

HSE STRATEGY LAUNCH

Background paper: the economic evidence

1. Economists in the Health and Safety Executive (HSE) have been working with outside experts to monitor the economic downturn and assess its impact on health and safety. This paper presents the evidence in three key areas: the picture from past recessions; what we know so far about the current downturn; and what may happen when the economy recovers.

Evidence from past recessions

2. The evidence from previous recessions, including that from HSE-sponsored research¹, is that ***injury rates fall*** during periods of reduced economic activity. The main reason is that in a downturn there are fewer newly hired workers (especially young male workers), i.e. the average level of experience in the workforce is greater and so the average risk of injury falls. This is reinforced by the effect of reduced 'work effort': when the level of demand falls, so does the proportion of people working long hours, which reduces injury rates through lower levels of fatigue. For minor injuries, there may be a further effect due to reduced incentives for workers to report them.

3. Against this, there is some evidence that 'corner cutting' by employers in times of recession can lead to increasing rates of injury. This might be due to 'retrenchment', with employers cutting back on investment and training, and/or to the weaker bargaining position of workers due to higher unemployment.

4. On balance, though, in past recessions the former effect has outweighed the latter, producing a 'pro-cyclical' pattern of injury rates. In the most recent previous UK recession, from 1989 to 1993, the rate of reported major injuries fell by over 10 per cent. (And because the level of employment falls in a recession, the *number* of injuries falls by even more). Effects are most pronounced in the construction and manufacturing sectors.

5. Much less evidence is available regarding ***work-related ill health***. For some types of ill health – e.g. those involving exposures to noise or chemical agents – we might expect to see a similar pro-cyclical pattern as for injuries, due to the effect of workers' experience on risk levels. And the effect of reduced 'work effort' might be expected, other things equal, to reduce the incidence of stress-related conditions.

6. However, there are likely to be different patterns for different health conditions. For example, health/welfare issues sometimes seen as more peripheral might be particularly prone to the effects of employers' 'corner cutting'. Also, the incidence of conditions which can be caused by non-work as well as work factors – such as stress – could *rise* due to the association between unemployment / deprivation and general ill health. For many types of ill health there is also the issue of latency, which will mean that any effects of the recession would not show up in health outcomes for a number of years.

¹ Research Report 386 *Trends and context to rates of workplace injury*, Warwick Institute for Employment Research, 2005, available at <http://www.hse.gov.uk/research/rrhtm/rr386.htm>

Evidence on this recession

7. Turning to the current recession, it is worth noting first the main features which make it distinctive. Briefly, these are:

- The origins of the current crisis in the 'credit crunch' and the financial and housing markets, with accompanying sharp fluctuations in global oil and commodity prices.
- The speed and depth of the downturn, both in the UK and globally, with falls in Gross Domestic Product (GDP), investment, employment, job vacancies and confidence levels in many cases the largest for decades.
- The scale and nature of the national and international policy responses – monetary, fiscal and regulatory.

8. In considering the current economic climate it is important to remember that when the UK economy entered recession it was in a much stronger position than it had been by comparison to previous recessions. Unemployment rates, for example, remain lower than they were during the bottom of the recession of the 1990s.

9. Because of these special features, it will be important to analyse the nature of the current recession – and assess the impact on health and safety – as more intelligence becomes available. The next few paragraphs begin to do this, with respect to the sectors and the groups of workers affected, employers' reactions to the downturn, and the health and safety statistics themselves.

10. The **sectoral impact** is important partly because of the different health and safety records of different parts of the economy. The recession has affected virtually all sectors, but the latest GDP figures (2009 Q1)² show especially marked year-on-year falls in manufacturing (14%) and construction (9%). This would be expected to reduce overall injury rates due to the effect of a shift in the composition of the economy away from sectors with relatively high injury rates, amplified by the fact that the 'pro-cyclical' relationship described above is particularly strong in these sectors.

11. The recession is also affecting different **groups of workers** to different extents. To pick out some trends from the latest labour market statistics³: men have been more affected than women, and young people more than other age groups (in the year to 2009 Q1, unemployment rates for 18-24 year olds increased by 4 percentage points to 16%); unemployment has risen in all regions of the UK, but worst affected have been traditional industrial areas such as the West Midlands. These patterns would again be expected to have downward (compositional) effects on overall injury rates.

12. There is some evidence on **employers' responses** to the downturn, largely from less formal surveys and intelligence. These show a mixed picture with regard to the extent of 'corner cutting': in one survey a tenth of workers said they are fearful of raising concerns about health and safety issues in the current

² Office for National Statistics (ONS) *GDP preliminary estimate*, April 2009, available at <http://www.statistics.gov.uk/pdfdir/gdp0409.pdf>

³ ONS *The impact of the recession on the labour market*, May 2009, available at http://www.statistics.gov.uk/downloads/theme_labour/impact-of-recession-on-LM.pdf

economic climate, but on the other hand half of company directors stated they would cut bonuses rather than cut health and safety spending⁴.

13. Finally, there are limited data so far on **injuries and ill health** since the onset of the recession. The available figures for 2008/09 to date (Q1-Q3)⁵ show major injuries down 1.1% compared with the same period the year before. First data on injuries for the full year 2008/09 will be published in June 2009, and comprehensive 2008/09 health and safety statistics in October.

Recovery from recession

14. While economic forecasts vary, the consensus is that a short, sharp (V-shaped) recession is unlikely – due to factors such as continuing difficulties with the availability of credit, a higher propensity of households to save, and depressed global demand. All of this led the Bank of England's Monetary Policy Committee to expect “a relatively slow recovery in economic activity”, although it also noted that “the substantial scale of the stimulus in train may prompt a rapid rebound in activity”⁶.

15. When the recovery does come, the evidence suggests that this will bring **upward pressure on injury rates**, as hours worked increase and new workers are hired. It is not possible reliably to predict the *size* of the effect this time. However, the more rapid the recovery, the more marked it is likely to be – especially in sectors where hiring is concentrated among workers with little previous experience (which could be the case if workers laid off during the recession have left the labour market for good). If the recession were especially protracted, on the other hand, then the balance between the ‘new hires’/‘work effort’ and ‘corner cutting’ effects of economic activity on injury rates might shift, so that injury rates might conceivably begin to rise even before the recession ends.

16. As noted above, the effects on **ill health** are harder to assess. However, bearing in mind both the long latency of some conditions, and the potential long-term effects of unemployment on health, it seems plausible that any health effects may persist well after the recession itself is over.

17. In conclusion, the picture is changing rapidly and there remains much uncertainty about the extent and nature of the current downturn and – especially – the prospects for recovery. HSE will continue to track the emerging evidence on the economic situation and its implications for health and safety, both during the recession and beyond.

HSE Economic Analysis Unit
May 2009

⁴ British Safety Council *Annual Health & Safety Perceptions Survey*, May 2009, available at <http://www.britsafe.org/feedcontents.aspx?id=100238>

⁵ HSE in-year RIDDOR injuries analysis, available at <http://www.hse.gov.uk/statistics/riddoranalysis.htm>

⁶ Bank of England *Quarterly Inflation Report*, May 2009, available at <http://www.bankofengland.co.uk/publications/inflationreport/irlatest.htm>