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# **The Challenge of Occupational Safety and Health in Greece**

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## **Abstract**

This study examines the managerial challenges and economic contexts of occupational safety and health in Greece as a dimension of national labor standards and working conditions. Empirical data is provided to document areas of Greek occupational safety and health concern. Recommended Greek occupational safety and health best practices are provided to address workplace safety issues and promote sustained economic productivity.

**JEL classification numbers: J81, R41**

**Keywords: Occupational safety and health, Greece**

## **1 Introduction**

Occupational safety and health (OSH) issues impact governments, labor and business organizations throughout the world, influencing economies, profits and most important the lives of those affected [12]. Managing OSH to ensure a healthy, effective work force and safe work conditions is critical for increased economic productivity. The awareness of global OSH problems has increased dramatically due to mainstream media coverage and rapid social networking communications[1].The Great Global Recession exposed structural economic problems that have exacerbated OSH problems in many developed countries, including those in Greece [11, 1]. In fact Greece has emerged as a developed nation that has had the most severe economic problems by many measures, even though Ireland, Portugal and Spain have had their economic flaws exposed during this downturn[17].Yet Greece was the first to receive a massive financial bailout from the

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European Union (EU) and the International Monetary Fund (IMF), which imposed numerous financial reform requirements on the country [9].

Some of the problems that led to the financial crisis in Greece include: poorly controlled government spending, low savings rates, lack of adequate domestic and global financial institution regulation, high borrowing costs, graft, and lower productivity [17]. At the height of the Greek crisis public debt exceeded gross domestic product, meaning that the country was essentially bankrupt, as indicated in Table 1.

Table 1: Comparative overview of principal measures of economic activity in Greece

	<u>2010</u>	<u>2012</u>
Gross Domestic Product	\$339 billion	\$304
Population	10.7 million	10.8 million
Gross Domestic Product per Capita	\$32,100	\$24,700
Change in Gross Domestic Product	-4%	-7%
Budget Deficit as % of GDP	9.4%	9%
Public Debt as % of GDP	144%	162%
Inflation	5%	2%
Labor Force	5.01 million	4.9 million
Unemployment	12.2%	24%
Percentage of Labor Force Covered by State Workers Compensation	48%	40%

References: [7], [9], [10]

Since 2008 Greece's economy has shrunk by more than a quarter while unemployment has reached 24 percent of the workforce [4]. To deal with this unprecedented problem the EU central bank and the IMF were forced to bail out the country. This unprecedented \$150 billion flow of funds into the country uncovered significant flaws in the EU financial structure and focused the world spotlight on Greece. However, recent economic data from 2013, indicating that Greece's economy has contracted by 3.7 percent rather than the forecasted 4 percent, with manufacturing, tourist and retail-sales figures rapidly expanding, point to the bottoming out of the descent with the promise of positive growth in 2014 [4, 2]. The effects of this financial crisis on Greek OSH and motor vehicle safety have yet to be fully explored.

The purpose of this paper is to begin that determination by utilizing available, fragmented published information and sources and to recommend best practices to improve Greek OSH to address workplace safety issues and promote sustained economic productivity.

## 2 Global Influences on OSH

Institutional world influence on OSH is provided through the United Nations (UN). The UN primarily utilizes the long standing International Labor Organization (ILO), headquartered in Geneva, Switzerland to provide relevant services and information to member countries and their agencies. Some additional input is provided by the United Nations Economic, Social and Cultural Organization (UNESCO).

The ILO deals with a wide variety of labor issues. The organization provides a forum by which hundreds of international agreements or conventions have been reached. About half of these conventions deal at least to some extent with working conditions. The ILO also provides for the exchange of safety information through its International Occupational Safety and Health Information Center and encourages information flow regarding for relevant activities and programs through its Global Program on Occupational Safety, Health and the Environment.

The EU provides the European Union Occupational Safety and Health system, which is located in Brussels. Its operational arm, the European Agency for Safety and Health at Work, provides a communication portal and works toward common structures and toward improved performance in member countries. Some activities include recommended legislation and recommended best practices such as safety in small and medium enterprises, work place health promotion, dangerous substance safety, and participation in European Week for Safety and Health at work campaigns.

The United States of America (USA) also provides input into OSH in Greece. The National Safety Council provides services through membership and an annual National Safety Congress, which frequently features activities and programs in other countries. In addition, the Voluntary Protection Program Participants Association, building on 25 years of success, increasingly provides strong support and certification for those organizations that operate on a world-wide basis and for companies that are headquartered in other countries.

### **3 The Greek Economy**

Greece is slowly recovering from the most severe and lengthy economic recession over the past sixty years [17]. Among the primary causes have been the relative decline in private investment, rising unemployment, steadily increased public debt, and relatively flat exports [4, 2]. The socialist government led by Prime Minister George Papandreou was forced to ask for and accept funds from the European Union and the International Monetary Fund in order to remain solvent and as a condition of the bailout is required to drastically reduce government spending while trying to maintain essential government services. The newly reorganized and newly named Ministry of Employment and Social Security is focused on problems of high unemployment as well as overseeing the safety net. These would be difficult problems in normal times but recently became central issues which have led to unrest, demonstrations and riots.

Labor unions and government workers have been forced to accept cuts in wages, benefits and other conditions of employment. Private sector firms continue to try to remain solvent while hampered by deteriorating plants and equipment, labor unrest and uncertain government interventions. The quantitative data on the Greek economy in Table 1 show a decrease in gross domestic product, public debt that exceeds the gross domestic product, and a budget deficit that is a large percent of gross domestic product.

Recent data, however, raises the hope that the rate of economic descent may be bottoming out with the hope of a return to economic growth due to expansion of manufacturing, tourist and retail-sales [4]. Greece's economic sentiment indicator is at the highest level since 2008, the European Commission forecasts a .6% expansion in the Greek economy, and Greek banks are finally raising fresh capital [2]. In short, Greece is generating the economic resources to address its OSH challenges.

## 4 Occupational Safety and Health in Greece

The General Directorate of Working Conditions and Health is located within the Hellenic Ministry of Employment and Social Security and is the focal point of safety and health in the national government. This agency consists of three institutions: the Directorate of Working Conditions, which deals with legislative and political liaison; the Center for Occupational Health and Safety, which provides technical support; and the Directorate for OSH Information Management, Training and Monitoring, which disseminates information[3]. Another agency of the Ministry, the Labor Inspectorate(SEPE), inspects sites in order to enforce labor legislation[13]. A private, non-profit organization, the Hellenic Institute for Occupational Health and Safety, was founded in 1992 and is funded by contributions both from employers and trade unions. The institute communicates safety information and sponsored the first Hellenic Congress on Occupational Health and Safety, which was held in Athens in 2010.

Statistical information is provided by the Social Insurance Institute (SSI), the SEPE and the Hellenic National Statistical Authority (ESYE). The most complete information is available from the SSI, which provides data for 40 percent of the labor force. The remainder of the labor force is either unemployed, works for small firms, or is self-employed. Some of these individuals are insured for workers injuries by private firms and some have no insurance. No data has been obtained regarding these latter individuals.

Available quantitative information from the SSI is provided in Table 2. These data estimate that the number of work deaths was 113 or 5.6 per 100,000 insured workers. The number of reported disabling injuries was 14,440 which is .6 per 100 insured workers. The total number of reported days lost was 485,550 or 34 days per disabling injury. The estimated total cost of these fatal and disabling work injuries was \$48million or \$10,300per reported injury.

No similar information is yet available for the most recent period during which the economic downturn has occurred. It is estimated that lower numbers may be reported as the Greek labor force continues to shift toward the less hazardous service sector, including the government, which now accounts for 65 percent of the labor force, and because reported work injuries normally decrease during difficult economic times as workers are more careful knowing that a work injury could lead to the loss of employment. More complete, timely, comparative, and centralized reporting of statistical information would better define current problems. However, it can reasonably be inferred that work deaths and injuries remain another significant problem which needs to be better addressed as Greece continues to recover from its financial crisis.

Another aspect of OSH involves the safe transportation of goods, services and people from place to place and the extent of motor vehicle accidents in Greece. The number of motor vehicles in Greece increased from 4.2 million vehicles in 2005 to 4.9 million vehicles, an increase of 15 percent. During this same period of time the number of motor vehicle deaths in Greece increased from 1,895 to 2,435 or 28 percent [18]. The number of reported motor vehicle injuries increased from 30,803 to 39,420 or 26 percent. Greece is regarded as the worst performing country in Europe in terms of road safety with the highest annual amount of fatalities per million inhabitants [6].

Probable causes for this significant increase have been inferred to include economic pressures and distractions caused by the recent financial downturn, increased traffic, poorer roadway maintenance due to austerity cutbacks, inadequate safety education, and increased numbers of immigrant, tourist and younger drivers [6].

Table 2: Principal measures of occupational safety and health  
And motor vehicle safety in Greece

Number of Reported Work Fatalities	113
Number of Reported Work Fatalities Per 100,000 Insured Workers	3.9
Number of Reported Disabling Injuries	14,440
Number of Reported Disabling Injuries Per 100 Insured Workers	.60
Number of Days Lost for Reported Disabling Injuries	485,550
Average Days Lost per Reported Disabling Injury	34 days
Temporary and Permanent Indemnity Costs	\$74 million
Estimated Medical and Hospital Costs	\$74 million
Total Estimated Workers Compensation Costs	\$148 million
Estimated Cost per Disabling Injury	\$10,300
Motor Vehicle Deaths	2435
Number of Motor Vehicles	4,870,000
Motor Vehicle Deaths per 10,000 Vehicles	5.0
Motor Vehicles Injuries	39,400
Motor Vehicle Injuries per 10,000 Vehicles	90.3

References: [6], [8], [14]

## **5 Recommended Greek OSH Best Practices**

To eliminate or reduce the regrettably high human and financial costs of current Greek OSH practices during a period of gradual recovery from severe economic austerity, a two-pronged approach is recommended: (1) take preventive and protective measures at multiple levels and (2) implement health promotion, education and training programs at multiple levels.

While preventive and protective measures may take many forms in Greece and are a function of various causes and their severity, the following general OSH best practices are recommended: improved workplace engineering design and control; substitution of hazardous materials insofar as possible; administrative reorganization of workflows to reduce risk exposure; improved access to and use of personal protective equipment at work sites; enforcement of existing OSH rules; incentivization rather than penalization for identification of workplace hazards; and general environmental protection and infrastructure improvement at local, regional and national levels[5].

To provide positive OSH options for the future, it will be necessary for Greece to enhance and implement health promotion, education and training programs at multiple levels [15]. Health promotion at the enterprise level can be enhanced by incorporating OSH as a strategic priority, organizing processes to ensure accurate, timely and transparent OSH records that are routinely available and posted, and providing healthy worker lifestyle information and resources to all employees. Implementing education programs at the local, regional and national levels that provide certified, coordinated, centralized, and quality-controlled treatment of the essential knowledge to recognize and rectify OSH risks would be a definite step forward. Specifically, the Greek Ministry of Labor and Social Affairs operates the General Directorate of Working Conditions and Health which is an OHS certification body for all adult education courses in OHS could be enhanced to ensure that all OSH education programs at all levels in Greece are in fact certified and quality-controlled so that Greek best safety practices could be more effectively and efficiently shared. Lastly, implementing OSH training programs for particular jobs, utilizing both online and off-line e-learning resources, would increase awareness of risks and best job safety practices, especially in fields with rapidly developing new technologies.

## **6 Conclusion**

This overview of OSH and motor vehicle safety issues and recommendations for improvement provide a snapshot of a challenging opportunity facing Greece as it begins to recover from difficult economic times. It is hoped that increased awareness of Greek OSH information and best practice recommendations can lead to enhanced governmental and private sector support to improve safety for those who call Greece their home and all future visitors and to sustained economic productivity.

## References

- [1] Alli, B. (2008). *Fundamental Principles of Occupational Health and Safety*. Second Edition. Geneva: International Labour Office.
- [2] Barley, R. (2014). "Investors Rediscover Greece," *Wall Street Journal*, 3/19/14, C14.
- [3] Boukouvalas, K. (2005). "Evaluation of the Legislation on Health and Safety at Work in Greece," *Enimerosi*. Athens: INE/GSEE-ADEDY, **116**: 2–38.
- [4] Bouras, S. (2014). "Greece Data Raise Hopes of a Return to Growth," *Wall Street Journal*, 2/15/14, A7.
- [5] Cherrie, J., R. Howie, & S. Semple (2010). *Monitoring for Health Hazards at Work*. Fourth Edition. New York: Wiley-Blackwell.
- [6] Drakopoulos, A., A. Economou & A. Grimani (2012). "A Survey of Safety and Health at Work in Greece," *International Journal of Workplace Health Management*, **5**(1): 56-70.
- [7] Editors. (2012). *CIA World Factbook: Greece Economy*. Washington, DC: Government Printing Office.
- [8] Eironline. (2012). Survey on Workplace Health and Safety: Greece, [www.eurofound.ed.int](http://www.eurofound.ed.int).
- [9] Forelle, C. (2010). "Greece, Germany Grapple Over Debt," *Wall Street Journal*,
- [10] Gauthier-Villars, D. (2010). "As Currency Union Tottered, "Mr. Euro" Was Forced to Act," *Wall Street Journal*, 9/27/10, A1.
- [11] Hellenic Institute of Occupational Safety and Health (2012). *National Report on Existing Occupational Health and Safety Activities in Greece*. Athens: Elinyae Press.
- [12] Koradecka, D. (ed.) (2010). *Handbook of Occupational Safety and Health*. New York: CRC Press.
- [13] Kretsos, L. (2006). *Health and Safety at Work in Greece*. Athens: INE/GSEE-ADEDY.
- [14] Lamprousaki, S. (2010). Absence from Work: Greece, EWCO, 7/21/10, [ww.eurofound.europa.eu.ewco](http://ww.eurofound.europa.eu.ewco)
- [15] Marsh, T. (2013). *Talking Safety*. Second Edition. New York: Gower.
- [16] Petrick, J. (2009). "Toward Responsible Global Financial Risk Management: The Reckoning and Reform Recommendations," *Journal of Asia-Pacific Business*, **10**: 1-33.
- [17] Stevis, M. (2014). "Greece Takes EU helm, Still Focused on Itself." *Wall Street Journal*, 1/10/14, A8.
- [18] Walker, M. (2010). "Three Deaths Shifted Course of Greek Crisis," *Wall Street Journal*, 11/27/10, A1.