



# Protecting Workplace Safety and Health in Difficult Economic Times – The Effect of the Financial Crisis and Economic Recession on Occupational Safety and Health



Programme on Safety and Health at Work and the Environment (SafeWork)

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ISBN 978-92-2-127054-6 (print) ISBN 978-92-2-127055-3 (web)

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This report was produced under the project "Linking safety and health at work to sustainable economic development: From theory and platitudes to conviction and action" (2009–2012), funded by the Swedish International Development Cooperation Agency (SIDA).

The project promotes the improvement of occupational safety and health for all workers through the development of global products addressing the methodological and informational gaps in this field, and through the mobilization of national stakeholders towards the implementation of practical measures at national, local and enterprise levels. The outputs of the project include training materials, practical tools and policy guidance to reinforce national and local capacities in occupational safety and health, and to help constituents design and implement occupational safety and health policies and programmes.

### Preface

The United Nations conference called in 2009 to discuss the global economic situation<sup>1</sup> concluded: "The governments and peoples of the 192 Member States of the United Nations are collectively mired in the midst of the most severe financial and economic crisis since the establishment of the modern international financial architecture."

The International Labour Office (ILO) is concerned that this crisis has led to the restructuring of businesses that could be compromising safety and health measures in the workplace. This report therefore focuses on the implications of the financial and economic crisis on occupational safety and health. It considers the evidence that occupational safety and health may have suffered, and it provides examples of current good practice. It offers the conclusion that, whilst there are certainly threats to workers' safety and health, as a result of restructuring and downsizing by businesses, there are also some opportunities in the current situation for improving corporate occupational safety and health practice. The report ends with a series of short recommendations.

The report is aimed primarily at ILO constituents and safety and health professionals at all levels, from policy-makers to those with responsibilities for occupational safety and health, including worker representatives, in multinational enterprises as well as in their suppliers and other enterprises. We hope it will be of use to all those who are interested in this issue which combines occupational safety and health and economic concerns around the world.

Seiji Machida Director Programme on Safety and Health at Work and the Environment (SafeWork)

### **Acknowledgements**

This report draws on research commissioned by the ILO's SafeWork Programme from the United Kingdom (UK) academic Dr Jason Devereux, researcher and registered human factors ergonomist in organizational design and management issues. Dr Devereux is a former lecturer at the University of Surrey and Honorary Member of the Business Psychology Unit, University College London, UK.

We gratefully acknowledge Dr Devereux's review of the scientific and "grey" literature on the effects of the crisis relating to work organizations, his study of 45 global companies listed in French, German, UK and US markets to determine how the economic crisis has affected them, and his interviews of selected global companies regarding the effects of the economic crisis on their past, present and future OSH strategy. In this respect we would also like to thank the multinational enterprises that contributed to this research, that wish to remain anonymous.

Dr Devereux benefitted from the experience and insights of Dr Mark Cropley, Chartered Health Psychologist at the Department of Psychology, University of Surrey, UK, and of Professor Adrian Furnham, Professor in Psychology at the Business Psychology Unit, University College London, UK. Our appreciation goes to them also.

We would also like to thank ILO colleagues in Headquarters and the field who provided advice on the initiative, and we particularly acknowledge the contribution of Dr Manal Azzi who negotiated the conditions of the research.

Finally we would like to thank Mr Andrew Bibby, consultant, for his work in reviewing and editing the report to make it accessible to a wide audience, to the benefit of occupational safety and health professionals and economists alike.

The report was prepared under the technical guidance and supervision of Ms Annie Rice, Senior Specialist for Occupational Safety and Health, SafeWork. Our thanks also go to Ms Amélie Schmitt, Chief Technical Adviser of the SafeWork/SIDA project under which the report was produced, for her coordination of this and other related products.

## Contents

_					
	face	v			
Ack	xnowledgment	vii			
List	t of abbreviations	1			
1. Introduction					
<b>2.</b> ]	The global financial and economic crisis	5			
2.1	The global economic recession	5			
2.1	Company responses	5			
3. 1	The recession and occupational safety and health: Challenges and changes	9			
3.1	The context	9			
3.2	Company restructuring and occupational safety and health	11			
3.3	Vulnerable groups in the workforce.	12			
3.4	New models of work organization	13			
3.5	Developing countries	13			
3.6	Psychosocial risk to health.	14			
3.7	Work-related musculoskeletal disorders	15			
3.8	Evidence of recession-linked changes in occupational safety and health	15			
3.9	Conclusion	17			
<b>4.</b> A	Actions and good practice	19			
4.1	Identifying the opportunities	19			
4.2	Senior management leadership on occupational safety and health	19			
4.3	Adopting a global strategy for improving employee health and well-being	20			
4.4	Social partnership and strong occupational safety and health practice	21			
4.5	Innovative approaches to tackling psychosocial factors	21			
4.6	Maintaining a focus on work-related musculoskeletal disorders.	22			
4.7	The business logic of developing good occupational safety and health practice	22			

Appendix I:	Summary of a study to assess the potential impact of the global economic recession on occupational safety and health	
	at the enterprise level.	29
Appendix II:	A summary of revenue change, employee changes and restructuring activities in some multinational enterprises during the recession	33
Appendix III:	Codes generated from the interviews for each multinational enterprise interviewed	39
	<b>Table 1:</b> What has been the impact on the workforce due to the economic recession?	39
	<b>Table 2:</b> How have occupational safety and health management   systems been affected directly by the economic recession?	41
	<b>Table 3:</b> What are the potential threats to occupational safety   and health management systems due to the economic recession?	43
Appendix IV:	The thematic template used for initially coding the interview data	45
Notes		47

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## List of abbreviations

BGL	Banque Générale du Luxembourg
CEEP	European Centre of Employers and Enterprises providing Public Services
EDF	Electricité de France
EMCC	European Monitoring Centre on Change
ETF	European Transport Workers' Federation
ETUC	European Trade Union Confederation
Eurofound	European Foundation for the Improvement of Living and Working Conditions
HR	Human resources
ICEM	International Federation of Chemical, Energy, Mine and General Workers' Unions
ILO	International Labour Office
ISSA	International Social Security Association
MNEs	Multinational enterprises
NIOSH	National Institute for Occupational Safety and Health
OSH	Occupational safety and health
PSI	Public Services International
R&D	Research and development
UEAPME	European Association of Craft, Small and Medium-Sized Enterprises
UNICE	Union of Industrial and Employers' Conference of Europe
WMSDs	Work-related musculoskeletal disorders

### Chapter 1 Introduction

The ILO is committed to ensuring Decent Work. With regards to improving safety and health at work, this is taking place most recently through the Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187) and its accompanying Recommendation (No.197).

However, the recent global economic and financial crisis has placed considerable strain on enterprises worldwide. Global listed enterprises have been faced with decreasing revenues. This has led to an ever-increasing loss of production, factory closures, an increase in part-time and temporary work, outsourcing and subcontracting, especially for latent business functions such as occupational safety and health (OSH). Pressure to cut jobs and business infrastructure costs has been considerable and many companies have "descaled" and reprioritized business functions. The potential effects of enterprise descaling on OSH have been acknowledged in "Health and Life at Work" published by the ILO in 2009. However, a deeper understanding of what aspects of OSH may be affected is needed in order to assess any potential impact and guide ILO policy advice to mitigate the impact.

Further evidence from around that time showed that the potential effects of enterprise descaling on OSH during a global economic crisis could be dramatic as OSH becomes more important for the health of workers and those facing job losses. For example, a report by the French labour inspection body had concluded that "pathogenic" management methods to reach a target of 22,000 staff cuts at France Telecom were to blame for an increasing incidence of suicides since the beginning of 2008.<sup>2</sup>

A European-wide study of 26 countries also showed that a rapid and large increase in unemployment was associated with significant increases in suicide rates.<sup>3</sup> In other words, people who lose their jobs during a recession are at greater risk of suicide – and that for the least well-educated, the risks are even higher. Rising suicide rates are a sign of high levels of mental distress among workers and their families.

Irrespective of job losses or management pressure to leave work, it also appeared that an economic crisis increases short-term population mortality rates. A review of mortality studies<sup>4</sup> in 13 countries, including the Russian Federation, Republic of Korea, and countries in South and Central America, Africa and Europe, in periods of crisis compared to periods prior to and after the crises between 1962 and 2002, showed that cardiovascular mortality rates increased by 6.4 per cent in high income countries. The estimated effect was nearly four times higher in low income countries.

At the time, it was postulated that working conditions were likely to worsen because of the economic climate as major company restructuring and low business confidence prevented large scale worker hiring.

A survey by the Chartered Management Institute,<sup>5</sup> conducted in September 2009, of 836 senior British managers who were members of the Institute showed the following:

The majority of managers believed that the economic situation was worsening and that there were another six to twelve months of the recession to endure.

- The majority of managers still expected employment rates to fall, in addition to all forms of investment (research, computer and information technology, and managerial skills).
- Managers were still concerned with the availability of finance for work in progress and for long-term investment. Only 8 per cent expected to see an improvement in the short term.
- Business optimism over the next six months remained low (until March 2010) and the outlook for the next three years was not positive.
- There were worrying problems in the workforce concerning employee morale and engagement.
- There were clear signs of increasing recruitment freezes and compulsory redundancies continued.
- Managers recognized that productivity potential could be damaged in future due to actual insufficient investment, but they felt that they had no choice given the current deterioration in credit and demand.
- The fall in the exchange rate was not seen as a competitive opportunity.

It follows that it is likely that the economic recovery would be undermined by the lack of investment in people and in productive capacity.

However, OSH becomes ever more important during an economic crisis because it can protect and promote better health and this can lead to increases in labour supply and productivity. Also, historically, health has been a major contributor to economic growth. Therefore it is important to assess what impact there has been on OSH management during the global economic crisis, as well as to determine the impact further economic decline and other organizational issues may have on OSH.

It was in this context that the ILO commissioned research to determine how enterprises have responded to the global financial and economic crisis in regard to OSH. The following chapters are the results of the study which investigated the impact of the "Great Recession" (2007–2009) on OSH management systems using data obtained from multinational enterprises (MNEs) and the scientific and "grey" literature (technical reports from agencies or scientific research groups, working papers, white papers or preprints).

The next chapter examines how MNEs within the major global economies were financially affected during the recession and also examines the potential threats in the economic recovery, thus helping the reader appreciate the impact on labour markets and worker safety and health, in later sections. This puts into context the chapter on organizational restructuring and changes as well as potential threats to OSH within enterprises, using data obtained from annual reports and other MNE documentation, the scientific and "grey" literature and interviews with company OSH employees.

Chapter 4 provides some examples of how pre-recession aspects of OSH management systems may protect workers and companies during difficult economic times, giving rise, in Chapter 5, to a series of recommendations. Such information may assist enterprises in deciding how they should respond appropriately to OSH when cost cutting may be required.

The reader is also directed to the appendices which are a summary of the key findings of the commissioned research.

### Chapter 2

The global financial and economic crisis

#### 2.1 The global economic recession

The banking crisis of 2007–2009 almost brought down the international financial system. It affected very severely the economies of many developed countries, and had negative economic effects in virtually all countries.

It was followed by a sharp economic recession, which was worsened by the problems within the Euro currency union and by the extremely febrile state of the financial and currency markets.

In the past two years, there has been a widespread shift by governments to stimulate demand to policies based on reducing government borrowing and debt. This approach – which has been called a strategy of austerity – has had the effect of dampening demand further and postponing economic recovery. It has also led to a further contraction of credit, lower investment by governments and companies, and consequently more job losses.

The majority of advanced economies have combined this with a relaxation in employment regulation and a weakening of labour market institutions.<sup>6</sup> This approach has been claimed as a way to boost employment. However the ILO's World of *Work Report 2012* which examines the effect of such deregulation policies in practice concludes that they are failing to boost growth and employment.

The report offers a global perspective of the present employment situation. It indicates that the global employment rate has fallen from the time of the financial crisis in 2008 by 0.9 per cent, which means that around fifty million jobs are missing relative to the pre-crisis situation. Employment rates remain subdued particularly in many advanced economies. Projections indicate that, on present trends, employment in advanced economies will not reach pre-crisis levels until late 2016.<sup>7</sup>

#### 2.2 Company responses

The financial crisis of 2007–09 and the subsequent economic recession have had profound effects on the revenues and profits of multinational enterprises, large national companies as well as small and medium-sized enterprises.

The United States (US), for example, the largest 425 US-based companies, taken as a whole, have shown a steep drop in revenues over the 2007–09 period (see figure 2.1 below).

In many cases profits also declined. The average profit returned in 2009 was down by 76 per cent compared to 2007, before the recession took hold.<sup>8</sup>

Companies have responded in various ways. An analysis undertaken for the ILO of the annual reports of 45 representative multinational enterprises (twelve with their headquarters in the

#### Figure 2.1

Percentage decline in revenue compared with the previous year for the 425 largest US companies, 2007–2009



UK, twelve in Germany, ten in France and eleven in the US) found that various forms of restructuring were being adopted. Table 2.1 below gives these findings.<sup>9</sup>

#### Table 2.1

Restructuring activity used by multinational enterprises during the recession (n = 45)



These findings are limited by the sample size and the fact that some companies may have chosen not to include in their annual reports information on the restructuring measures they were taking. It is also the case that the period of study concluded in 2009, before the economic recession took full effect. However, the message is clearly that many companies are going through a period of major restructuring, which frequently includes steps to downsize the workforce.

This is reinforced from other robust data sources. The most comprehensive survey of announcements of company restructurings which affect employment, at least for the European market, is undertaken by the European Monitoring Centre on Change (EMCC), part of the EU tripartite agency Eurofound (European Foundation for the Improvement of Living and Working Conditions). The EMCC data can be scrutinized sector by sector. For example, data for the finance sector (which has been examined in detail for an ILO sectoral study)<sup>10</sup> shows a wave of redundancies, especially in the period between mid-2011to end-2012. As table 2.2 below shows, in many cases significant percentages of the workforce have been affected.<sup>11</sup>

#### Table 2.2

#### Percentage of positions at risk in selected companies in the finance industry, 2011

Company	Total staffing numbers	Percentage represented by job cuts announced
Bank of America	287,839	10 per cent
HSBC	295,995	10 per cent
Lloyds	103,859	14 per cent
UBS	65,707	5 per cent
Credit Suisse	50,700	7 per cent
Mizuho	57,000	5 per cent
ABN Amro	26,161	9 per cent
Nordea	34,169	<11 per cent
Danske Bank	21,567	9 per cent
Bank of New York Mellon	48,900	3 per cent

Such is the context of this report. The next section explores in detail the implications for OSH of the recession and of the steps adopted by companies to restructure and downsize.

### Chapter 3 The recession and occupational safety and health: Challenges and changes

#### 3.1 The context

Will the economic recession adversely affect OSH? The public, at least in the European Union (EU), seems to think that it will.

The pan-European opinion poll on OSH, carried out in June 2009 for the European Agency for Safety and Health at Work in the 27 member states of the EU, specifically asked, "*Do you expect or not that safety and health conditions at work in [your country] might deteriorate due to the economic crisis?*".<sup>12</sup> The survey found, across all member states, that 61 per cent of those polled believed that it would "a great deal" or "to some extent". Only 34 per cent answered "not really" or "not at all". The response in some countries, including Sweden, Portugal, France and Italy, was significantly more pessimistic.

The ILO has itself drawn attention to the risks. The 2009 publication *Health and Safety at Work: A basic human right*,<sup>13</sup> pointed out that evidence from previous crises suggested that organizational changes and the restructuring which they engendered could potentially lead to compromises in safety and health measures and to an increase in workplace accidents, diseases and fatalities, as well as an increase in ill health from unemployment. The report included the chart on following page (Figure 3.1).

The report went on to make the following comments:

"The organizational changes of restructuring, such as outsourcing, increased part-time work, and subcontracting, complicate the management of safety and health at work. This creates uncertainty and misunderstandings about responsibilities, especially where several different employers are working on one site, as in the case of construction, for example."

"Some employees will have to work extra hard and longer hours to compensate for the lack of human and financial resources, leading to physical and mental workload and fatigue."

There is academic evidence to suggest that these concerns are justified. The Scandinavian academics Rolf Harald Westgaard and Jörgen Winkel published the results in 2011 of a scientific literature review of 101 research studies on organizational downsizing or restructuring in general. With respect to studies on employee downsizing, they found that 26 of the 34 relevant studies had shown negative effects on risk factors and health and only two had shown positive effects. Of the 67 studies analysed on more general restructuring (those which did not involve downsizing), 45 studies pointed to negative effects and 11 studies showed positive effects.<sup>14</sup>

Further concern has been expressed by the British academic Dr Jason Devereux. An analysis he undertook on behalf of the ILO in 2010 regarding the drop in the market capitalisation values

#### Figure 3.1

The financial crisis and its potential impact on safety and healthy at work



of the top 425 of the Fortune 500 US companies between their peak in 2007 and their trough in 2009, found that some sectors had been harder hit than others. According to his findings, the materials and the industrial sectors were two of the sectors most affected. As he has pointed out, these sectors include industries such as forestry, mining, oil/gas extraction and construction where the risk of accidents, if poor OSH standards are permitted, is high. A deterioration of job conditions in these industries or a reduction in OSH resources could have serious repercussions, he suggested.<sup>15</sup>

A survey was undertaken in late 2009 by the International Social Security Association (ISSA) of seventeen selected ISSA members, asking them to report on the impact of the financial crisis on OSH in their own countries.<sup>16</sup> This survey found that the crisis had "significantly affected occupational safety and health" in several major countries, particularly in the US and Europe. However, it should also be noted that six ISSA members reported that the crisis had had no effect on OSH. Figure 3.2 below is taken from ISSA's report.

#### Figure 3.2



ISSA also pointed out that, in some countries, the decline in employment caused by the recession was itself a factor in leading to a decline in the numbers of work-related accidents. This does not necessarily mean, of course, that the number of accidents relative to the size of the workforce had fallen.

#### 3.2 Company restructuring and occupational safety and health

Academic research<sup>17</sup> suggests that the financial hardship and mental stress for workers losing their jobs during an economic recession is likely to increase the risk of ill health and even mortality.

One concern is that, even when the world's major economies are eventually able to move out of recession, workforce levels are unlikely to return to the pre-recession levels for a considerable number of years. According to the ILO,<sup>18</sup> it is estimated that 43 million workers are at risk of exclusion from the labour market in the longer term. This threat to the labour market could remain for 6 to 8 years.

Young people are disproportionately affected by unemployment in many countries, and urgent attention needs to be given to the well-being and mental health of young adults who, at a time of their lives which can be unsettling at the best of times, now find themselves having to cope with the experience of joblessness.

Attention also needs to be paid to those workers who continue in their employment posts after a restructuring exercise by their employers. These "lay-off survivors", as they have been called, have been found to be at risk from a number of psychosocial work-related conditions.<sup>19</sup> This is discussed further below.

The literature review carried out by Westgaard and Winkel mentioned above<sup>20</sup> produced clear evidence of the importance of managing organizational downsizing carefully, as exposure by employees to repeated downsizing exercises over a period of time had been found to further increase risk.

If downsizing is not implemented fairly, those employees who are most committed to their work may actually respond in more dysfunctional ways than employees who are less committed.<sup>21</sup> This is linked to the concept of relational justice, or, in other words, to the sense that an employee is being treated fairly by their manager. A UK survey found that when employees felt that there had been adverse changes in relational justice, (for example, by a lack of consistent information from a manager or from unfair criticism) the risk of mental illness and long spells of sickness absence increased.<sup>22</sup>

#### 3.3 Vulnerable groups in the workforce

In any consideration of the implications for OSH of downsizing and restructuring, it is important to note that some groups in the workforce are potentially more at risk than others.

Older workers may find themselves encouraged or obliged to take retirement earlier than they had anticipated, and this abrupt transition from the world of work may have implications for their health and well-being. Appropriate support and professional advice during this period of change is highly desirable. For those older workers who remain at work (the "lay-off survivors"), there are other issues to address. It has been found<sup>23</sup> that older staff can have greater vulnerability to OSH risks. Work and rest scheduling may need to be different for older workers compared with their younger colleagues with the same physically or psychologically demanding jobs, because older workers may need more recovery time within or between shifts.<sup>24</sup> According to Eurostat (the European Commission's statistical arm) most fatal work-related accidents in Europe happen in the 55–65 age group.<sup>25</sup>

Women may be another group in the workforce who are particularly affected. One recent analysis of job losses in the finance sector found that women in the US and the UK were disproportionately adversely affected,<sup>26</sup> for example. Further work on the implications for women's health and well-being of the current economic recession would be valuable.

One result of company restructuring has been the redeployment of staff to new geographic locations, sometimes very far removed from their previous base. For example, a major UK consulting engineering firm has responded to the decline in work in Europe by sending staff to Australia. Depending on factors such as their age, occupation and personal and family relation-

ships, this type of significant career change may be empowering for some, but for others it may be a cause of considerable anxiety, with implications on their mental health and well-being.

The process of restructuring is also leading to further use of outsourcing (transferring work previously undertaken in-house to third-party employers or to independent contractors). This is a process which has been taking place for a number of years, and its implications for OSH has been the subject of academic study. There is a growing body of international research indicating that outsourcing in general is having serious negative effects on workplace safety and health.<sup>27</sup>

#### 3.4 New models of work organization

The growing numbers of "contingent" workers, those without a permanent employment position or contract, are also considered a particularly at risk group in relation to OSH. The recession and consequential company restructuring is seeing an increase in the number of workers undertaking flexible or 'precarious' working. According to work undertaken by Philip Bohle and colleagues from the University of Sydney, Australia, these workers are at greater risk from occupational injuries.<sup>28</sup>

Some companies are making greater use of technology-enabled remote working and home working. Earlier work undertaken in Europe in the run-up to the European Framework Agreement on Telework signed in 2002 by the social partners suggested that there can be both positive and negative safety and health implications of remote working. The Framework Agreement spells out the employer's continuing responsibility for the protection of the OSH of teleworking employees.<sup>29</sup>

#### 3.5 Developing countries

It is important to remember, as the UN Conference on the financial and economic crisis held in June 2009 reminded us, that developing countries have been just as much affected:

"Developing countries are now bearing the brunt of this crisis, for which they are least responsible... The crisis has exacerbated the challenges and impediments to the attainment of our internationally agreed development goals, including the Millennium Development Goals. It risks becoming a social and human crisis."<sup>30</sup>

In general, there has been less focus by academic researchers and practitioners on OSH issues in developing countries than in developed economies. One recent study, by Evelyn Kortum and colleagues from the University of Nottingham, UK, tried to address this deficiency. They wrote:

"It is essential to keep the developing countries in our sight, considering that approximately 80% of the global workforce resides in the developing world." Their research found that the growth of industrialization, urbanization and outsourcing in developing economies had led to a rise in the number of workers exposed both to traditional and new occupational risks, and they pointed out that psychosocial hazards also potentially affected the health of workers in developing countries. They called for greater exchange of information between international experts and the development of interventions in workplaces in developing countries with a view to creating comprehensive OSH policy frameworks.<sup>31</sup>

#### 3.6 Psychosocial risk to health

Mention has already been made on a number of points in this chapter on the implications of the recession and company restructuring on the psychosocial health of workers. It is appropriate at this stage to consider this issue in a little more detail.

As the ILO itself has stated, "Both employers and workers have the responsibility to address psychosocial hazards at the workplace and find innovative ways to deal with the consequences of the risks associated with psychosocial factors such as stress, violence, abuse of alcohol and drug consumption at the workplace". The ILO points out that stress at work has a high cost in terms of workers' health, absenteeism, lower performance and productivity.<sup>32</sup>

Over the previous 30 years, a considerable amount of research work has been dedicated to this issue. High work demands, low decision latitude, and low levels of social support at work have been identified as important constructs in relation to work-related psychological health and well-being.<sup>33</sup> For example, a scientific literature review of psychosocial work factors covering research studies between 1998 and 2007 revealed that a combination of high job demands, low control and low social support (the combination often characterized as job strain) can increase the risk of damage to psychological well-being.<sup>34</sup> A systematic review was also undertaken in 2006 to establish associations between psychosocial work factors and mental health. This showed that there was consistent evidence that combinations of high demands and low decision latitude and combinations of high efforts and low rewards were risk factors that predicted the onset of common mental disorders. High efforts in this context include high job demands, responsibilities and increasing time pressures. Rewards include change, job security, work and promotion prospects, feelings of being treated fairly at work, adequate respect and support, and salary.

The extent of downsizing which some companies have undertaken as a response to recent economic conditions has meant that workloads of staff retained may have been increased. As one person from a multinational enterprise participating in the ILO study stated, there are in their company now "less people doing more work hours over the week".<sup>35</sup> There are, therefore, real grounds for concern that the psychosocial risks to workers' health and well-being may be increasing.

The fact that "lay-off survivors" are at risk from psychosocial factors has been mentioned above. These have been categorized by one writer as follows:<sup>36</sup>

- **Workload intensification:** fewer workers available to deal with a workload.
- Role stress (a combination of role ambiguity, role conflict and increasing workload). Role ambiguity occurs when employees are unclear about role requirements, performance standards and responsibilities. Role conflict occurs when two or more requirements of an employee's role are in conflict, perhaps from contradictory instructions from managers, from conflict with personal values, or from requirements to undertake tasks without the adequate resources being available.
- Distrust of management, lack of respect, and feelings of betrayal perhaps associated with unpaid leave, bonus freezes, reduced working hours and outsourcing/contractual work.
- Uncertainty regarding future restructuring and job loss even in the absence of actual material change.

- **Little reward for the effort put into work**, associated with pay freezes or reducing pay.
- **Reduced job commitment and lower job involvement**, perhaps associated with forced employee redistribution to more productive facilities.

One disturbing statistic from the US may be attributed to an increase in work-related stress. The US Bureau of Labor Statistics, in its census of fatal occupational injuries, has reported that 2008 saw the highest number of workplace suicides recorded since 1992.<sup>37</sup>

#### 3.7 Work-related musculoskeletal disorders

One issue identified in the literature review<sup>38</sup> undertaken by Westgaard and Winkel was that the negative health outcomes associated with organizational restructuring by companies also included work-related musculoskeletal disorders (WMSDs) among "lay-off survivors".

For example, a study of municipal employees in Finland showed that employee downsizing was a risk factor for medically certified sickness absence due to musculoskeletal disorders within 2 years of the restructuring process among those who remained in employment.<sup>39</sup> Much of the risk was attributable to increased physical demands however the researchers acknowl-edged that adverse changes in psychosocial work factors may have also been involved.

Lower back problems are the most prevalent type of WMSD and the primary risk factors are related to manual handling, awkward postures and whole body vibration.<sup>40</sup> For WMSDs affecting the neck region, high postural load associated with the duration of sitting, twisting and trunk bending has been consistently shown to be a risk factor.<sup>41</sup> For the upper limbs, there is strong evidence that the biomechanical load from a combination of repetitive arm or wrist movement, high force application and awkward postures increases the risk.<sup>42</sup> It is also widely accepted that vibration is the main causal agent for some specific WMSDs.

A number of epidemiological studies have shown that joint exposure to both physical work risk factors and psychosocial work risk factors can further increase the risk of WMSDs.<sup>43</sup> Mental stress at work may also contribute to the increase in the incidence of WMSDs either due to the nature of the work itself or from the threat of job loss.<sup>44</sup> The reason is that mental stress may modify the risk from physical and psychosocial work factors that affect WMSDs.<sup>45</sup>

Previous to the onset of the recession, many employers had developed good ergonomic practices to help mitigate the risks of WMSDs. Given the evidence that restructuring and downsizing may increase these risks, a continued focus on precautionary measures against WMSDs seems highly advisable.

#### **3.8** Evidence of recession-linked changes in occupational safety and health

This chapter began by asking the question of whether the recession will have an adverse effect on OSH. As previously mentioned, the International Social Security Association's survey of several of its member organizations suggested a mixed picture. However, this was conducted in 2009, before the current economic recession had really taken hold.

At this stage, evidence from other sources is also ambivalent. For example, research<sup>46</sup> suggests that there is no consistent evidence from the limited lost time injury data available in company annual reports or elsewhere to confirm the hypothesis that the recession has increased the

incidence of WMSDs. More generally, labour statistics show a decline in fatal injuries at work in the US and the UK between the immediate period before the onset of the 2008 financial crisis and the period immediately after. However, these falls could be a direct consequence of the decline in economic activity in high-risk industries such as construction.

A UK study, conducted by the professional services company KPMG (one of the "Big Four" auditors) in conjunction with the Chartered Institute of Personnel and Development, sampled 892 Human Resources professionals in relation to the effect of the "credit crunch" in late 2008. About half (48 per cent) of those surveyed said that individual staff workloads had increased as a result of the economic situation and a similar number (46 per cent) reported that employee stress levels had increased.

A telephone survey of thirteen multinational enterprises (with their head offices located in the US, Germany, France and the UK) was undertaken by Dr Jason Devereux and colleagues in 2010.<sup>47</sup> This asked, among other things, what the effects of the recession had been on OSH management systems. Dr Devereux has reported that some of the OSH managers interviewed acknowledged that the recession had adversely affected the resources available to protect OSH. One interviewee talked of the possibility that both managers and employees were "distracted and distressed" by restructuring, with the tendency to take their eye off the ball in relation to safety and health concerns. Another commented that "numbers-focused managers at the top with wrong attitudes towards OSH may have a negative impact on safety culture."

Among other findings, Dr Devereux reported the following responses from the (admittedly small) sample of companies surveyed:

- Greater justification needed for spending (2 respondents).
- Increase in workload for OSH professionals (3 respondents), including demands associated with an ageing workforce, issues around ergonomics and less focus on machinery and personal protection.
- Problems in recruiting OSH staff because of recruitment freezes (1 respondent), or problems in recruiting suitably qualified staff (2 respondents).
- Inappropriate managing of work-related stress (2 respondents).
- Effect on policy and on development of safety culture (2 respondents).
- Shift in priorities away from OSH (2 respondents).

Only one of the multinational enterprises surveyed stated that OSH budgets had been reduced, though Dr Devereux commented that some interviewees would not necessarily be fully informed on budget decisions. Dr Devereux also reported on the implications specifically for the safety and well-being of OSH professionals themselves. There were reports of greater workloads and of cuts for example in travel budgets. Outsourcing of OSH management was also reported, with some suggestion that this was associated with requirements to cut costs.

In this context, it is appropriate to recall the findings of the much larger survey undertaken in 2010 for the European Agency for Safety and Health at Work, which involved 36,000 telephone interviews with managers, OSH employees and worker representatives in companies and public sector organizations with ten or more employees in the 27 EU member states. The survey asked respondents about the safety and health risks in the workplace, the main drivers for taking action, and the most significant obstacles. These were found to be:

- Lack of resources such as time, money and staff.
- Lack of expertise (more easily accessed by larger enterprises).
- Unsatisfactory safety and health culture (especially in the case of larger enterprises).
- Lack of sensitivity in dealing with safety and health issues.
- Lack of technical support or guidance.

#### 3.9 Conclusion

It would appear to be still too early in relation to statistical data and empirical research findings to be able to conclusively demonstrate causal links between the recession and higher levels of occupational accidents and ill health. What can be safely said is that the trend towards restructuring and downsizing undertaken by many companies throws up new challenges in relation to OSH and that this is not the time for companies to be distracted away from OSH concerns.

In the next chapter, we shall turn to look at some examples of good practice.

## *Chapter 4 Actions and good practice*

#### 4.1 Identifying the opportunities

Professor Matti Ylikoski of the Finnish Institute of Occupational Health has indicated<sup>48</sup> that, whilst restructuring and downsizing can result in stressful changes at work and challenges to good OSH practices, the current economic crisis also offers an opportunity.

He suggests in particular two possible gains. Firstly, new innovations may emerge, with an increase in joint responsibility towards OSH concerns. Secondly, there may be a growth in what he describes as "multiprofessionality", and of understanding about well-being at work.

Professor Ylikoski offers a four-pronged approach to defending OSH management practices during the recession. Firstly, he argues for support for the most vulnerable groups, including those made redundant and the unemployed, those laid off (temporarily dismissed), young people, older workers, disabled workers and unskilled workers. Secondly, he offers ways to prevent the development of detrimental OSH consequences, including strengthening the "sense of coherence" and reducing the insecurity of work, focusing attention on retained workers (the "lay-off survivors"), and training supervisors to cope in difficult workplace situations. Thirdly, he promotes the idea of increasing the empowerment of individual workers through strengthening the promotion of health in enterprises. Finally, he calls for help to be offered to OSH professionals who are coping with the fall-out of the recession.

Further evidence that health risks do not necessarily have to be adversely affected by restructuring comes from some of the studies reviewed by Westgaard and Winkel.<sup>49</sup> Positive health outcomes, including reduced sick leave and reduced injury rates, were reported in both the public sector and in manufacturing when the work environment and worker participation was taken into account during restructuring.

#### 4.2 Senior management leadership on occupational safety and health

As in other aspects of business management, a strong lead from the Chief Executive Officer (CEO) and other senior management can be important in establishing company priorities and culture.

The CEO of a multinational enterprise in the utilities sector circulated a statement to all employees in May 2010, which read as follows:

"Employee health & safety in the workplace must remain our top priority. The issue is crucial in the drive to achieve social and economic targets. It enables our organization to progress towards excellence. All business units should ensure compliance with local health and safety laws and regulations while applying Group standards and working towards risk-management objectives.

Managers are tasked with ensuring the health & safety of employees who make up their team. To this end, they should ensure systematic assessment of any incidents to tirelessly promote the safest, most effective working conditions. Management performance is evaluated on the basis of their ability to fulfil this vital goal.

All Group employees should take every precaution to ensure their own safety and that of their colleagues by applying best practices in their field: this means monitoring workstations, approaches and team members to ensure their work puts neither themselves not those around them at risk.

Accident Prevention and Health & Safety networks are on hand to help managers conduct assessments of working conditions and implement any corrective action. These same networks are also responsible for distributing information needed to promote continuous improvement at Group level."<sup>50</sup>

This sort of strong lead – provided it is reinforced in internal company management systems – is invaluable in helping to ensure that OSH issues are not marginalised as a human resources (HR) detail.

#### 4.3 Adopting a global strategy for improving employee health and well-being

A growing number of multinational enterprises are trying to empower their employees in relation to health matters through company-sponsored wellness programmes. A global survey<sup>51</sup> of 1,103 organizations carried out by Buck Consultants in 2009 estimated that 41 per cent of multinationals had a global strategy on improving the health and well-being of employees, and 48 per cent had globally centralised ownership and responsibility for wellness. This was a significant increase from 22 per cent in 2008.

The same survey also identified the most commonly implemented strategies for managing work-related stress. In order of prevalence, these were:

- employee assistance programmes (over 70 per cent);
- leadership training;
- physical activity programmes;
- stress awareness campaigns;
- establishment of flexible work schedules;
- online healthy living programmes;
- programmes to improve the psychosocial work environment.

One reported example of good practice in this respect is the UK-based telecom operator British Telecom (BT). BT experienced a major decline in profits in 2009 and had to lay off five thousand workers. However, it established a clear business case for enhancing its stress management strategy. This focused on reducing psychosocial risks by examining the interactions between BT employees and the workplace, and by scrutinising such things as job design, leadership, management and training. Individual employees were given access to an online tool to help

21

them identify symptoms of stress early and to develop and action plan with their line managers, in this way maximising the support available to staff under pressure and helping to build their personal resilience.<sup>52</sup>

#### 4.4 Social partnership and strong occupational safety and health practice

The Global Framework Agreement<sup>53</sup> signed in May 2009 between the French multinational enterprise EDF and two global union federations, ICEM and PSI, provides a good example of the way that OSH issues can be integrated into top-level agreements between the social partners. The Global Framework Agreement covers seven countries and fourteen Group companies and accepts the need for in-depth social dialogue about many aspects of the Group's operations, including OSH.

EDF introduced a new workplace health policy for 2009–2012, focused on a new system for supervising health in the workplace overseen by occupational health physicians. Collective agreements have been signed in a number of business units with the aim of improving the workplace environment and preventing psychosocial risks. EDF's German subsidiary has also been considering some organizational changes such as teleworking, part-time scheduling and time off work for parents with young children.

Media attention<sup>54</sup> was focused early in 2010 on a close cluster of cases of suicides in France Telecom. The French government responded by instructing 2,500 French companies with more than 1,000 employees to hold talks with unions on how to reduce workplace stress. France Telecom's restructuring strategy was put on hold, and unions are now involved in negotiations of future internal job transfers. Managers are being provided with training on how to identify depression amongst employees.

At European level, the formalised social dialogue structure which brings together the European Trade Union Confederation, ETUC (representing workers' organizations) and the Union of Industrial and Employers' Confederations of Europe, UNICE, the European Association of Craft, Small and Medium-Sized Enterprises, UEAPME, and the European Centre of Employers and Enterprises providing Public Services, CEEP (representing employers) successfully enabled agreement to be made on a Framework Agreement on work-related stress.<sup>55</sup> The Agreement remains very relevant in today's different economic climate. Guidance on the Agreement has been produced by the ETUC.<sup>56</sup>

#### 4.5 Innovative approaches to tackling psychosocial factors

The ILO has itself taken a lead in encouraging new and innovative approaches to stress at work and the psychosocial factors which can contribute to it. Its recent SOLVE programme<sup>57</sup> is an interactive educational programme which is based on the recognition of the interdependency of psychosocial work factors and other health-related issues, and their underlying causes in the workplace. The programme advocates the design of enterprise-level policies and intervention programmes to reduce work-related stress by incorporating psychosocial hazards in to the companies' risk assessment and risk management strategies. SOLVE encourages the involvement of both employers and workers through bipartite OSH committees at workplace level.

#### 4.6 Maintaining a focus on work-related musculoskeletal disorders

Given the suggestion that company restructuring and an increase in workplace stress levels can also be linked to higher levels of work-related musculoskeletal disorders (section 3.7), it is appropriate to look to develop further the examples of best practice in relation to WMSDs.

Useful early work in Europe, for example, which involved the European Commission and the European social partners, developed a set of recommended principles. These include early identification of WMSDs (early ergonomic intervention has proved successful in reducing sickness absence), identification of those most – and least – at risk, and assessment of symptom changes over time.<sup>58</sup>

The ergonomic approach is formalised in Europe in the Directive on the Introduction of Measures to Encourage Improvements in the Safety and Health of Workers at Work (89/391/EEC) and the Directive on manual handling (90/269/EEC). It is also taken into account in the display screen equipment Directive (90/270/EEC). Within the US, the Occupational Safety and Health Administration (OSHA) has developed industry specific and task specific guidelines to reduce and prevent WMSDs. OSHA has enforcement powers in relation to ergonomic hazards.

There has been innovative work undertaken around WMSDs in recent years both by individual companies and also (as in the Pays de la Loire in France, for example)<sup>59</sup> by government health agencies. It would appear to be too early, however, for scientific research data to have emerged on new WMSD good practice programmes and interventions specifically linked to downsizing and restructuring.

#### 4.7 The business logic of developing good occupational safety and health practice

If, as we have seen (section 3.8), the risk is that managers and employees may be "distracted and distressed" by company restructuring, there are compelling economic reasons not to cut corners in relation to OSH – and not simply because healthy workers are productive workers.

A study by Ranjay Gulati of the Harvard Business School and two of his colleagues<sup>60</sup> which they contributed to the Harvard Business Review in 2010 looked at successful and unsuccessful business strategies adopted by companies in relation to economic recession, using data from 4,700 public companies. Their findings were highly instructive. As they wrote:

"Firms that cut costs faster and deeper than rivals don't necessarily flourish. They have the lowest probability -21% – of pulling ahead of the competition when times get better, according to our study..."

"A focus solely on cost cutting causes several problems. One, executives and employees start approaching every decision through a loss-minimising lens. A siege mentality leads the organization to aim low and keep both innovation and cost cutting incremental. Two, instead of learning to operate more effectively, the organization tries to do more of the same with less. That often results in lower quality and therefore a drop in customer satisfaction. Three, cost-cutting decisions become centralized: The finance department makes across-the-board cuts, paying little attention to initiatives that may be the nuclei of post-recession growth. Four, pessimism permeates the organization. Centralization, strict controls, and the constant threat of more cuts build a feeling of disempowerment..."

23

Gulati and his colleagues' analysis can be applied to the specific area of OSH. Firstly, there is a reputational risk to take into account, if cuts result in increased ill health and (particularly) mortality among the workforce. In this context, Dr Jason Devereux has drawn attention to the report of twelve suicides directly resulting from work-related stress in French banks in 2008.<sup>61</sup>

During staff downsizing and restructuring there is a risk of the loss of key "tribal knowledge" from within a company. This can apply in the OSH area in various respects, including, for example, the loss of knowledge of the operation or maintenance history of items of equipment with safety and health implications. Once lost, the information built up over a period of several years cannot easily be recovered.

In any case, maintaining (and developing) a strong focus on good OSH practice should not be an expensive drain on resources, as the International Social Security Association has pointed out: *"Failure in the prevention of occupational accidents and diseases cannot be excused on the basis of economic restrictions... Positive change can be introduced without major financial commitment, and the initial investment, for example, in safety training and protective equipment is recouped when prevention strategies begin to pay off, as less work-related accidents and diseases are expected to result in lower production costs, reduced absenteeism, leading to higher motivation and productivity."<sup>62</sup>* 

## Chapter 5 Recommendations

#### 5.1 A continuing commitment to occupational safety and health

The current economic recession is a challenging time for companies, particularly those which may find themselves with the legacy of inadequate business strategies or poor management practices. However, the recession is not a reason for OSH to be deprioritized or an excuse for poor practices to be tolerated.

As the ILO has said, "*It is in such situations of [economic] crisis that the voices calling for the right to safe and healthy workplaces should be loud and not muted*"<sup>63</sup> In the longer term, as economies recover, companies will need healthy and safe workforces more than ever.

#### 5.2 Occupational safety and health taken into account during restructuring

OSH issues and implications should be fully taken into account during restructuring and downsizing exercises and be the subject of social partnership consultation processes, so that workers' representative organizations also participate in the shaping of appropriate policies and measures.

Monitoring and evaluation of the health effects of any restructuring should be carried out. It is important for companies to identify what impact there has been on OSH management systems during the recession, and to properly determine the OSH resources which are required for the future.

#### 5.3 Maintaining and improving proper occupational safety and health processes

As the International Social Security Association (ISSA) has indicated, "Successful outcomes need to be based on a proper regulatory OSH framework and risk management systems, especially during times of economic difficulty".<sup>64</sup>

The recession should not be seen as precluding a commitment by companies to the principle of continual improvement, and in particular of working to refine and develop their OSH procedures.

#### 5.4 A focus on psychosocial health, both of workers dismissed and of those retained

Measures should be taken to maintain the psychosocial health of those workers who lose their employment during restructuring exercises, as well as those at risk of losing their jobs. This may involve partnerships between companies and external agencies.
The psychosocial health of those workers who remain in employment (the "lay-off survivors") also needs to be protected. Companies need to be aware of the risk of increased work-related stress as the result of greater workloads and greater uncertainty.

# 5.5 Senior managers to take a lead

Business leaders should be aware of the strategic disadvantages of aggressive cost cutting plans. Alternative strategies to enable a company to ride out a recession and position itself for success in a subsequent recovery include improving the quality of management, products and services, improving the capacity to innovate, making efficient use of corporate assets, improving the quality of marketing and delivering on corporate social responsibilities.

Senior managers should publicly remind all staff of the importance of OSH.

# 5.6 Middle managers as key players

Middle managers have a key role to play in helping to guard against work-related stress and psychosocial ill health. They may be facing situations in relation to the staff they line-manage which they have not previously had to deal with. They need support and adequate training.

Managers should be encouraged to adopt principles of fairness and relational justice in situations of restructuring.

## 5.7 A focus on contingent workers and subcontractors as particularly vulnerable

Contingent workers, including temporary workers, and those working in new ways (such as teleworking) are a vulnerable group in relation to OSH. They should be treated as of equal importance as those employees employed in more traditional ways. Special audits and procedures may need to be instituted. Where contractors are used, appropriate safety and health requirements should be a condition of the agreed contractual relationship.

Companies should strongly resist the temptation to outsource their OSH responsibilities through use of independent contractors.

## 5.8 Maintaining a focus on emerging risks

As technologies change and new products and services are developed, so new OSH risks emerge. It is necessary that companies continue to be alert for emerging OSH risks, even during a period of economic downturn.

# 5.9 Social partnership for improved safety and health conditions and productivity

There is strong scientific support for the benefits which come from worker participation within continual improvement processes for quality of work and productivity. Employers may have legal responsibilities to provide a safe and healthy working environment, but experience shows that such participation is crucial for businesses and organizations in their management of OSH.

And there is evidence of a particularly positive impact of trade union models of participation, usually through joint OSH committees at the workplace – and in tripartite national OSH committees. Worker involvement helps improve OSH conditions, but trade union representatives help more. A spin-off from this is that just as work-related injuries and ill health are clearly bad for productivity, so healthy working conditions actually make enterprises more productive.

# 5.10 Encouraging workers' participation in their health and well-being

More fundamentally, companies and their OSH professional staff should be seeking a long-term shift in approach, complementing prevention with general promotion of health and well-being. The aim should be to change from treating individual workers as objects of expert actions towards one where they are empowered and encouraged to participate in maintaining safe and healthy approaches to their work. This can be summarized as a move from an emphasis on illness and what is dangerous to health to one focused on a more holistic approach to health and well-being.

# Appendix I

# Summary of a study to assess the potential impact of the global economic recession on occupational safety and health at the enterprise level

This appendix is an edited summary of the findings of a scientific research study undertaken on behalf of the ILO by Dr Jason Devereux, Dr Mark Cropley and Professor Adrian Furnham. The study investigated the impact of the "Great Recession" (2007–2009) on occupational safety and health (OSH) management systems using data obtained from multinational enterprises (MNEs).

The study was the basis of this publication and is reproduced here for background information.

The specific research questions were:

- What has been the impact on the workforce due to the economic recession?
- How have OSH management systems been directly affected by the economic recession?
- What are the potential threats to OSH management systems due to the economic recession?

## The research study methods

A review and synthesis of the scientific and grey literature was conducted on the "Great Recession" (2007–2009) to determine what happened financially to MNEs in major economies using financial, economic and agency data sources.

To gain a representative insight into revenue and profit changes, the 500 US companies listed in the Fortune 500 for 2009 were compared against the same measures for 2008 and 2007.

To appreciate the relationship between employee downsizing, other restructuring and revenue change, information on revenue listed in the 2008 and 2009 annual reports were collated from 45 MNEs listed in one or other of the following major market indices:

- French CAC 40;
- German DAX 30;
- UK FTSE 30;
- New York Stock Exchange or Nasdaq in the United States.

The data were then compared within 10 key sectors (financial, materials, industrial, energy, technology, telecommunications, utilities, health care, consumer discretionary and consumer staples) to determine whether some sectors had been worse affected than others.

Semi-structured telephone interviews were planned using an interview guide (appendix IV) with 13 of the MNEs that had points of interest in relation to the study objectives mentioned in their annual report, and were spread across all key sectors with headquarters located in France, Germany, the United Kingdom, or the United States. The companies were selected across sectors to increase the likelihood of different themes emerging from the data.

The MNEs that declined to participate in the interviews were substituted with another MNE (n=4) within the same sector. The data gathered from each interview was compared with the documented data obtained on the same company from various sources including the company's website, annual reports and presentations, published literature or documentation provided by the company upon request.

There were three questions in the interview that were asked in order to obtain further detail on:

- the impact of the recession on the MNE and the workforce;
- the effects on OSH management systems;
- the potential threats to OSH management systems from the recession.

After 13 interviews, no further themes were generated indicating data saturation. This was a sufficient number of interviews for generating themes from the data and falls within the recommended number of interviews for this type of research study.

# **Key findings**

MNE market funds across major economies declined over 50 per cent between 2007 and 2009 from their peak to their trough. Major restructuring of assets and the labour force resulted from the financial pressures.

According to the performance of the global sector funds over the duration of the economic recession, all MNE sectors were negatively affected by the global recession. However, there were large differences in the declines observed. The basic material and the industrial sector were two of the most affected by the recession (declines of 60–65 per cent). These sectors also include industries such as forestry, mining, transportation and construction. These industries have high mortality/ health risk according to data provided by Eurostat and the US Bureau of Labor Statistics.

The various types of restructuring mentioned in the annual reports were grouped into ten types of activity:

- closing of factories;
- decreasing production;
- controlling expenses, freezing pay or reducing pay;
- applying bonus freezes;
- redistributing some of the workforce to facilities that are more productive;
- changing job roles;
- reducing working hours;
- unpaid leave;
- outsourcing and subcontracting essential work;
- downsizing the workforce using early retirement and other schemes.

Employee downsizing was the most commonly reported restructuring activity using early retirement and other schemes and was reported by 68 per cent of the 45 MNEs. The scientific literature showed that restructuring and employee downsizing were mostly associated

with increased risk for negative health outcomes including mental ill health and work-related musculoskeletal disorders among "lay-off survivors".

The downsizing effects of the recession may have led to an increase in exposure to both physical and psychosocial work risk factors and may also have increased the incidence of mental stress and work-related musculoskeletal disorders at work across all sectors according to the literature.

Some of the OSH managers in the MNEs that were interviewed acknowledged the fact that the economic recession has negatively affected occupational safety and health resources. Budgets, the number of OSH professionals and staff training may be reduced due to the recession. However, the biggest drain on OSH resources appears to have been the increase in workload for occupational health professionals. Work demands have increased due to the need for a higher number of risk assessments for an older workforce demographic and also for ergonomics hazards associated with manual handling, repetitive work and use of computers (risk factors for work-related musculoskeletal disorders). Some OSH professionals have had to increase their contact time with employees who have been concerned about their mental stress brought about by redundancy action. The response times for dealing with particular OSH risks may have increased as a result.

A number of MNEs have introduced or improved workplace health or stress management policies in the workplace during the recession. This has led to extra workload in planning on how to assess psychosocial risks, performing audits and attending safety and health committees. This workload combined with the need to manage existing or emerging risks (from noise, vibration, heat, the human-machine interface, chemicals, asbestos among others) creates a significant challenge for OSH professionals.

According to the interview data, there is a possibility that the risk management process or OSH measures may be compromised for certain health outcomes if adequate resources are not made available or if there is too strong a reliance on outsourcing of OSH activities. For example, the quality of the health data obtained on work-related musculoskeletal disorders suggested that some MNEs might underestimate the prevalence of these disorders in the workplace and the risk.

The study concludes that a number of potential threats exist for OSH due to the economic recession, including:

- **a** focus on productivity and growth leading to a distraction on OSH;
- an increase in psychosocial risks due to organizational restructuring;
- further increases in workload with insufficient resources.

# A summary of revenue change, employee changes and restructuring activities in some multinational enterprises during the recession. **APPENDIX II**

Country	Company	Sector	Revenue change (per cent) 2008–2009	Employee Changes	Restructuring
UNITED KINGOM	GLAXOSMITHKLINE	HEALTH CARE	-16.0	Decreased by 2 per cent	Redundancy programme initiated prior to recession.
UNITED KINGOM	:	ENERGY	-19.0	7 per cent turnover	17 per cent of the workforce changed job roles in 1 year.
UNITED KINGOM	BRITISH AIRWAYS TRAVEL &	TRAVEL & LEISURE	-11.0	Decreased 33 per cent	<u>e</u>
UNITED KINGOM	UNITED KINGOM TESCO CONSUMER	CONSUMER	14.7	Increased 7 per cent	Continued to expand operations into financials and other markets.
UNITED KINGOM	UNITED KINGOM LOGICA INDUSTRIAL	INDUSTRIAL	2.8	Decreased 2 per cent	Reduced cost base by GBP 130 million by focusing on back office reductions.
UNITED KINGOM	ANGLOAMERICAN	BASIC MATERIALS	-21.0	19,000 jobs cut	Major restructuring with a leaner system. De-layered the organization.
UNITED KINGOM	BRITISH AMERICAN TOBACCO	CONSUMER	17.0	Decreased 1 per cent	-
UNITED KINGOM	BARCLAYS		34.0	Unchanged	1
UNITED KINGOM	VODAFONE TELECOM	TELECOMMUNICATIONS	15.6	1,900 jobs eliminated in global support role	Accelerated a GBP 1 billion cost reduction programme. Outsourced field network maintenance operations in the United Kingdom and used network sharing across Germany, Ireland, Spain and the United Kingdom.
UNITED KINGOM	ТАТ	к	24.0 Decreased 13 per cer	Decreased 13 per cent	Optimised working capital, tight capital expenditure control and reduced the cost base. De-layered the organization using metric-driven performance management. GBP 8 million spent on reorganization costs with a two year payback.

Country	Company	Sector	Revenue change (per cent) 2008–2009	Employee Changes	Restructuring
UNITED KINGOM	ВР	ENERGY	-33.0	Decreased 13 per cent	Introduced operating management system to become more efficient.
: :	BT GROUP		3.3	Decreased 4 per cent	ATIONS 3.3 Decreased 4 per cent –
GERMANY	ALLIANZ	FINANCE	5.2	Decreased 16.2 per cent	. 1
GERMANY	THYSSENKRUPP	BASIC MATERIALS	s –14.0	Decreased 6 per cent	About 26 per cent of employees had to go to short- time working. All key measures agreed with employee representatives. Restricted the use of temporary employees. No changes to occupational health and safety. Steel group hit most, where 20 per cent had to work fewer hours. Used short-time working to upgrade the skills of employees affected. Used e-learning platform to upgrade skills. Provided partial retirement for 4,170 employees. Cut costs by 1 billion euros. Reduced loan requirements. Scaled back capital expenditures, sold off parts of the business and administration expenses reduced by 20 per cent.
GERMANY	SIEMENS	INDUSTRIAL	0 0	Decreased 5 per cent	Downsizing programme targeted 12,600 job cuts worldwide, completed in 2009. Benefits accounted for in 2008. Re-organised supply chain management by bundling purchases to get lower prices. Increased share of sourcing in emerging countries. Significantly reduced the number of suppliers by 20 per cent. Introduced "Fit for 2010" programme. Reduced marketing selling and general administrative expenses. Saved 1.2 billion euros due to these operations.
GERMANY	ADIDAS	CONSUMER	-4.0 Decreased 4 per cent	Decreased 4 per cent	Reduced headcount in non-retail related functions.
GERMANY	VOLKWAGEN	CAR MANUFACTURE		No change	Exceeded deliveries recorded in 2008 due to strong Asia/Pacific market growth.
GERMANY	GERMANY BASF BASIC MATERIAI		-18.6	Increased 8.1 per cent	<ul> <li>-18.6 Increased 8.1 per cent Limited the need for shorter working days in Europe by using: temporary personnel transfers, a flexible system for working time and variable remuneration, as well as a strict cost cutting discipline to achieve job security and cost reduction. Maintained investment in demographic change and further training. Employees temporarily transferred to other operations due to plant shutdowns and production slowdowns. There was more work in some plants than others. In close consultation with employee representatives at sites in Begium and Germany during the transition.</li> </ul>

Country	Company	Sector	Revenue change (per cent) 2008–2009	Employee Changes	Restructuring
GERMANY	BAYER	HEALTH CARE	с, v,	Decreased less than 1 per cent	Working hours and pay were temporarily reduced between February and October 2009, making official short-time working unnecessary. Paid out 139 million euros on severance payments and 37 million euros on demolition and costs for production facility closures. In 2009, integrated some divisions and eliminated others.
GERMANY	BMW	CAR MANUFACTURE	-4.7	Decreased 3.8 per cent	Increased liquidity levels. Rigorous cost management to improve efficiency and productivity. "Today for Tomorrow programme" focused on changing age structures. 2010 recovery expected to be at a lower rate of growth than pre-crisis levels.
GERMANY	DEUTSCHE BANK		105.0	Decreased 4.2 per cent	Made over 100 per cent return on revenue and a 5 billion euro profit compared to the 4 billion euro loss of the previous year. Did not conduct large scale restructuring.
GERMANY	INFINEON	•	TECHNOLOGY –24.0 Decreased 10 per cent	Decreased 10 per cent	Introduced short working time and an unpaid leave programme, travel restrictions, and a cut in training and external measures. Suspended salary increases, abolished long service bonuses and reduced staff restaurant subsidies. This put considerable strain on management and employees alike but contributed the largest amount to cost savings.
GERMANY	LUFTHANSA	TRAVEL & LE		-10.3 Increased 9 per cent	2,600 ground staff in Germany began reduced working hours in March 2009. Capacities reduced by 20 per cent, and retired 4 freighters.
GERMANY	LINDE	INDUSTRIAL	-11.5	Decreased 8 per cent	
FRANCE	FRANCE VEOLIA UTILITIES IN	: _ :	DUSTRIAL -3.0 I	Decreased less than 1 per cent	General efficiency plan 255 million euros. 2 billion euros in divestments completed in 2 years.

Country	Company	Sector	Revenue change (per cent) 2008–2009	Employee Changes	Restructuring
FRANCE	EDF ENERGY	UTILITIES INDUSTRIAL	6.4	Increased 5 per cent	Revenue and profits up based on other income. Established national advisory board on health in the workplace. One third of staff in France is over 50 years old. Over half of employees retire between 2008 and 2015. Recruited 3,700 people in 2009. Health and safety committee meets 3 times a year to exchange best practice, compare indicators and suggest improvements. The company associates reduction in injury rate with training. Established a new workplace health policy for 2009–2012 factoring in an extension to working life. A new system for supervising health in the workplace overseen by occupational health physicians. OSH committee meets 3 times a year, bringing together managers, trade unions, physicians and external experts. Employees have access to toll free support. Managers use intranet to share best practice. Other measures include teleworking, part-time schedules, childcare, social benefits and time off when necessary for parents of toddlers.
FRANCE	LA FARGE	BASIC MATERIALS	-16.0	Decreased 6.5 per cent	Headcount in Latin America reduced by 40 per cent compared to 23 per cent in North America and 8.4 per cent in Western Europe. Revenue and profits hit hard. Affected by residential, commercial and infrastructure construction. OSH management system developed in 2010. Executive committee has 30 per cent of bonuses linked to safety and health. Group-wide occupational health programme in 2010 developed a health strategy supporting a healthy work environment. The health strategy considers effects of health on work also by using a health survey.
FRANCE	FRANCE TELECOM	TELECOMMUNICATIONS	-7.0	Decreased 7 per cent	Growth rates in France down in 2009. Responded to stiffer competition by converging services.
FRANCE	RENAULT	CAR MANUFACTURE	-11.0	Decreased 6 per cent	FRANCE     RENAULT     CAR MANUFACTURE     -11.0     Decreased 6 per cent     Re-organized production sites and maintained freeze on hiring put in place at end of 2008. Created a voluntary departure plan. In Paris, all employees followed three days of training during non-work periods. This included prevention of psychosocial risks, proposals for continuous improvement initiatives for health, safety, ergonomics and working conditions, stress awareness, as well as an HR course to identify stress. There were 73, 000 participants in the surveys to identify stress. There were 73, 000 participants in the survey.

Country	Company	Sector	Revenue change (per cent) 2008–2009	Employee Changes	Restructuring
FRANCE	PEUGEOT	CAR MANUFACTURE	- 10.9	Decreased 8 per cent	Short-time working periods were used to attend courses in lean management methods, among others, whist receiving 100 per cent compensation. Safeguarded 3,500 jobs. Voluntary separations used. Around 6,200 people left the group as part of the 2009–2010 plan. Workplace safety and health focus is on preventing musculoskeletal disorders, managing chemical risks and averting road risks. A 2007 study on work stress resulted in a signed agreement on assessing and preventing psychosocial risks. More than 40 OSH audits conducted in 2009 by corporate teams in addition to local audits.
FRANCE	TOTAL	ENERGY	-27.0	Decreased less than 1 per cent	1
FRANCE	MICHELIN	CONSUMER	8. 6	Decreased 7 per cent	A 15 per cent drop in volume. Decline in unit sales but structural improvement in productivity and decline in raw materials. Reorganization in the United States, voluntary separation in France and closure of a plant in Japan. Programmes taken in North America and Europe affected 5,500 employees in 2009. These were notified 12 months in advance. OSH prevention programmes implemented on in-plant traffic, working at heights, power distribution and lockout procedures during maintenance. On-site ergonomist identifies areas for action and implements corrective measures. Dedicated budget. New computerized system for managing safety documents. Psychosocial risks addressed since 2002. Occupational physicians, HR and managers attend stress management courses (2,700 had taken part at end of 2009). A two-hour module helps operators manage their own stress. Two stress management surveys from 2008 now are carried out on a regular basis. Psychosocial risk prevention system introduced, based on objective assessment tested in 2010. System quantifies workloads, deadline related stress and degree of autonomy.
FRANCE	FRANCE PNB PARIBAS	FINANCE	47.0 Increased 16 per cent	Increased 16 per cent	

Country	Company	Sector F	Revenue change (per cent) 2008–2009	Employee Changes	Restructuring
FRANCE	SANOFFI AVENTIS	HEALTH CARE	0.0	I	Transformation in 2009 due to acquisition of company. Most injuries were musculoskeletal. Psychosocial risks assessed at end of 2009. Occupational health agreement signed to address these issues.
UNITED STATES	GE	:		Decreased 6 per cent	I
UNITED STATES	UNITED STATES INTEL TECHNOLOGY	•	-7.0	I	Focused on efficiency and tight spending controls across all operations. Restructuring started in 2006.
UNITED STATES	UNITED STATES MICROSOFT TECHNOLOGY		-3.0 Cut 5,000 positions in R&D, HR and other departments	Cut 5,000 positions in R&D, HR and other departments	US\$ 330 million spent on severance charges for expected reduction in headcount. Considered a foundation for future growth.
UNITED STATES	PFIZER			-	Downsized due to acquisitions but undisclosed.
UNITED STATES	CISCO TECHNOLOGY		0.6-	Increased employee headcount across all regions	Used a pulse survey to gauge employee engagement.
UNITED STATES	UNITED STATES JP MORGAN FINANCE		49.0	-	49.0
UNITED STATES	:	BASIC MATERIALS		-32.0 Decreased 32 per cent	Price of aluminium dropped 50 per cent. Had to restore balance sheet, restore liquidity and get to neutral cash flow.
UNITED STATES		AT&T TELECOMMUNICATIONS		Decreased 7 per cent	-
UNITED STATES	EXXON MOBIL	ENERGY	-35.0	Increased 1 per cent	Incident investigation revealed that employee awareness of hazards and the degree to which they comply with critical procedures are often significant contributors to accident prevention. Deployment and enhancement of behaviour based safety tools. Developing a culture of intervention where everyone takes responsibility for own safety and safety of others. Conformance with critical operating procedures emphasised.
UNITED STATES	VERIZON	TELECOMMUNICATIONS		-	1.0
UNITED STATES	HEWLETT PACKARD	TECHNOLOGY		-	-3.0

# **Appendix III** Codes generated from the interviews for each multinational enterprise interviewed.

### 1. What has been the impact on the workforce due to the economic recession?

MNE	Sector	Codes
A	Health care	workforce changes are due to the industry transforming and not the recession
		research and development is changing
		<ul> <li>employee redeployment from the United States and the United Kingdom to developing countries</li> </ul>
в	Basic materials	workforce size was stable over 25 years until this recession
		personnel transfers
		short-time work
		difficult to run plants not at full capacity
		use downtime for training
С	Consumer	restructured because revenue declined 30 per cent
		■ staff number reduced by 2,000
D	Consumer	recruitment freeze in developed markets
b		staff increases in emerging markets
		staff reductions in developed markets
		performance appraisals introduced
		increases in mental stress from appraisals
		managers more aware of occupational health concerns
Е	Finance	no change to staff numbers but some staff transferred
		increased time pressure
		management carefully reviewing expenditure on business travel and building projects
F	Telecommunications	jobs restructured during and before the recession
		working hours and time unchanged
		drive towards a team-based culture
		difficulty in negotiating pay, terms and conditions with Unions
G	Energy	natural downsizing before and during the recession
		freeze on hiring temporary workers
		home working encouraged but unions are resisting over concerns of work-home life interference

MNE	Sector	Codes
н	Industrial	exited some businesses to reduce manufacturing costs
		revenues down substantially
		■ reduced staff levels by 10–15 per cent
		focused on research and development investments
		all staff took 10 per cent pay cut
		returned full pay to employees as soon as possible
		outsourced work services
I	Technology	revenues up slightly
		workforce reduced by 10 per cent
		less people doing more work
		more staff mobility
J	Finance	■ increase in musculoskeletal disorders
к	Utilities	no changes in employee numbers
		contractors increased in emerging markets
		no changes to working time or working hours
		mentoring programmed to transfer experience from older to younger workers
L	Basic materials	major staff downsizing across all departments
		no changes in hours or working time
м	Utilities	more working hours

# Table 2. How have occupational safety and health management systems been directly affected by the economic recession?

Health care Basic materials	<ul> <li>policy changes</li> <li>worker participation</li> <li>staff levels and training</li> <li>budget cuts at headquarters and field offices</li> <li>policy changes using more outsourcing</li> <li>health screening unchanged because it is harder to raise awareness again</li> </ul>
Basic materials	<ul> <li>staff levels and training</li> <li>budget cuts at headquarters and field offices</li> <li>policy changes using more outsourcing</li> <li>health screening unchanged because it is harder to raise</li> </ul>
Basic materials	<ul> <li>budget cuts at headquarters and field offices</li> <li>policy changes using more outsourcing</li> <li>health screening unchanged because it is harder to raise</li> </ul>
Basic materials	<ul><li>policy changes using more outsourcing</li><li>health screening unchanged because it is harder to raise</li></ul>
	health screening unchanged because it is harder to raise
	awareness again
	travel restrictions for health and safety staff
	stress hotlines introduced
	<ul> <li>audits unchanged</li> <li>as abarges to OSU in developing countries</li> </ul>
	<ul> <li>no changes to OSH in developing countries</li> <li>OCU staff lavels reduced</li> </ul>
	<ul> <li>OSH staff levels reduced</li> <li>response time of OSH staff increased</li> </ul>
	response time of OSH staff increased
Consumer	■ no decrease in OSH staff levels
	increase in activity due to ageing workforce
	OSH staff busy with ergonomics issues
	wellness programme unaffected
	less focus on machinery and personal protection issues
	no change in audit procedures
Consumer	no budget cuts
	no changes in policy
	demands on occupational health resources significantly increased
	OSH staff working harder despite having fewer employees to deal with locally
	<pre>ergonomics not taken seriously</pre>
Finance	stronger policy on stress management
	OSH staff levels increased slightly
	business travel has restricted staff in how risk is managed
	need for justification for spending on OSH
	outsourcing OSH
	harder to recruit OSH staff because of limitations with hiring because of the recession
Telecommunications	■ budget cuts
	management and accountability has increased
	no change in planning, development and implementation procedures
	<ul> <li>no change in policy</li> </ul>
	<ul> <li>no change in policy</li> <li>most recent changes have been focused on mental health issues</li> </ul>
Energy	no changes in budget
	<ul> <li>no change in staff levels or training</li> </ul>
	Consumer Finance

MNE	Sector	Codes
Η	Industrial	<ul> <li>reduced staff levels</li> <li>more work on OSH</li> <li>more outsourcing</li> <li>office ergonomics a priority</li> <li>more manual handling/repetitive work risks evident</li> </ul>
I	Technology	<ul> <li>no budget cuts</li> <li>temporary cut on staff training</li> <li>shifted control of OSH from corporate to local level</li> </ul>
J	Finance	<ul> <li>no staff changes</li> <li>no change in ergonomics assessments</li> <li>no impact on health and wellness programmes, an advantage of localized control, there is no budget that can be cut at corporate level</li> </ul>
K	Utilities	<ul> <li>no change to budget</li> <li>changed audit procedures on psychosocial risks</li> <li>greater focus on mental stress</li> </ul>
L	Basic materials	<ul> <li>no change to budget</li> <li>essential training continued</li> <li>lost travel clinic on site</li> <li>investigation and assurance procedures increased to protect against distraction from health and safety issues due to recession</li> <li>psychosocial risk assessments increased</li> </ul>
М	Utilities	<ul> <li>new workplace health policy</li> <li>introduced a new system for monitoring health and reducing envi- ronmental and psychosocial risks</li> </ul>

# Table 3. What are the potential threats to occupational safety and health management systems due to the economic recession?

MNE	Sector	Codes
A	Health care	<ul> <li>losing jobs due to site closures</li> <li>losing valuable experience</li> <li>may affect in house mentoring programme</li> <li>future budget cuts</li> <li>outsourcing OSH is a weakness</li> <li>recruiting suitably qualified staff in developing countries</li> </ul>
В	Basic materials	<ul> <li>redundancies</li> <li>subsequent increase in workload</li> <li>further increases in response times</li> <li>potential increase in accidents and ill health</li> </ul>
с	Consumer	<ul> <li>ageing workforce issues</li> <li>older people working longer hours</li> <li>overall wellness among older workers is a concern</li> </ul>
D	Consumer	<ul> <li>more outsourcing of occupational health activities</li> <li>external contractors have less knowledge of the "shop floor"; they are less clear about the interactions between the work and individuals</li> <li>contractors are not prepared for psychosocial risk assessment</li> </ul>
E	Finance	<ul> <li>recruitment of suitably qualified OSH staff may become a problem due to increased demand</li> <li>numbers-focused managers at the top with incorrect attitudes towards OSH; this negatively impacts safety culture</li> <li>threat to maintaining flexibility in systems in order to respond to fast changing circumstances in a recession</li> <li>major organizational changes that do not have OSH management support may lead to poor health, poor industrial relations and have a negative impact on the business; need to integrate health and wellness into change strategy</li> </ul>
F	Telecommunications	<ul> <li>budget constraints may affect policy and safety culture development</li> <li>need to find low-cost-high-impact strategies such as computer-based OSH training for all employees</li> </ul>
G	Energy	<b>-</b>
н	Industrial	<ul> <li>priorities may shift away from OSH to sustainability issues too much</li> <li>not appropriately managing stress issues</li> <li>need survey and metrics for mental stress</li> </ul>
I	Technology	government intervention and excessive regulation may be more disruptive than helpful

MNE	Sector	Codes
ſ	Finance	<ul> <li>conflicting priorities</li> <li>enforcement and further regulation</li> <li>future resource issues from increasing commercial pressures and ability to manage health and well being</li> </ul>
К	Utilities	<ul> <li>sub-contractors may find it difficult to keep up with higher OSH standards</li> <li>emerging psychosocial risks</li> </ul>
L	Basic materials	<ul> <li>being distracted by events affecting the company due to the recession</li> <li>losing focus on safety culture; maintaining a strong safety culture is more important than OSH resources</li> </ul>
М	Utilities	<ul><li>work-life balance issues</li><li>losing talented young engineers as a result</li></ul>

# **APPENDIX IV** The thematic template used for initially coding

the interview data

# 1. IMPACT ON THE WORKFORCE DUE TO THE GLOBAL RECESSION

- **1.** Changes to the workforce
  - 1.1. Employee downsizing before and during the recession
- 2. Changes in working hours and working time
- **3.** Changes in workforce mobility
- **4.** Outsourcing and temporary contractors
- 5. Age or demographic trends in "lay-off survivors"
- 6. Union related issues
- 7. Worker motivation and engagement

# 2. DIRECT EFFECTS OF THE RECESSION ON OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT SYSTEMS

- 1. Budget cuts at headquarters and field offices
- 2. Policy (OSH objectives)
- **3.** Worker and trade union participation
- 4. Management responsibility and accountability
- 5. Staff levels and training
- 6. Documentation procedures
- 7. Planning, development and implementation procedures (risk reduction)
- 8. Investigation processes (continual improvement processes)
- 9. Audit procedures (performance monitoring and review)
- **10.** Effect on the supplier chain
- 11. OSH operations in developing countries affected differently

# 3. POTENTIAL THREATS TO OCCUPATIONAL SAFETY AND HEALTH DUE TO THE ECONOMIC CRISIS – PERSONAL CONCERNS IN GENERAL TERMS

- **1.** OSH staff levels
- 2. Safety culture
- 3. Worker pressure
- 4. Outsourcing OSH

# Notes

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