



Finnish Institute of
Occupational Health

Forecast on future working environment challenges in Finland

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International Expert Seminar
Copenhagen, 24-25 September 2009

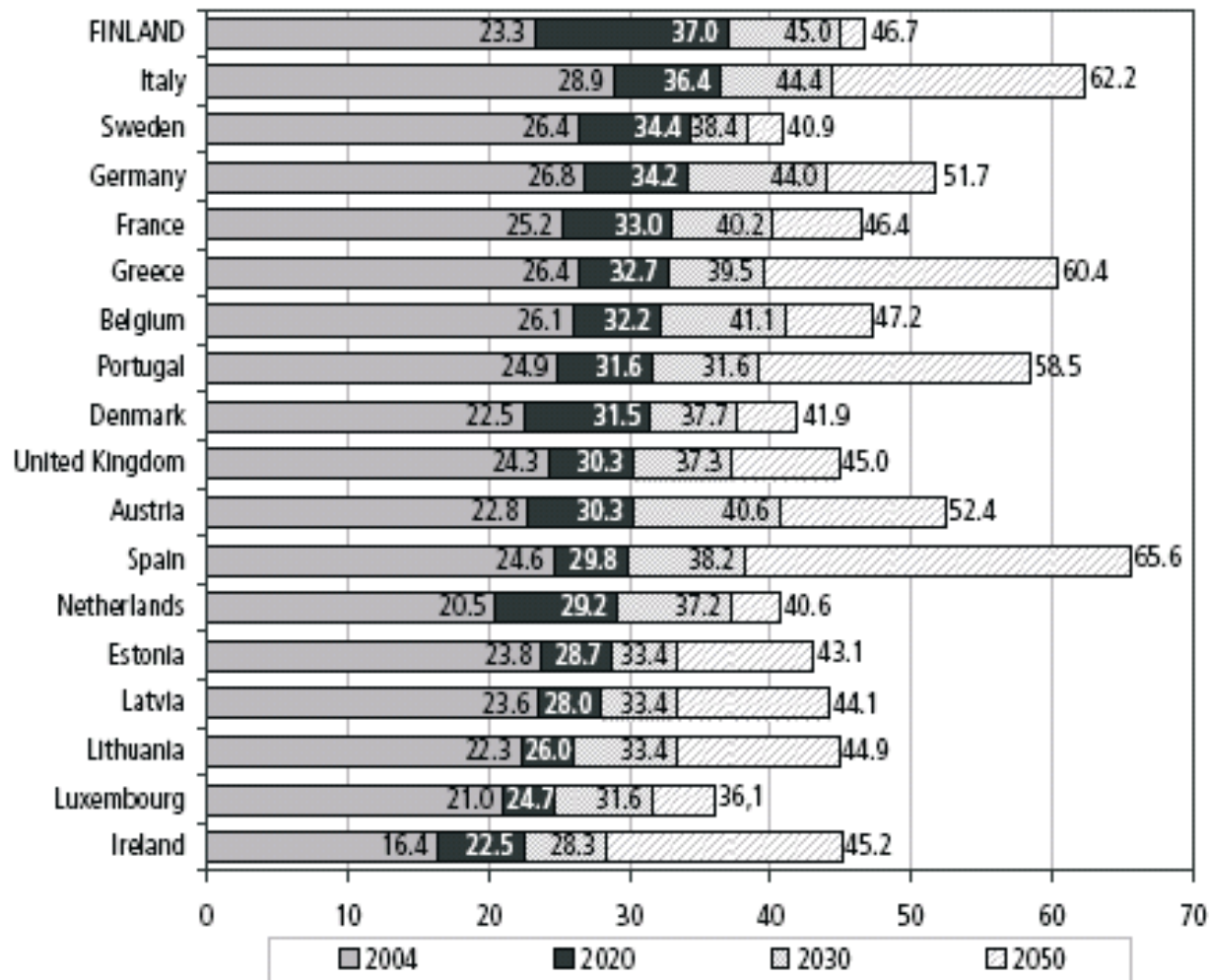
Forecast on future working environment challenges in Finland

- Key drivers of change in the Finnish society
 - according to the government of Finland
 - according to the Finnish Innovation Fund
- Characteristics of the Finnish working life
 - Finland among other EU countries
 - current trends in occupational safety & health
- Forecast on future trends in Finnish working life
 - according to the Finnish Innovation Fund
 - according to the FIOH
- FIOH challenges

Key drivers of change according to Matti Vanhanen's II Cabinet , 2008

- **Globalisation.** Industrial manufacturing is flexibly placed in locations offering the most favourable operating conditions. Knowledge and competence are undergoing similar development. Operators in developing countries are striving to challenge those who are presently enjoying success throughout the world.
- **Sustainable development.** Increasing awareness of climate change and the related threats has created pressure to adopt ecologically sustainable production and consumption. The scarcity of energy and raw materials, and their soaring prices, are adding to this pressure.
- **New technologies.** Technological development continues at an accelerating pace. For instance, the fields of information and communication technology and bio- and nanotechnology are producing information and results on a continuous basis, creating huge potential for new applications and the renewal of former operations.
- **Ageing of the population.** Finland is one of the first countries to face reducing workforce volumes. The rapidly changing population structure is forcing Finland to devise rapid solutions in order to enhance productivity and efficiency, while creating the preconditions for new innovations.

Old-age dependency ratio (>64/15–64) in EU Years 2004, 2020, 2030 and 2050



Source: Eurostat (2006).

Key drivers of change

... additions by the Finnish Innovation Fund in 2009

- *Increasing migration*
 - related to globalisation
(network economy & welfare differences)
- *Structural trends in economical and industrial life*
 - structural changes in industrial activities and branches of employment
 - it is unclear yet which branches of work will stay permanently in Finland

Finland in the 4th European Survey on Working Conditions

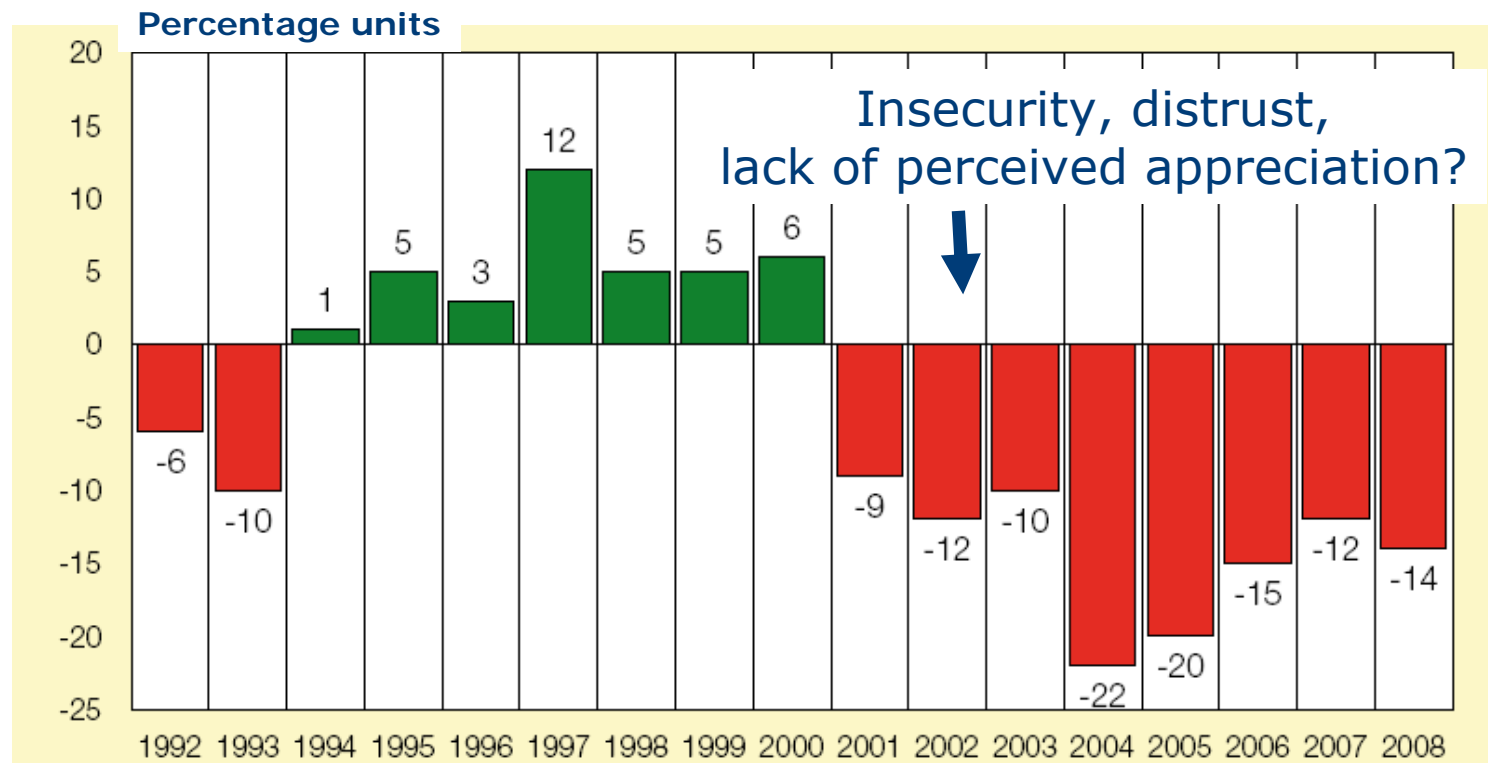
- Finland reported the highest:
 - frequency of having a female immediate boss
 - frequency of workers feeling they are well informed about health and safety risks
- Finland was above EU15 average:
 - in the frequency of telework, work with computers and using internet/email at work and doing teamwork.
 - fit between working hours and social/family commitments
 - satisfaction with working conditions
- Finland was below EU15 average:
 - for violence, bullying and harassment at work
 - working at a very high speed and working to tight deadlines

Finland is among the best performers within the socio-economic security, general working conditions and the gender balance/education dimensions

(EU Commission's 2008 Employment in Europe report)

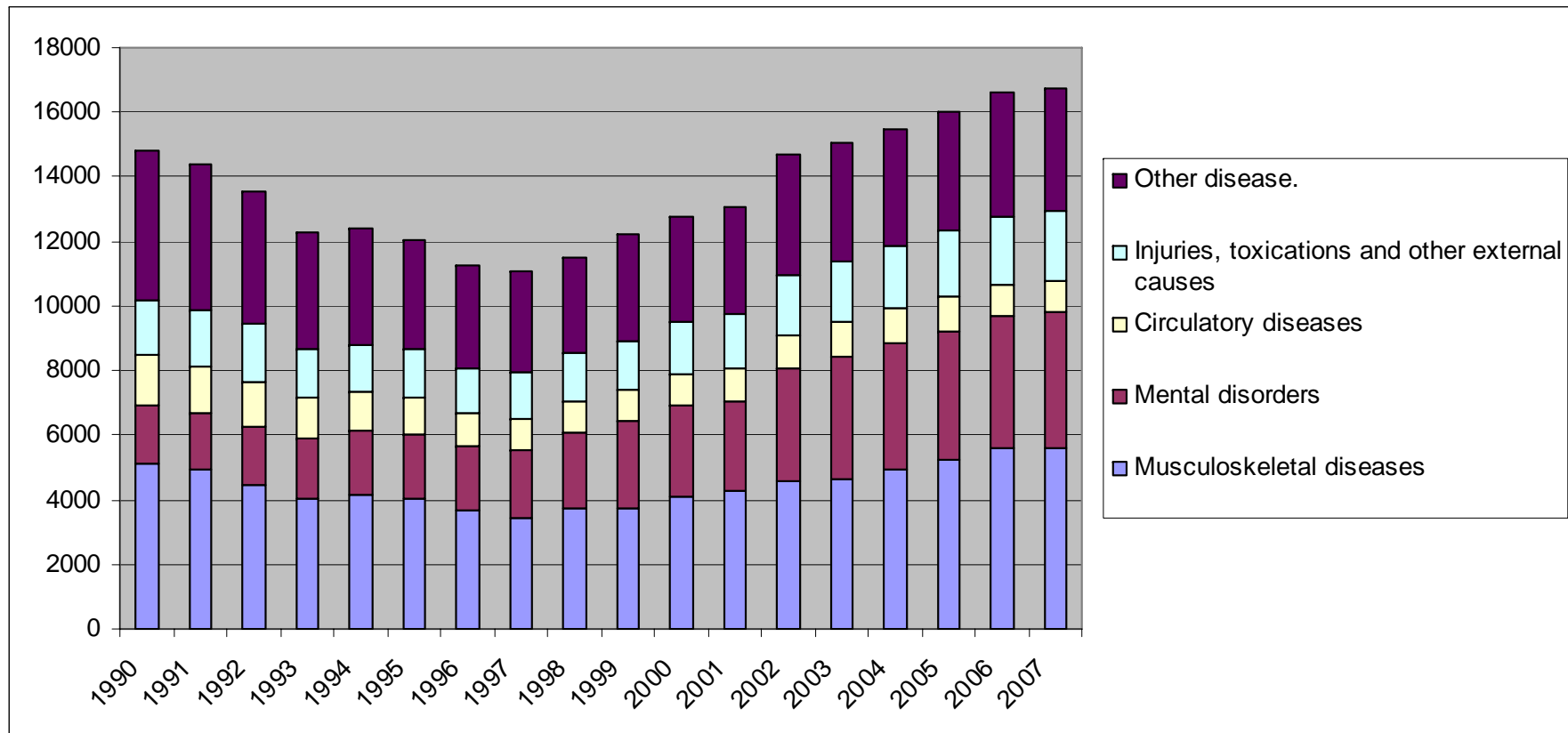
Meaningfulness of work - balance score

All wage earners 1992-2008

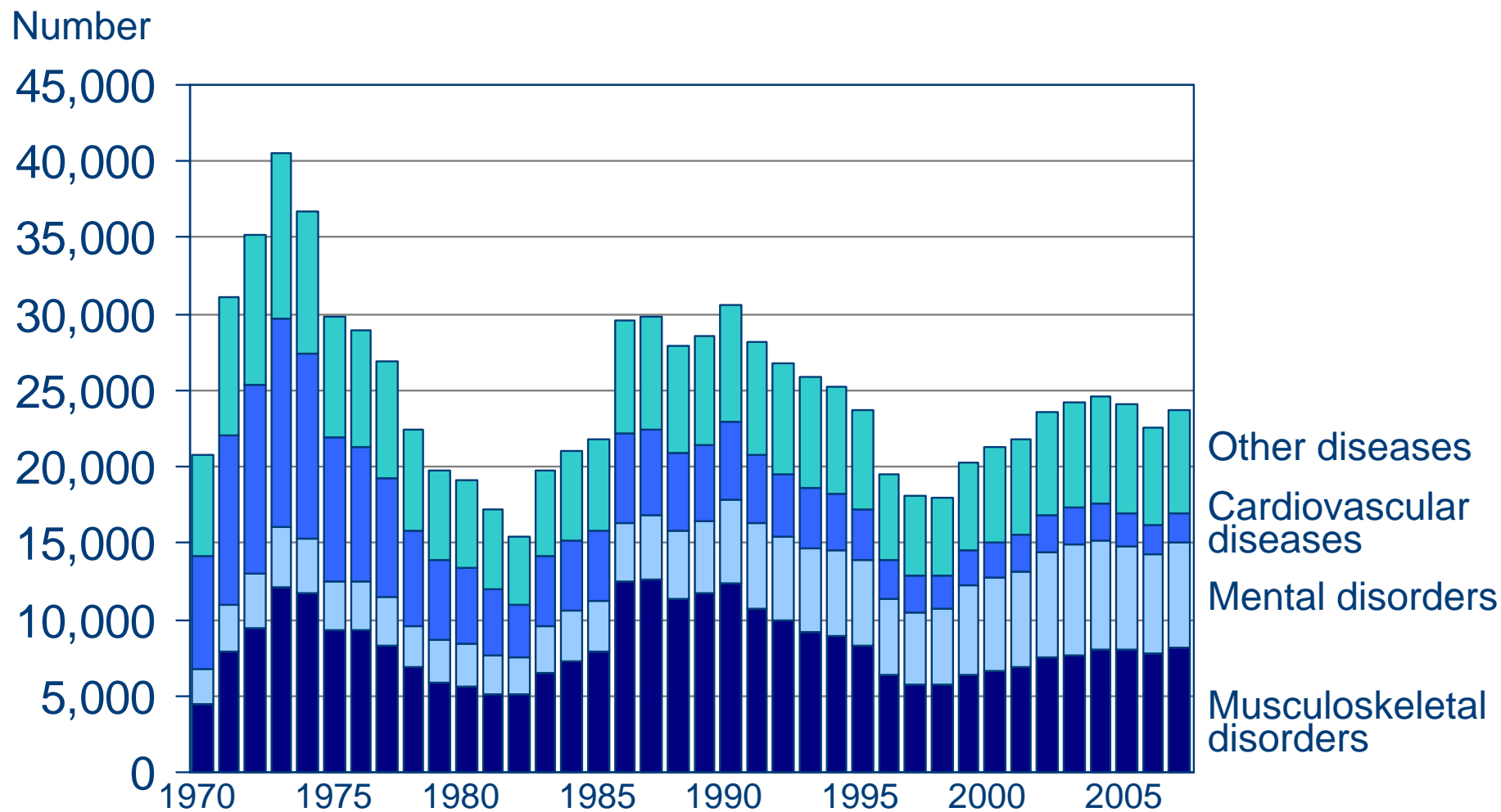


Balance score = change for the better (percentage value) – change for the worse (percentage value)

Statistics: sick allowance days in 1990-2007 by diagnosis

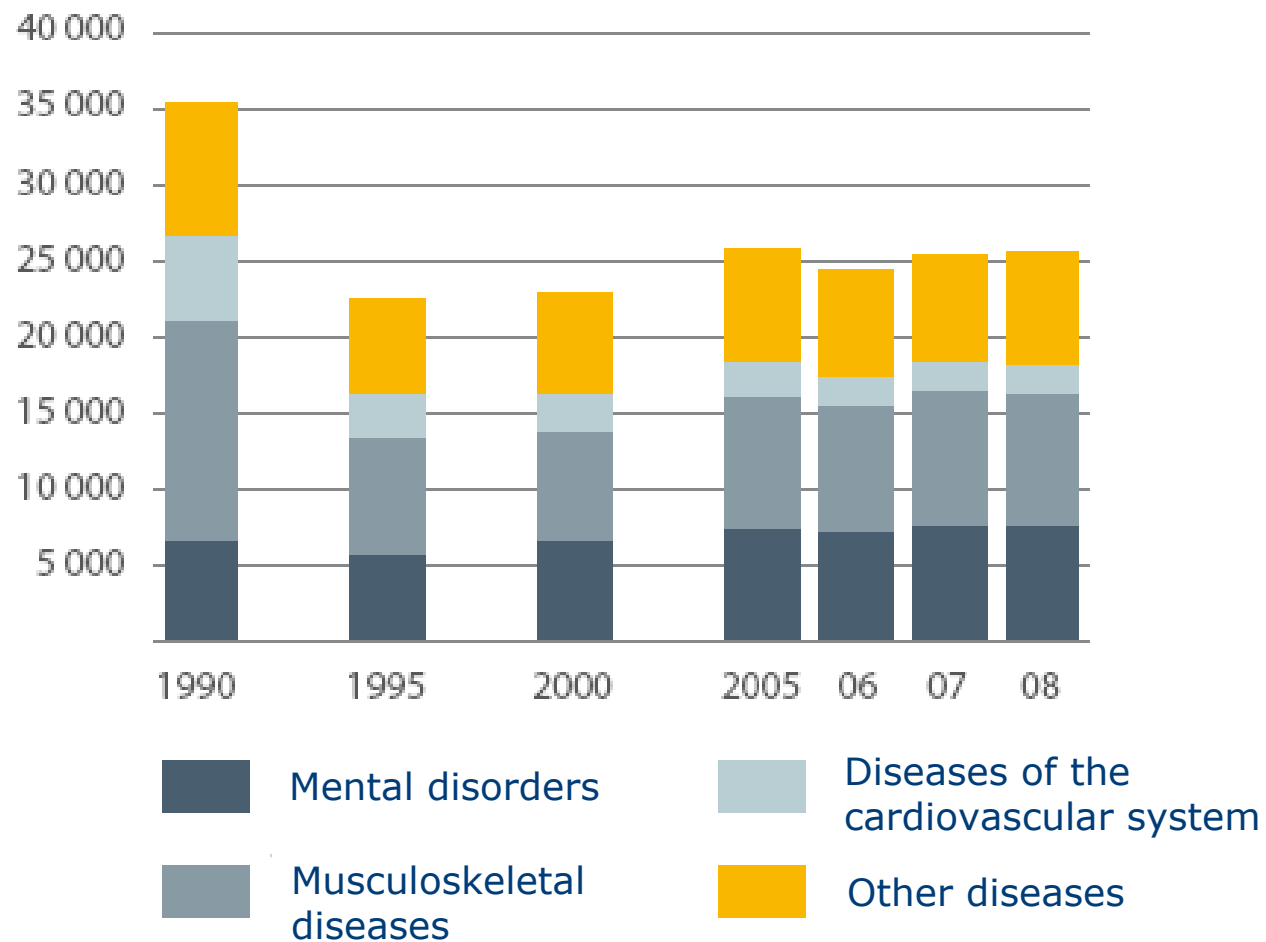


Statistics: new disability pensions in the private sector in 1970–2007 by diagnosis

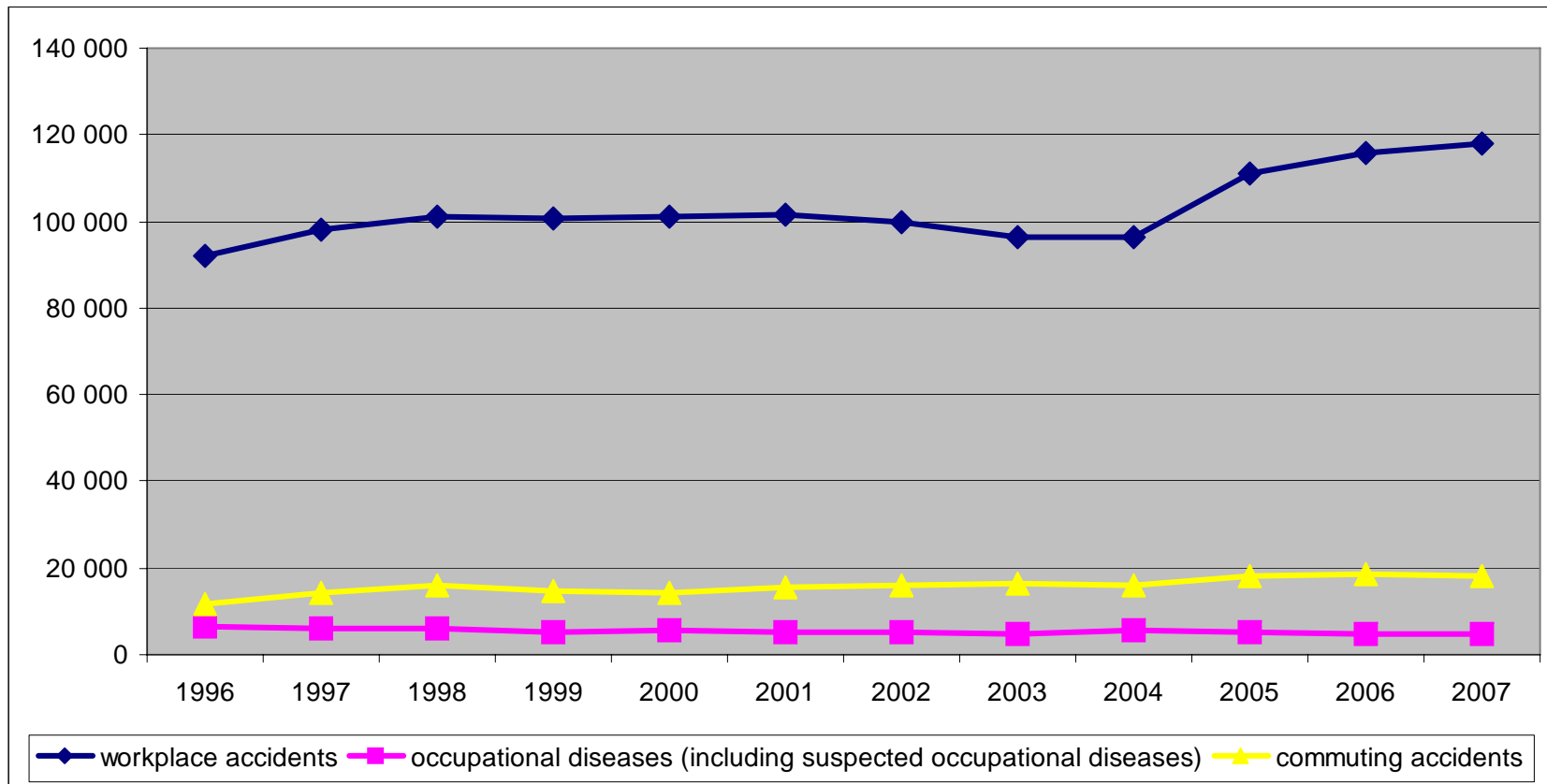


Actual disability pensions and individual early pension included

New disability pensions, private and public sector



Employees' accidents and occupational diseases in Finland 1996-2007 (all compensated cases)



Note 1: Including accidents that didn't inflict absence from work

Note 2: Due to a legal change in year 2005 the statistics show approximately 10% more accidents

Future trends in future Finnish working life

Finnish Innovation Fund:

- open and network economy
- insecurity and insecure working places
- higher work demands and longer working hours
- increased competition at work and for working places

Kasvio et al., FIOH:

- the effect of immigration and its challenge to the managerial practices and workplace cultures
- the insecurity in working life may activate dissatisfaction with the precariousness of the labour market and induce polarisation in workers' attitudes with existing jobs.
- possible vicious circle due to depression and weaker public finances
- ✓ although 80% of Finnish employees feel currently that their physical and mental work ability is fairly or very good, they have rather pessimistic visions about long-terms trends in working life.

Future working environment challenges in Finland

System level challenges

- a need for new OSH strategies due to changing OSH management systems, network economy and changes in safety cultures at work.
- integration of OSH to general management and productivity.
- a need for higher protection of increasing high-risk groups: older workers, low status workers and the foreign workforce

Future working environment challenges in Finland

Mental:

- new forms of employment contracts and job insecurity
- complexity of new technologies, work processes and human-machine interfaces leading to information overload, increased mental and emotional strain
- work intensification (high workload and time pressure) and higher professional and emotional demands at work (including violence and bullying)
- poor work-life balance: disintegration of work from time and place, atypical working hours

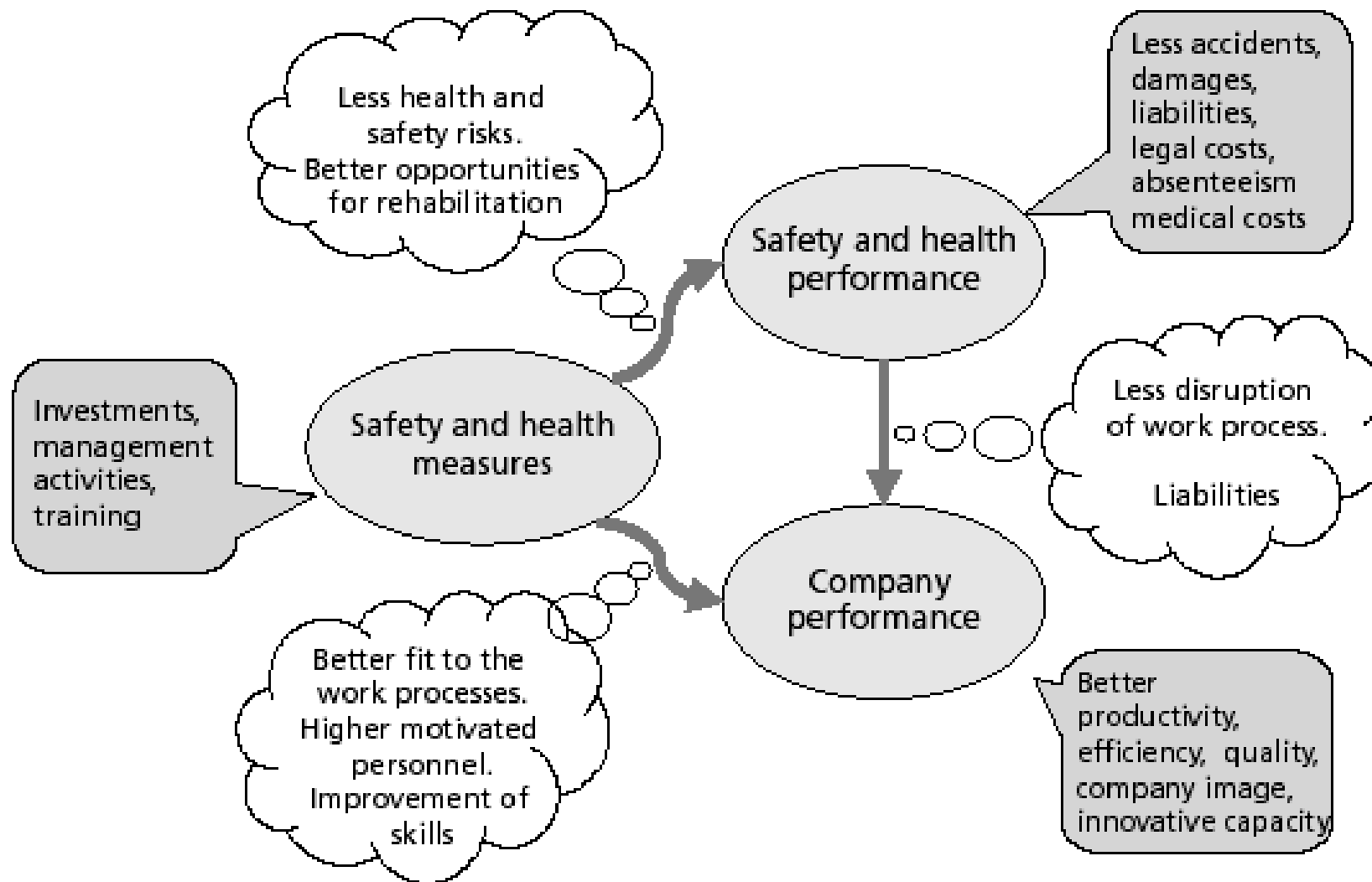
Physical:

- pertinent high exposure to MSD risk factors at work
- moulds in indoor workplaces
- new potential risks due to the use of new bio- and nanotechnology

- new potential risks due to global epidemics

Model for economic effects of safety and health at company level

(Mossink & de Greef 2002)



Health risks of night and shift work (compared to day work)

	Risk	Evidence
insomnia and sleep deprivation	1-2	high
occupational accidents	1.2 -2.0	average
coronary heart disease	1.3 -1.6	average
breast cancer	1.3 -1.6	average
peptic ulcer	about 2	average
metabolic syndrome	1.6 -1.7	average
obesity	1-2	average
type II diabetes	1-2	average
spontaneous abortions	about 2	low
rheumatoid arthritis	about 2	low
brain infarction	?	low

The basic choices of the future Finnish innovation policy (The government of Finland)



Future FIOH choices

