

Occupational Risk in Flexible Forms of Employment in Greece

Antonis TARGOUTZIDIS ¹

Savvas ROBOLIS ²

Received: November-2010, Accepted: January-2011

Abstract

“Flexible” employment, such as part-time, temporary, short-term or self-employment increased during last decades in the context of deregulation of labour market in Greece and in other member states of the European Union. However, despite these trends, limited statistical data and research do not allow for safe conclusions on occupational risk in these forms of employment.

Estimating occupational risk in flexible employment is a product of two uncertainties: a) poor accident data (under-reporting) and b) poor labour data (informal employment). Still, it is a scientific challenge to identify these forms of employment and occupational accidents and occupational diseases in sectors where these flexible forms are increasing; these sectors also happen to be among the most dangerous for occupational health and safety (OHS).

In this paper it is attempted to analyse the phenomenon of flexible employment, (focusing on the case of Greece) so as to indicate its implications for OHS, especially in the context of the deregulated labour environment.

The most important features of flexible employment in Greece are presented, along with estimates for its magnitude. On the other hand, the implications of these forms of employment on occupational risk are explored, aiming to build a holistic picture of this phenomenon.

Keywords: Flexible employment, workplace accidents

JEL Codes: J81; J71

¹ Regional Director, Elinyae, Greece, targoutzidis@elinyae.gr.

² Professor, Panteion University, Director of the Labour Institute of the General Confederation of Greek Workers, vpetrak@inegsee.gr

1. Introduction

Globalization of competition has undoubtedly been the most important economic process of last decades, with fast, wide and deep results that have changed the international status of allocation of resources in many areas of the economy and the society, such as in labour and in work environment, thus directly affecting OHS.

The after-war model of employment especially in industrialized capitalist countries involved full-time and stable employment based on collective bargaining and direct labour contracts. Domestic labour markets were increasingly regulated with a continuous trend for reduction in working hours, as a result of the bargaining power of trade unions and limitations in labour and capital mobility. Large state-owned enterprises were dominating services and sectors of heavy infrastructure, whereas domination of economies of scale was maintaining and empowering commercial private enterprise schemes.

Only few of these characteristics can be found in contemporary function of labour market. Large state-owned companies are privatizing or led to free competition, which results to serious downsizing and massive personnel cuts. The same happens to many private enterprises. By choosing the strategy of change as leverage for dealing with the threats of global competition, enterprises intensify internal flexibility, i.e. matching capacity to the existing demand. In terms of production, flexibility is translated into minimization of idle capital in inventories ("Just-in-Time" strategies) and of organizational inertia (small autonomous units). Competition is considered as a massive stream reaching everywhere and changing everything.

The necessity for flexibility of resources in order to maximize their utilization, also applies to human resources, especially for enterprises in developed countries, where production cost is high. Enterprises assume that this utilization is only maximized when labour is employed solely when required (temporary or part-time employment, large scale overtime, etc.) so as to reduce its volume, and when competition is introduced to the providers of labour (self-employment, individual motives, labour mobility), so as to reduce its marginal cost (Mayhew, Quinlan & Ferris, 1997). Both of these targets are served through labour flexibility.

Self-, temporary (or short-term) and part-time employment, as well as employment through agencies saw a significant increase last years (European Agency for Safety and Health at Work - OSHA, 2002a&b; EUROSTAT, 2008). Projections are that a quarter of the workforce could be working in non-stable employment arrangements by the year 2020 (Sauter & Rosenstock, 2000), whereas already by 2000 more than a quarter of all employees in the EU worked less than 25 hours per week. Extended practice of weekend work, extended time schedules, irregular and less predictable or excessively long working hours are also increasing (OSHA, 2002b).

When labour changes, occupational risk also changes, either in its magnitude or in its patterns. This paper aims to identify the profile of flexible forms of employment in Greece and to discuss its implications on occupational risk. Causal relationships are not attempted to be proved, since this would be out of the scope of this paper.

2. Methodology

In conditions of statistical efficiency, where all statistical data on employment and occupational accidents would be accurately reported and recorded, it would be quite easy to estimate the implications of flexible forms of employment on occupational risk, at least by means of magnitude, by simply comparing incident rates. However, this is not the case in any country, since neither all forms of employment are “formal” nor all occupational accidents are reported, which is even more intense in precarious employment (Guadalupe, 2003).

Greece is absolutely not a country of statistical efficiency. Lack of statistical data on occupational accidents is intense, mostly due to lack of motives for reporting accidents. Moreover, there is significant “informal” labour, either in “formal” economy (informal labour but formal output value) or in informal economy (informal labour and output value), so that neither labour data is precise. An estimate of incident rates based on existing data would be a product of both these uncertainties, that is statistical unreliability. Nevertheless, exploring this area is a challenge due to a number of reasons:

- Flexible forms of employment concern an increasing proportion of labour.
- Precarious and insecure workers are usually employed in more risky sectors or tasks.
- Informal employment usually concerns precarious and insecure workers.
- Immigrant workers are a large part of all these categories.

The study will focus on certain forms of employment. As official statistics and questionnaire surveys indicate, part-time employment is not as important (both by means of magnitude and exposure to risks) in Greece, whereas immigrant employees have to be incorporated in the analysis, since this part of workforce is an important portion (almost 10% of total employment), which is more likely to be precariously and/or informally employed. Moreover, employment of immigrants accounts for 38% of lethal accidents at work (SEPE, 2008), whereas incident factor in the main insurance institution of the country (IKA, 2008) appears to be 50% higher for this category of workforce.

Due to unreliability of statistical data, the methodological approach of this paper will be sectorial. Sectors of increased flexible and informal employment are identified, both by existing questionnaire surveys and cross-national/cross-sectorial comparison of value added to official employment statistics. In more detail, Gross Value Added (GVA) per sector is divided by employment per sector to obtain a measure of productivity both for Greece and European Union of 15 member states (EU15). However, productivity is a measure that differs between sectors (labour or capital intensity) and countries (economic effectiveness). Therefore, both these influences need to be taken into account.

Since statistical data of employment in Greece do not reflect reality, an estimate of employment takes place by dividing GVA of each sector of Greek economy with the average productivity of the respective sector of EU. In this way, sectorial productivity is taken into account, whereas a correction (i.e. multiplying with the rate of overall productivity in EU15/Greece) will help incorporating the effect of national productivity. In other words, since employment in Greece in these sectors is considered to be underestimated, it is corrected with respective figures of EU15 and overall Greek economy that are considered to be more reliable (although still underestimated). Therefore, the result is still rather lower than the real one.

Moreover, this methodological approach only takes into account informal labour in formal economy, and not in informal economy. Without attempting another correction (due to lack of availability of statistical data per sector) informal economy in Greece is estimated between 30% and 40% of formal economy (without including household activities and criminal economy). Therefore, the true figures of precarious employment are expected to be even higher.

Despite not a theoretically rigid methodology, it is a useful approach to explore flexible employment, which can bypass the obstacle of insufficient and unreliable data. Although applied in the case of Greece, this approach also applies to any country, most significantly to the countries where statistical data is limited or unreliable.

In addition, data from questionnaire surveys, sectorial studies and the census were used, since in these cases people might easier report their true occupation even if it is informal.

2004 was selected as a base year for the following reasons:

- It is the most recent year with available and accurate statistical data.
- To avoid the effect of booming in fuel prices and in food prices (agriculture).

However, to identify the risk (i.e. precise occupational accident rates) in these sectors, no numerical analysis applies. Therefore, the risk profiles of these sectors are presented with respect to flexible employment; literature on risk for flexible employment is also quoted.

3. Flexible Employment in Greece

As mentioned above, flexible employment in Greece has to be seen in a wider spectrum that also includes informal employment and immigrant employees.

There are three large-scale questionnaire surveys conducted in Greece concerning this kind of employment (Dimoulas & Papadopoulou 2004; Baldwin-Edwards, 2005; Kavounidi, 2004) and some surveys of the National Statistical Service of Greece (ESYE, 2007). They all agree that despite official

statistics, immigrant workers in reality account for about 10% of workforce in Greece. The main sectors where they are employed to are construction (26% in Greece – ESYE, 2007 and 34% in Athens – Dimoulas & Papadopoulou 2004), agriculture (19% in Greece – ESYE, 2007) and personal services – tourism (17% in Greece – ESYE, 2007 and 25% in Athens – Dimoulas & Papadopoulou 2004), which is close to the figures of a similar study for Italy (European Foundation for the Improvement of Living and Working Conditions – EUROFOUND, 2007a). The respective overall employment in these sectors in Greece is only 8%, 11.5% and 10% respectively (EUROSTAT, 2008). By multiplying the percentage of employment per sector with the incidence factor of the sector, a total incidence factor of 12.33 is produced for immigrant employees compared to 7.43 for overall employment in Greece. Similar studies in other countries (EUROFOUND, 2007a) also indicate similar results, whereas reports of IKA (2008), for occupational accidents in immigrants verify this estimate. The same estimate (based on the incidence rate of the sectors they are employed to) indicates an expected realistic incidence rate of 13.85 for self-employed persons (as opposed to the officially reported 0.94), which verifies accident under-reporting in flexible employment (Guadalupe, 2003). Exclusion of self-employed workers from the occupational accident registration system in Greece has already been emphasized (Jørgensen, 1997; Jacinto & Aspinwall, 2004)

Of the contracted employees, only 63.3% are long-term (or feeling so), whereas 20.6% are informally employed (Kavounidi, 2004). Employment in construction and to some extent in services, both for locals and immigrants is not always accompanied with full respect of working rights (Dimoulas & Papadopoulou, 2004). Only 36% of immigrant workers work 40 hours per week or less (Dimoulas & Papadopoulou, 2004), which is not far from the average for all employees in Greece. Greece and Romania are the two EU countries with the most working hours per day and most working days per week (EUROFOUND 2007b)

To sum up, key sectors of (immigrant or domestic) informal and flexible employment are, hotels-restaurants-catering (HORECA), personal services, construction and agriculture. These are the sectors with the most working hours per day and most working days per week (EUROFOUND 2007b). Moreover, these are the sectors with the highest levels of seasonality (mostly during

summer). These sectors are further analyzed with the methodology quoted in Paragraph 2.

Table 1. Employment Estimate

		GREECE	EU15
GVA (million euros)	Agriculture	7,791	179,105
	Construction	12,724	524,258
	HORECA	13,126	267,404
	Personal services	7,668	350,942
	Total	165,775	8,955,277
Employment	Agriculture	555,000	6,301,000
	Construction	350,000	12,427,000
	HORECA	274,000	8502,000
	Personal services	188,000	8,022,000
	Total	4,469,000	172,513,000
GVA (euros)/ employee	Agriculture	14,039	28,425
	Construction	36,354	42,187
	HORECA	47,905	31,452
	Personal services	40,787	43,747
	Total	37,094	51,911
Employment estimate	Agriculture	383,589	
	Construction	422,079	
	HORECA	584,029	
	Personal services	245,289	

There is a statistical abnormality in agriculture, which is attributed to the intense seasonality (crop harvesting that can take even a few days) and short-term nature of work in Greece compared to other EU15 countries (e.g. due to less intense forestry or hunting, etc.). However, in the case of agriculture, a number of 1.24 million seasonal workers and 245 thousand self-employed persons are estimated by ESYE (2007). Apart from this sector, a 20% more employment is estimated for construction, a 30% for services (including personal services) and almost double personnel is estimated for HORECA (there might be an overestimate due to high seasonality).

This is informal labour, which is by definition precarious. Of course, these figures cannot be assumed to be accurate; however, they provide a picture of the

magnitude of hidden labour, even without taking informal economy into account.

4. Implications for Workplace Risk

4.1 Flexible Employment Patterns and Occupational Risk

In literature, some efforts have been made to explore and discuss the implications of these flexible forms of employment in OHS. In general, there is evidence that accident risk is systematically higher for temporary employees (Guadalupe, 2003; OSHA, 2002a, c & d) and self-employed persons (OSHA, 2002a). This can be attributed to a number of reasons.

“Flexible” workers are usually assigned with more risky tasks (OSHA, 2002a; Mayhew et al. 1997), they do not have equal opportunities to safety information (OSHA, 2002a), training (Guadalupe, 2003; OSHA, 2002a & b) or protection (OSHA, 2002c) and have less control on their work and its risks (Mayhew et al. 1997; OSHA, 2002a).

Flexible employment patterns may be seen either as a source of success and security or as a threat (James, 2000). On the one hand, pressure from the perceived threat in employment may lead to increased stress, which is positively related to risk and error proneness (OSHA, 2002a; Guadalupe, 2003) as employees are working under more pressure.

On the other hand, perceived as source of success, flexible employment patterns might also lead to risky behavior. There are studies indicating an increase to occupational accident rate when job turns to piece-rate payment (Organization for Economic Co-operation and Development - OECD, 1989). A number of studies (quoted in Mayhew et al. 1997) indicate the same effect for “incentive payment” bonuses. A survey for Denmark attributes increase of occupational accidents to this flexible employment (EUROFOUND 2008)

Another effect of the new competitive environment is a general trend (OSHA, 2002b) for increase of small enterprises (SE's), where accident risk is higher (Dorman, 2000; Clifton, 2005). Job prospects in SE's are significantly lower, just like the survival prospects of the whole enterprise. Resources for safety are also less. Moreover, since the benefits (and the respective economic returns) of investment in OHS are in long term, it is unlike that an SE with uncertain future will ever undertake it, especially when this small invested capital is needed for more elementary investments that are crucial for its survival.

With labour mobility workers are transferred between countries and enterprises in order to increase utilization of labour resource. Thus, workplaces may have to adapt to accommodate people from different backgrounds (OSHA 2002b) and culture, which increases the complexity and risk of the workplace system. Mobility also results to increase of staff turnover and decrease of mutual commitment between the employer and the employee. This diminished commitment reduces the long term and stability prospects and leads to behaviors with a limited time horizon, thus increasing individualism and job insecurity that might lead to risky behavior.

Labour mobility and high staff turnover has a direct impact on the acquired skills and training opportunities that are limited to the time horizon of the employment. Moreover, it affects motives pressing for productivity and increasing stress, due to insecurity of work prospects. Thus the person is individualized in a deregulated work environment, i.e. more likely to behave as an independent unit, which generally reduces job security and increases pressure for high productivity standards that may lead to risky behavior and stress. This situation is expected to deteriorate in the forthcoming economic recession. During a recession workers accept less favorable working conditions than they normally would (OSHA, 2002c).

One of the main victims of labour mobility was the development of unionization, which has decreased across EU and it is even more limited in SE's (OSHA, 2002b), in precarious workers and in decentralized units (Mayhew et al. 1997) enhancing individualism. Self-employed workers are unlikely ever to cohesively address their OHS hazards and risks, precisely because the market mechanism has divided them from each other (Mayhew et al. 1997).

Decrease of unionization is related to respective decrease of collectiveness in workplaces, bargaining power and job security. Moreover, it appears to be connected to higher accident rates and lower worker consultation on safety issues (OSHA, 2002b).

Intensification of global competition inevitably bounds the potential of governmental intervention, which is restricted to OHS law enforcement and incentives (mainly through insurance schemes). EU OHS legislation has already been criticized for incapacity to correspond to the deregulated working environment and to ensure a common level of workplace standards in all countries (Walters, 1996). The intensification of global competition has led countries to a competition to attract capital investments, which makes any further economic burden (such as costs for higher workplace standards or intensification of law enforcement) hard to apply (Dorman, 2000; Etienne,

1996). On the contrary, deregulation of labour and social security system is rapidly adopted.

Of course there is no evidence that any country or company in the long term would benefit from a low level of safety and health (OECD, 1989). However, competition usually sets the focus on short term results that may even lead to a situation of “prisoner’s dilemma”.

Reduction in government intervention and deregulation also add to this insecurity and individualism. Changing working patterns as well as a feeling of mistrust of government action, especially in issues such as pensions, shifts responsibilities from organizations to individuals (James, 2000). Mayhew et al. (1997) describe the situation in Australia: “Primarily because government action over OHS was focused merely on the hazards and risks, and not the economic driven labour intensification, inspectorate attempts to improve OHS were seen to be irrelevant, Futile, or even laughable”. As a result of globalization “unemployment and job insecurity have become widespread and long lasting” (Ali-Taqi, 1996).

4.2 Main risk factors

Summarizing, flexibility of employment has three main implications on OHS:

- Changes in the motivation of the employee: individualized workers paid on a piece-rate (self-employed) or under insecure employment have a strong motive to maximize profits or to pursue a more permanent contract. These motives outbalance safety compared to productivity, urging for higher productivity even at the cost of safety, i.e. to potential intentional risky behavior. There are studies (Rundmo, 2001) supporting a positive relation between precarious employment and risky behavior.
- Stress: pursue of higher productivity standards, along with insecurity for the present situation adds to stress, which is recognized in human error literature as a key factor for erroneous (i.e. unintentional risky) behavior. There is literature (OSHA, 2002b) relating precarious and immigrant employees with increased stress.
- Lower level of skills: less opportunities for training and less experience on the tasks (due to precariousness and lack of unionization) is an additional factor for erroneous behavior, whereas they also influence the quality of conscious decision making against risk (risk awareness).

- New technologies, management approaches and tools have a similar effect, since they add to motives for high productivity standards and stress (due to higher speed and complexity). Modern equipment, new tasks and increase in the overall complexity have decreased workers' level of control on the process, since their depth of knowledge on it is eventually limited. Ambiguity in task definition, unclear relationships and the existence of stranger or unqualified workers may lead to errors of omission in decision making or inconsistent sets of decisions (Kochan, Smith, Wells & Rebitzer 1994, Mayhew et al. 1997).

5. Sectors of Flexible Employment

5.1 Construction

Construction is a key sector in OHS. In Greece it accounts for more than 55% of lethal occupational accidents (SEPE, 2008) and 24% of overall accidents reported to the main insurance institution of the country (IKA, 2008), whereas only an 8% of workers in the country are (formally) employed in this sector (EUROSTAT, 2008).

The sector is dominated by immigrant employees (38% of insured workers are immigrants – IKA, 2008), however a lot of “informal” immigrant workers are also estimated). Due to the project-based nature of the sector, employment is usually temporary. There is also some seasonality effect, since a lot of construction projects stagnate during winter.

The sector is also dominated by sub-contracting and self-employment, since (due to the temporary nature of employment in projects) specialized technicians become subcontractors to main contractors, either working alone or with a small group of technicians.

This low level of mutual commitment between employers and employees leads to increased motives for risk-taking. There is a severe time pressure to the SE or self-employed person to complete works in one project, in order to be transferred to the next (or parallel) one, since involvement to one certain project is temporary and usually not sufficient. Apart from increased risk motives, this pressure also adds to stress, whereas frequent shift of workplace (that is already changing by itself as it evolves) adds to complexity.

These risk factors simply supplement the physical existing natural risk of the sector due to its characteristics. The main risks for safety in the sector come from the incomplete infrastructure of the working environment and include:

- Work at height (44% of fatal accidents).
- Electricity (20% of fatal accidents).
- Equipment (5% of fatal accidents).
- Slips and trips.
- Falling objects.

5.2 Agriculture

Agriculture is also a sector of increased occupational risk, with an incidence rate four times higher than the average in the main insurance institution of the country (although significant underreporting is estimated in this sector). The main characteristic of the sector is seasonality, since there are certain periods (mainly in summer), when economic activity of the sector peaks (harvesting), leaving land and automatic equipment to do most of the remaining work throughout the year. Therefore, there is dominance of temporary work.

According to an ESYE (2007) survey, there are 1.2 million seasonal workers in Agriculture in Greece, compared to 24 thousand permanent employees. Thus, it can be safely assumed that labour in sector mainly consists of immigrant or temporary workers, self-employed farmers and their families, most of them working informally. Most workers are unskilled due to the low requirements of the regular tasks that (however) may be found in risky situations close to equipment.

Precariousness of employment in the sector, apart from low levels of knowledge and experience in work and its risks, also increases the potential for risky behaviour of workers.

5.3 Tourism

Personal services is the third most important sector of employment for immigrants and it mainly involves work in HORECA, as well as in other personal services, mainly included in the tourism business, the “heavy industry” of the Greek economy. This sector is also characterized by intense seasonality, especially during summer, resulting to temporary employment (temporary

operation of the whole workplace) and long working hours during these period. Immigrant and informal employment are extensive, especially in “back room” employees (e.g. cleaners, chambermaids, etc.).

Like in agriculture, seasonal workers are sporadically employed in this sector as a second or an extra job. Likewise, this results to low levels of knowledge and experience in the tasks and their risks. However, tasks in this sector are much more demanding leading to stress and potential for risk taking, due to high levels of responsibility and “moments of truth” (e.g. cleaning or sudden equipment repairs in a hotel). The interface between “back rooms” and “front rooms” also increases complexity.

The main risks in the sector are:

- Slips and trips.
- Electricity.
- Hot objects.
- Equipment.
- Acute chemical exposure.

It has to be mentioned that in this sector there is also a “sub-sector” of criminal activity concerning related personal services (i.e. trafficking, illegal entertainment activities, etc.) that accounts for a significant informal value added and “employment”, but this analysis is out of scope of this paper.

6. Conclusions

Flexible forms of employment is a key topic for OHS, since this kind of employment is mainly focused in the most risky sectors and the most risky tasks, whereas there are a number of risk factors that are related to the precariousness and insecurity of employment. These forms of employment have significantly increased during last decades and current trends are to the same direction.

Despite the interest in exploring this kind of employment, there are certain obstacles that have to do with under-reporting of both this employment and of these occupational accidents. This obstacle is even higher in Greece, where data is not reliable.

Since no analysis of statistical data could take place, in this paper it was attempted to make some estimations of the true size of these forms of employment and to qualitatively assess its risks. Sectors of these forms of employment were identified and risks were presented with respect to the special characteristics of this employment. In many cases evidence is quite clear supporting a strong relation between immigrant employees, precarious employment, “informal” employment and sectors of increased occupational risk in the context of illegal labour market.

By applying sectoral incidence rates to the sectoral structure of each category of employment, combined with statistical and questionnaire data, the following estimates were produced for Greece:

- Occupational accident risk for immigrant employees is 66% higher.
- Occupational accident risk for self-employed persons is 86.4% higher.

According to international literature, it is expected that occupational accident risk is higher in flexible forms of employment (part-time, temporary, seasonal, etc.) than in stable employment. Unfortunately, lack of statistical data does not allow for quantitative investigation of this phenomenon in Greece. Therefore, further efforts of the institutions that are involved in the registration of occupational accidents (IKA, SEPE, etc.) are required for the collection and processing of necessary data, so that statistical efficiency allows researchers to reach in precise conclusions and decision making institutions to plan and implement proper and effective measures against occupational risk in flexible forms of employment.

REFERENCES

- Ali Taqi (1996 April 23). Globalization of Economic Relations: Implications for Occupational Safety and Health, An International View, Paper presented at the XIVth World Congress on Occupational Safety and Health, Madrid.
- Baldwin-Edwards M. (2005). Statistical Data on Immigrants in Greece: An analytical study of available data and recommendations for conformity with European Union Standards, Mediterranean Migration Observatory. Retrieved December 7, 2010, from http://www.mmo.gr/pdf/general/IMEPO_Exec_Summary_English.pdf
- Clifton R. (2000). The consequences of new enterprise structures. In: OSHA (2000). Magazine 2: The changing world of work. Luxembourg: Office for Official Publications of the European Communities. Retrieved December 7, 2010, from http://osha.europa.eu/publications/magazine/2/magazine2_en.pdf/at_download/file

- Dimoulas, K. & Papadopoulou, D. (2004). Forms of Social Integration of Economic Migrants in the Attica Region 2003-2004 (in greek). Athens: INE/GSEE-ADEDY – Attica Region. Retrieved December 7, 2010, from <http://www.inegsee.gr/ereunes-meletes-biblia.htm>
- Dorman P. (2000). The Economics of Safety, Health and Well-Being at Work: An Overview. InFocus Program on SafeWork, International Labour Organisation, The Evergreen State College. Retrieved December 7, 2010, from <http://www.ilo.org/public/english/protection/safework/papers/ecoanal/ecoview.pdf>
- Etienne P. (1996). Inspection and Control Policies. In EUROFOUND (1996). Abstracts from the Workshop on Occupational Health Strategies, Luxembourg, Office for Official Publications of the European Communities, Working Paper No.:WP/97/49/EN
- ESYE (2007). Greece in Figures. Retrieved December 7, 2010, from http://www.statistics.gr/eng_tables/hellas_in_numbers_eng.pdf
- EUROFOUND (2007a). Migrant workers prone to more work-related accidents but fewer diseases. Retrieved December 7, 2010, from <http://www.eurofound.europa.eu/ewco/2007/06/IT0706039I.htm>
- EUROFOUND (2007b). Fourth European Working Conditions Survey (2005). Luxembourg: Office for Official Publications of the European Communities. url: <http://www.eurofound.europa.eu/publications/htmlfiles/ef0698.htm>
- EUROFOUND (2008). Factors explaining rise in occupational accidents. Retrieved December 7, 2010, from <http://www.eurofound.europa.eu/ewco/2008/04/DK0804019I.htm>
- EUROSTAT (2008). Data: Population and Social Conditions: Labour Market. Retrieved December 7, 2010, from <http://ec.europa.eu/eurostat/>
- Guadalupe M. (2003). The Hidden Costs of Fixed Term Contracts: The Impact on Work Accidents. *Labour Economics*. 10. pp. 339-357.
- IKA (2008). Bulletin of Occupational Accidents of IKA of Year 2005. Retrieved December 7, 2010, from http://www.ika.gr/gr/infopages/stats/stat_reports/EA_2005_TRANS.zip
- Jacinto C. & Aspinwall E. (2004). A Survey on Occupational Accidents' Reporting and Registration Systems in the European Union. *Safety Science*. 42. pp. 933-960.
- James L. (2000). Redefining work as a result of globalisation and the use of new information technologies. In: OSHA (2000). op. cit.
- Jørgensen K. (1997). Recording and Notification of Occupational Accidents and occupational diseases: comments on the ILO Code of Practice and proposed for revision of the classifications used for statistics of occupational injuries. In: Jacinto C. & Aspinwall E. (2004). op. cit.
- Kavounidi, T. (2004). Survey on the Economy and Social Integration of Immigrants (in greek). PAEP Studies, Athens: Retrieved December 7, 2010, from <http://www.paep.org.gr/gr/mod/fileman/files/erevna.pdf>

- Kochan T., Smith M., Wells J. & Rebitzer J. (1994). Human Resource Strategies ant Contingent Workers: The Case of Safety in the Petrochemical Industry. In: Mayhew C., Quinlan M., Ferris R. 1997. op. cit.
- Mayhew C., Quinlan M. & Ferris R. (1997). The Effects of Subcontracting/Outsourcing on Occupational Health and Safety: Survey Evidence from Four Australian Industries. *Safety Science.*, 1-3, 163-178
- OECD (1989). Occupational Accidents in OECD Countries. url:<http://www.oecd.org/dataoecd/63/54/3888265.pdf>.
- OSHA (2002a). FACTS 25. New Forms of Contractual Relationships and the Implications for Occupational Safety and Health. Summary of a Agency report. Luxemburg: Office for Official Publications of the European Communities. Retrieved December 7, 2010, from <http://osha.europa.eu/publications/factsheets/25>
- OSHA (2002b). FORUM 5. The Changing World of Work. Trends and Implications for Occupational Safety and Health in the European Union. Luxemburg: Office for Official Publications of the European Communities. Retrieved December 7, 2010, from http://osha.europa.eu/publications/forum/5/forum5_en.pdf/at_download/file
- OSHA, (2002c). FORUM 7. Prevention of Work-related Accidents: a different strategy in a changing world of work? European Conference and Closing Event of the European Week for Safety and Health at Work 2001. Luxemburg: Office for Official Publications of the European Communities. Retrieved December 7, 2010, from http://osha.europa.eu/publications/forum/7/forum7_en.pdf/at_download/file
- OSHA, (2002d). New trends in accident prevention due to the changing world of work. Luxemburg: Office for Official Publications of the European Communities. Retrieved December 7, 2010, from http://osha.europa.eu/publications/reports/208/newtrends_en.pdf/at_download/file
- Rundmo T. (2001). Study on organisational change, job security and occupational risk-taking behaviour in the Norwegian chemical industry. In: OSHA (2002d) op. cit.
- Sauter S. & Rosenstock L. (2000). An American Perspective. In: OSHA (2000). op. cit.
- SEPE (2008). Activity report 2007 (in greek) Retrieved December 7, 2010, from <http://www.ypakp.gr/uploads/docs/2612.pdf>
- Walters D. (1996). Health and Safety Policies in Europe: An Overview. In EUROFOUND (1996) op. cit.