European countries could benefit from introducing more economic incentives to promote workplace health and safety, rewarding those organisations that work hardest to protect their employees. That is the message of the economic incentive project, undertaken by the European Agency for Safety and Health at Work (EU-OSHA). Some EU Member States already offer various kinds of financial rewards for businesses that invest in keeping their employees safe. These rewards range from state subsidies and grants, through to tax breaks, preferential terms for bank loans, and lower insurance premiums for the best-performing businesses.

Keywords: economic incentives, cost-benefit analysis, prevention

1 Introduction

The European Union strategy 2007–12 on occupational safety and health (OSH) recognises that there is a need to use economic incentives to motivate enterprises to apply good practice in their prevention work. EU-OSHA contributes to meeting this need by providing information on the types of economic incentives that are most likely to succeed. Research has shown that external economic incentives can motivate further investments in prevention in all organisations and thus lead to lower accident rates (Tompa, Trevithick & McLeod, 2007, Elsler et al, 2010).

This project gives the clearest indication yet that these types of incentives are effective, encouraging organisations to improve their occupational health and safety. According to Elsler et al. (2010), for every euro spent through incentive schemes, up to € 4.81 is saved at societal level through reduced accident and disease rates, and lower rates of absenteeism as working conditions improve.

Besides this business case for the incentive-providing organisations, there are further arguments to introduce an economic incentive scheme, especially for private or state-run insurance companies:

- improvement of corporate social responsibility (especially in large companies)
- improved reputation of the insurance company
- creating win–win situations with clients
- competitive advantage (for private insurance companies).

The project was inspired by the European OSH Strategy 2007–2012, which aimed to reduce occupational accidents by 25%. In its first (2007-2010) phase several products were delivered:

The second phase (2010-2012) of the project is now delivering more practical products for organisations that are interested in developing or optimising their own incentive scheme:


The practical guide is based on the findings of the economic incentives project and is intended to serve as a practical and user-friendly guide to help incentive providers to create or optimise their own economic incentive schemes. The primary target audience is organisations that can provide economic incentives to improve OSH, such as insurance companies, social partners or governmental institutions. These organisations are regarded as important intermediaries to stimulate further efforts in OSH in their cooperating enterprises; for example as clients of insurance institutions.

One conclusion from the EU-OSHA project is that incentives schemes should not only reward past results of good OSH management (such as accident numbers in experience rating), but should also reward specific prevention efforts that aim to reduce future accidents and ill-health (EU-OSHA, 2010). Experts from the project therefore suggested the development of compilations of innovative and evidence-based preventive solutions, starting with the three sectors construction, health care and HORECA (hotels, restaurants, catering). The preventive measures from these compilations are worth promoting in their own right, as well as being applied in economic incentives schemes. These preventive solutions can be used as a basis for incentive-providing organisations to develop their own incentive scheme, adapted to the specific situation in their sector and country.

So far, the economic incentives project has already encouraged different EU Member States to learn from each other, and to exchange good practice in designing incentive schemes. All in all, the project shows that economic incentives can be effective in nearly all countries, despite the wide differences in their social security and accident insurance systems. The project and its results have been presented at conferences and workshops in numerous European countries, including Bulgaria, Cyprus, the Czech Republic, Germany, Italy, Sweden, Slovenia and the UK. Some practical consequences have already been observed. For example, the Italian workers’ compensation authority INAIL
has developed a new incentive scheme which takes into account the experiences and good practice of other countries and is therefore based on the best available international knowledge. With a budget of over € 60 million in 2011 and of € 205 million in 2012, the INAIL scheme is targeting small and medium-sized enterprises in particular. Experts estimate that it could lead to benefits worth € 180 million at society level in 2011 and € 615 million in 2012.

2 Types of incentives

The following economic incentives to promote occupational safety and health can be found in European countries (EU-OSHA, 2010):

- Insurance premium variations, for example dependent on
  - Occupational accidents and diseases (experience rating)
  - Specific risk of sector
  - Prevention activities such as training, investments, personal protection measures
- State subsidies, for example for innovative investments or reorganisation
- Tax incentives, such as better write-off conditions
- Better banking conditions, for example lower interest rates
- Non-financial incentives, for example certification of OSH management systems or awards

Many common incentive schemes in Europe are based on insurance premium reductions. If the premium reductions are simply calculated according to the risk of the company, taking into account past accident insurance and disease rates, this so-called experience rating process is very easy to apply. In addition a large number of companies can take part in this incentive scheme, as it applies to all insured companies. Research about the effectiveness of experience rating found evidence (for example Tompa et al., 2007) that a lower rate of accidents is achieved. The effect of experience rating is analysed in depth in the incentive scheme of the Finnish agriculture sector. Using administrative data, Rautiainen et al. (2005) conducted interrupted time series analyses which showed that the premium discount reduced the overall claim rate by 10.2%, meaning the reduction of more than 5000 accidents. However, the authors do not exclude the possibility that under-reporting could have contributed partly to the claim reduction, although actually no farmer would benefit economically from such a practice. Under-reporting is often discussed as a possible negative side effect of experience rating. As the Finnish example shows, such a practice hardly ever leads to a positive economic benefit for the under-reporting company, if the incentive scheme is designed in the right way.

Kohstall et al. (2006) propose that both positive and negative incentives should be used in an incentive system. Through negative incentives (or disbenefits), companies that remain significantly above the sector’s average accident rate can be obliged to pay an augmented insurance premium. This would increase the visibility of bad OSH performance and therefore raise awareness in the enterprises concerned. The normal insurance premiums are usually planned into the budget of companies. A positive variation is of course welcomed, but only a negative variation will force companies to
adapt their budget planning and therefore make them think more deeply about taking preventive measures. Further negative deviation in insurance premiums can serve as a psychological ‘foot in the door’ for labour inspectors or safety representatives trying to persuade an enterprise to put more effort into OSH. Overall, research literature provides convincing evidence for the positive effects of experience rating, i.e. accident insurance premiums depending on the individual accident record of a company, but nevertheless there are some potential shortcomings connected with this method. Small and medium-sized enterprises (SMEs) in particular rarely profit from such incentive schemes and therefore the insurance schemes of FBG (Germany) and INAIL (Italy) combine an experience rating system with a funding system that rewards specific prevention activities as well. The statistical evaluations of both case studies have proven the effectiveness of such an approach, leading to significantly lower accident rates and better health outcomes among participating enterprises. For SMEs it is important to create a direct link between OSH activities and a reward, such as an insurance premium reduction. Therefore, effort-based incentive schemes are more effective for SMEs than pure experience rating approaches. Possible adaptations of this type of incentive scheme could be a start, with high premiums that are reduced annually if no accidents occur (as in car insurance). Another idea could be to reward increased reporting in order to receive more detailed information on accidents/diseases.

Example: Incentive scheme of the German Butchery Sector Accident Insurance (EU-OSHA, 2010, p. 208)
Premiums are reduced in participating companies for preventive measures, for example those concerning knife accidents, falls and slips, machines and traffic safety. The economic incentive can reach up to 5% reduction of the insurance rate. An OSH audit is also offered, which checks the proper implementation of an OSH management system and in which more than 40 companies participated in 2008. During the period evaluated (2001 to 2007) target fulfilment of the participating companies improved continually. Starting at a similar accident rate in 2001 (92 per 1,000 full-time workers) the six-year participants reduced their accident rate to 65, compared to only 78 per 1,000 FTE in non-participants. A cost–benefit analysis comparing the costs of premiums granted and the theoretical accident cost reduction showed that financial benefits were significant on the side of the insurance. As a positive side effect the collected data can serve as a benchmark for other companies and as a foundation for scheme development.

3 References

