

Psychosocial risk factors in the changing world of work

COMPARI SK International Conference

Research

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Development of the modern workplace

**Global socio-political
developments of increasing
globalisation**

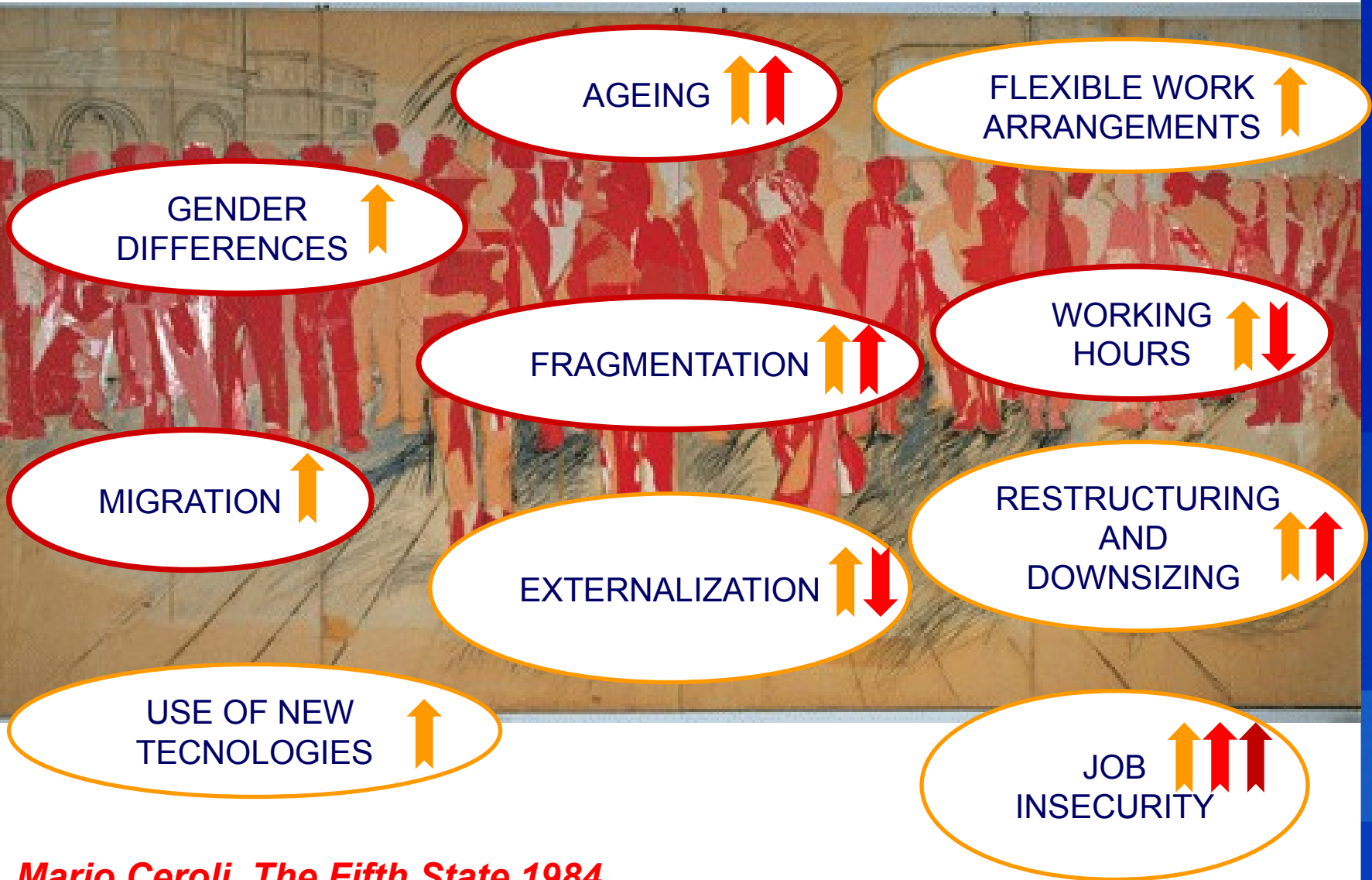
**Establishment of a
free market**

**Development of
Information and
Communication
Technology**



**Significant demographic
changes in the workforce**

The changing world of work



Mario Ceroli, The Fifth State, 1984

PEROSH, 2012 EU-OSHA, 2007; 2009

european restructuring monitor *quarterly*

■ Top five cases of announced job reduction

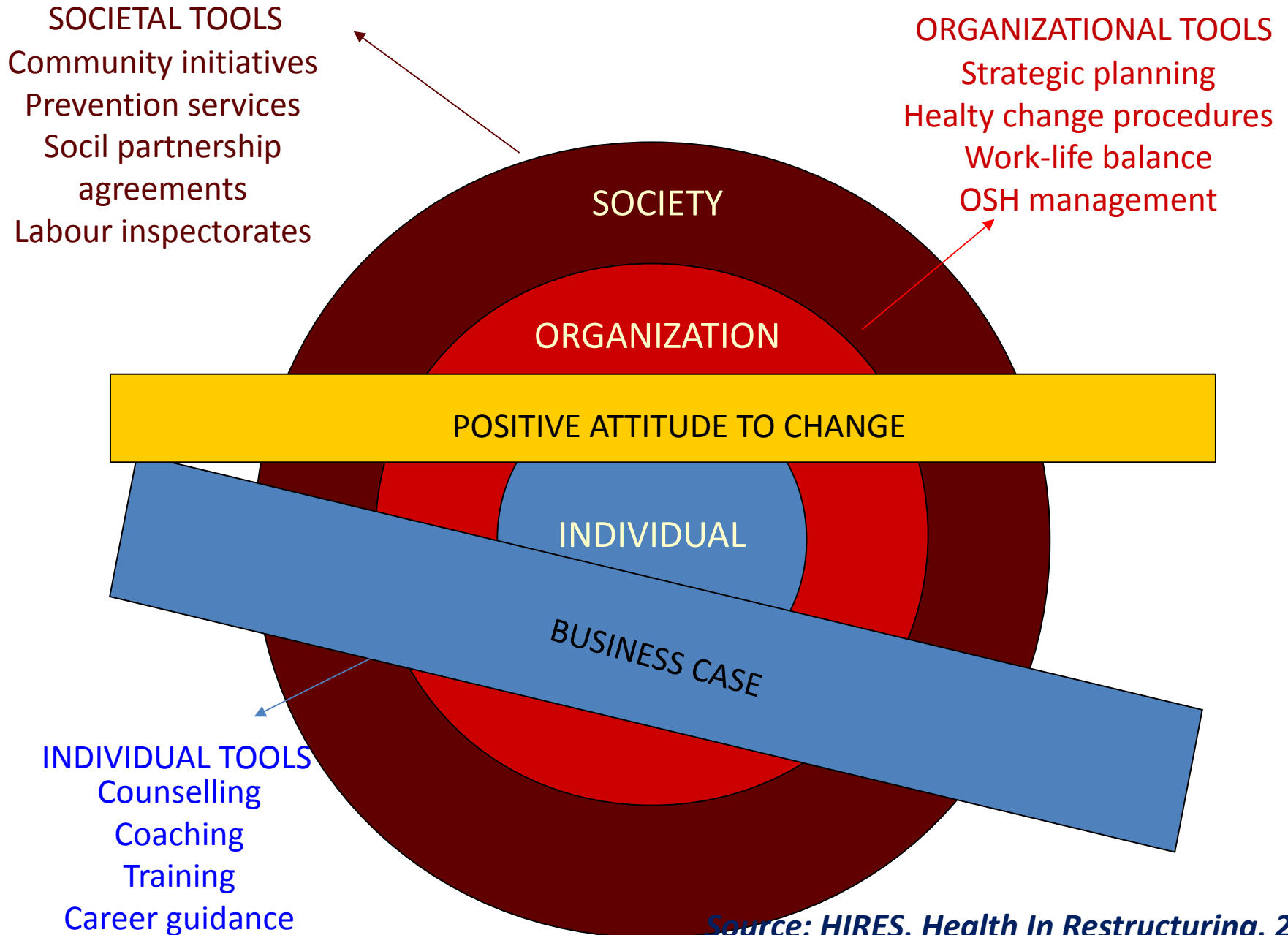
Date	Company	Job losses	Location	Sector	Type of restructuring
02/07/2012	Italian public administration	24,000	Italy	Public administration	Internal restructuring
13/07/2012	PSA Peugeot-Citroën	8,000	France	Manufacturing	Internal restructuring
14/08/2012	RWE	2,400	Germany	Electricity, gas, etc. supply	Internal restructuring
22/08/2012	P+S Werften	2,000	Germany	Manufacturing	Bankruptcy
18/07/2012	Karstadt	2,000	Germany	Wholesale & retail trade, etc.	Internal restructuring

■ Top five cases of announced job creation

Date	Company	Job gains	Location	Sector
17/08/2012	Aida Cruises	3,000	Germany	Transportation and storage
06/09/2012	Amazon	2,000	United Kingdom	Transportation and storage
02/07/2012	Pôle Emploi	2,000	France	Public administration
26/07/2012	Sumitomo Electric	1,500	Romania	Manufacturing
24/07/2012	Ausy	1,200	France	Information and communication

Source: ERM – European Restructuring Monitor, July - September, 2012

HIRES STRATEGY FOR THE MANAGEMENT OF ORGANIZATIONAL RESTRUCTURING



Fukushima nuclear disaster



Outsourcing:

Less than 10% of the work at this nuclear power plant is conducted by those directly employed by Tokyo Electric Power Co. (Tepco). Over 90% is done by employees of subcontractors, sub-subcontractors and contractors several times removed.

Working Hours – 24/7 Society

Average **weekly** working hours 2010:

Turkey 49,3

Korea 45,9

Mexico 43,2

Grece 42,3

Czech Republic 41,2

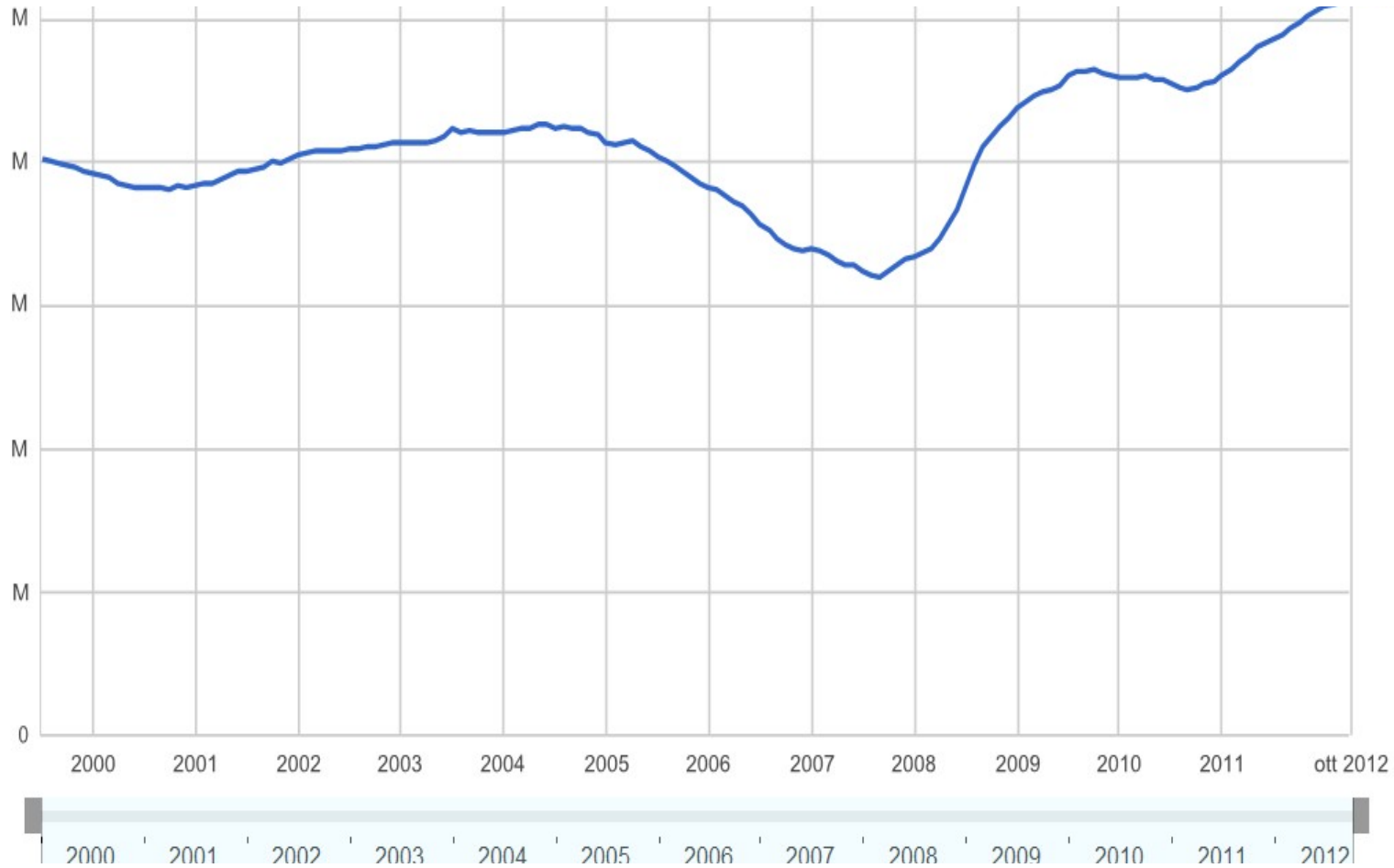
Slovakia 40,6

Poland 40,6

Italy 37,8



Unemployment in EU (2000 – 2012)



**25913
Millions**

**October
2012**

Source: Eurostat 2012

Youth Unemployment in EU (2000–2012) *less than 25 years*



Source: Eurostat 2012

Relative Risks for Specific Causes of Death and Total Mortality by Exposure to Unemployment

Unemployed people incur a multiplicity of elevated both short- and long-term health risks.

They have increased rates of limiting long-term illness, mental illness and cardiovascular disease. Furthermore they have much higher use of medication, recovery rates and much worse prognosis.

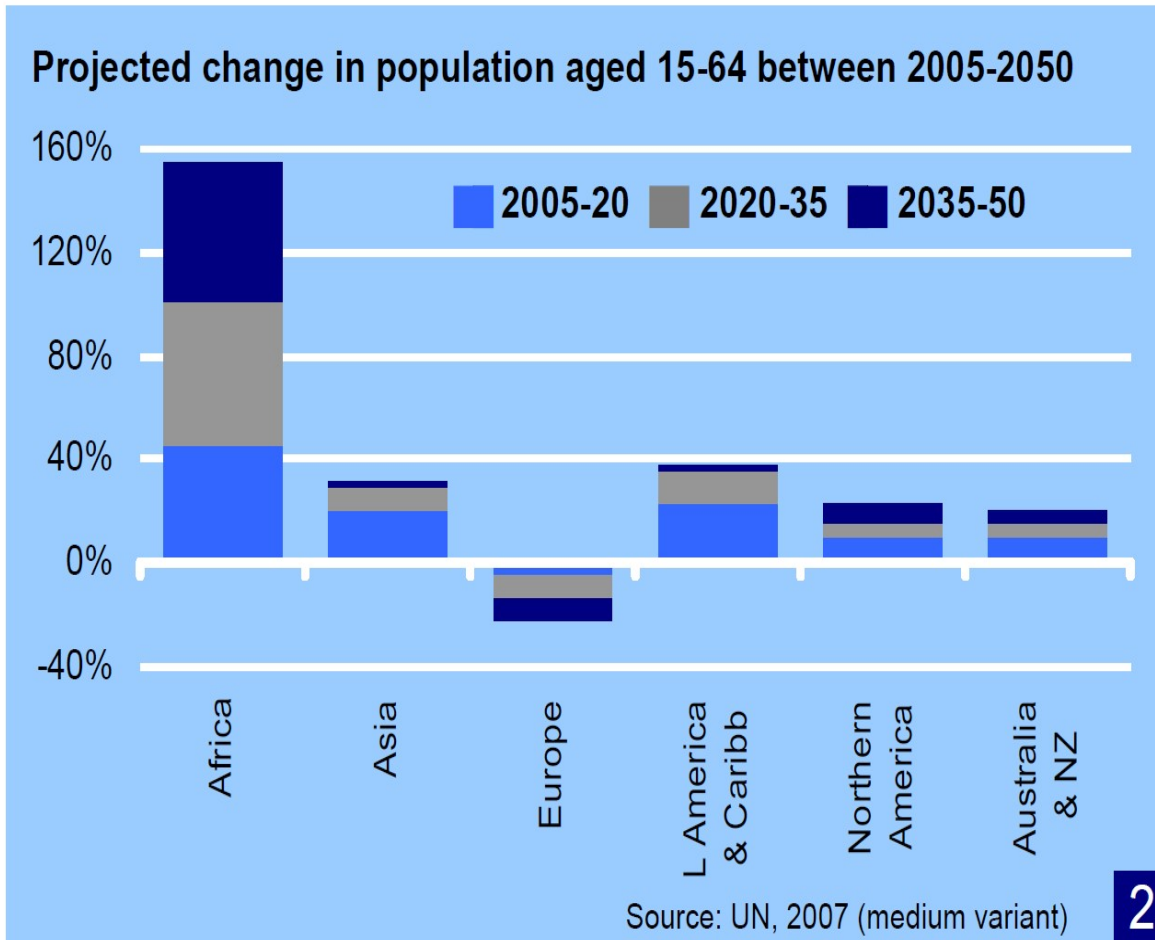
The experience of unemployment has also been consistently **associated with an increase in overall mortality**, and in particular **with suicide**.

(Sweden, 1973) ***Relative Risk; (95% CI) at 24 y Follow up*** ***Relative Risk; (95% CI) at 24 y Follow up***

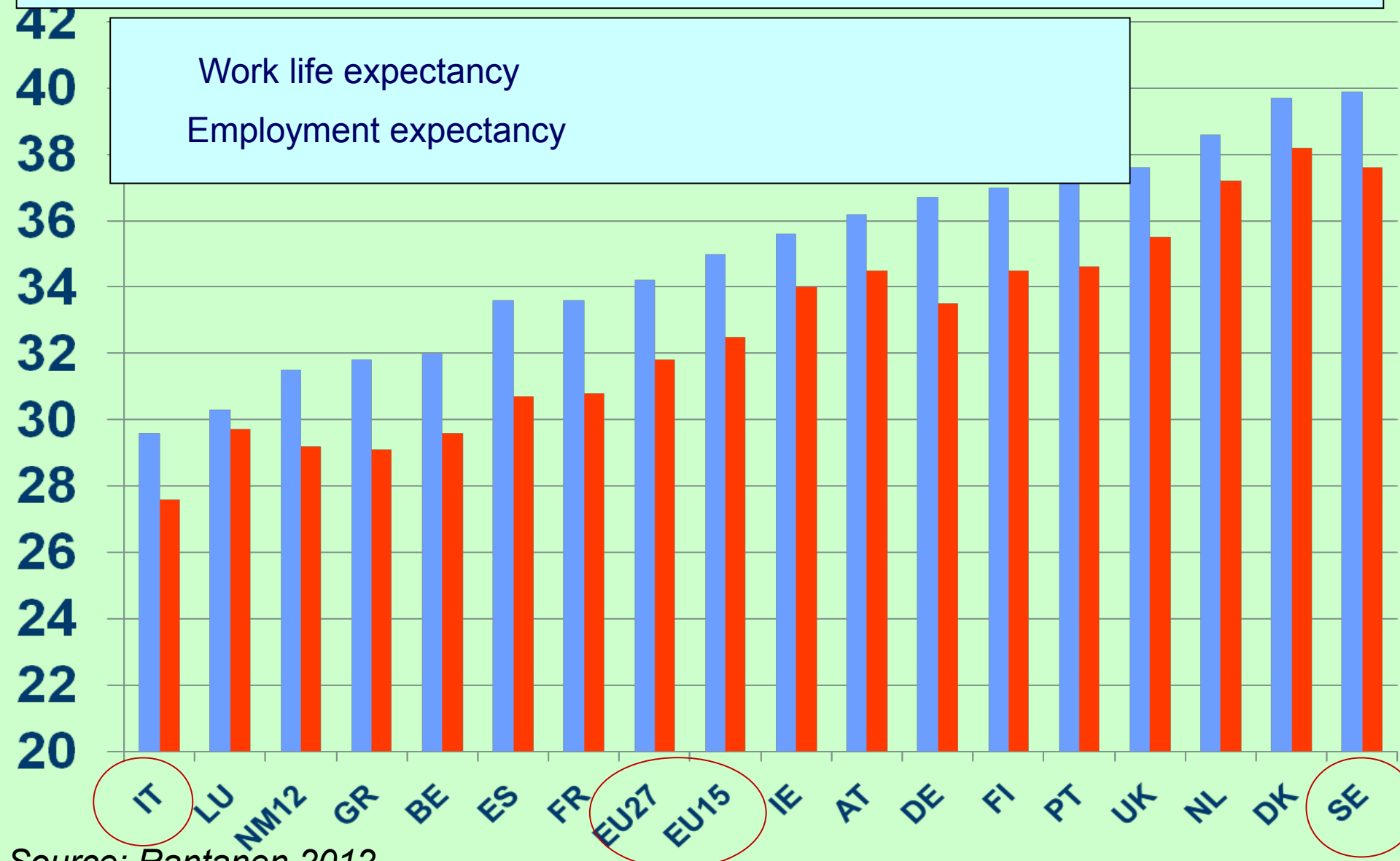
	Women		Men	
Cause of death	Total No. Of Deaths	No. Of Deaths among those exposed to unemployment	Total No. Of Deaths	No. Of Deaths among those exposed to unemployment
<i>Total mortality</i>	399	42	792	97
<i>Malignat neoplasm</i>	208	16	224	26
<i>Diseas of the circulatory system</i>	68	6	237	23
<i>Suicide</i>	30	8	91	12

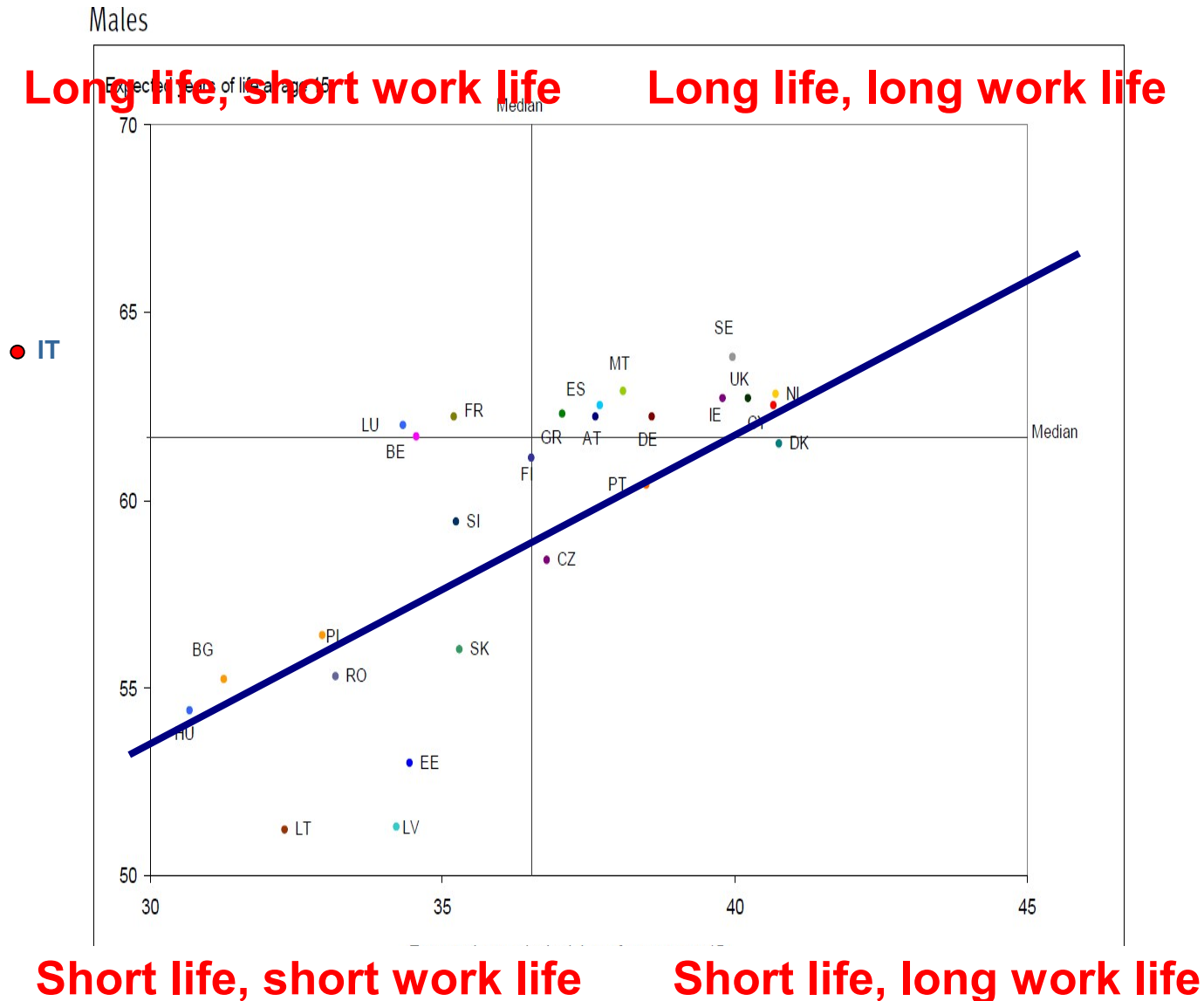
Sources: Voss et al., American Journal of Public Health, 2004; Marmot, M., Fair Society, Healthy Lives and the role of Work, 2010.

AGEING WORKFORCE



**Work life expectancy (WLE) and employment expectancy (EE)
(years) in EU Countries 2007 (both genders)**





Skills education and impact on welfare policies

Working life expectancy (yrs) of 18-year-olds according to education level

Education	Men	Women	Population by level of education (%)
Basic level	25.9	23.1	32.6
Secondary level	32.7	33.4	36.7
Lower university level	35.9	36.7	22.0
Higher university level	38.4	36.8	8.7

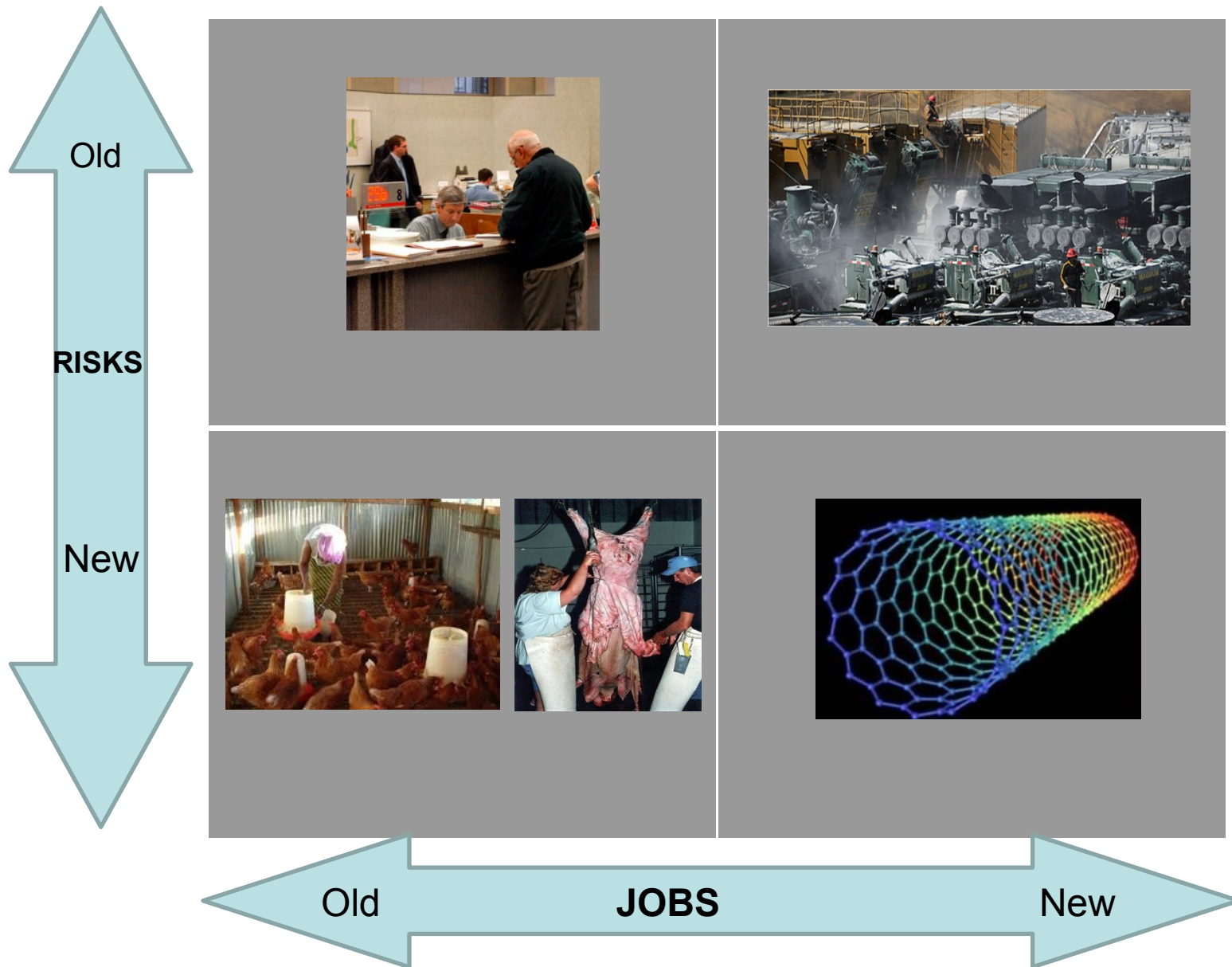
Social cost of early retirement in Finland 2008 (Ahonen 2010)

The official retirement age	63-68 = 65
Number of new pension takers	77.109
Average age of new pension takers	58.1
Average los of productive work years per pension taker	65-58,1 = 6,9 v
Total annual loss of productive years	532.052
Average value (cost) of one work year	45.405 €
Total annual cost of early retirement (cf. State budget 49 Bill. €, GNP 180 Bill. €)	24 Bill. €

An enterprise case report

- 10 000 workers company, operating in five Northern-European countries: Highly profitable, but 40% of profit went to sickness absenteeism and premature pensions
- Human work-intensive physical low-skill, manual job with numerous safety and health hazards
- 5-year comprehensive PMWA programme results:
 - Absenteeism rates 7,5% > 5.0%
 - 90 workers re-employed
 - Disability pensions reduction 50%
 - Retirement age 59.4 > 62.4 yr
 - Pension insurance costs reduction 72%
 - 5 million € direct savings a year
 - Improved working climate
 - Better profitability and sustainability

The impact of innovative technology on occupational risks



***Psychosocial
risk factors***

New and emerging risks



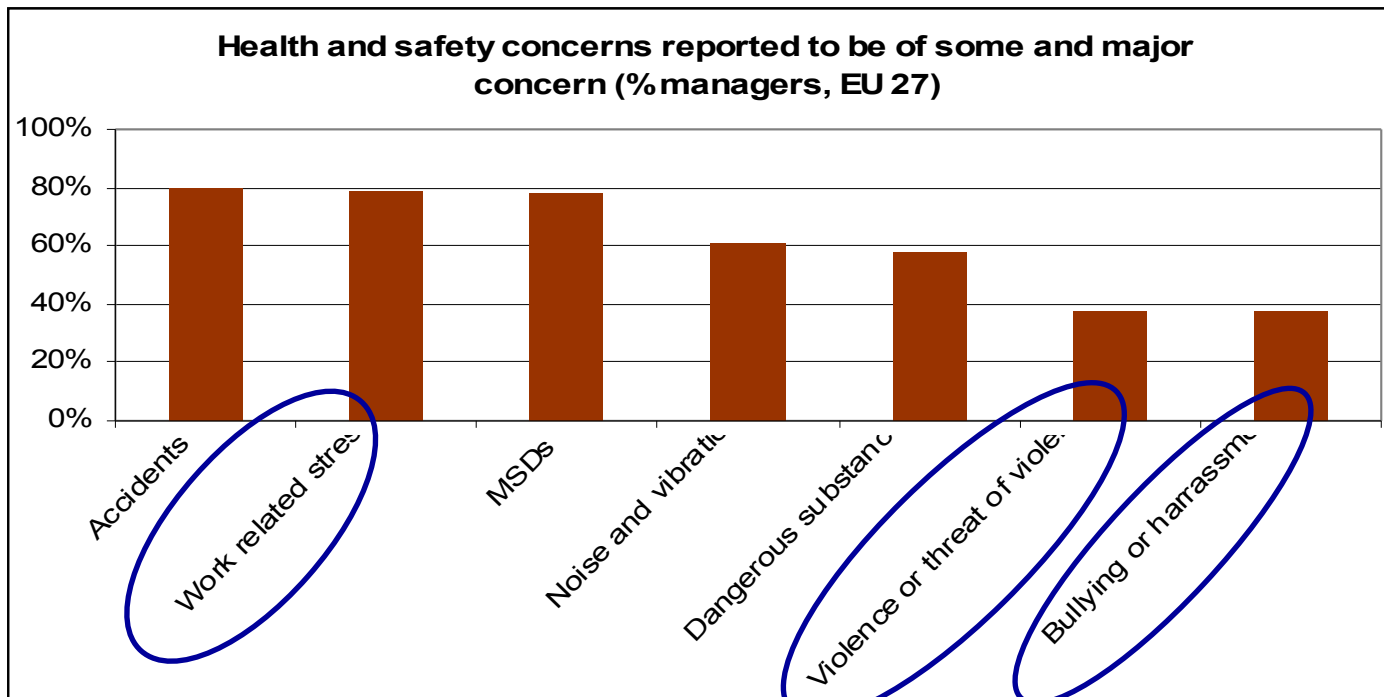
European Agency
for Safety and Health
at Work

ESENER - European Survey of Enterprises on New and Emerging Risks

Across the European Union (EU) **psychosocial risks** have been identified as an **emerging risk** and as a key challenge in **modern occupational safety and health management**:

work-related stress is of major or some concern for **79%** of interviewed European managers

violence and harassment are of major or some concern for **almost 40%**.



REMARKS ON PSYCHOSOCIAL RISKS



“Work-related stress is one of the biggest occupational safety and health challenges faced in Europe and the number of people suffering from stress related conditions caused or made worse by work is likely to increase.

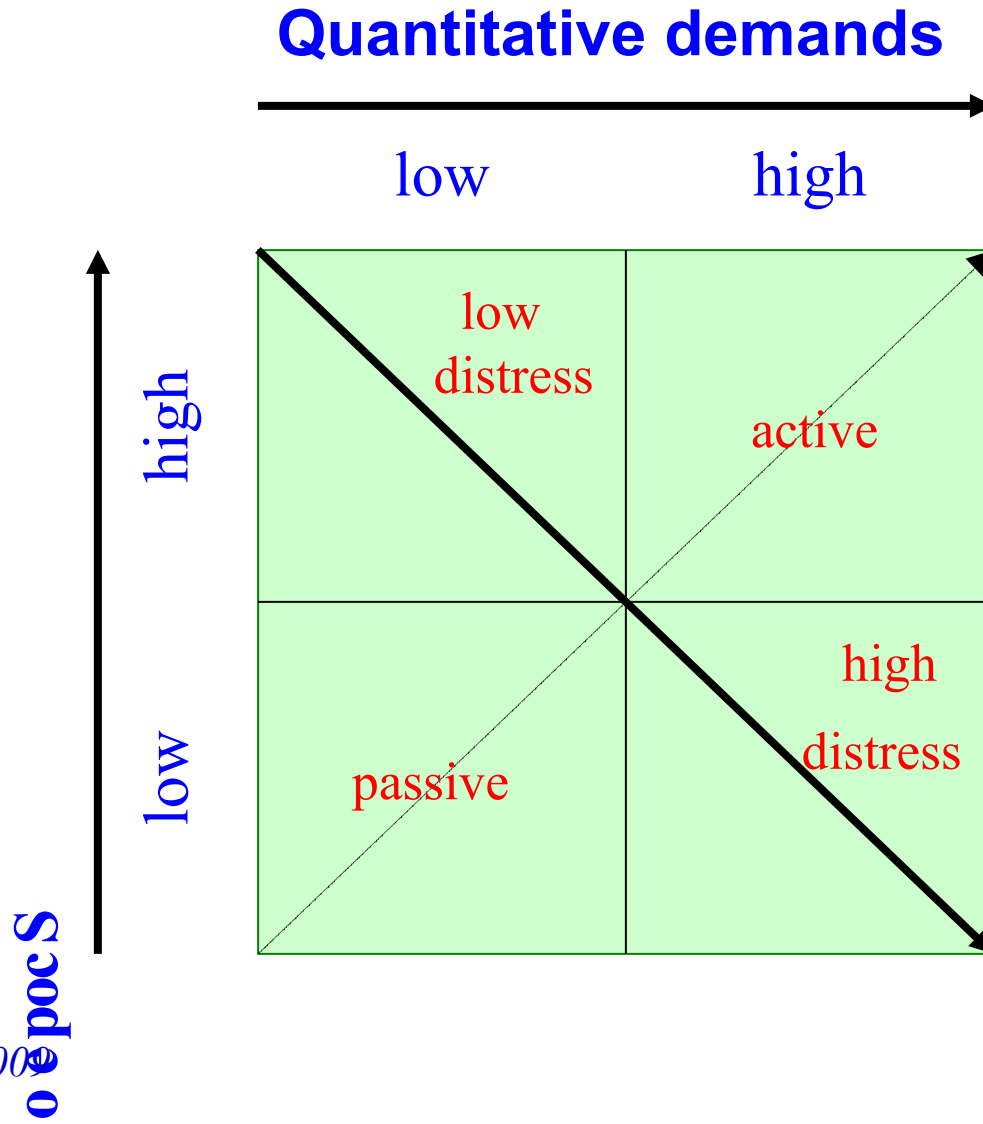
Studies suggest that between 50% and 60% of all lost working days are related to stress.

In 2002, the annual economic cost of work-related stress in the EU 15 was estimated at EUR 20 billion”

(Jukka Takala, 2008)

THE DEMAND-CONTROL MODEL

(R. Karasek 1979; R. Karasek & T. Theorell 1990)

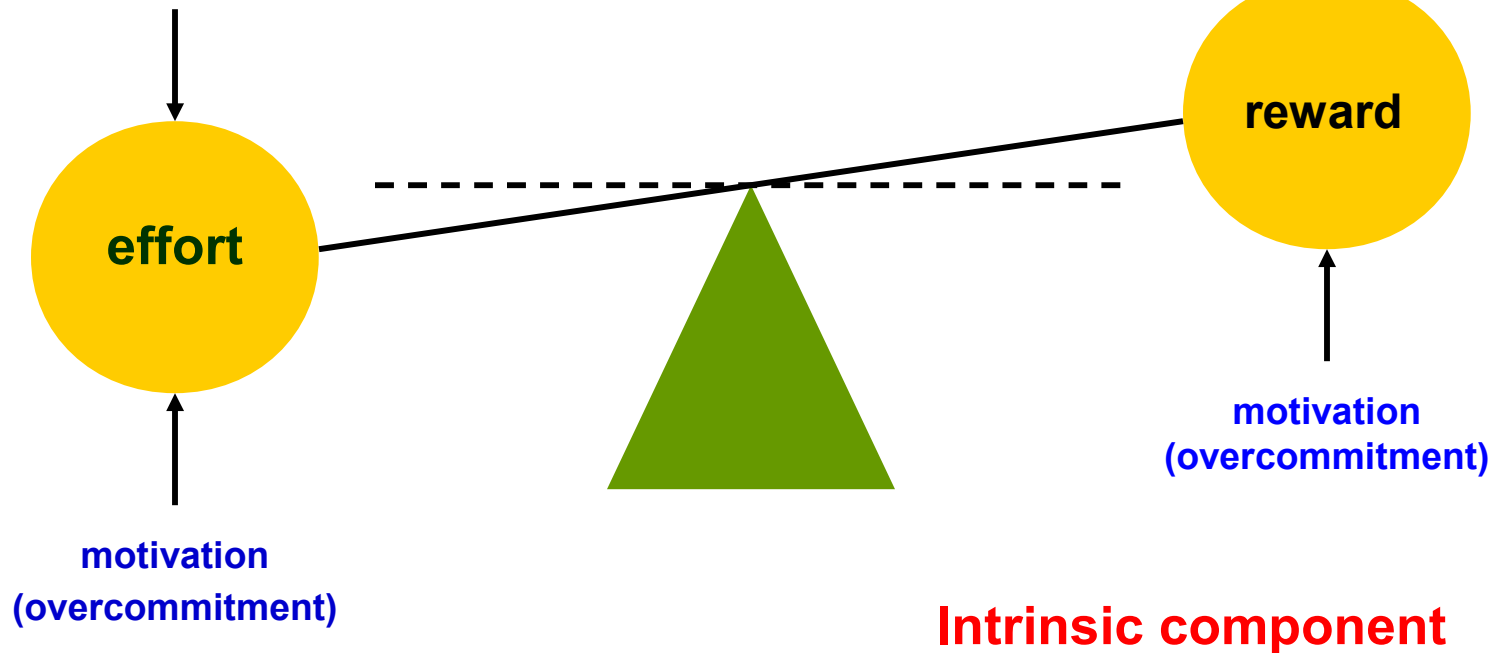


THE MODEL OF EFFORT-REWARD IMBALANCE (J. Siegrist 1996)

Extrinsic components

- labour income
- career mobility / job security
- esteem, respect

demands / obligations



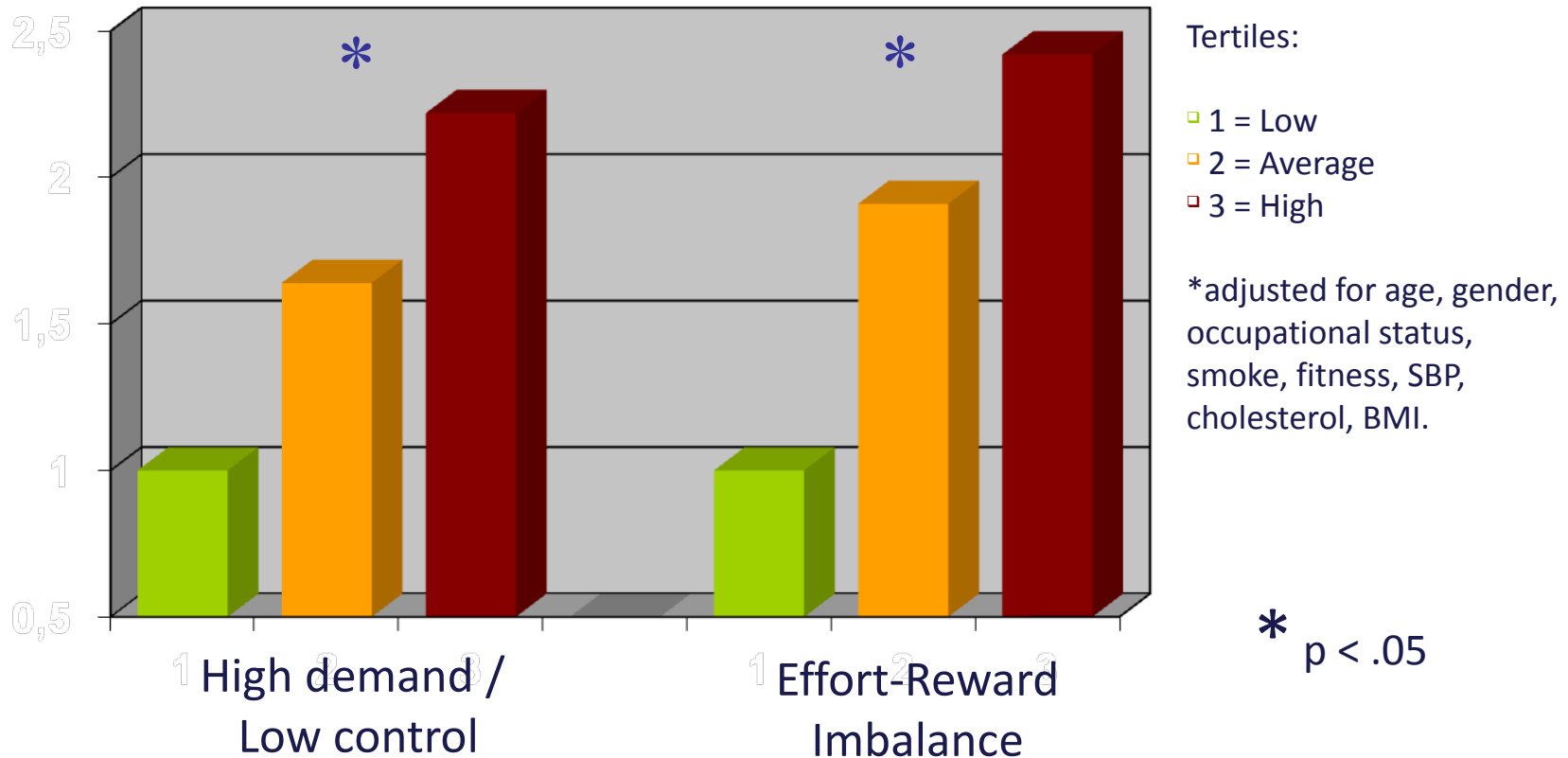
The European framework for psychosocial risk management at the workplace (PRIMA-EF) aims at **providing a framework to promote policy and practice at national and enterprise level** within the European Union (EU). PRIMA-EF identifies key aspects, stages and best practice principles and examples in psychosocial risk management at work.

Key Aspects of Psychosocial Risk Management (PRIMA)

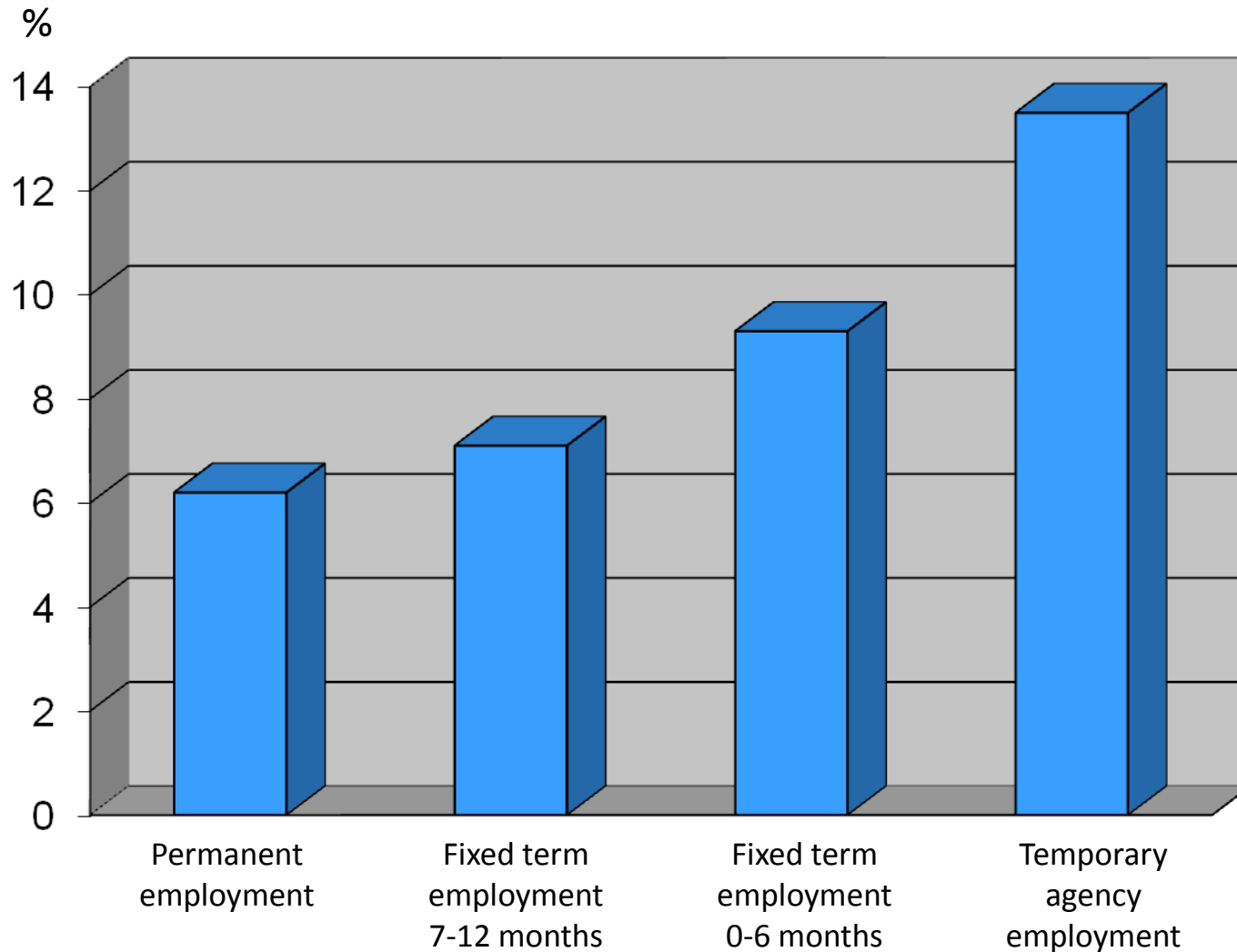
- ✓ Good PRIMA is good business
- ✓ PRIMA should be a continuous process, part of normal business operations
- ✓ Ownership by all stakeholders
- ✓ Contextualisation and tailoring
- ✓ Evidence-informed practice
- ✓ Participative approach and social dialogue
- ✓ Different levels of interventions with focus on measures at source
- ✓ Ethics and corporate social responsibility
- ✓ Capabilities at enterprise and macro levels

Work-related Stress and risk of cardiovascular mortality

N max=812 (73 deceases); follow-up's length 25,6 years



Employment status and antidepressant treatment (1998-2002)



POLICIES

Implementation

RESEARCH

- 1989 - OSH Framework directive 89/391/EEC
- Directive 90/270/EEC - display screen equipment ;
- -Directive 90/269/EEC - manual handling of loads ;
- - Directive 2003/88/EC - working time ;

1993- 1999 Maastricht and Amsterdam EU treaties

· 2004 - European Framework Agreement on Work

· 2002: EU-OSHA European Week- Preventing psychosocial risks at work

· 2000: Eurofound 3th EWCS

· 2004: HSE- Management Standards

· 2007- European Framework Agreement on harassment and violence

· 2008 – Leka & Cox PRIMA - EF European Framework for Psychosocial Risk Management

· 1996 - Siegrist Effort-Reward Imbalance Theory

· 1975- Cox & Griffiths Psychosocial risk factors definition

· 1990/1991: Eurofound 1th EWCS
· 1993- Bongers et al. Psychosocial factors at work and musculoskeletal disease [review]

· 2000 – EU-OSHA Review on work-related stress

· 2012- 2013: EU-OSHA Working together for Risk Prevention

· 2012: Pan-European opinion poll on occupational safety and health

· 2010: EU- OSHA - ESENER

· 2010: Eurofound 5th EWCS

· 2009: Proceedings PEROSH Seminar Research in Action

· 2005: Eurofound 4th EWCS

· 2010 EU strategy on health and safety

· 2010 EU strategy on health and safety

· 2010 EU strategy on health and safety

· 2011: EU-OSHA OiRA - Online interactive Risk Assessment project

· 2010 –New OSH Research Programme on Psychosocial Risks at Work

· 1979 – Karasek Demand-Control model

From 1972- University of Michigan Person – Environment Fit

Need of multidisciplinary approach

1970

1980

1990

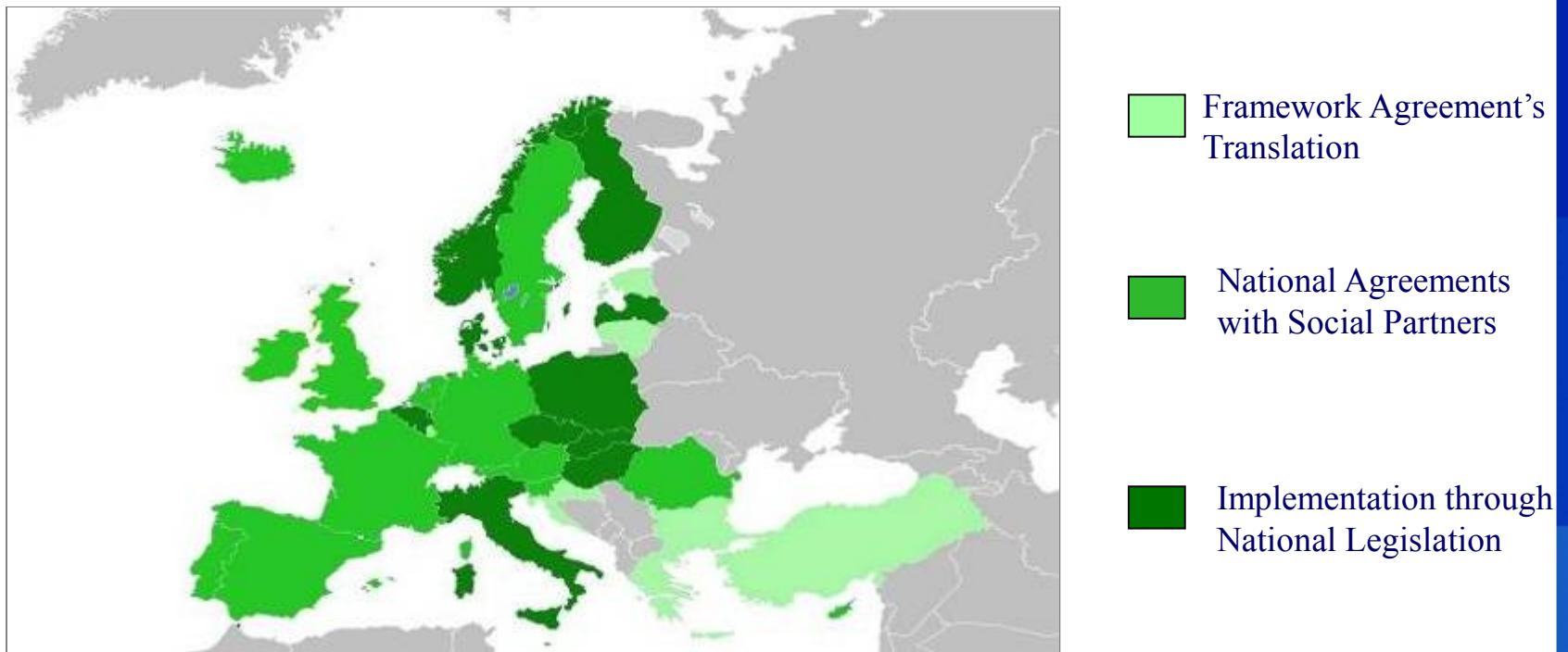
2000

2012

Development and adaptation of the European Framework Agreement on Work related stress

- ✚ 19 EU Countries have laws and agreements to deal with work-related stress and other psychosocial risks at work.

(European Commission, 2011)



Source: ETUC, BUSINESSEUROPE, UEAPME, CEEP. Implementation of the European autonomous framework agreement on work related stress. Report by the European Social Partners adopted at the Social Dialogue Committee on 18 June 2008.

PROCEDURE TO DEAL WITH WORK-RELATED STRESS

E_{NER}



ADVANTAGES AND DISADVANTAGES OF THE THREE APPROACH

ADVANTAGES

DISADVANTAGES

**H
S
E**

- It ensures a joint evaluation
- It may be used cyclically and is funded on a global approach
- It may be combined with other instruments
- It provides an analysis software
- It is a validated tool and approach
- Standard benchmarks are provided
- In-house management is ensured in coordination with OSH representatives/ managers/ professionals



- Limited availability of practical corrective interventions
- Poorly adapting to small enterprises (with less than 10 employees)

**S
O
B
A
N
E**

- It ensures a joint evaluation
- It may be used cyclically and is founded on a global approach
- It may be combined with other tools
- It focuses on prevention
- Internal and external counseling services are provided
- No standard benchmark is provided



- Interventions are not detailed
- Lack of a specific tool
- High risk to give-up during screening phase

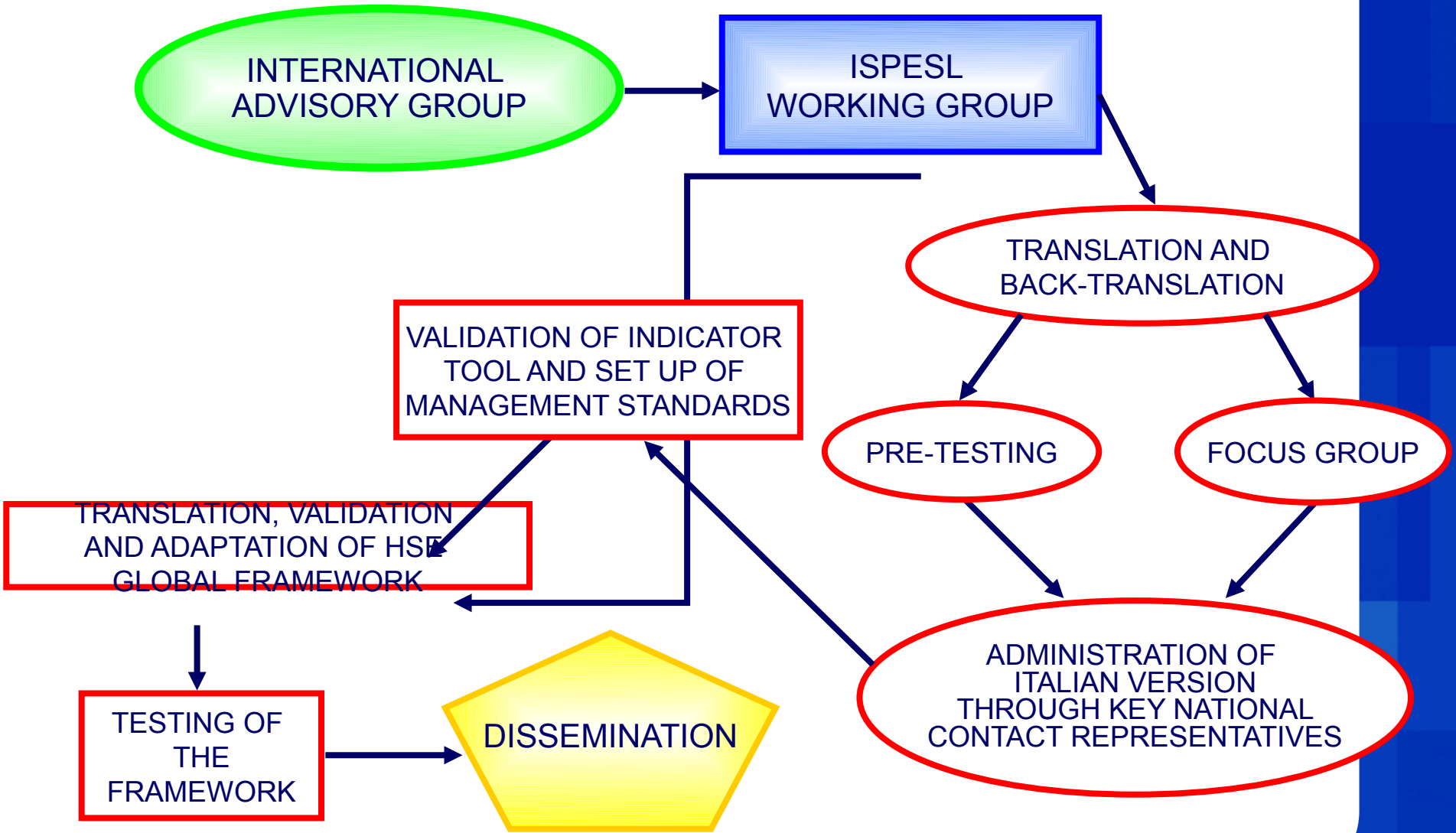
**S
T
A
R
T**

- It ensures a joint evaluation
- It may be used cyclically and is founded on a global approach
- It focuses on prevention
- External counseling service is provided
- It is an adaptable tool
- It provides comparisons between objective and subjective indicators
- No standard benchmark is provided



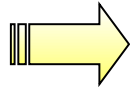
- Interventions are not detailed
- Lack of a standardized tool
- Limited participation of internal OSH representatives, managers, professionals

HSE FRAMEWORK FOR ASSESS AND MANAGE WORK-RELATED STRESS IN THE ITALIAN CONTEXT



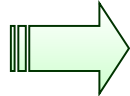
6 KEY DIMENSIONS

DEMANDS



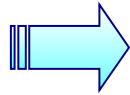
This includes issues such as workload, work patterns and the work environment.

CONTROL



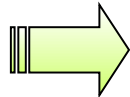
How much say the person has in the way they do their work

SUPPORT



This includes the encouragement, sponsorship and resources provided by the organisation, line management and colleagues

RELATIONSHIPS



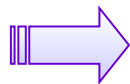
This includes promoting positive working to avoid conflict and dealing with unacceptable behaviour

ROLE



Whether people understand their role within the organisation and whether the organisation ensures they do not have conflicting roles

CHANGE



How organisational change (large or small) is managed and communicated in the organisation.

ITALIAN ADAPTATION OF HSE MANAGEMENT STANDARDS APPROACH



The INAIL methodology for assessing and managing work related stress

AIMS

- to provide an effective methodological path for assessing and managing the work related stress
- to ensure the compliance with the regulatory framework requirements
- to provide a methodological path that is adaptable to the organizations' size
- to provide validated but easy to use tools to support organizations in achieving a work related stress assessment

INAIL

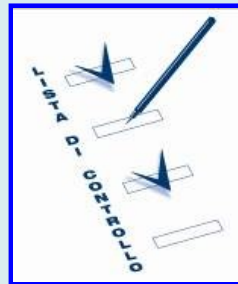
VALUTAZIONE E GESTIONE DEL RISCHIO DA STRESS LAVORO-CORRELATO

Manuale ad uso delle aziende in attuazione del D.Lgs 81/08 e s.m.i.



Ricerca

TOOLS



**CHECK
LIST**

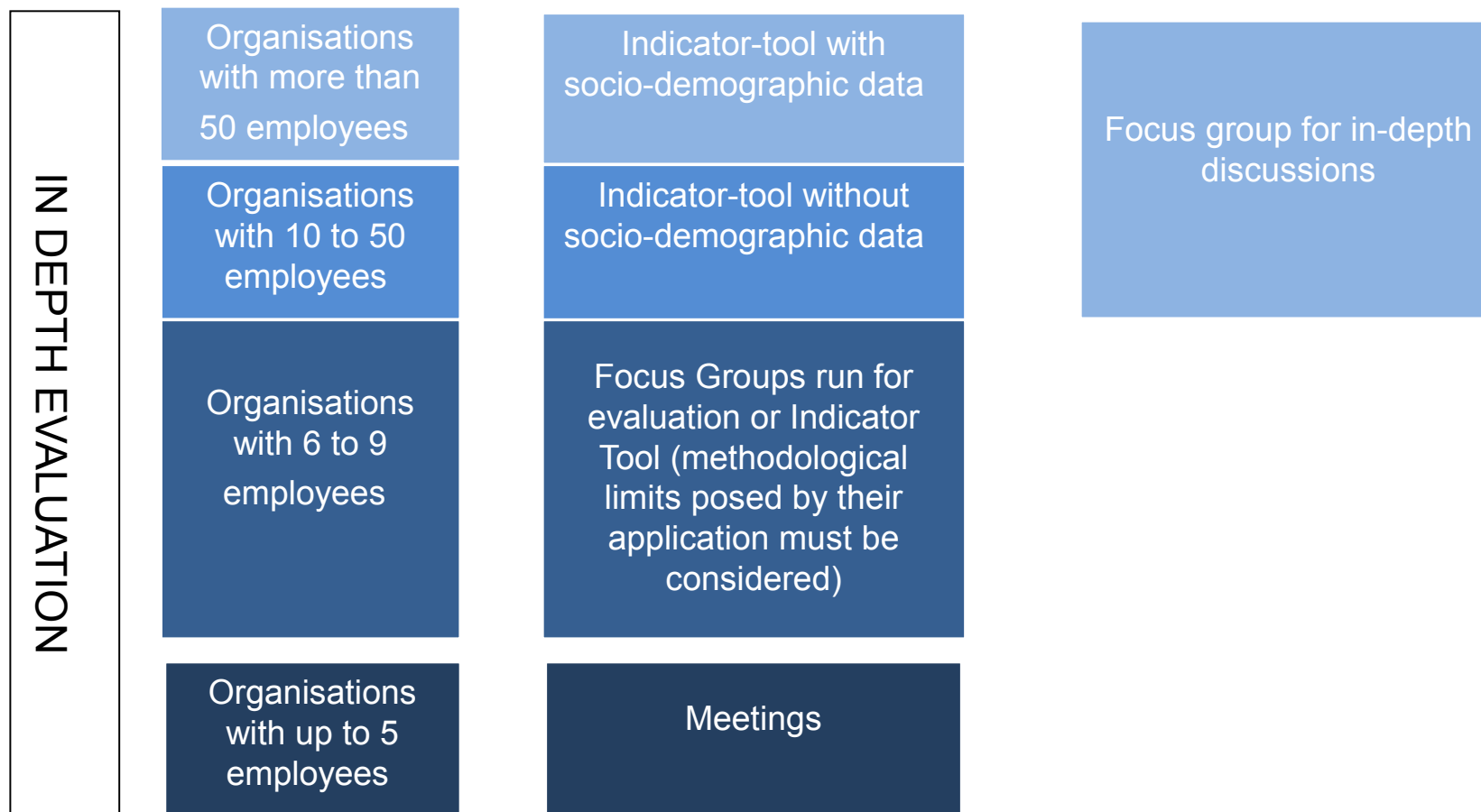


**INDICAT
ORS
TOOL**



**FOCUS
GROUP**

APPLICABILITY OF THE INDICATOR TOOL



Data on web platform

Registered companies : **4500**

Check lists uploaded: **3700**

Questionnaires uploaded: **18200**

First 5 ATECO Sectors

M Professional, scientific and technical activities

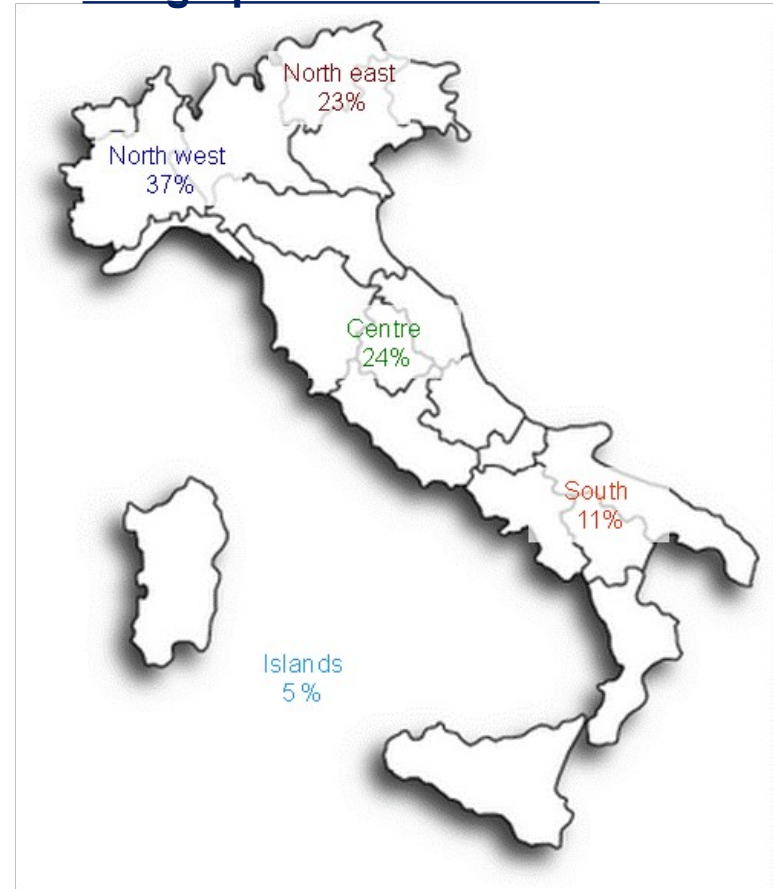
S Other services activities

C Manufacturing

Q Human health and social work activities

F Construction

Geographical distribution



ongoing developments and future goals

- To develop a Methodology monitoring plan
- To improve the platform's database, by diversifying companies in relation to productive sectors and organizational size
- To support the monitoring activities carried out by Ministry of Labour on adoption of procedures for work-related stress assessment
- To Develop guidelines for Stress Management Interventions
- To Support OSH professional's training
- To carry out a worker's perception survey about OSH issues and policies






***In this scenario,
what are the
future OSH trends
regarding
psychosocial risk
factors?***



Psychosocial hazards








European framework programs

Framework program	Number of projects	Total cost	Leading coordinating Countries	Key words
 <p>Global budget 14.960 million euro</p>	5 projects	total cost 9.986.952 EU contribution 7.019.153	United Kingdom (3) Germany (2)	Mental health, older workforce, work-related stress, risk management, training, shortage of nursing labour, working conditions, retirement age, health promotion, working conditions, technological advancement, demographics and economic changes.
 <p>Global budget 19.113 million euro</p>	8 projects	total cost 12.977.631 EU contribution 11.557.710	Netherlands Finland Belgium (3) Germany United Kingdom France	Work-related stress, psychosocial risk management, workplace violence, job insecurity, precariousness, working hours, work-family challenge, ageing workforce, gender dimension, migrant workers, mobility, health, employment policies, restructuring, OSH research, best practices, case studies, learning.
 <p>Global budget 53.272 million euro</p>	13 projects	total cost 7,144,868 EU contribution 6,189,770	United Kingdom (2) Netherlands (3) Germany Greece France Spain (2) Poland Portugal Turkey	Work-related stress, wellbeing, psychosocial work characteristics, health, premature departure from work, job strain, social support, cardiovascular diseases, depression, coping, musculoskeletal system, training programs, changing in nature of work, work-related diseases, career satisfaction, job satisfaction, gender, work-family conflict, turnover intentions emotion regulation, employability, ageing OSH policies, Intellectual capital work-life balance, motivation, performance.

A Comparison: Nanotechnologies European framework programs

Psychosocial hazards

Nanotechnologies

Framework program	Number of projects	Total cost	Number of projects	Total cost
 <p>Global budget 14.960 million euro</p>	5 projects	total cost 9.986.952 EU contribution 7.019.153	3 projects	total cost 2.893.493 EU contribution 2.420.718
 <p>SIXTH FRAMEWORK PROGRAMME Global budget 19.113 million euro</p>	8 projects	total cost 12.977.631  EU contribution 11.557.710	15 projects	total cost 52.363.724  EU contribution 32.256.381
 <p>SEVENTH FRAMEWORK PROGRAMME Global budget 53.272 million euro</p>	13 projects	total cost 7,144,868  EU contribution 6,189,770	10 projects	total cost 29.985.403  EU contribution 20.964.837

Ten most-cited citation classics in occupational health journals

Rank	Authors	Title	Journal	Times cited
1	Wagner JC et al	Diffuse pleural mesothelioma and asbestos exposure in the North Western Cape Province	Br J Ind Med. <u>1960</u> ;17:260–71	979
2	Bongers PM et al	Psychosocial factors at work and musculoskeletal disease [review]	Scand J Work Environ Health. <u>1993</u> ;19(5):297–312	374
3	Silverstein BA et al	Occupational factors and carpal tunnel syndrome	Am J Ind Med. <u>1987</u> ;11(3):343–58	315
4	Barry PS	A comparison of concentrations of lead in human tissues	Br J Ind Med. <u>1975</u> ;32(2):119–39	304
5	Barnes JM et al	Some toxic properties of dimethylnitrosamine	Br J Ind Med. <u>1954</u> ;11(3):167–74	291
6	Clark DG et al	The toxicity of paraquat	Br J Ind Med. <u>1966</u> ;23(2):126–32	256
7	Hagberg M et al	Prevalence rates and odds ratios of shoulder-neck diseases in different occupational groups	Br J Ind Med. <u>1987</u> ;44(9):602–10	253
8	Newhouse ML et al	Mesothelioma of pleura and peritoneum following exposure to asbestos in the London area	Br J Ind Med. <u>1965</u> ;22(4):261–9	252
9	Silverstein BA et al	Hand wrist cumulative trauma disorders in industry	Br J Ind Med. <u>1986</u> ;43(11):779–84	249
10	Fullerton PM,	Peripheral neuropathy in rats produced by acrylamide	Br J Ind Med. <u>1966</u> ;23(3):210–21	238

24 Cross-Sector Programs organized around adverse health outcomes, statutory programs, and global efforts, **to address issues** (e.g., **work organization and stress-related disorders**, hearing loss, musculoskeletal disorders, and traumatic injury) that affect workers in multiple sectors.

The **Work Organization and Stress-Related Disorders Cross-Sector Program** builds upon work completed under the first decade of NORA and will continue its efforts as one of the Cross-Sector Programs.

The Changing Organization of Work and the Safety and Health of Working People



Work Organization and Stress-Related Disorders Cross-Sector Program

MAIN AIM: to eliminate occupational stress, diseases, injuries, and fatalities in the workforce through a focused program of research and prevention addressing work organization risk factors for these outcomes. The program strives to fulfill its mission through:

· **High Quality Research** to improvement in work organization and reductions in occupational stress, illness, and injury in the workforce;

· **Practical Solutions** to the complex problems that cause occupational stress, illness, and injury in the workforce;

· **Partnerships** with labor, industry, government, academia, and other stakeholders.



THE WAY FORWARD

**SURVEILLANCE
AND
MONITORING
SYSTEM**

**SIMPLE AND
ACCESSIBLE
TOOLS**

**SOCIOECONO
MIC
INTEGRATED
APPROACH**

**Occupational wellbeing and productivity
through psychosocial risk management**

Deliverables

- Tools for diagnosis, monitoring and evaluation tailored to sector, organizational branches, size, socio-economical determinants, legislation specificities.
- Raising awareness on health with special focus on the impact of stress, violence and harassment in term of health consequences, productivity, costs and specific groups of workers.
- Integrated monitoring systems combining epidemiological data and surveillance on psychosocial determinants in the economical dimensions.



European Strategy 2020

SMART GROWTH

- ✓ reaching **3% of EU's GDP** as well as better conditions for R&D and Innovation
- ✓ reducing **school drop-out rates below 10%**

INCLUSIVE GROWTH

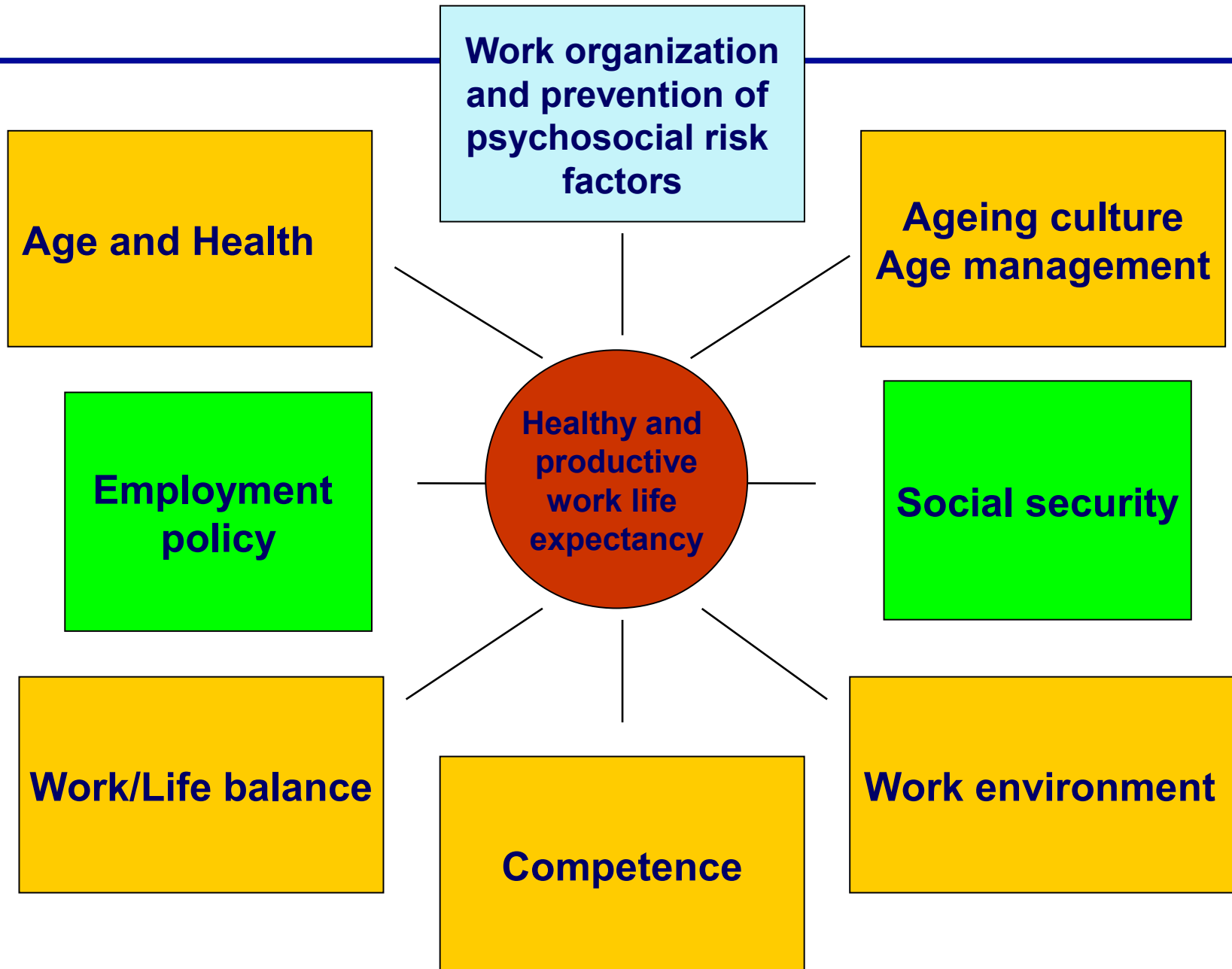
- ✓ at least **20 million fewer people in or at risk of poverty and social exclusion**
- ✓ **75% employment rate** for women and men aged 20-64

SUSTAINABLE GROWTH

- ✓ reducing greenhouse gas emissions by **20%**
- ✓ increasing the share of **renewables** in final energy consumption to **20%**
- ✓ moving towards a **20% increase in energy efficiency**

Comprehensive

paradigm



Thank you for your attention!