vol. 13, No 5, pp. 667-680.

- Unerman, J. (2003), "Enhancing organizational global hegemony with narrative accounting disclosures: an early example", *Accounting Forum*, Vol. 27, No 4, pp. 425-448.
- Unerman, J and O'Dwyer, B. (2010), "Analysing the relevance and utility of leading accounting research", paper presented in the British Accounting Association Annual Conference, Cardiff, 30 March – 1 April.
- Van Peurseem, K A, Pratt, M J, and Lawrence, S R. (1995), "Health Management Performance: A review of measures and indicators", *Accounting, Auditing and Accountability Journal*, Vol. 8, No 5, pp. 34-70.
- Viator, R E. (2001), "The association of formal and informal public accounting mentoring with role stress and related job outcomes", *Accounting, Organizations and Society*, Vol. 26, pp. 73-93.
- Weick, K E. (1983), "Stress in Accounting Systems", *The Accounting Review*, Vol. 58, No 2, pp. 350-369.
- Zéghal, D and Ahmed, S A. (1990), "Comparison of Social Responsibility Information Disclosure Media Used by Canadian Firms", *Accounting, Auditing and Accountability Journal*, Vol. 3, No 1, pp. 38-53.