



ECONOMIC & SOCIAL  
RESEARCH INSTITUTE



# Job Stress and Working Conditions: Ireland in Comparative Perspective

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## EVENT

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# Motivation

- Transformation from industrial production to services=> workers increasingly exposed to psychological risks
- **Stress Anxiety Depression**, second highest self reported work related illness in Ireland and EU.
- Long term health consequences
- Cost implications: employers/health system & wide economy. Estimates of £5.2 billion in the UK for the year 2013/14 EU15 (HSE).

# Outline

1. Research questions
2. Data and measures
3. Working conditions and job stress
4. Summary and policy implications

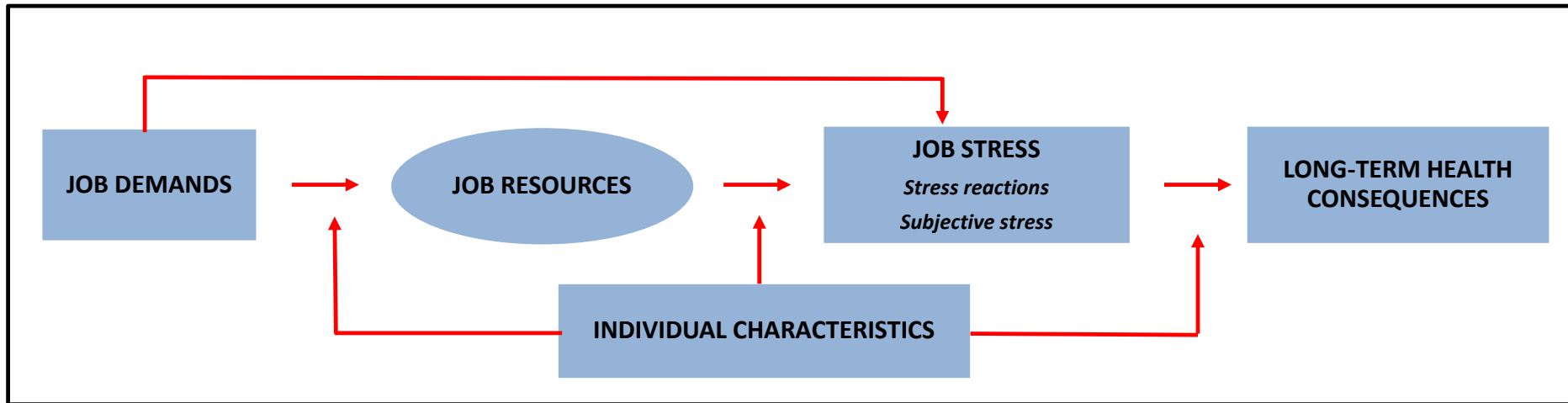
# Research Questions

- What is the level of job stress in Ireland?
- How do levels of job stress in Ireland compare to other countries?
- What working conditions are associated higher job stress?
- Which sectors and occupations exhibit the highest levels of job stress?
- Implications for policy and practice

# Theories of job stress

- Job Demand/Control model (Karasek,1979): high demands combined with low control worst for wellbeing. Control (and support) can buffer effect of high demands.
- Effort reward imbalance (Siegrist, 1996). Mismatch between effort and rewards (e.g. pay, security, opportunities) leads to job stress
- Job demands-resources model (Demerouti et al. 2001).
  - Demands =‘those physical, social or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills’ become stressors when they exhaust employees’ physical and mental resources.
  - Wider range of resources can moderate demands e.g. social, psychological and organisational resources.

# Conceptual Model of Causes & Consequences of Job Stress



Source: adapted from Eurofound 2010

# Data and Measures

## ● Data

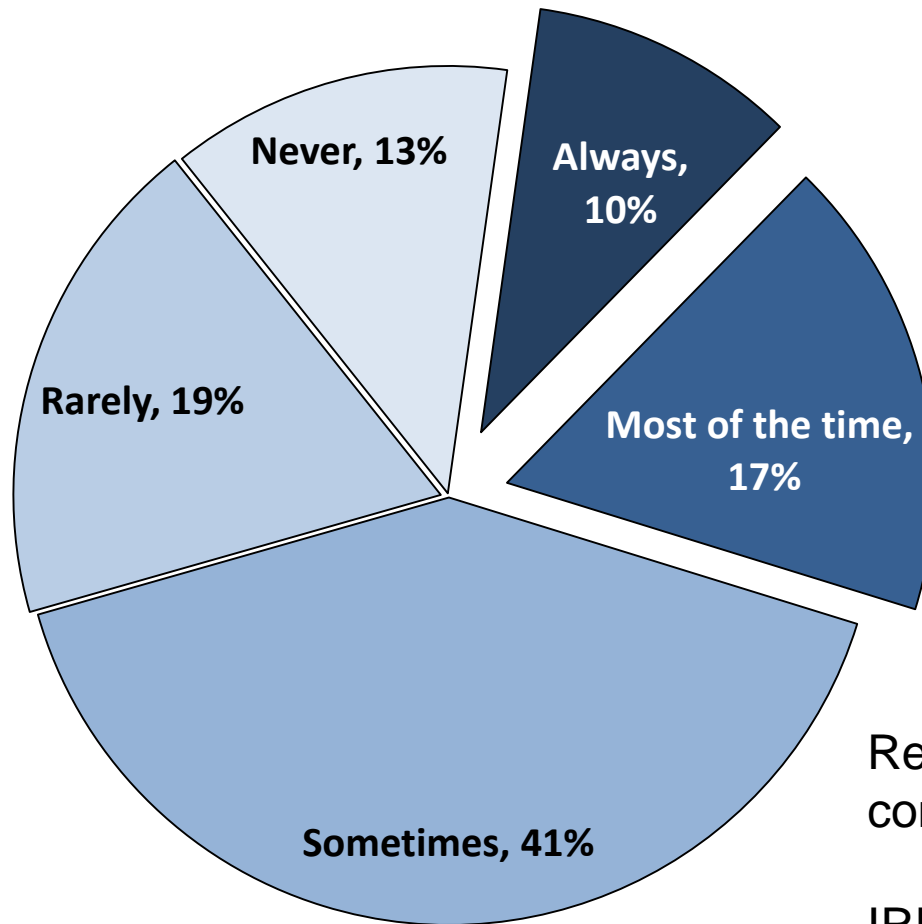
- European Working Conditions Survey
- Two latest waves 2010 and 2015
- Ireland 1000 workers each year, 830 employees (ex self employed)
- Information about employment status, work organisation, working conditions
- Selected sample of employees for 10 western European countries representative of different employment regimes.

## ● Job stress measure

- Combined subjective and stress reactions (anxiety, fatigue, sleep disturbance)

# 1. Subjective Stress Measure:

Which response best describes your work situation:  
you experience stress in your work?



Responses for 10 countries  
combined, 2010 & 2015.

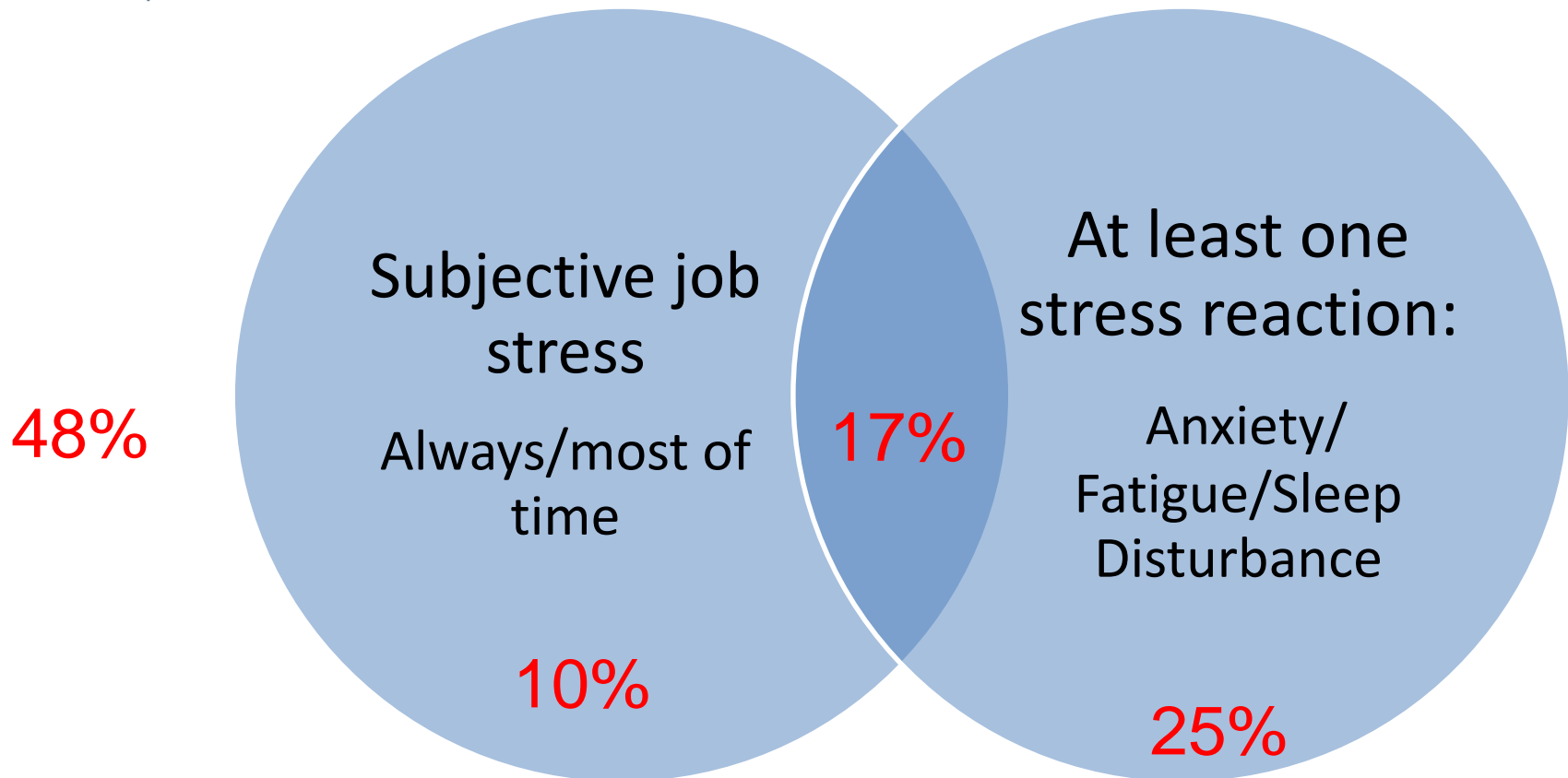
IRL: 23%(2010) & 27% (2015)



## 2. Stress Reactions Measure

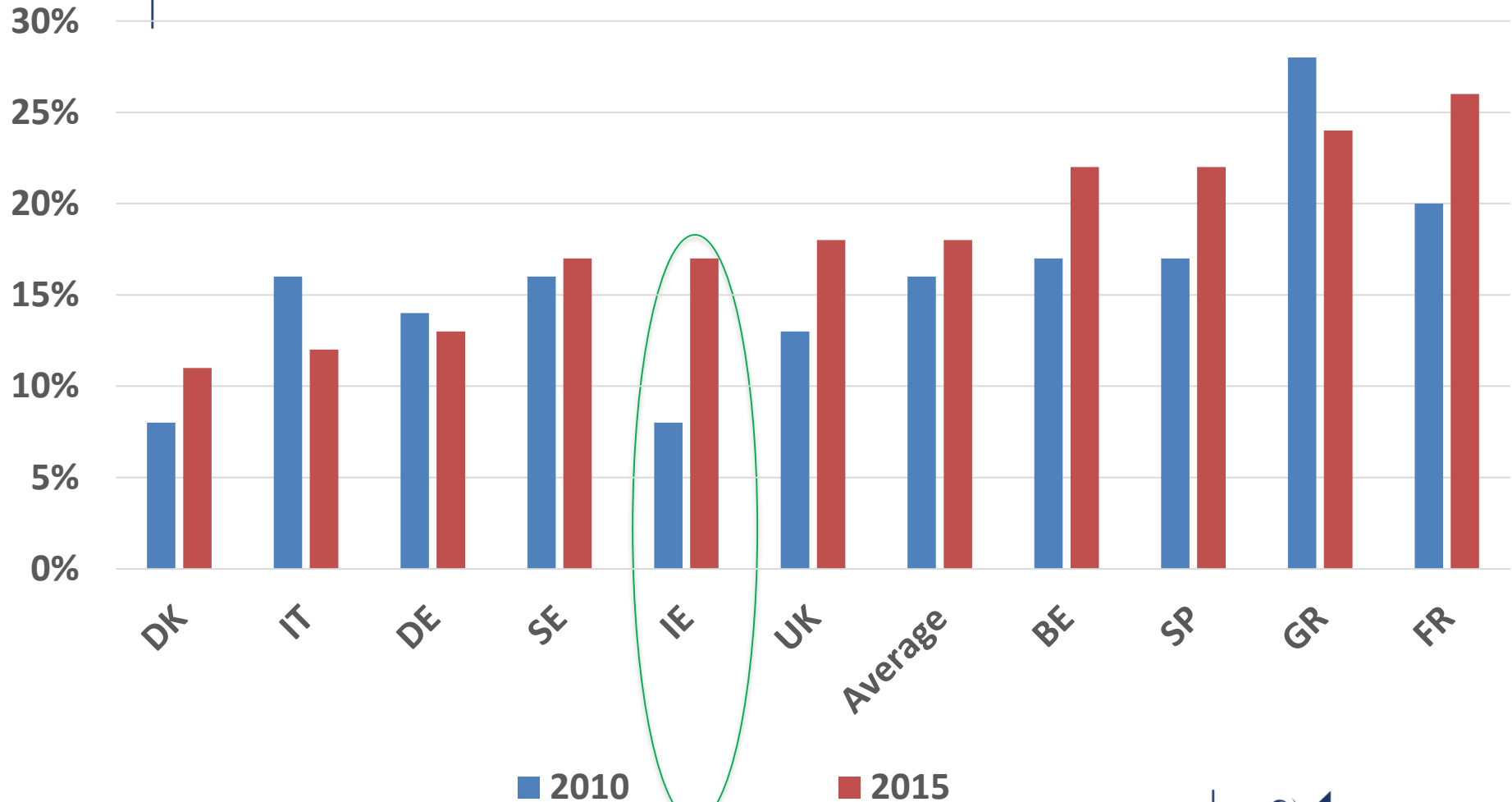
- Over the last 12 months have you experienced any of the following health problems? Yes/no
  - Overall fatigue
  - Anxiety
  - Insomnia or sleep difficulties (change in wording 2015)
- Stress reactions not directly linked to work, no issue of attribution.
- Combined measure, reduce risk of non-work causes of reactions & more robust than single subjective measure

# Measure of Job Stress



Responses for 10 countries combined, 2010 & 2015

# Combined Job Stress by Country, 2010 & 2015

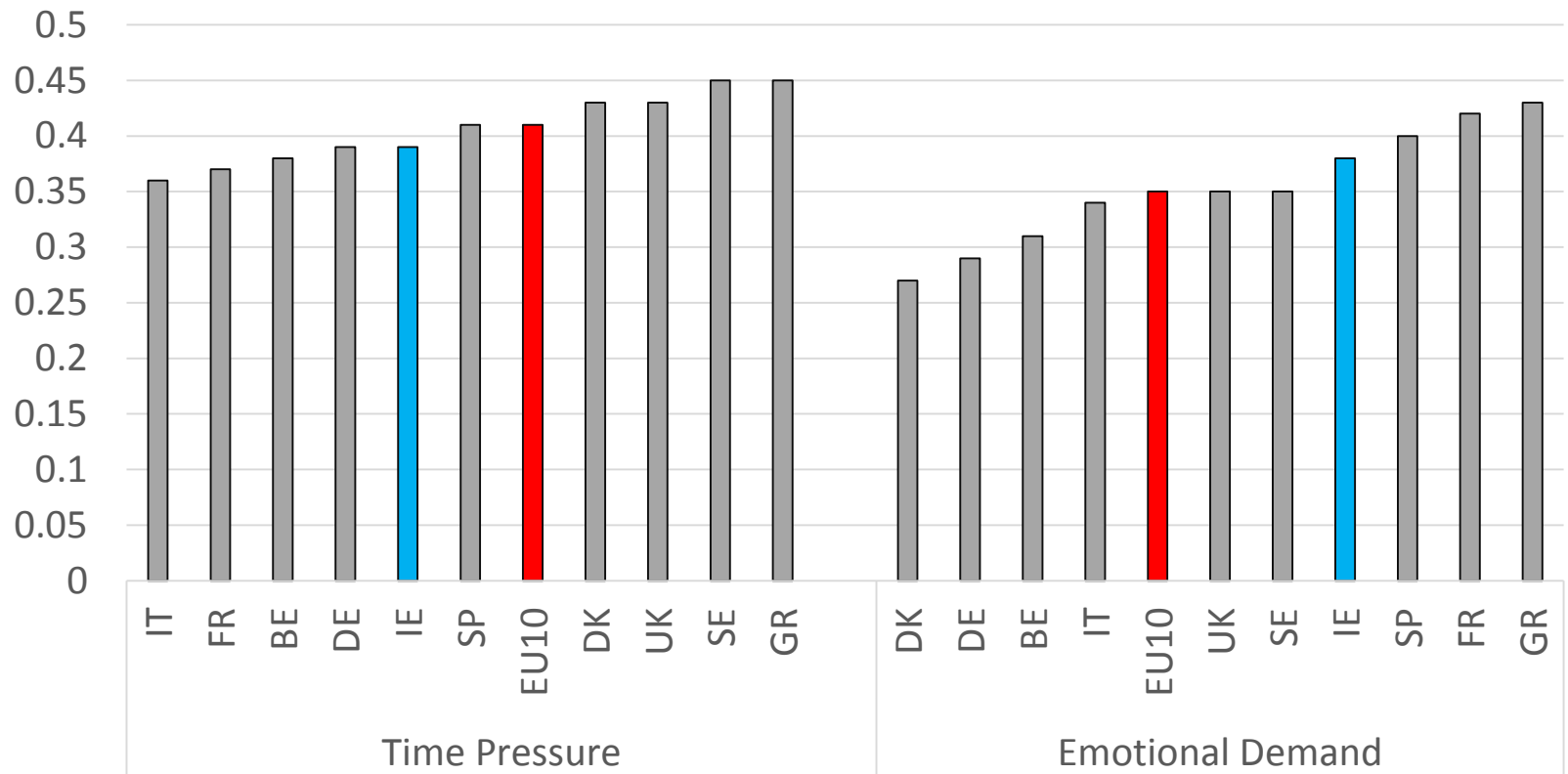


# Job Demand Indicators (I)

(additive scales: rescaled 0 to 1)

Indicator	Component questions	Response categories
<b>Time pressure</b>	<ul style="list-style-type: none"> <li>• Does your job involve working at very high speed?</li> <li>• Does your job involve working to tight deadlines?</li> <li>• Do you have enough time to get the job done?</li> </ul>	<p>All the time to never</p> <p>All the time to never</p> <p>Always to never</p>
<b>Emotional demands</b>	<ul style="list-style-type: none"> <li>• Does your job require that you hide your feelings?</li> <li>• Does your job involve handling angry clients, customers, patients, pupils, etc.?</li> </ul>	<p>Always to never</p>

# Job Demands by Country, 2015 (0=low to 1=high)



## Further Job Demand Indicators (II) (additive indices: rescaled 0 to1)

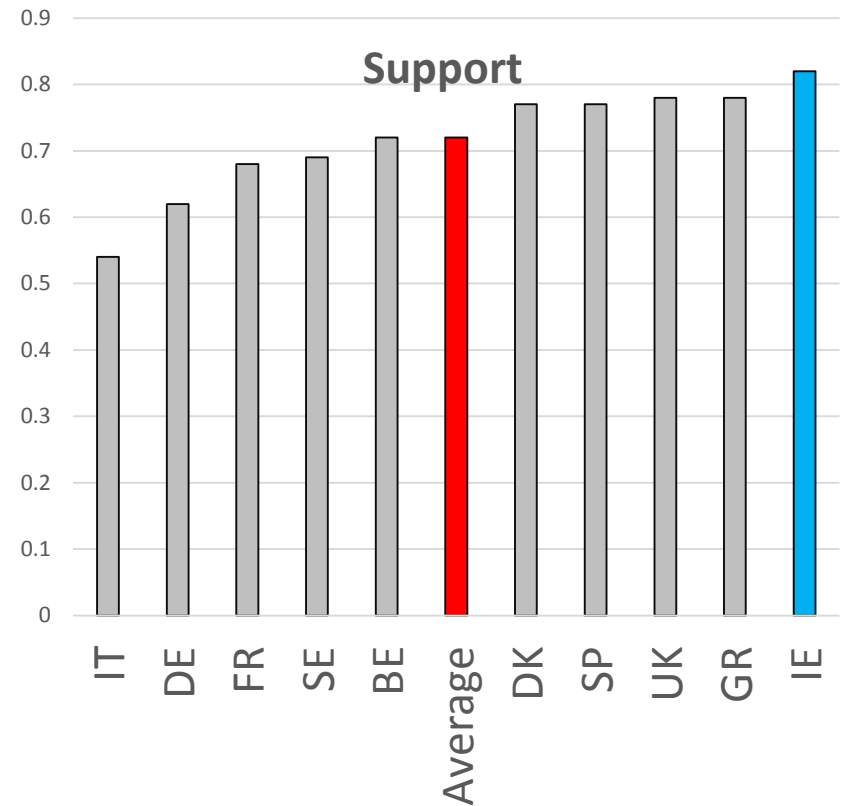
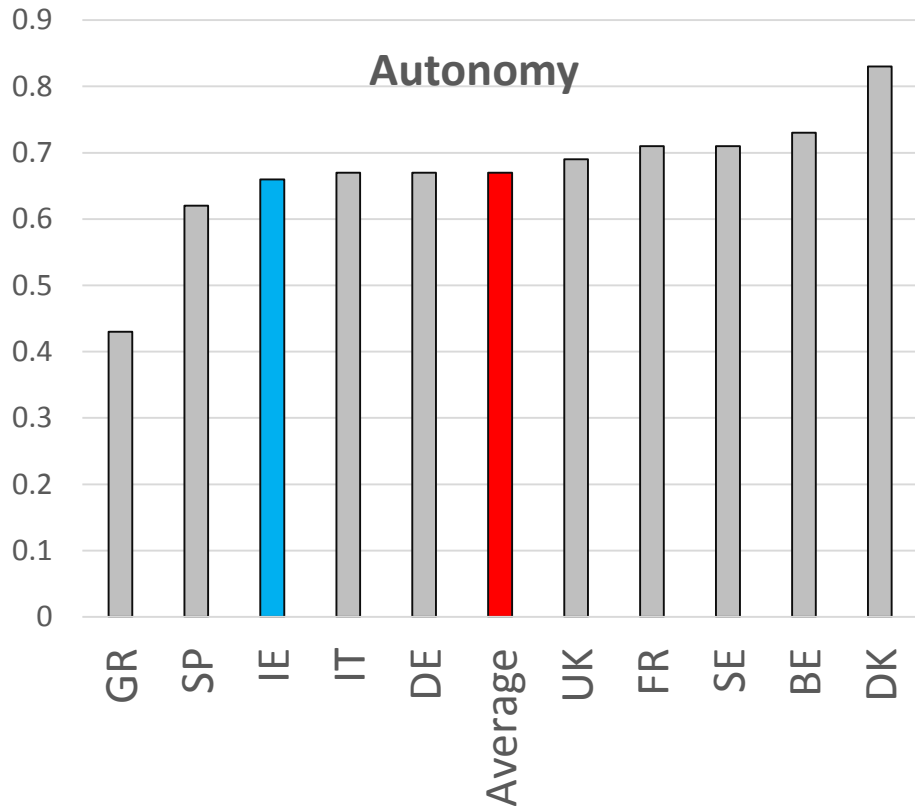
Indicator	Component questions	Response categories
<b>Effort-reward imbalance</b>	Considering all my efforts and achievements in my job, I feel I get paid appropriately	Strongly agree to strongly disagree
<b>Physical demands</b>	Tiring or painful movements Lifting or moving people Carrying or moving heavy loads Repetitive hand or arm movements	All of the time to never
<b>Bullying, harassment, violence etc.</b>	Unwanted sexual attention (last month) Physical violence (last 12 months ) Bullying/harassment (last 12 months) Sexual harassment (last 12 months) Threats/humiliating behaviour (last month) Discrimination at work (last 12 months) Verbal abuse (last month)	Yes/No

# Job Resource Indicators (additive scales; rescaled 0 to1)

Indicator	Component questions	Response categories
<b>Autonomy</b>	<p>Are you able to choose or change your order of tasks ?</p> <p>Are you able to choose or change your methods of work?</p> <p>Are you able to choose or change your speed or rate of work?</p>	<p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p>
<b>Support</b>	<p>Your colleagues help and support you</p> <p>Your manager helps and supports you</p>	<p>Always to never</p>
<b>Intrinsic reward scale</b>	<p>Your job gives you the feeling of work well done</p> <p>You have the feeling of doing useful work</p>	<p>Always to never</p>

# Job Resources by Country, 2015

(0=low to 1=high)





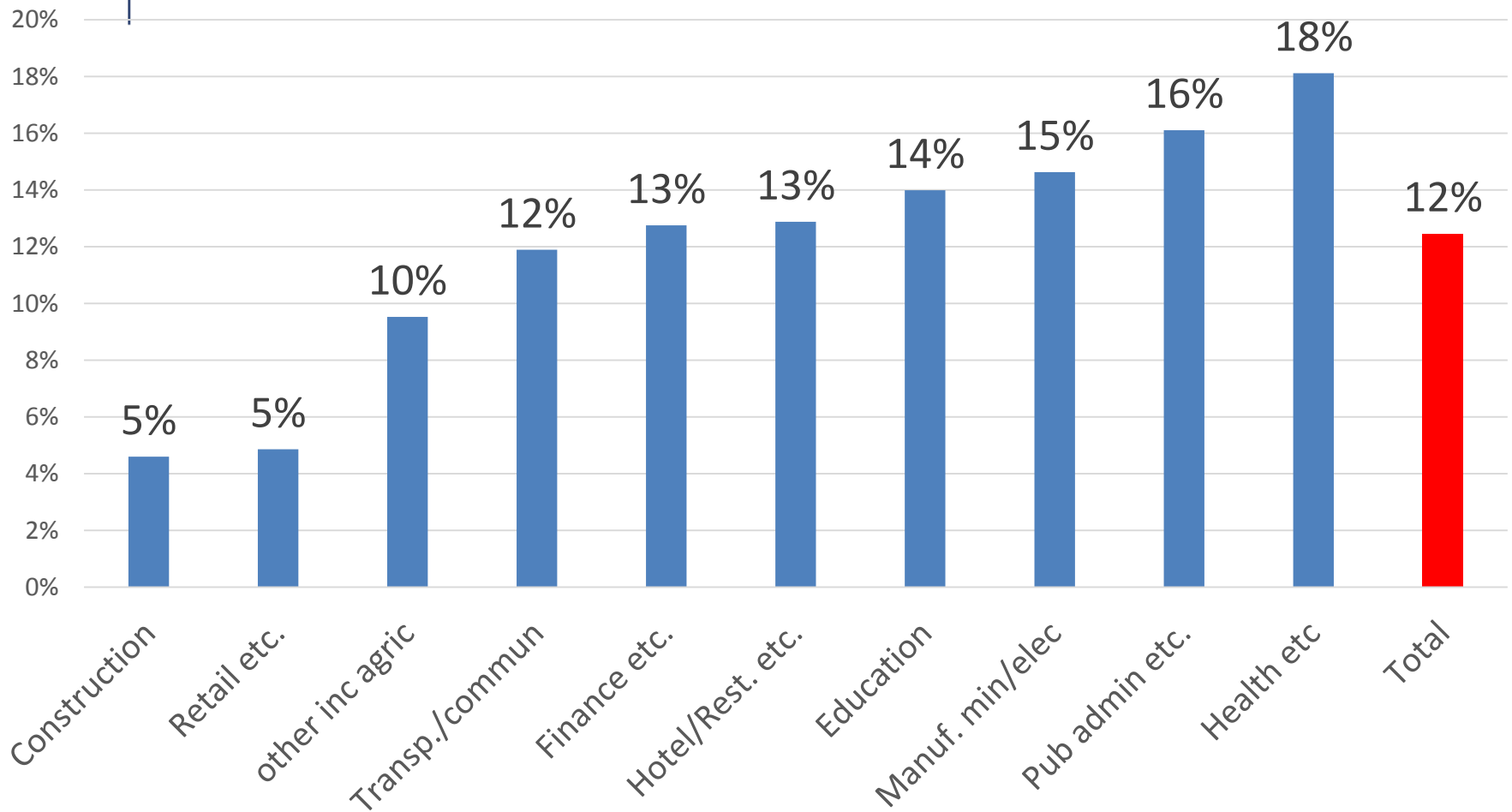
# Statistical Model of Job Stress Ireland 2010–2015

- Logistic regression to estimate the likelihood of an event
  - Dependent variable: risk of job stress; value of 0 (No) or 1 (Yes).
  - Non-work characteristics (e.g family status) are controlled.
  - Report the likelihood (odds ratio) of experiencing job stress for each characteristic by taking account of all other characteristics.
  - Odds ratio: If  $OR > 1$  means more likely than a reference group;  
If  $OR < 1$  means less likely than a reference group.

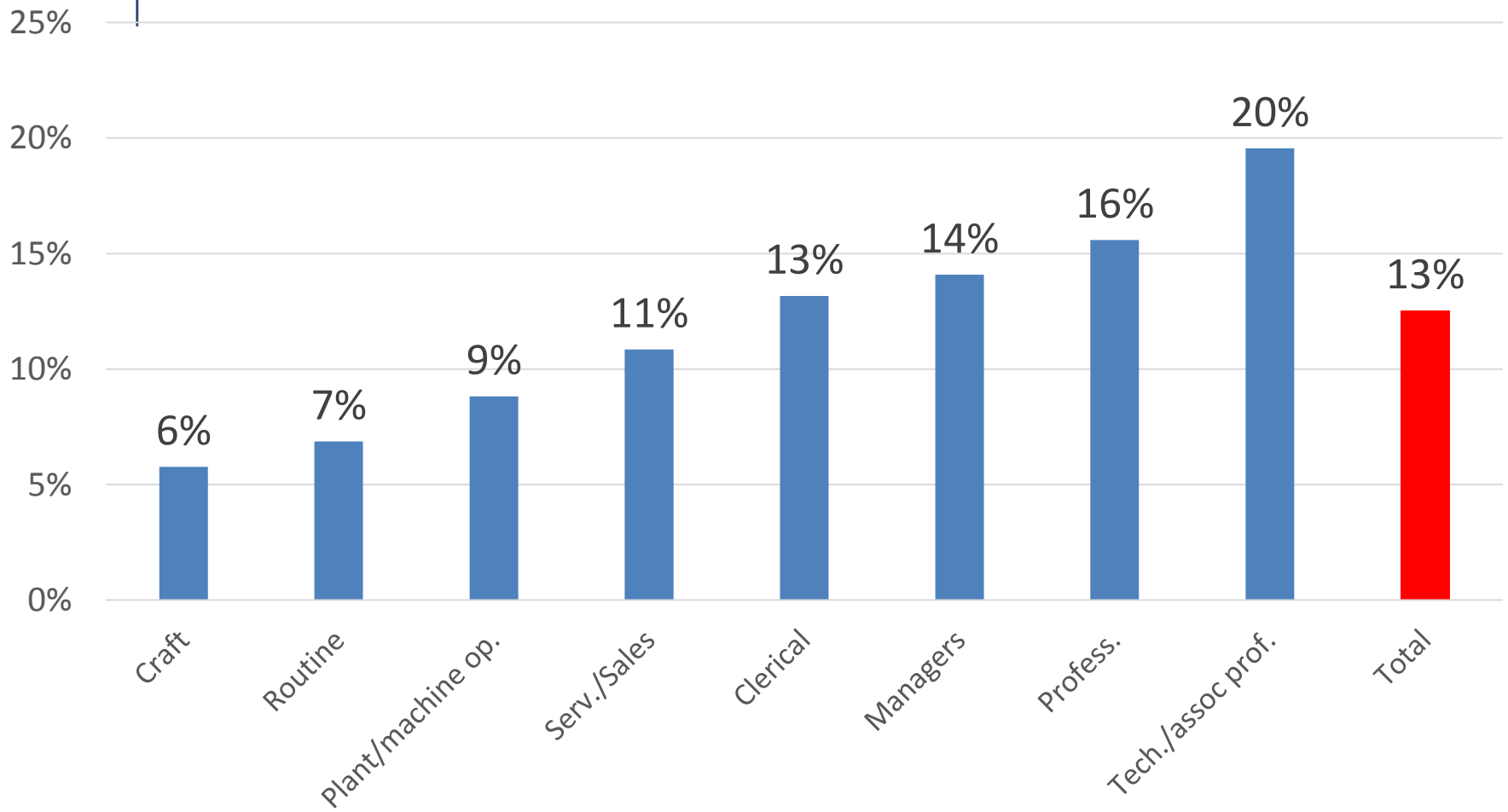
# Logistic Regression on Job Stress (Odds ratios)

Demands & resources	Ireland
2015	2.34***
Female; age; age of children	n.s
Difficulty making ends meet	n.s.
Time pressure 0-1	<b>10.36***</b>
Emotional demand 0-1	<b>21.28***</b>
Bullying/harassment 0-1	<b>8.28***</b>
Effort reward imbalance 0-1	<b>4.26***</b>
Perceived insecurity 0-1	n.s
Physical demand 0-1	n.s
+40 hours (ref 36-40 hours)	<b>2.12*</b>
Autonomy 0-1	n.s
Support 0-1	n.s
Intrinsic reward 0-1	n.s
Shift work/night work	n.s.

# Which sectors are most stressful? Ireland 2010 & 2015



# Which Occupations are most stressful? Ireland 2010 & 2015



# Summary

- Working conditions with strongest association with job stress:
  - High job demands (emotional demands, time pressure, bullying/harassment/violence)
  - Weaker influence of job resources (autonomy, support, intrinsic reward) on job stress
- Sharp increase of job stress in Ireland from 2010 to 2015 but still among the lowest across EU10.

# Policy Implications (1)

- Job stress important issue for employers/employees
  - Employees mental health included in the Irish health and safety regulation
  - In Ireland 50% firms do not have enough information for the assessment of psychological risk & less than 45% Irish firms have and action plan to prevent job stress (EU-OSHA, 2016).
- Managing high job demands
  - Need for action in relation to psycho-social risks at organisational level: formal policies and organisational culture
  - EU and national initiatives on job stress and bullying/violence (Eurofound and HSA) awareness, guidelines, stress audit tools

## Policy Implications (2)

- Enhancing worker resources
  - Some evidence that support moderates negative effect of high emotional demands=>implementation of a supportive organisational environment highly relevant in activities with high emotional demands.
- Special attention to higher risk sectors and occupations
  - Health sector/ hospitality/education (high emotional demand); manufacturing (time pressure, long working hours)
  - Managers (time pressure, long working hours); professionals (above average emotional demand, bullying/harassment/ violence)

# Thank You