

POLICY HEALTH IMPACT ASSESSMENT FOR THE EUROPEAN UNION

A HEALTH IMPACT ASSESSMENT OF THE EUROPEAN EMPLOYMENT STRATEGY ACROSS THE EUROPEAN UNION

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Contents

Acknowledgements	1
Contents	2
List of tables and figures	4
Executive Summary	6
Introduction	6
Methods	7
Results	8
Conclusion and Recommendations	13
1. Introduction	16
1.1 Background	16
1.2 Health Impact Assessment and the European Union	16
1.3 Aim of the HIA pilot	17
2. Methods	18
2.1 Introduction	18
2.2 EPHIA methodology overview	18
2.3 Data collection	20
2.4 Impact Analysis	22
2.5 Limitations to the study	23
3. Policy analysis	24
3.1 Introduction	24
3.2 The origins of the European Employment Strategy	24
3.3 EES- how it works	25
3.4 EES features	26
3.5 Other EU level policies relevant to the EES	28
3.6 The EES and national level employment policy	30
4. EU Profile	32
4.1 Introduction	32
4.2 Population Status	32
4.3 Population structure and projections	34
4.4 Income distribution	36
4.5 Health status	38
4.6 Work-related injuries and health problems	43
4.7 Employment	48
4.8 Labour Market Policy expenditure	57
5. Evidence from the literature, key informants and stakeholders	59
5.1 Introduction	59
5.2 Employment and health	59
5.3 The flexible labour market and health impacts	64
5.4 Employment and vulnerable groups	69
5.5 Perceptions of key informants and stakeholders on employment and health	71
5.6 Unemployment and health	72
5.7 Unemployment, vulnerable groups and health	74
5.8 Evidence from key informants and stakeholders on perceptions of unemployment and health	75
5.9 Unemployment/employment and the inactive	75
5.10 Impacts of labour market interventions	76
5.11 Impacts of employment interventions	77
6. The quantification of health impacts	78
6.1 Introduction	78
6.2 Estimation of the impact of part and full-time work on work-related absenteeism due to health problems	78
7. Impact Analysis	85
7.1 Introduction	85
7.2 Increasing employment and reducing unemployment	86

Policy HIA for the EU ♦ Pilot Study European Union

7.3	Increasing flexible labour markets	89
7.4	Increasing active labour markets	92
8.	Conclusion and Recommendations	95
8.1	Conclusion	95
8.2	Recommendations	96
	Bibliography	98
	Appendix	105

List of tables and figures

Figure 1 EU Policy HIA (EPHIA) methodology	8
Figure 2. Total population EU-15 1960-2002	32
Figure 3 Crude rate of population increase, 2001 (per 1000 population)	33
Figure 4 Proportion of non-nationals by main groups of citizenship, 2000	34
Figure 5 Population of EU-15 by broad age groups, 1960-2001	35
Figure 6 Total population of EU-15, 2000-2020, latest national forecasts	35
Figure 7 At-risk-of-poverty rate (after social transfers) and At-persistent-risk-of-poverty rate, 1999	36
Figure 8 At-risk-of-poverty rates among people living in households where none, some or all people of working age are in employment, 1999	37
Figure 9 Population in jobless households, 2002	37
Figure 10 Gender pay gap in unadjusted form 1998 and 1999	38
Figure 11 Percentage of population perceiving their health as 'good' or 'very good', by country	39
Figure 12 Percentage of population perceiving their health as 'good' or 'very good', by activity status	39
Figure 13 Percentage of female population with a longstanding illness or health problem, by age	41
Figure 14 Percentage of male population with a longstanding illness or health problem, by age	41
Figure 15 Percentage of population with a longstanding illness or health problem, by activity status	42
Figure 16 Life expectancy at birth, males, 2000	42
Figure 17 Life expectancy at birth, females, 2000	43
Figure 18 Non-fatal accidents at work and commuting accidents by Member State and severity. 2000	44
Figure 19 Accidents at work by type of activity, EU-15, 2000	45
Figure 20 Work status of persons aged 15 years and more, EU-15, 2002 (1)	48
Figure 21 Population aged 15-64 by employment status, age groups and sex for (EU-15, 2002)	49
Figure 22 Employment rates of population aged 15 to 64 years old (2002)	49
Figure 23 Part-time as percentage of total employment (2002)	50
Figure 24 Involuntary part-time as percentage of the total part-time employment (2002)	50
Figure 25 Employment rates by age-group and sex, (EU-15, 2001)	51
Figure 26 Employment rates of older (aged 55-64) workers, 2001	51
Figure 27 Self-employed as percentage of total employment (2002)	52
Figure 28 Average actual weekly hours of work for all in employment (2002)	52
Figure 29 Average actual weekly hours of work by type of employment (2002)	54
Figure 33 Unemployment rates by sex, 2001	55
Figure 34 Relative Differences in Labour Force Participation Rates Between Selected Groups of Immigrants/Minorities and Nationals*	56
Figure 35 Total public expenditure on LMP measures as a percentage of GDP, 2000	58
Figure 36 Labour Market Policy expenditure by type of action (categories 2-7), EU-15, 2000	59
Figure 37 Proportion of European workers exposed to working conditions presenting risks to health (2000) (Daubas- Letourneux and Thebaud-Mony, 2003)	62
Figure 38 Number of part-time and full-time contracts according to scenarios (100s)	81
Figure 39 Number of cases of absenteeism due to work related health problems	82
Figure 40 Number of reduced cases of absenteeism	82
Figure 41 Reduced number of cases of reported absenteeism due to shift towards part-time contracts with 95% CI	83

Table 1 Aims of the European Employment Strategy	6
Table 2 EU Policy HIA Methods and Procedures	18
Table 3 HIA Steering Group - identified membership	19
Table 4 Stakeholder and Key Informant Groups invited to participate in the HIA	21
Table 5 Themes for workshops and focus groups	22
Table 6 Total workforce of the EU-15, 1995-2002	33
Table 7 Roma/Sinti/Traveller Population in Europe (in 1,000)	33
Table 8 Percentage of persons (aged 16-64 years) with self-reported disability, according to estimates based on national surveys (various years) and ECHP (1996)	40
Table 9 Percentage of most serious work-related health problems by sex and Member State (with or without absence from work)	46
Table 10 Working Patterns in the EU	65
Table 11 Reasons for not working part-time (%)	66
Table 12 Summary of results of modelling the effect of part-time employment on health related absenteeism	83
Table 13 Potential Health Impacts of the EES: employment, job quality, social cohesion	87
Table 14 Potential Health Impacts of the EES: flexible labour markets	90
Table 15 Potential Health Impacts of the EES: active labour markets	93
Appendix	
Table A1 Immigrants and Minorities: Labour Force Participation Rates	106
Table A1 (continued) Immigrants and Minorities: Labour Force Participation Rates	107
Table A2 Immigrants and Minorities: Unemployment Rates	107
Table A2 (continued) Immigrants and Minorities: Unemployment Rates	108

Executive Summary

Introduction

This Executive Summary of the Health Impact Assessment (HIA) of the European Employment Strategy (EES) across the EU summarises the work undertaken by IMPACT. This was part of the 'Policy Health Impact Assessment for the European Union' project, funded by DG SANCO of the European Commission (EC). The project was responsible for synthesising a new HIA methodology (the 'EPHIA' methodology). EPHIA was then piloted on a selected EU policy (the European Employment Strategy) in Germany, Ireland and the Netherlands and in the UK, as well as across the EU.

HIA is a policy tool. EPHIA has been developed for use in policy planning across European institutions to help 'add health value' to decision-making. The aim of the HIA was:

To assess the potential health effects of the EES within the UK using the synthesised EU Policy HIA (EPHIA) methodology

The primary purpose of this HIA is to test EPHIA on the EES. However the findings from this HIA are also being made available to policy proponents to contribute to future decision-making.

The European Employment Strategy aims to increase the employment rate across the EU as described in Table 1 below:

Table 1 Aims of the European Employment Strategy

Increase the EU employment rate:	2005	2010
Total	67%	70%
Women	57%	60%
Older people (55-64 years)		50%

It fosters full employment, quality and productivity at work and social cohesion and inclusion. The Employment Guidelines in 2003, identified priorities for action across the EU to help meet these aims.

The Employment Guidelines 2003

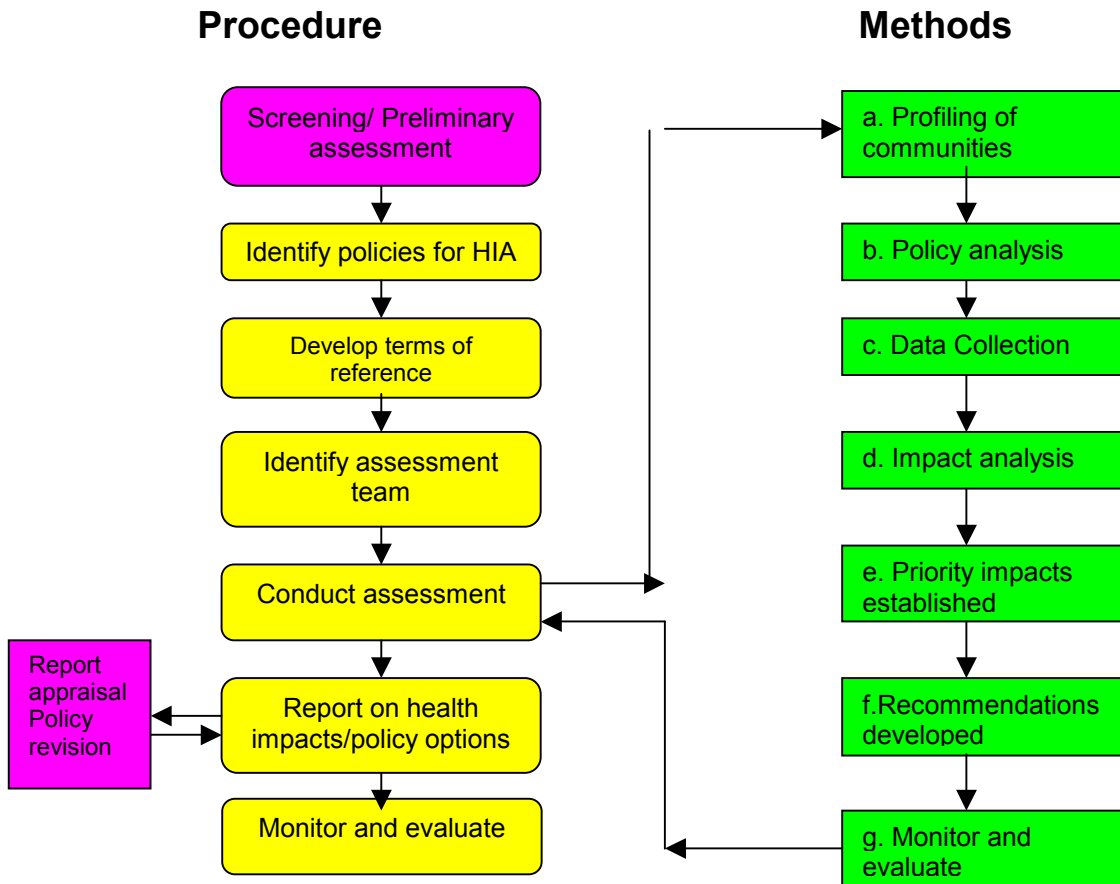
- Active and preventative measures for the unemployed and inactive
- Job creation and entrepreneurship
- Address change and promote adaptability and mobility in the market place
- Promote development of human capital and lifelong learning
- Increase labour supply and promote active ageing
- Gender equality
- Promote the integration of and combat the discrimination against people at a disadvantage in the labour market
- Make work pay through incentives to enhance work attractiveness
- Transform undeclared work into regular employment
- Address regional employment disparities

National Employment Action Plans (NAPs) are developed by Member States in response to the Guidelines, they define progress and future actions to meet EES targets. A Joint Employment Report is subsequently produced that comments on the NAPs. The 'open method of co-ordination' is used. The HIA was undertaken on the EES and specific areas of the Guidelines.

Methods

The HIA methods and procedure used were based on the draft EU Policy HIA (EPHIA) methodology (Figure 1). The process took approximately 50 assessor days.

Figure 1 EU Policy HIA (EPHIA) methodology



The HIA methods involved the collection and analysis of both secondary (existing) and primary (new) data (section 2). The policy analysis (section 3) involved the collection and analysis of a range of policy documents. Relevant secondary data were identified and retrieved from various data sources (section 4) for the development of the profile. Evidence from the literature was also gathered and primary data were collected from stakeholders (people affected by the policy) and key informants (people with expert knowledge) (section 5). Mathematical modelling was undertaken to quantify the effects of part-time work on sickness absence (section 6). Evidence from all data was then aggregated and the health impacts of the EES characterised in the impact analysis (section 7). Where there is a convergence of the evidence from the different data sources this is regarded as strong evidence with a greater likelihood of the impacts occurring.

The limitations of the HIA were identified as practical and resource issues associated with undertaking a multi-national HIA; the lack of access to various stakeholders; the availability of or accessibility to comparable data, for example, employment rates for ethnic minority groups or disabled people, participants who exit active labour market programmes and the benefit system; and the lack of strong evidence from research of the health effects of, for example, active labour market interventions.

Results

Increasing employment

Data from the profile shows that employment is increasing across the EU, with a 10% increase between 1995 and 2002. Denmark, the Netherlands, Sweden and the UK all had employment rates over 70%. However, Belgium, Greece, Spain and Italy all had rates less than 60%.

There has been a greater increase in employment for women than for men, with 14% more women in employment in 2002 compared with 1995. However, from 2002 data there is a difference in employment rates for men and women across the EU of 17.4%. This varies between Member States with the biggest difference in Greece, Spain, Italy and Luxembourg (24%) and the smallest difference in Finland and Sweden (less than 4%).

There has also been an increase in older people (55-64 year olds) in employment, up 16% between 1995 and 2002. The EU employment rate for 55-64 year olds was 11% in 2002, with rates above this in Sweden (18%), Denmark and Greece (both 13%), and below Luxembourg (6%), Belgium and Austria (7%).

Data was not available to enable a reliable comparative analysis of trends in employment for disabled people and minority groups. It will be important to collect these data in the future if the implementation of the social inclusion objectives of the EES are to be monitored effectively.

There is evidence indicating the probable positive impacts of the EES in increasing employment across the EU. Although it is difficult to disentangle the contribution of different structural reforms and cyclical variations in the labour market from economic influences, it was estimated that the EES influenced an acceleration of the rate of decrease of long-term unemployment by approximately 1.4% at the end of the 1990s. There was also evidence of a more responsive approach to labour market participation during that period, enabling employment to increase. The EES was assessed to have contributed to this. Whereas in 1998 only 6 Member states were considered to comply with the preventive and active targets of the EES, by 2001 only 5 Member States could not meet these targets.

Any increase in employment will have positive effects on the health of the population as a whole. A reduction in all cause mortality in the EU using an unemployment-GDP model with a lag of 2 to 14 years after the increase in GDP and employment has been forecast. It is believed that this is primarily due to the increase in per capita income resulting from GDP growth. There may also be improvements in mental health. Evidence from the US suggests there may be short and long-term health benefits to the children of families where parents' move from unemployment to employment increases the household income and enhances the family environment.

But evidence from the literature, stakeholders and key informants has also shown that not all employment is beneficial for health. Some work characteristics can be as damaging to health as unemployment. Workers in jobs that are of poor quality, including low paid, and precarious (insecure) have similar health scores to the unemployed. Evidence from the US also indicates negative impacts on the cognitive, emotional and behavioural development of children from families where parents move from unemployment to employment that fails to provide an increase in household income, and where the job is also of poor quality and has few prospects. The EES is concerned with improving quality of jobs. However, the evidence related to quality of jobs shows mixed results. For example, reductions in the incidence of injuries at work suggest improvements while trends in the incidence of work related stress indicate deterioration. Some data such as trends in work related ill health is ambiguous. The development of 'job quality' indicators is welcomed. The collective reporting of these, and the

development of an overall job quality index, will be important in monitoring improvements in job quality.

Whilst the EES objectives and targets for full employment across the EU population as a whole coupled with strengthening social cohesion and inclusion are recognised and supported, the following suggests that the 'social' dimension of the EES needs greater attention. For example:

- The Joint Employment Report indicates that the difference in some Member States employment rates, for example, Belgium and Greece, from the EU average may continue.
- Evidence from the JER and stakeholders make it unclear whether the differences in employment levels of some population groups, for example, women and older workers will be significantly impacted on.
- It was noted that levels of self-reported health for women and across some Member States, including Greece, were low. Whilst the data are not readily compared it suggests that the EES is unlikely to contribute to reducing existing health inequality gaps.
- With a target of 50% of older workers in employment by 2010, at current levels this means that between 2002 and 2010 there needs to be an increase of 7 million older people in employment. 2.6 million of this total is required purely to counteract the effect of an ageing population. From 2002 to 2010 there needs to be an annual increase of 900 000 older workers in employment per year.
- The lack of comparable data for minority groups and people with disabilities across the EU has already been mentioned; this was also the case for people with chronic health conditions who are more likely to be inactive.
- It has been estimated that the under-use of available human resources in the EU and the wider costs of wastage in the economy (including ill-health, crime and related costs) could be between €1,000-2,000 billion (12-20% of GDP).
- Documentary and stakeholder evidence has shown the discrimination that takes place in recruitment to employment as well as once in employment.

The complex sets factors associated with these labour market inequalities are recognised. Action on these root causes needs to be strengthened.

Increasing flexible labour markets

As described in section 5, flexible labour markets include the following types of flexibility: flexible employment type (also 'atypical', 'non-standard' or 'precarious' employment), functional flexibility (adapting the job tasks) and numerical flexibility (adjusting size e.g., 'downsizing').

In Europe, flexible employment includes part-time, temporary contract, and fixed term contracts. The EES is likely to contribute to this increase in employment flexibility (Guideline 3), particularly in those Member States where this has not been well established. However, Member States have introduced different measures to achieve this that may have different degrees of success in increasing employment flexibility as well as different associated effects.

Evidence from section 4 indicates a trend for an increase in part-time employment across the EU. Part-time work increased by 3.5% between 1994 and 2001. The EU average for part-time work in 2002 was 18.2%; however for women this was 33% and for men, 6%. More part-time work is undertaken in the north of Europe: 43.8% in the Netherlands, 21.4% in the UK, 21.4% in Sweden and 20.6% in Denmark. In south Europe levels are lower: Portugal, 11.3%, Italy, 8.6%, Spain, 8% and Greece, 4.5%; however, they had all introduced labour market reforms, including legislation for part-time work between 1998 and 2002.

Evidence from section 5 shows that part-time workers are more likely to report better health outcomes for six indicators compared with full-time workers of any contract type: job

satisfaction, health-related absenteeism, stress, fatigue, backache and muscular pains. As discussed in section 6, there is inconclusive evidence to suggest that reductions in absenteeism are due to improvements in health. However, bearing this in mind, the modelling undertaken to forecast potential changes in sickness absence from work with a shift from full-time to part-time indicates a reduction of reported absenteeism of between 177 000 (5% shift to part-time work) and 530 000 (15% shift to part-time work).

However, there are potential negative impacts associated with part-time work including, low pay, less involvement in the organisation, and less career development or training opportunities (including health and safety training). Part-time work is also often unskilled and with poor working conditions; although exposure to hazards is obviously less than for full-time workers.

There has also been an increase in the proportion of fixed term contracts as opposed to permanent contracts. Between 1994 and 2001, these increased by 29%. In 2002, the EU average for fixed term contracts was 13.1%. Portugal and Spain had the highest levels of fixed term contracts at 21.8% and 31.2%, respectively. Ireland, Iceland and Luxembourg had the lowest at 6% each.

Workers with fixed term contracts or in temporary work are more likely to report poorer health compared to permanent workers. They are more likely to be exposed to physical and chemical hazards, such as working in painful or tiring positions, high noise levels and do work involving repetitive tasks or movements. They are also less likely to be in control of their work and time, and have less opportunity to be involved in work decisions. However, there is evidence showing that contract status has an independent effect on health outcomes regardless of working conditions. They are particularly likely to suffer from job insecurity. There is strong evidence showing the negative health impacts of being in an insecure job, although there appears to be different responses to this depending on contextual and individual factors, such as support within an organisation and changes in perceived security or a loss in a valued aspect of a job. In general, changes made to workers already in insecure jobs seem to have less negative effects, but this requires further research.

Negative impacts are most severe when jobs change from being secure to being insecure, for example:

- changes in health-related behaviour, e.g. increase in smoking, reduction in physical activity in women),
- psychological effects, e.g. increase in depression, anxiety,
- physiological effects, e.g. increase in cardiovascular risk factors (hypertension)
- increase in the use of health services,
- increase in job dissatisfaction, e.g. twice as prevalent compared to permanent workers.

Other reported negative effects include reduced organisational commitment and performance. There is also some evidence from qualitative studies in the UK suggesting that ethnic minority groups experienced more negative effects as a result of discrimination. Some studies have shown equivalent health scores for people in insecure jobs and unemployed people.

Evidence from UK studies suggests that the psychosocial work factors associated with changes in job security and possible mediators for the health effects were:

- increase in control,
- increase in demand,
- loss of skill discretion,
- loss of support.

This is contrary to earlier job strain models where the level of control was seen as the key psychosocial work characteristic that could predict cardiovascular and other health outcomes

of employees. However, evidence from Finland was that there was an increase in demand, but reduction in control and a loss of support. It has been suggested that during organisational change, the relationship between psychosocial work environment characteristics to health differ from a stable organisational state. Further research needs to be undertaken to explore this relationship.

There is strong evidence that increasing workers' control, for example, decision latitude and participation, can benefit both physical and mental health, and mitigate against the harmful effects of job insecurity. Having information and co-worker, supervisor or trade union support, were also identified as valuable buffers to the negative effects of job insecurity during organisational change.

Flexible labour markets also mean people moving into and out of employment ('numerical' flexibility). However, the literature indicates that there is a difference between voluntary redundancy involving a good financial settlement, exit counselling and/or training for future employment. Although there is some evidence indicating that the steepest decline in mental health is in the early stages of unemployment, more research is needed to understand the effects of the employment-unemployment-employment transition on health. For example, it has been suggested that 'active coping' - focusing on the problem - has a more positive effect as opposed to 'passive coping' - focusing on the symptoms.

Thus there may be both positive and negative health impacts associated with the EES' promotion of increased labour market flexibility.

Increasing active labour markets

From evaluations, there is evidence to suggest that the EES will continue to contribute to the unemployed in the EU being engaged early in measures to return them to work (Guideline 1). Belgium, Germany, France, Luxembourg, Netherlands, Portugal and the UK all introduced new programmes aimed at the unemployed during 1998 and 1999. However documentary evidence suggests there have been variations in the relative success in the implementation of these schemes; for example, the proportion of unemployed people who are still unemployed after 6 or 12 months.

There is some documentary and stakeholder evidence, as well as from the literature, that show a range of impacts associated with preventive and active labour market programmes. A summary of these positive impacts include:

Individual

- Increased confidence (UK)
- Increased motivation (UK)
- Reduced isolation (UK)
- Reduced anxiety (UK)

Socio-economic

- Social inclusion of beneficiaries (FI, FR, DK, GR)
- Preventing exclusion from the labour market (SW)
- Increase in labour supply (LU, SW)
- Improvements in human capital, less bottlenecks (DK, SW, UK)
- Participants moving off benefit/increasing national income (UK)
- Reduced wage pressure (UK)

These impacts varied by Member State, target group and age, as well as according to the measure and size of the programme. This was not evaluated in detail.

Evidence from the UK suggests that for people who are 'job ready', 'work first' approaches will potentially have short-term benefits to participants' mental health as a result of 'welfare to work' programmes. Evidence from 'work first'/'welfare to work' programmes in the US suggests positive health effects, for example enhanced well-being, are most likely to occur

when there is an increase in household income compared with the benefit position. There is also evidence indicating that there may be associated benefits for the health and development of children in households where parents move into employment. This is primarily as a result of enhanced parenting practices, as well as improvements in standards of living. For families with young children ensuring good quality childcare could potentially maximise the cognitive, social and emotional benefits even further.

However, the long-term unemployed or inactive are less likely to be 'job ready'. The long term unemployed (one year and more) represented 40.2% of EU unemployment as a whole, more than 50% in Greece and Italy, less than 25% in Denmark, Austria, Finland, Sweden, the United Kingdom, Norway and Switzerland. Evidence from studies evaluating US 'work first'/'welfare to work' approaches indicates that the 'hard to employ' quintile were more likely to be placed in low paid jobs. When the income from work was less than the income on benefit, there were poor prospects and the job was of poor quality, the mental health of participants deteriorated. There were also negative impacts on children, including a reduction in cognitive development and school performance and an increase in anti-social behaviour. Very severe impacts on living conditions and health service use were also reported in the US when financial assistance was withdrawn after 6 months or sanctions were applied, for example, if participants refused a job.

Other potential health impacts from the move from unemployment or inactivity to employment could be changes in health-related behaviour and health service use. The changes in health-related behaviour could be either positive or negative; there was insufficient evidence to predict these with any reliability. Similarly it is not possible to predict the change in health service activity, however it is probable that the frequency of use will change, which has implications for out of hours provision. In addition the focus on reducing inactivity due to ill health will undoubtedly impact on primary care professionals from the General Practitioners' initial certification to chronic disease management with practice nurses and rehabilitation with occupational therapists. The 'unemployment/inactivity to employment transition' may also have a number of stages in terms of the effects on mental and physical health; for example there may be an 'Anticipation Phase' for participants waiting to start a programme or be seen by a Counsellor or Personal Advisor. Analysis of other international welfare reforms suggest contextual factors appear to influence the impacts of interventions on participants, for example, when the changes are perceived as a net loss (financial, education, choice, esteem) or are introduced relatively quickly, the impacts on participants are more negative. This is reminiscent of the effort-reward imbalance model that has been used to explain the effects of psychosocial work characteristics on health outcomes. It is clear that more work needs to be done to construct a model explaining the relationship between different 'employment transition' factors and their impact on health.

Conclusion and Recommendations

Conclusion

The EES is likely to have contributed to a range of employment-related impacts during 2003. It is difficult to isolate the specific contribution of different elements of the EES from each other and from the impacts of different policy measures at Member State level; on top of this there are various other labour market and economic influences. However, there is evidence to support the impact of the EES on employment policy at national level. The extent of this influence seems to vary from providing a policy framework, to consolidation of policy plans, to no influence (policy in progress). In addition some Member States may prioritise particular employment policy objectives, for example, social cohesion, more than others. How Member States implement the objectives and meet targets is another variable.

It is probable that there will be employment gains in the EU in 2003. The extent of these gains is likely to vary in Member States and is not likely to make significant differences to their relative employment rates. Employment gains for women and older people are also likely, but in some Member States more than others. There was a paucity of comparable employment data for ethnic minority groups, people with disabilities and on people with chronic ill health conditions to comment on in detail.

There will be positive impacts on population health associated with these employment gains. These will include long term reductions in all cause mortality. Improvements in mental health are also possible in the short term. There may also be improvements in the health and development of children when household income increases, however these health impacts are speculative. Associated with the likely differential gains in employment are differential health gains. Some areas (e.g., Greece) and population groups (e.g., women) who may gain least in employment terms also have poorer self-reported health.

There is speculative evidence as to whether 'job quality' is improving (e.g., the incidence of injuries from accidents at work is falling) or getting worse (e.g., the incidence of work-related stress is increasing). 'Job quality' is associated with productivity and performance. Poor 'job quality' is also associated with poor health; workers in poor quality, low paid, precarious jobs have similar health scores to the unemployed.

Social cohesion may possibly improve in some Member States; however this is by no means universal. There are concerns that these employment gains are not being as universally shared as they could be which will have impacts on social cohesion and ultimately on health.

Developments in flexible labour markets in the EU are likely to increase; this includes the likely increase in employment flexibility, for example part-time and fixed term/temporary work. Part-time work is associated with positive health impacts, including less sickness absence and stress compared with full-time workers. It has been estimated that a 15% shift from full-time to part-time working could reduce the incidence of reported sickness absence by 530 000 across the EU. Part-time work is also associated with various poor quality job indicators, including low income, fewer career opportunities, poor working conditions.

People in fixed term/temporary work report poorer health compared with permanent workers. There is a direct association between contract status and health although it is not a causal relationship. Employment flexibility that results in a reduction in perceived job security (e.g., permanent to fixed term contracts) or losses in valued aspects of work may also have negative health effects, for example, increased job dissatisfaction, changes in health-related behaviour, reduction in mental well-being, increase in cardiovascular effects. Increases in numerical flexibility may have implications for redundancy in the future. This will have health implications in the early stages of employment. However, the impact of the employment-unemployment-employment transition is unknown and has not been investigated in detail.

It is probable that the unemployed will be guided into various active labour market interventions, although there appear to be different emphases in Member States as to the intervention type (e.g., 'work first', training), different success rates regarding early interventions and various impacts associated with the interventions themselves. Impacts on participants may include increasing confidence, increasing motivation, and reducing anxiety. Socio-economic impacts may include increasing employment, social inclusion and human capital. These impacts are associated with both direct and indirect positive effects on population health.

'Work first' approaches are more likely to benefit 'job ready' participants. There are concerns that an over-emphasis of this intervention may have detrimental effects on the mental health of participants who are not 'job ready'; without adequate alternative interventions, it may also potentially exclude people who are not 'job ready'. There was some evidence that when the transition from benefit to employment results in an increase in household income there are positive health benefits to the participants and their children; however the opposite is true when there is no increase in household income. No data was available on the participants who exit active labour market interventions and leave benefit, but who are unemployed. There may be severe impacts on poverty and health for these individuals and their families.

Recommendations

Reduce the negative health effects of labour market inequalities by:

- Emphasising the priority to reduce labour market inequalities (LMI) between regions and population groups.
- Harmonising and collecting data (e.g. employment, health - see ECHI 2 indicator set) for different population groups, (e.g. ethnic minority groups, people with disabilities and on people with chronic ill health conditions) to enable monitoring and comparative analysis.
- Supporting action to develop a comprehensive picture of the underlying causes of these LMI within and between countries.
- Monitoring action to reduce LMI to ensure this is focused at underlying causes.
- Extending support for action to reduce LMI (e.g., EQUAL).
- Monitoring the enforcement of anti-discrimination legislation.
- Working towards the development of targets for reductions in LMI for a wider range of population groups and regions in the next Guidelines.

Increasing the positive impacts on health by improving 'job quality' by:

- Making explicit the importance of improving job quality, for example, publish triannual reports on performance of Member States against the 10 'job quality' indicators.
- Exploring the possibility of developing an overall 'job quality' index score based on the 10 dimensions and reporting on performance of Member States.
- Improving the psychosocial work environment and employee health by actively promoting evidence-based approaches, for example:
 - demonstrating management commitment to improving working conditions and worker health
 - providing worker support from managers, co-workers and unions
 - developing worker participation in the planning and implementation of individual business objectives.
- Review the UK Health and Safety Executive's pilot of Management Standards for Reducing Stress in the workplace, for application at EU level.

Increase the positive and reduce the negative health effects of labour market flexibility by:

- Actively promoting 'quality jobs' including characteristics that increase control, support, information.

- Supporting more detailed research into the health effects on different workers and population groups of :
 - Part-time and fixed term work
 - Organisational and job security changes
 - Improving work-life balance measures.
- Supporting more detailed research into the health effects on different workers and population groups of the employment-unemployment-employment transition.
- Supporting the introduction of early health care interventions for newly unemployed.

Enhance the positive and reduce the health effects of active labour market policies (ALMP) by:

- Encouraging a range of ALMP to cater for different participant needs.
- Supporting pilots reducing the time before unemployed enter active labour market policies, for example, by introducing an interview with Public Employment Sector advisor as soon as the unemployed or inactive register for benefits (as New Zealand model).
- Supporting pilots identifying each participant's labour market barriers (including health) and holistic action planning to address labour market barriers (New Zealand and Iceland models).
- Supporting pilots focusing on the inactive with chronic health conditions.
- Supporting pilots developing specialist Public Employment Sector advisors to provide support and guidance to those groups most disadvantaged in the labour market (people with health problems, from ethnic minority groups, or without basic skills).
- Undertaking prospective research to identify the short and long term health effects of 'welfare to work' programmes, including mixed programmes.
- Collecting data on the short and long term effects of 'welfare to work' programmes on household income.
- Collecting follow-up data on unemployed programme 'leavers' who do not re-register for benefits.
- Considering the potential health impacts of 'welfare to work' programmes during programme planning.

Increase the positive health effects of social cohesion by:

- In addition to above, making explicit the importance of social cohesion within the EES.
- Reviewing EC procurement policies regarding contractors requirement to submit evidence of their employment policies, for example, equality and diversity.

Enhance the impacts of the European Employment Strategy by:

- The systematic and regular evaluation of the EES, for example triannually.
- Building on the open method of policy co-ordination to share good practice between Member States.
- Considering the potential health impacts of employment policy during policy planning, for example, applying 'EPHIA' to future Guidelines.

1. Introduction

1.1 Background

IMPACT, the International Health Impact Assessment Consortium at the University of Liverpool successfully co-ordinated a bid, 'Policy Health Impact Assessment (HIA) for the European Union (EU)', with partners from Germany, Ireland and the Netherlands to assess the health impacts of a selected EU policy by:

- synthesising a generic HIA methodology for use on EU policies and activities,
- applying this HIA methodology to a selected EU policy at both EU and Member State levels,
- actively disseminating the findings and the lessons learnt.

The project commenced in 2002 and synthesised a generic HIA methodology, EPHIA (version 1), in addition to selecting an EU policy, the European Employment Strategy (EES), to pilot this methodology on.

This report describes the HIA pilot on the European Employment Strategy at EU level.

1.2 Health Impact Assessment and the European Union

It is now generally accepted that non-health care policies are key determinants of public health. This reflects evidence from the Black Report (Townsend et al, 1982), The Health Divide (Whitehead, 1987) and more recently the Independent Inquiry into Health Inequalities (Acheson et al, 1998). HIA builds on the understanding that a community's health is determined by a wide range of variable economic, environmental and psychosocial influences as well as fixed factors such as heredity and age. HIA aims to identify what potential changes in health determinants might result from a new policy or project, for example an employment strategy, and what effects these changes might have on a defined population, for example communities affected by employment policies.

The elements of this approach have much in common with the established field of environmental impact assessment (EIA), and build on this methodology. However it has been recognised that impacts on human health were not an explicit concern of EIA. As such HIA methodologies have been developed. A number of countries in Northern Europe in particular have been active in the development and use of HIA, for example, the UK, Ireland, Germany, the Netherlands and Sweden.

Article 152 of the Treaty of Amsterdam (EC, 1999) made explicit the commitment of the EU to ensure that human health is protected in the definition and implementation of all Community policies and activities. However there has been no accepted methodology for assessing the impacts of EU policies on health within the Community, although many organisations are carrying out HIA at regional or Member State level. More recently, the proposal for a decision by the European Parliament and Council in the field of public health (Commission of the European Communities, 2002a) included objectives to 'support the development of health impact assessment methodologies and other relevant tools' (Commission of the European Communities, 2002a, objective 4.2) and to 'support pilot projects on the health impact of Community policies and actions' (Commission of the European Communities, 2002a, objective 4.3).

The 'Policy HIA for the EU' project is contributing to the EC's commitment to develop HIA methodologies and ensure EU policies protect human health.

1.3 Aim of the HIA pilot

The aim of the HIA pilot was:

To assess the potential health effects of the EES at EU level using the synthesised EU Policy HIA (EPHIA) methodology.

Specific objectives included:

- To undertake an analysis of the EES, Employment Guidelines and associated policies.
- To develop a baseline health profile of the EU with data relevant to the EES, with particular attention to health inequalities.
- To identify the perceptions of selected stakeholders and key informants of the EES and its potential health impacts.
- To identify and analyse evidence from the collected qualitative and quantitative data.
- To analyse the impacts on key health determinants and health/wellbeing outcomes from the assembled evidence for two scenarios:
 - Forecasts from baseline (no EES)
 - Forecasts from policy (with EES).
- To prioritise impacts and develop recommendations for DG Employment and Social Affairs.

2. Methods

2.1 Introduction

This section summarises the 'EU Policy HIA' (EPHIA) methodology and describes the methods used in this HIA to collect and analyse the primary and secondary data.

2.2 EPHIA methodology overview

Aims

The aim of the EPHIA methodology is:

'To estimate the effects of a DG proposed policy on the health of affected populations by the systematic application of rigorous methods, tools and procedures.'

The methods and procedures used in this Health Impact Assessment (HIA) reflect the generic EPHIA methodology. This is summarised in Table 2 below.

Table 2 EU Policy HIA Methods and Procedures

HIA procedures	HIA methods
Establish a Steering Group and Terms of Reference	Profile the area and communities
Carry out the health impact assessment	Documentary analysis
Negotiate the favoured option(s)	Data collection - involve stakeholders and key informants
Monitor and evaluate	Impact analysis - assess the importance, direction, scale and likelihood of predicted impacts from all data collected
	Consider alternative options
	Make recommendations for action - enhance positive or mitigate negative impacts
	Monitor and evaluate

Values

The EPHIA methodology is underpinned by an explicit set of values as described below:

<p>Shared Ownership - the assessment should be jointly owned by the assessors, DG proposing the policy, DG SANCO and the Secretary General's office</p> <p>Socio-environmental model of health - the assessment should identify potential impacts on a broad range of health determinants - economic, social, physical environment, lifestyle factors - which are known to or believed to have a known causal relationship with health outcomes</p> <p>Democratic/Public involvement - the populations affected should be involved in the process, e.g. through their elected representatives or where the likelihood, latency, scale and severity of the impacts warrants the involvement of members of affected communities themselves</p> <p>Robust - the assessment should include detailed design, rigorous methods and validated tools and measures</p> <p>Reducing health inequalities - the HIA should assess the differential distribution of impacts across the population; a special focus is on reducing health inequalities</p> <p>Objective - the identification of data sources and samples, the collection and analysis of data, and the identification of evidence of impacts from this data should be based on recognised research quality standards, ensuring the objectivity in the assessment</p> <p>Transparent - the assessment should have explicit, open methods and procedures, including decision-making</p> <p>Sustainable - both short and long-term impacts should be identified as well as the sustainability of recommendations</p> <p>Ethical - the assessment should be ethical in all aspects of data collection and analysis, the identification and valuing of different evidence, development and negotiation of recommendations and in reporting</p> <p>Practicable - the methods used and recommendations developed should be practicable and achievable</p>
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Establishing a steering group

An important influence in planning and undertaking a HIA is the engagement and commitment of key stakeholders to the process and outcome of the assessment. It is important to have a steering group comprising of key stakeholders with a range of expertise and perspectives that can also 'open doors' and ensure the outcomes of the health impact assessment are acted upon. A partnership approach is more likely to facilitate ownership and develop a more realistic understanding of what can and cannot be achieved when reviewing any recommendations for developing a policy, programme or project.

Potential members of a HIA Steering Group were selected from policy proponents, stakeholders - individuals or groups who have a 'stake' in the policy under investigation - and key informants - 'experts' or 'specialists' in the specific policy field, in this case 'employment' and 'employment and health'.

Table 3 HIA Steering Group - identified membership

HIA Assessment Team	DG Employment & Social Affairs
Employment policy academic	DG Economic & Financial Affairs
Employment & health academic	European Trade Union Confederation
European Public Health Alliance	Union of Industrial & Employers' confederation of Europe
European Anti-Poverty Network	Eurochambers

Terms of reference for the Steering Group were developed in addition to terms of reference for the EES (EU) HIA. The EES (EU) HIA terms of reference defined the scope and research design of the HIA.

2.3 Data collection

Documentary analysis

The documentary audit and analysis in EPHIA describes four document sources:

- the policy proposals and supporting documentation - in this case the EES and Employment Guidelines (Commission of the European Communities, 2002a) and the National Action Plan,
- official policy documents at EU level related to the EES and Guidelines,
- evidence of the social, economic, political, cultural and scientific context of the policy,
- evidence from the literature defining the relationship between policy interventions, the effects on health determinant and health outcomes, and 'determinants of determinants' - in this case a literature review was undertaken to consider up to date evidence on the relationship between employment and health and unemployment and health.

The audit involved document and literature searches followed by their systematic qualitative and quantitative analysis in order to identify:

- the rationale, context and strategies of the policy,
- the targeted populations and sub-populations who are affected, positively or negatively, by the policy,
- key informant and stakeholder sample groups,
- the health determinants affected and if known the magnitude of the effects,
- health promotion opportunities,
- the impacts of the proposed policy on other policies and vice versa,
- the results from output evaluations of other similar policies.

Health and demographic profile

Existing routine data was collected from a variety of different sources, for example, Eurostat, to define the baseline position of the following data categories:

- populations, e.g. population total, composition by age, gender,
- health status, e.g. mortality rates, perceived health & well-being,
- health determinants, e.g. unemployment, economic activity rates,
- 'determinants of determinants', e.g. mode of travel to work.

Stakeholder and key informants

The purpose of participatory, qualitative approaches is to gather evidence from the experience, knowledge, opinions and perceptions of populations affected by the policy (stakeholders) and people with expert knowledge (key informants). This evidence:

- provides a more in-depth picture of the range of health determinants affected by the policy,
- provides a detailed understanding of how they think this impacts on health outcomes and why,
- contributes to prioritisation of impacts,
- provides a valuable perspective on health inequalities,
- contributes to a robust HIA process by using triangulation (multiple methods),
- supports better policy-making.

Purposive and random sampling methods were used to generate the initial organisational stakeholder and key informants groups, followed by snowball sampling. Representatives from the following organisations were invited to participate:

Table 4 Stakeholder and Key Informant Groups invited to participate in the HIA

Stakeholder/Key Informant Category	Stakeholder/Key Informant
Organisational stakeholder - policy proponents	DG Employment & Social Affairs
Organisational stakeholder - relevant to the policy	DG Economic & Financial Affairs
Organisational stakeholder - social partners	European Trade Union Confederation, Union of Industrial & Employers' Confederation of Europe, Eurochambers
Organisational stakeholder (NGO/VS) - special interest groups	'AGE', European Anti-Poverty Network, European Women's Lobby, European Disability Forum, European Network against Racism, International Lesbian & Gay Association (Europe)
Key informants - Employment & health	University College, London European Foundation for Improvement of Living & Working Conditions
Key informants - Employment	Manchester Business School Institute for Employment Research

Planned data collection methods consisted of:

- focus groups in a workshop format, followed by,
- one to one semi-structured interviews (telephone),
- observation notes and written submissions,
- email discussion group.

Stakeholder and key informant engagement process

The engagement process was planned as follows:

- once organisations had been identified from sampling, a 'fieldwork plan' was developed,
- initial contact was made in writing and followed up by telephone,
- confirmation of the interview date/time/venue was made in writing,
- details of the HIA, a summary of the EES and Employment Guidelines and the question themes for the interview were circulated with the confirmation letter,
- consent forms were sent to interviewees for completion,
- expenses were reimbursed (where appropriate).

Development of question guides

The HIA team at IMPACT developed two question guides: one for employment stakeholders and key informants and one for stakeholders and key informants with a background in health and employment. Each was designed with a number of themes (table 5), which started with broad open questions and then focused down to more specific questions; all had supplementary questions and prompts. Table 5 below summarises the key themes used for community and organisational groups and individuals. A health impact matrix was used to record the potential positive and negative impacts.

Table 5 Themes for workshops and focus groups

Employment Question Themes	Employment and Health Question Themes
Unemployment trends in the EU, e.g. <ul style="list-style-type: none"> • Population sub-groups most affected? Why? How? • Effects on quality of life? Priorities? 	Effects of unemployment on health and well-being, e.g. <ul style="list-style-type: none"> • Physical, psychosocial health/wellbeing? How (causal relationship)? • Population sub-groups most affected? Why?
Employment trends in the EU, e.g. <ul style="list-style-type: none"> • Employment types? • Low pay? • Employee involvement? 	Effects of employment on health and well-being, e.g. <ul style="list-style-type: none"> • Employment types? • Low pay? • Employee involvement? • Who? How?
Effective interventions to reduce unemployment, e.g. for <ul style="list-style-type: none"> • Long-term unemployment? • Economically inactive? 	Effects of interventions to reduce unemployment on health and well-being, e.g. <ul style="list-style-type: none"> • Benefit claimant interviews?
Effective employment interventions, e.g. to <ul style="list-style-type: none"> • Increase productivity? • Increase innovation? 	Effects of employment interventions on health and well-being, e.g. <ul style="list-style-type: none"> • Increase flexible working? • Employee involvement?
Potential effects of the EES in the EU, e.g. <ul style="list-style-type: none"> • EU EES/Guideline targets? • Other health determinants - average income, educational attainment etc 	Potential effects of the Employment Guidelines across the EU, e.g. <ul style="list-style-type: none"> • EU EES/Guideline targets, on health and wellbeing?

Transcription and data analysis

As soon as possible after each interview the facilitator wrote down their broad impressions about how the interview went and any limitations or procedural variations they were aware of. Notes that were taken during the interviews were used to supplement the recorded transcripts. One-to-one interviews (face to face and telephone) were tape recorded and transcribed verbatim. Qualitative data was coded according to the themes generated, and analysed systematically for similarities and differences (Knodel, 1993; Silverman, 1993).

Content analysis - the systematic identification and analysis of key words and phrases in documents, transcripts, field-notes and recordings - has been used to analyse qualitative data.

2.4 Impact Analysis

Impact analysis involves assembling evidence of impacts from the different data sources, qualitative and quantitative, and defining:

- Health impacts - the health determinants affected and the subsequent effect on health outcomes.
- Direction of change - indicates a health gain (+) or loss (-).
- Latency - when the impact will occur - immediate, short, medium or long term.

- Measurability - refers to the measurability of the impact, quantitative (impacts that can be measured by direct indicators), qualitative (non-quantifiable opinions or perceptions), estimable (quantifiable impacts that cannot be measured directly, but can be estimated by proxy measures).
- Scale - severity of the impact (mortality, morbidity and well-being) and the size/proportion of the population affected - is represented by the number of symbols as follows:

Severity/population proportion	High	Medium	Low
Death	---- or +++++	--- or +++	-- or ++
Illness/injury	--- or +++	-- or ++	- or +
Well-being	-- or ++	- or +	negligible

- Likelihood - definite (retrospective HIA only) , probable, possible or speculative, based on the strength of evidence (eg evidence from systematic reviews or meta analyses) and number of sources (eg literature, stakeholders/key informants, documents).

2.5 Limitations to the study

All studies have limitations. This study presented many challenges. Firstly this HIA was a pilot being undertaken independently from the policy proponents; this affected the scope and also the access to data sources and networks. Secondly the scale of analysis of the HIA was multi-State; the practical considerations and resources required to engage community stakeholders meant that community group representatives were involved in their place via the Social Platform organisations. In addition there was limited appropriate European epidemiological evidence on, for example, the health effects of active welfare policies across the EU or the differential distribution in population sub-groups. Other threats to reliability and validity have been minimised by a robust research design including the use of multiple methods. A more detailed evaluation of the EPHIA methodology can be found in the final project report.

3. Policy analysis

3.1 Introduction

This section presents a contextual analysis of EU Employment Policy. The following areas are covered: the origins within the political, legislative and administrative context of the EU; the constituents of the EES and how they relate to one another; the principles upon which the EES is based and the policy context within which the EES operates are covered. In addition, programmes (for example, the European Social Fund) that have a direct relationship to the EES are considered.

The policy analysis process involved three stages:

- a systematic search (outlined in the appendix) of the primary source of EU public information, the EUROPA website, in order to identify key policies and legislation that are of relevance to the EES;
- the identification from the preliminary findings of the search, of policy/legislation that was of direct relevance to the 10 specific action areas of the EES Employment Guidelines;
- the identification and analysis of the core themes and applications of these policies as they relate to the EES.

3.2 The origins of the European Employment Strategy

The European Council (heads of state, assistants and the President of the European Commission) is the high-level policy-making body of the EU. It has responsibility for developing the economic and employment policies of the EU. These policies, in turn, are intended to co-ordinate the general economic and employment policies of the Member States. In relation to economic and employment matters the Treaty establishing the European Community gives the following main responsibilities to the Council:

- the Council is the Community's legislative body. For a wide range of Community issues it exercises legislative power in co-decision with the European Parliament. However, in relation to the EES the Council exercises its power in [consultation](#) with the European Parliament;
- the Council co-ordinates the general economic policies of the Member States;
- the Council concludes, on behalf of the Community, international agreements between the latter and one or more States or international organisations;
- the Council and the European Parliament constitute the budgetary authority that adopts the Community's budget .

The EU treaties can be found at http://europa.eu.int/eur-lex/en/search/search_treaties.html. In 1991, at the December EU summit at Maastricht, a commitment was made to an economic and monetary union. In addition to this, eleven of the twelve member states agreed to a social protocol. This social protocol contained provisions for the direct co-operation between the social partners (employers and trade unions) and the EU on certain issues. In 1995, at the Essen European Council on Employment, priorities for action in the field of employment were identified. This was followed by employment related meetings in Madrid and Dublin. Leading up to the extraordinary [Luxembourg European Council](#) (1997), meetings in Cardiff and Cologne reviewed states progress in carrying out the Essen employment strategy and conducted a best practice survey. The Amsterdam treaty (1997) added the promotion of employment to the list of community objectives. In order to reach the objective of a high level of employment the community was given a new area of responsibility involving the development of a co-ordinated strategy for employment. The Luxembourg European Council of November 1997 initiated the EES, also known as 'the Luxembourg process'.

At the [Lisbon European Council](#) (March 2000), the European Union set itself a new strategic goal (the 'Lisbon Strategy') for the next decade: 'to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion.' The EES is a key component of the

Lisbon strategy and the above objective is therefore central to the aims of the EES. The strategy was designed to enable the Union to regain the conditions for full employment and to strengthen cohesion by 2010. The objectives of achieving an overall employment rate of 70%, increasing the number of women in employment to more than 60% and older workers (aged 55-64) employment rate of 50% by 2010 were set.

European council meetings since Lisbon have made further contributions to the development of the EES:

- The [Santa Maria da Feira](#) European Council (June 2000) invited the social partners to play a more prominent role in the employment guidelines focusing particularly on modernising work organisation, lifelong learning and increasing the employment rate particularly of women.
- The [Nice](#) European Council (December 2000) approved the European Social Agenda which states "full employment involves ambitious policies in terms of increasing employment rates, reducing regional gaps, reducing inequality and improving job quality.
- The [Stockholm European Council](#) (March 2001) added two intermediate and one additional target: the employment rate should be raised to 67% overall by 2005, 57% for women by 2005 and 50% for older workers by 2010.
- The [Gothenburg European Council](#) (June 2001) added a sustainable development strategy to the economic objectives of the Lisbon Strategy.
- The [Barcelona Council](#) (March 2002) confirmed that full employment was the overarching goal of the EU and called for a reinforced Employment Strategy to underpin the Lisbon strategy in an enlarged EU.
- The [Brussels Council](#) (March 2003) invited the Commission to establish a European Employment Task Force to help "identify practical reforms that may have the most direct and immediate impact on the implementation by Member States of the revised employment strategy".

3.3 EES- how it works

The EES does not set binding rules for the Member States, which remain responsible for their employment policies. Instead it promotes convergence of employment policy through agreed objectives and a monitoring system, the 'open method of co-ordination' (OMC). The OMC differs from traditional regulation (directives, regulations and decisions) in that it imposes general standards rather than rules. The Member States can choose whether they implement European employment standards and also how they implement them.

The OMC also needs to be considered within the context of [subsidiarity](#), which is a core principle of the EU. Subsidiarity means that "all actions in social and political life should be performed by the smallest possible unit...This approach would mean that the EC "government" would do as little as possible, leaving most functions to the national and, perhaps especially, the subnational governments" (Peters, 1992). The OMC together with subsidiarity mean that the EU's role is one of policy guidance and it is at Member State and sub Member State level that decisions as to what and how employment policy is carried out will be made.

The co-ordination of national employment policies at EU level is built around several components:

Employment Guidelines

Each year following the Spring Council, the Commission makes a formal proposal of new Employment Guidelines and related national recommendations. The European Council agrees these Guidelines, which set out common priorities for Member States' employment policies. During the process of drafting the guidelines proposal the social partners, the European parliament, the Economic and Social Committee and the Committee of the Regions are consulted. These Guidelines must be consistent with the broad guidelines on economic policy. The Employment Guidelines and associated recommendations represent the annual priorities of the EES.

The Employment Guidelines can be found at

http://europa.eu.int/comm/employment_social/employment_strategy/guidelines_en.htm.

Recommendations

In addition to the guidelines the council often issues a number of country-specific recommendations (based on a proposal by the Commission). Recommendations are not sanctions, but are meant to provide additional guidance for Member States by directing their attention to issues that emerge from the analysis of all National Action Plans.

Recommendations can be found at

http://europa.eu.int/comm/employment_social/employment_strategy/recomm_en.htm.

National Action Plans

Member States respond to the Council's guidelines by each drawing up a National Action Plan (NAP) that describe how the employment guidelines are put into the national practice. The NAP presents the progress achieved in the Member State over the last 12 months and the measures planned for the coming 12 months. They are both reporting and planning documents.

NAPs can be found at

http://europa.eu.int/comm/employment_social/employment_strategy/national_en.htm.

Joint Employment Reports

The Member States submit their NAPs to the Commission for cross-national comparison and evaluation. The Commission and the Council jointly examine each National Action Plan. Member States also get the chance to review each other's NAPs at the Employment Committee, which consists of two officials from each member state and two commission officials. A Joint Employment Report (JER) is then created and sent to the to the European Council. That report contains country-specific information as well as a comparison of practices, establishing benchmarks and best practices.

JERs have recently been limited to a text of a more political nature, which summarises main developments, trends and challenges, while the more detailed in-depth analysis is now found in a separate document, called the Supporting Document. In the context of the new EES, the JER will become the main instrument for conveying key policy messages on employment and labour market measures to the Spring European Council (see

http://europa.eu.int/comm/employment_social/employment_strategy/employ_en.htm).

The Council meets during the spring and summer of each year to discuss, amend and approve a new employment strategy. The European Council also gives annual direction to the EES.

3.4 EES features

The EES views low employment rates as the main problem rather than high unemployment, which leads to the emphasis being on employment creation rather than unemployment reduction. In practical terms this means that Member States should not just focus on getting unemployed people back into work but should also encourage people who are not

participating fully in the labour force or inactive such as women, immigrants, older people, people with disabilities etc. Member States need to identify the obstacles to inclusion in the labour market and encourage measures such as lifelong learning, gender equity strategies and promoting the inclusion of marginalised groups into the . The EES also encourages active labour market policies. Active labour market policies encourage the unemployed into the labour force whereas passive labour policies relate to guaranteeing income and protection for unemployed people.

There are three overarching and interrelated objectives of the Employment Guidelines (reflecting those contained within the Lisbon agenda); full employment, quality and productivity at work, and social cohesion and inclusion. The Guidelines also identify ten specific action areas. The present Guidelines are as follows:

1. Active and Preventative Measures for the Unemployed and Inactive
2. Foster Entrepreneurship and Promote Job Creation
3. Address Change and Promote Adaptability and Mobility in the Labour Market
4. Promote the Development of Human Capital and Lifelong Learning
5. Increase Labour Supply and Promote Active Ageing
6. Gender Equality
7. Promote the Integration of and Combat Discrimination Against People at a Disadvantage in the Labour Market
8. Make Work Pay through Incentives to Enhance Work Attractiveness
9. Transform Undeclared Work into Regular Employment
10. Address Regional Employment Disparities

In the most recent proposal for employment it is planned to only review the Guidelines every three years. It is recommended to use "more forceful recommendations and more effective use of peer review, rather than engaging in a process of further change of the Guidelines" (Commission of the European Communities, 2004).

There were also specific targets set by the European Council itself.

The targets are:

- personalised job search plan for all unemployed before fourth month of unemployment by 2005,
- work experience or training for all unemployed before twelfth month of unemployment (before six months for young and vulnerable) by 2005,
- 30 percent of long-term unemployed in work experience or training by 2010,
- reduction of 15 percent in rate of accidents at work, and a reduction of 25 percent for high-risk sectors by 2010,
- 80 percent of 25-64 year olds to have at least upper secondary education by 2010,
- increase rate of participation of adults in education and training to 15 percent on average in the EU, and to at least 10 percent in every Member State by 2010,
- increase in investment by companies in training of adults from the existing level of the equivalent of 2.3 percent of labour costs up to 5 percent of labour costs on average in the EU by 2010,
- an increase in the effective average exit age from the labour market from 60 to 65 years on average in the EU by 2010,
- elimination of gender gaps in employment and halving of gender pay gaps in each Member State by 2010,
- childcare places available for 33 percent of 0-3 year olds and 90 percent of those from 3 years to mandatory school age in each Member State by 2010,
- halving of the school drop-out rate in each Member State and reduction of EU average drop-out rate to 10 percent by 2010,
- reduction by half in each Member State in the unemployment gaps for people defined as being at a disadvantage in accordance with national definitions by 2010,
- reduction by half in each Member State in the employment gap between non-EU and EU nationals by 2010,

- all job vacancies advertised by national employment services should be accessible and be able to be consulted by anyone in the EU by 2005,
- national targets to be set for: business training; reduction of red tape for startups; per capita increase of public and private investment in human resources; tax burden on low-paid workers; undeclared work.

3.5 Other EU level policies relevant to the EES

Although almost all EU policies are in some way relevant to employment, in the following sections some EU policies that impact directly or indirectly on the EES and in turn labour markets are identified. These include; structural actions, legislation such as regulations and directives, other associated programmes and policies such as the Broader Economic Policy Guidelines (BEPGs), education, sustainable development policy.

The Structural Funds

The Structural funds and particularly the [European Social Fund](#) (ESF) are the main financial tool through which the European Union translates its strategic employment policy aims into action. The ESF channels its support into strategic long-term programmes which help regions across Europe, particularly those lagging behind, to upgrade and modernise skills and to foster entrepreneurial initiative.

More recently a community initiative to combat all forms of discrimination and inequality in relation to the labour market has been launched ([EQUAL](#)) with a budget of €2,847 million. The priority areas of EQUAL are defined in the context of the four pillars of the employment strategy. The two core objectives of EQUAL are combating inequalities and discrimination in the labour market and integrating equality of opportunity in the framework of Structural Funds.

Community legislation

There is a range of community legislation directly addressing employment policy. The OMC can be described as 'soft law' because of its voluntary nature. Some of the employment related legislation provides the 'hard law' that requires Member States to conform with issues that are already to certain degree contained within the EES priorities and the [Community Charter of Fundamental Social Rights for Workers](#). [Regulations](#) and [directives](#) are the most legally binding forms of EU policy/legislation. Regulations apply in full to all Member States. A directive, in comparison, does not supersede the laws of the Member States but places the Member States under an obligation to adapt their national law in line with Community rules. What the directive aims for, then, is not the unification of the law, which is the regulation's purpose, but its harmonisation.

The Community Charter of Fundamental Social Rights for Workers establishes the major principles on which the European labour law model is based and, more generally, the role of work in society. As the basis of EU labour law, the Charter of Fundamental Social Rights for Workers is the foundation upon which all subsequent employment legislation is based. This includes all of the following legislation on employment.

The EES specifically calls for the promotion of integration and the combating of discrimination against people at a disadvantage in the labour market. The following directives and regulations address this issue; the Employment Directive (2000/78/EC), entitled "[establishing a general framework for equal treatment in employment and occupation](#)", outlaws discrimination on grounds of sexual orientation, religion or belief, disability and age in employment and vocational training. In December 2003 the Employment Equality (Sexual Orientation) Regulations 2003 and the Employment Equality (Religion or Belief) Regulations 2003 came into force.

The [Working Time Directive](#) (93/104/EC 1993 amended by: Directive 2000/34/EC 2000) lays down the minimum safety and health requirements for the organisation of working time in the

EU. The Directive applies to minimum periods of daily rest, weekly rest and annual leave. In addition, it also sets out maximum weekly working time and certain aspects of night work, shift work and patterns of work. The effectiveness of this legislation may to a certain extent be limited. This legislation is derogable so Member States can choose to allow exceptions, particularly in the case of managing executives and family workers. Directive ([97/81/EC 1997](#)) sets out the general principles and minimum requirements for member states. The purpose of the directive is to prevent discrimination against part-time workers and to improve the quality of part-time work; it also intended to encourage voluntary flexible work.

The EU has also developed a directive on the working conditions of temporary workers. "The basic working and employment conditions, applicable to temporary workers should be at least those which would apply to such workers if they were recruited by the user undertaking to occupy the same job" (Commission of the European Communities, 2002). This legislation is of relevance to the overarching aims of the EES and the specific guidelines. The directives relating to temporary and part-time work both share the objectives of reducing and preventing discrimination against flexible types of workers and to encourage flexible forms of work which are both key elements of the EES.

Associated policy/programmes

BEPGs: the EU's medium-term economic policy strategy is laid down in the [Broad Economic Policy Guidelines](#) (BEPGs). The Commission presented its 2003 policy guidance to the European Council in April in the form of its 'Guidelines Package' which contain the BEPGs, employment guidelines and employment recommendations (COM (2003) 170 final). For the first time, the European Commission adopted in streamlined form its proposals for the BEPGs and for the employment guidelines and recommendations. This is in order to ensure greater cohesion and effectiveness of these highly significant policy instruments. The BEPGs (COM (2003) 170 final) focus on the contribution that economic policies can make to achieve the strategic Lisbon goal. The BEPGs make both general and country-specific recommendations.

Education: education and training is of relevance to the overarching objectives of the EES and many of the specific guidelines of the EES, for example:

- Promote the development of human capital and lifelong learning.
- Promote the integration of and combat discrimination against people at a disadvantage in the labour market.

There are a range of EU education programmes such as; SOCRATES which promotes lifelong learning and the development of a knowledge-based society in Europe, The Tempus programme which is basically a Higher Education Co-operation scheme between EU Member States and Central and Eastern European Partner Countries, the YOUTH programme started in spring 2000 is the EU's mobility and non-formal education programme targeting young people aged between 15 and 25 years and the Leonardo da Vinci Programme that aims 'to contribute towards the creation of a European education area through the promotion of lifelong learning (this relates to Guideline 4) and continued Community-level co-operation between actors in the field of vocational training'. The Copenhagen declaration outlines the EU strategy towards enhanced European co-operation in vocational education and training.

Social inclusion process: the European Councils in Lisbon and in Feira made the promotion of social cohesion an essential element in the global strategy of the Union to achieve the Lisbon Agenda. The objectives of the EES mirror those of the Lisbon Strategy. Social inclusion is therefore a central objective of the EES. Employment is seen to be "the best safeguard against social exclusion". The EES itself emphasizes the balance between encouraging flexibility while also providing security. However flexible workers often do not have the same access to security measures (such as unemployment benefits) as traditional workers.

Sustainable Development: The Stockholm European Council decided that the EU sustainable development strategy should complete and build on the political commitment in the Lisbon strategy by including an environmental dimension. This recognises that in the long term, economic growth, social cohesion and environmental protection must go hand in hand. The Sustainable Development Strategy (EC, COM (2001) 264 final) did not propose new action for two of the key sustainable development issues: combating poverty and social exclusion, and dealing with the economic and social implications of an ageing society. These were felt to be adequately addressed by the EES and other policies. However, the 2001 objectives did propose new action that indirectly relates to the EES, for example, breaking the links between economic growth, the use of resources and the generation of waste, promoting more balanced regional growth in economic activity, and changes in passenger transport use.

3.6 The EES and national level employment policy

The EES may affect national employment policy in different ways. For example it may lead a Member State to consider a policy issue that it has previously ignored or it may change the emphasis a State places on different policy areas (i.e. a Member State recommendation might advise Germany to focus more strongly on encouraging older workers to keep working whereas Germany might have previously been focusing on other areas). It may even lead to policy areas being ignored if the EES ignores them as well. For example, the Member State may have reached the target set by the EES such as the UK with an overall employment rate of 74.7% in 2002, 69.9% for older workers (Spring 2003) and 69.8% for women (Spring 2003). The EES may also be used by national governments to legitimise employment policy that they intend to carry out. It can be used to convince groups (*the EU says it's good so it must be*) or the EU can also be blamed for unpopular policy decisions (*we know it hurts but the EU says we should*). Alternatively Member States can 'cherry pick' particular Guideline areas (*look how good we are doing here*) and downplay more challenging action or those where there may be political, cultural or ideological differences.

Since the OMC is voluntary the EU cannot act as the enforcer in a traditional sense (though the contractual arrangements of the specific ESF projects/programmes are enforceable). Whilst Member States are actively involved in developing employment policy, there may be different levels of 'buy in' to specific objectives, action and targets because of different local contexts. The OMC process is a powerful means of providing both support and pressure on Member States. The sharing of best practice is particularly welcome. However, by requiring countries to submit their NAP, Member States have to account for their employment policy, explaining why they may not be fulfilling certain EES priorities. The openness of the OMC and the development of indicators enable the EU to make comparisons between countries. In the JER, countries are compared with each other and benchmarks are identified. It may be a source of embarrassment for Governments to be identified as lagging behind other countries.

This has implications for carrying out a HIA at both Member State and EU level. If the EES consisted of binding law that had to be directly transferred into Member States' law and policy then the HIA would be able to identify how the same law impacts differently in different Member States. However with the EES every member state may choose different aspects of the EES to focus on or might even choose to ignore aspects of it. Even if all member states choose to focus on particular issues (for example, delaying the average retirement age by five years) they are free to choose how they do this; which could in turn have different health impacts.

The non-binding nature of the EES also means that it is very difficult to identify policy changes at national level that are as result of the EES. For example, in the five-year evaluation of the EES it is stated "It is obviously difficult to establish how much of the overall improvement in employment performance in the Union during the past five years can be attributed to the introduction of the EES and how much to economic improvement" (Commission of the European Communities, 2002b).

However, although the EES may be implemented in different ways in different countries, there remain the overarching objectives and the priorities that are identified in the yearly employment guidelines. These objectives, priorities and related targets are the focus of the HIA. In order to identify the possible health impacts of the EES we have to ask the question- what would it mean for health if the EES was successfully implemented and these targets were reached?

4. EU Profile

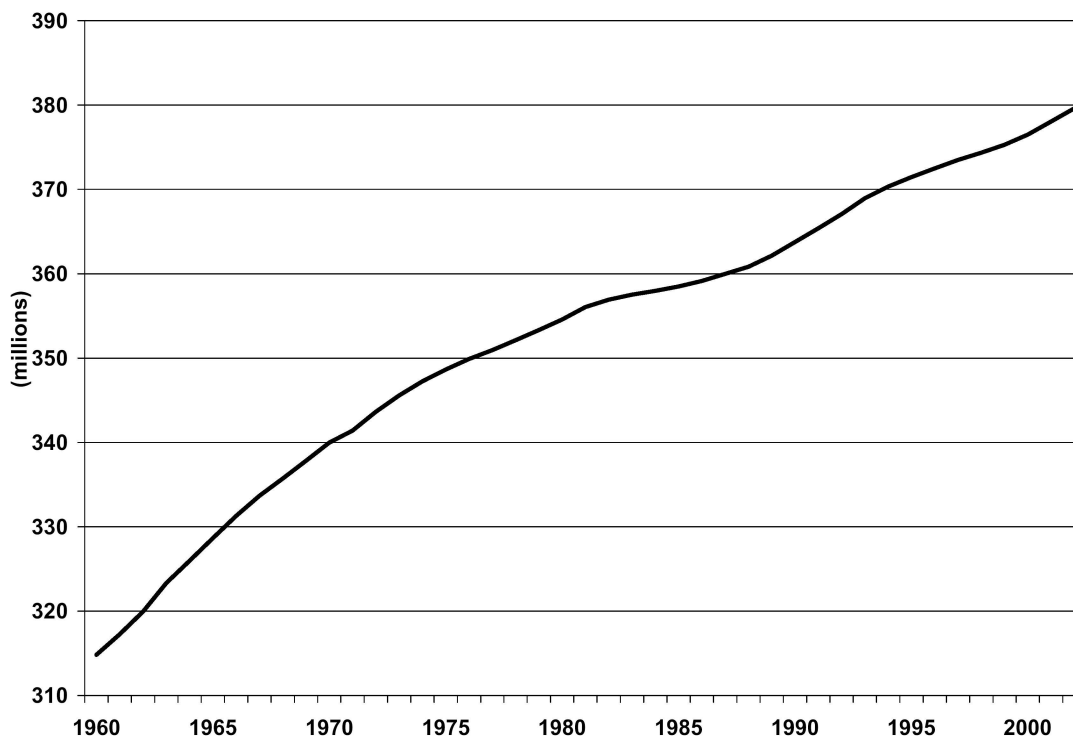
4.1 Introduction

A common set of indicators was developed for the pilot HIAs. This core indicator set was then adapted for each individual pilot. Alongside identified core indicators additional data were collected which were considered relevant for assessing the potential health impacts of the EES. The EU profile has been produced using a wide range of source materials from Eurostat. This includes data on population, employment and social conditions, health including work and health.

4.2 Population Status

At 1 January 2002, the total population of the European Union was 379.6 million. The EU population grew by 1 564 000 persons in 2001 - a trend very similar to that of 2000. Figure 2 shows the development of the total EU population since 1960. Table 6 shows the development of the working age population (total EU workforce) between 1997 and 2002.

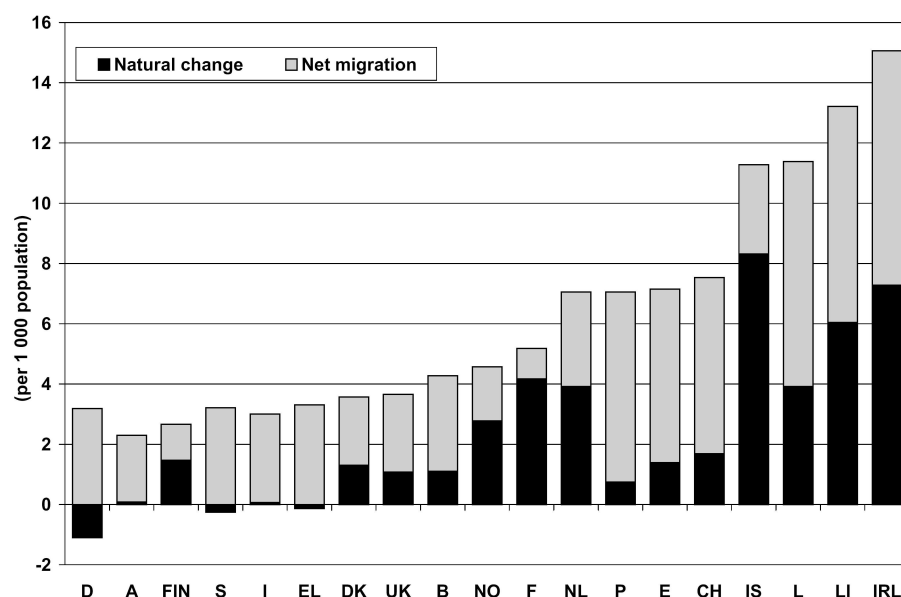
Figure 2 Total population EU-15 1960-2002



Source: Eurostat, 2003

Net migration is responsible for some three quarters of the total population growth of the EU population since 1999, equaling or even breaking the 1993 and 1995 post-war records. Since 1999 Spain and Germany have registered the highest net migration figures in the EU. Ireland has the highest natural growth rate in the European Union at 7.3%. The natural growth rate is however negative in Germany (-1.1%), Sweden (-0.3%) and Greece (-0.1%). Were it not for positive net migration, these three countries would see their populations fall. Figure 3 shows the population increases according to natural change and net migration rates for EU countries.

Figure 3 Crude rate of population increase, 2001 (per 1000 population)



Source: Eurostat, 2002

Table 6 Total workforce of the EU-15, 1995-2002

Sector (NACE)	Men		Women		Total	
	Number in 2002 (thousands)	Change (%) in 1995-2002	Number in 2002 (thousands)	Change (%) in 1995-2002	Number in 2002 (thousands)	Change (%) in 1995-2002
Total workforce	91 389	6	69 417	14	160 806	10

Minority groups

Because Member States differ so much in the composition and origin of their minorities, how these are defined, what status they have and what rights they may enjoy, it is difficult to present a clear-cut picture regarding the composition of the resident population in the European Union in terms of immigrant background and/or ethnicity. The data collected and the definitions employed do not necessarily represent an accurate picture of the diversity within the societies (International Centre for Migration Policy Development, 2003). This has implications for the EES and comparing the relative success of Member States in combating discrimination in the labour market.

Roma (including Sinti; Irish Travellers are sometimes also subsumed under this category) are present in every Member State. Their overall number in Europe is somewhere between 1.2 and 1.7 million, and according to Roma rights groups, may be well above. Arguably, Roma may be considered one of Europe's largest ethnic minorities. A number of countries recognise Roma as an official minority (e.g. Austria, Germany, Finland and Sweden).

Table 7 Roma/Sinti/Traveller Population in Europe (in 1,000)

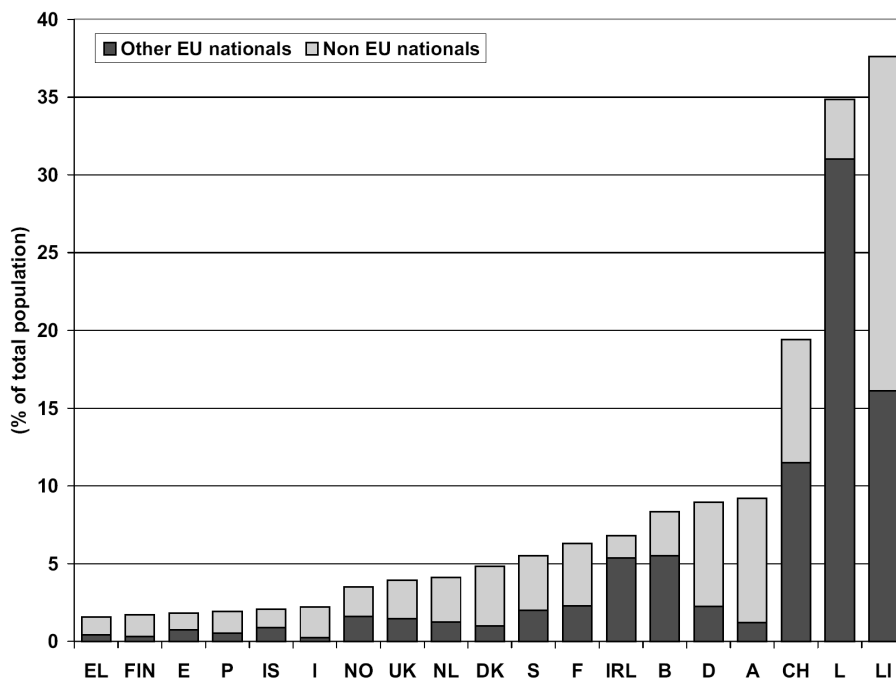
	A	B	DK	SF	F	G	GR	IRL	I	LX	NL	P	E	S	UK
Low estimate	20	25	1.8	10	280	70	150	10.9	130	0.1	23.5	40	325	40	90
High estimate	50	30	1.8	10	340	70	300	10.9	130	0.15	23.5	40	400	50	300

Source: Europe (2002): Legal Situation of Roma in Europe, DOC 9397 (19/04/02)

When it comes to immigrant minorities, the easiest category to define is probably the category of foreigners (non-nationals). In addition, figures on them are collected in every Member State of the European Union. In total, about 20 million foreigners reside in the EU-15 (total population of approximately 378 Million). The proportions of non-nationals in the populations of the EU member states differ widely: from 1.6% in Greece to 34.9% in Luxembourg. Luxembourg also has the highest proportion of other EU nationals, mainly due to its status as an international financial services centre and the EU institutions based there, both factors attracting significant numbers of foreign workers, predominantly from other parts of the EU. Without Luxembourg their share averages 5%. The proportion of non-EU nationals has increased significantly, from 2.3% in 1985 to some 3.5% in 2000, Austria (5.6%) and Germany (6.6%) having the highest percentages of non-EU nationals in their populations.

In general, the number of foreigners will tend to be larger in countries in which access to citizenship is more difficult and tied to longer waiting periods. Conversely countries with liberal naturalisation rules and practices, will have a lower foreign resident population (International Centre for Migration Policy Development, 2003).

Figure 4 Proportion of non-nationals by main groups of citizenship, 2000

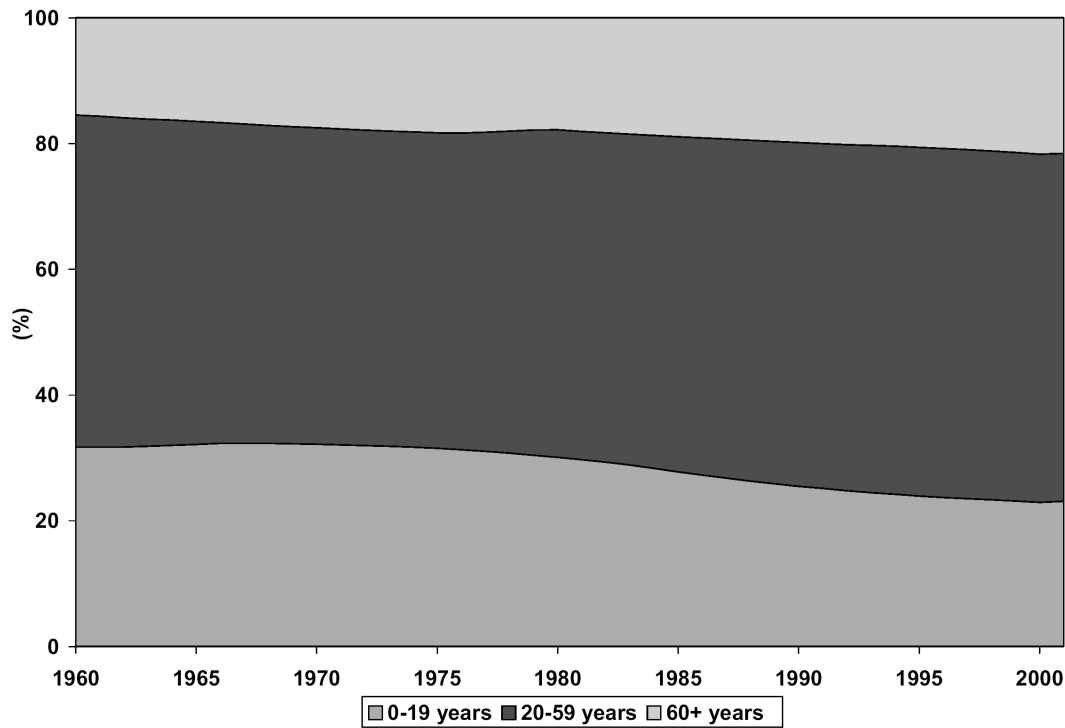


From: Labour force survey results 2002, Eurostat 2002.

4.3 Population structure and projections

Over the last 40 years, the population of the EU has become 'greyer' rather than greener: between 1960 and 2001 the proportion of young people in the total EU population dropped from 32% to 23%, whilst that of the elderly rose from 16% to 22%. Figure 5 shows the development of the EU population by age groups.

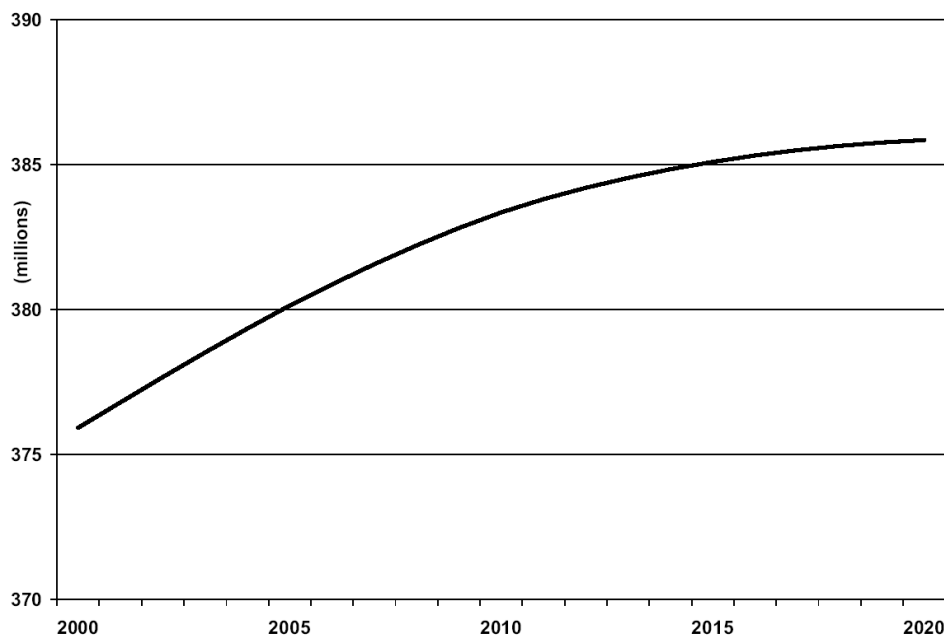
Figure 5 Population of EU-15 by broad age groups, 1960-2001



Source: Eurostat, 2000

According to the latest national population forecasts compiled by the National Statistical Institutes, a number of new demographic developments will occur over the coming two decades. First, after peaking at some 385 million people, 6 million more than in early 2000, the total EU population will probably stagnate and start to decline around 2020 (Figure 6). Germany, Italy and Spain will already be facing population losses within 10 years.

Figure 6 Total population of EU-15, 2000-2020, latest national forecasts



Source: Eurostat, 2002

It is expected that the 'dejuvenation' process will be coming to an end before 2020, but the ageing of the population will accelerate as the large post-war 'baby boom' generations reach the age of 60. At present, about 47% of the potential labour force is over 40 years old. By 2015, this proportion will reach levels of \pm 55%. Currently, 23% of the total EU population is under 20 years of age. By 2010, this figure will fall to around 20%, and remain more or less stable thereafter. Ireland will still be the youngest Member State, and Germany and Italy the most dejuvenated. In all probability the rate of growth of the working age population will become negative in the near future. Immediately after 2005, when the first, large post-war 'baby-boom' generations pass the age of 60, a fairly long period of decline will start. At the same time, the less numerous generations born during the 1980s and 1990s will join the labour force. Again, future net migration flows will be unlikely to offset these losses.

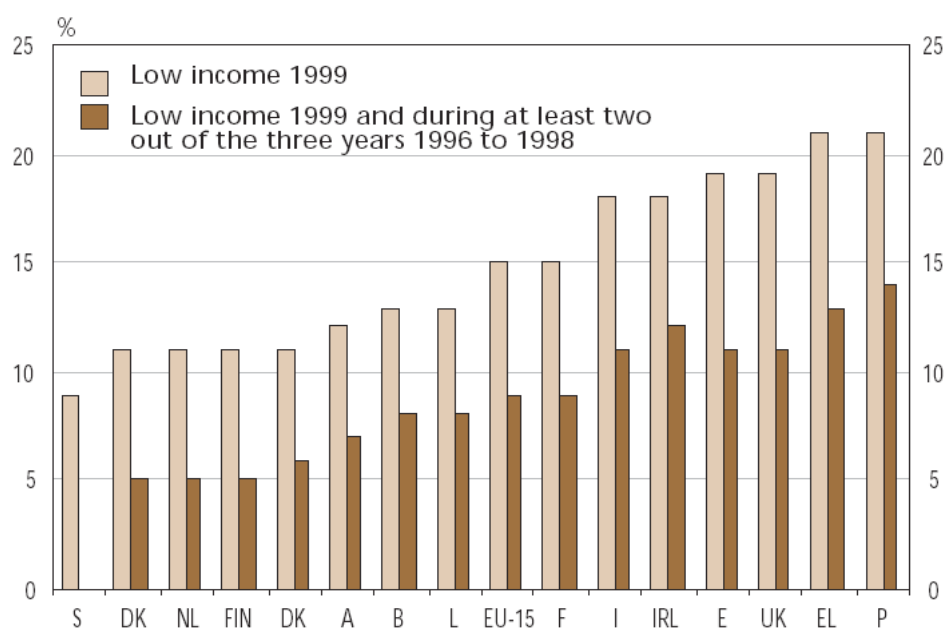
4.4 Income distribution

As a population-weighted average in EU Member States in 1999, the top (highest income) 20% of the population received 4.6 times as much of the total income as the bottom (lowest income) 20% of the population. This gap between the most and least well-off people is smallest in Denmark and Sweden (3.2%), followed by Finland, Germany, Netherlands and Austria. It is widest in the southern Member States, Ireland and the United Kingdom.

Low-income households

When looking at the total population, around 15% of EU citizens had an income that was less than 60% of their respective national median in 1999. This figure represents around 56 million people. Using 60% of the national median as a cut-off threshold, the proportion of people at risk of poverty was relatively higher in Greece and Portugal (21%), followed by Spain and United Kingdom (19%) - and was relatively lower in Belgium, Denmark, Germany, Luxembourg, the Netherlands, Austria and Finland (11 to 13%) (see Figure 7). It was particularly low in Sweden (9%). Social benefits reduce the proportion of people at risk of poverty in all Member States but to very differing degrees: the reduction ranging from around 5% in Greece to almost 70% in Sweden.

Figure 7 At-risk-of-poverty rate (after social transfers) and At-persistent-risk-of-poverty rate, 1999

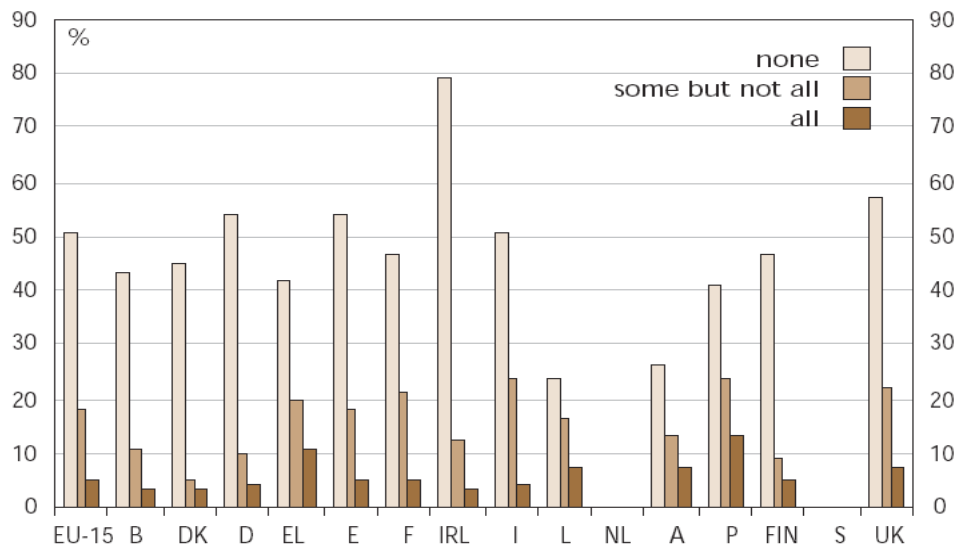


Source: Eurostat - European Community Household Panel, UDB, version December 2002

Jobless households and low wages

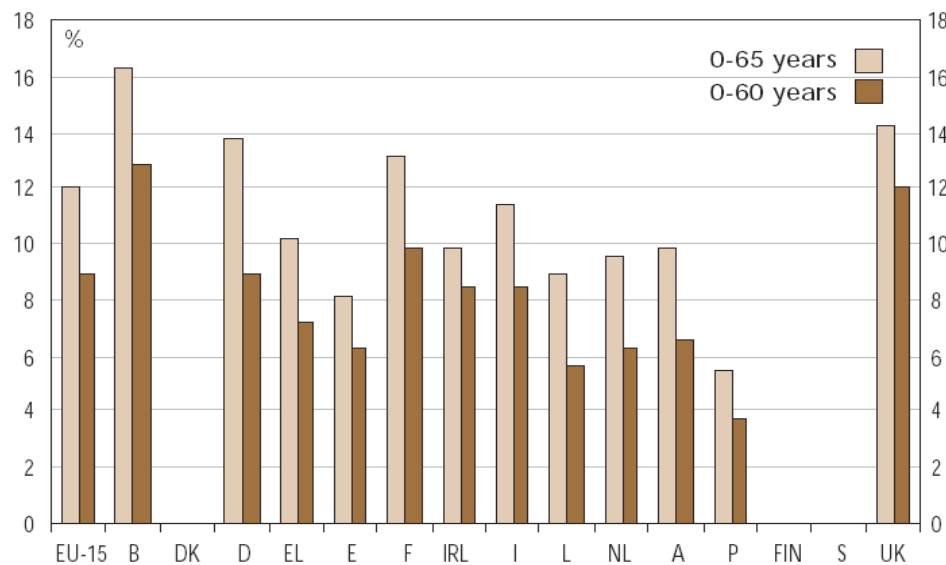
An important cause of poverty and social exclusion is the lack of a job or low paid work. In 1999, the 'at-risk-of-poverty' rate for people living in households where no people of working age are in employment was 51% - almost 3 times as high as the rate where at least one person is working (see Figure 8 and Figure 9).

Figure 8 At-risk-of-poverty rates among people living in households where none, some or all people of working age are in employment, 1999



Source: Eurostat - European Community Household Panel UDB, version December 2002

Figure 9 Population in jobless households, 2002

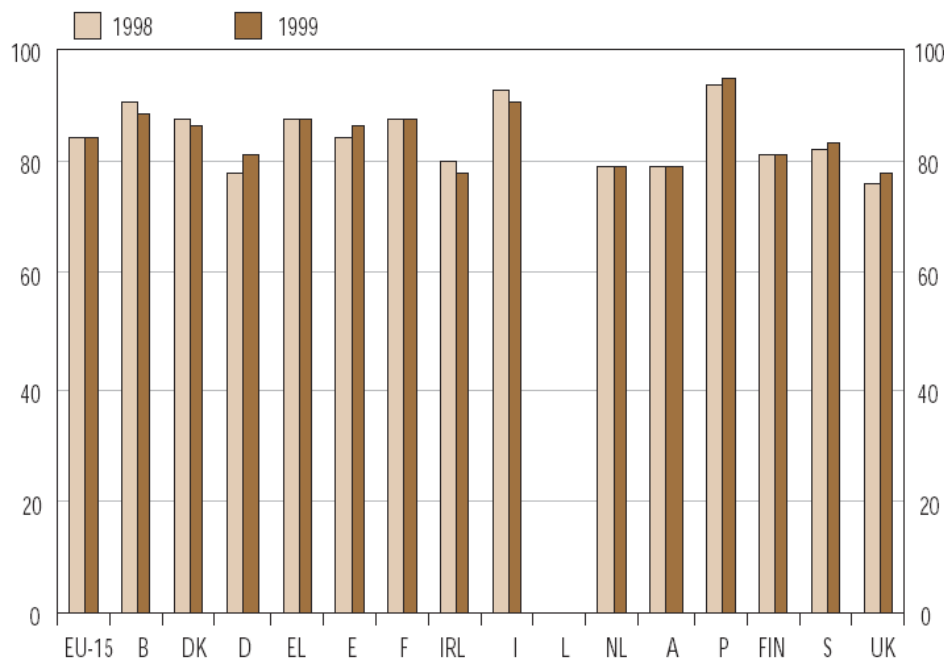


Source: Eurostat - European Labour Force Survey

Earnings of women and men

EU-wide, the average gross hourly earnings of women in 1999 were estimated at 16% less than the gross hourly earnings of men. The smallest differences are found in Portugal, Italy, Belgium and France, the biggest in the United Kingdom and Ireland (see Figure 10). To reduce gender pay differences both direct pay-related discrimination and indirect discrimination related to labour market participation, occupational choice and career progression have to be addressed.

Figure 10 Gender pay gap in unadjusted form 1998 and 1999



Source: Eurostat - European Community Household Panel UDB version December 2002 (except F: National Labour Force Survey, NL and S: Earnings Surveys.)

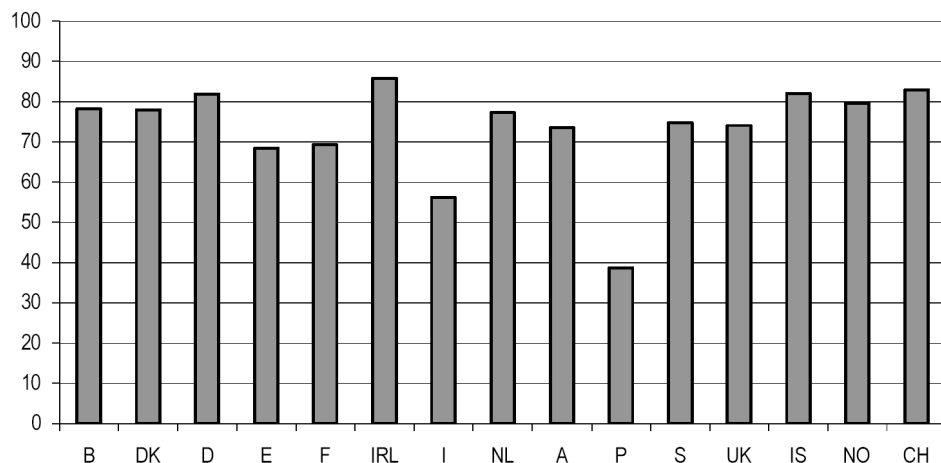
4.5 Health status

Perceived Health

Among the countries considered, health is perceived as “least good” in Portugal at all ages, probably because of cultural attitudes towards the question asked. Italy displays a similar pattern, but to a lesser extent. The two other southern countries (Greece and Spain) also display a lower degree of satisfaction than other countries, together with France, whose data depend on a recoding procedure. Ireland (86%) and Germany (82%) have high levels of perceived health¹ (Figure 11).

¹ The comparability between countries is limited because perceived health is based on national data with different categories.

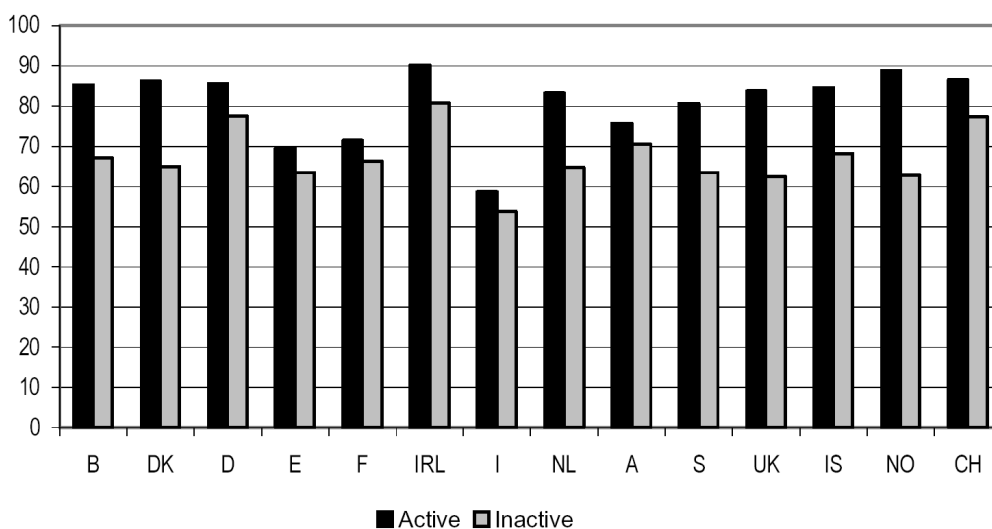
Figure 11 Percentage of population perceiving their health as 'good' or 'very good', by country



Source: Eurostat (2003) Health in Europe, from National data

After adjustment for age, women express less satisfaction with self-perceived health than men in all countries but two (Ireland and Iceland). In the three southern European Member States women display the least degree of satisfaction in comparison to men. Among the youngest groups, self-perceived health is generally perceived as good, and declines with age up to the 75-84 age group. This decline varies among countries, being very steep in Italy but much less so in Switzerland. Several countries display a reversal in perceived health after age 75-84, which can be explained by several factors: with increasing age, individuals increasingly tend to compare their own health with the health of persons of similar age, or in relation to their own survival in their generation. Several studies have shown that, with an apparently similar health status, mortality is much higher among those tending to perceive their health as 'bad' or 'very bad'; with a resulting higher survival of more optimistic elders. In all countries, the higher the formal educational level, the higher the satisfaction with self-perceived health. Economically active people also tend to perceive their health as being better than the economically inactive (figure 11).

Figure 12 Percentage of population perceiving their health as 'good' or 'very good', by activity status



Source: Eurostat (2003) Health in Europe, from National data

Disabled people

The prevalence of disabled people varies considerably across countries. This is partly according to estimates based on national surveys (various years) and ECHP (1996) explained by the different indicators used to define disability.

Table 8 Percentage of persons (aged 16-64 years) with self-reported disability

	A	B	DK	FIN	F	D	EL	IRL	I	L	NL	P	E	S	UK
Surveys	29.0	17.0	7.0	5.0	3.1	6.9	2.2		1.6	8.0	16.4		5.8	17.1	18.8
ECHP	12.5	12.9	17.4	22.9	15.3	17.3	8.2	10.9	7.8	16.5	18.6	18.4	9.9		18.8

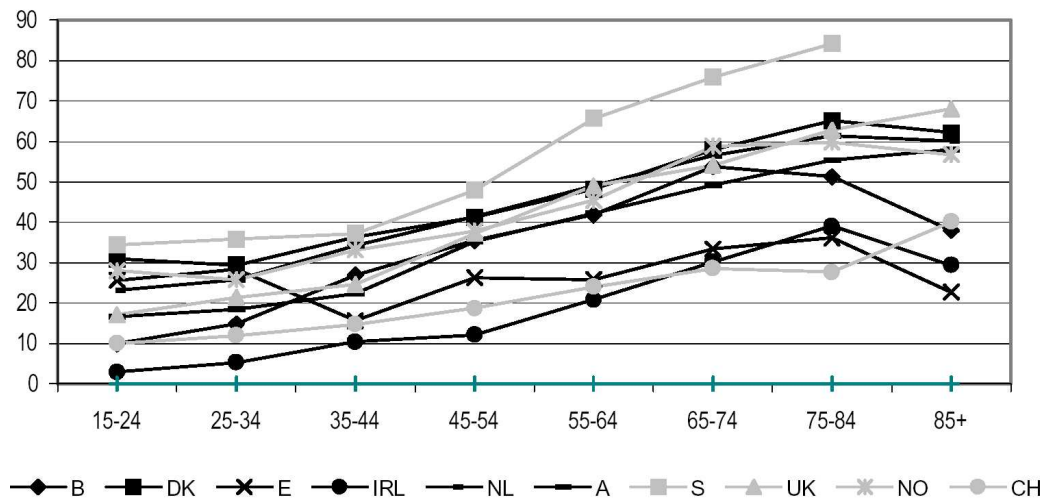
A : Based on Microcensus 1995.
 B : Based on Health survey 1997.
 DK : Based on The Danish National Institute of Social Research 1995.
 FIN : Based on table Finnish Committee for the International Year of Disabled Persons, percentage of population, 2000.
 F : Based on INSEE, 1999.
 D : Based on SOEP, 1998.
 EL : Based on NSSG, 1991; Estimate expert 10%.
 IRL : No data available.
 I : Based on ISTAT, 1994.
 L : Estimate by expert.
 NL : Based on AVO, 1999.
 P : No data available.
 E : Based on Spanish Survey on Disabilities (Encuesta sobre Defidenecias, Discapacidades y Estado de Salud, 1999)
 S : Based on Statistics Sweden, 1999.
 UK : Based on Labour Force Survey, 2000.
 Source: country profiles and 3rd wave of ECHP (1996).

Chronic conditions

It is difficult to compare chronic conditions between countries as the data is collected in different ways. The rates of chronic conditions found in Ireland, Switzerland and Spain, which cover just longstanding illness or health problems limiting daily activities or work, are generally lower than those in other countries. Norway, Denmark and Sweden have generally higher rates than other countries in all age groups. However this may be due to the specific inclusion of the consequence of injuries as health problems. All countries display similar patterns of increasing rates with age, at least up to the 75-84 age group (Figure 13 and Figure 14). However, the reversal found in the 85+ age group, especially among women, can be attributed to a variety of causes. After adjustment for age and gender, a higher educational level is associated in almost all countries with a lower probability of having a longstanding illness or health problem.

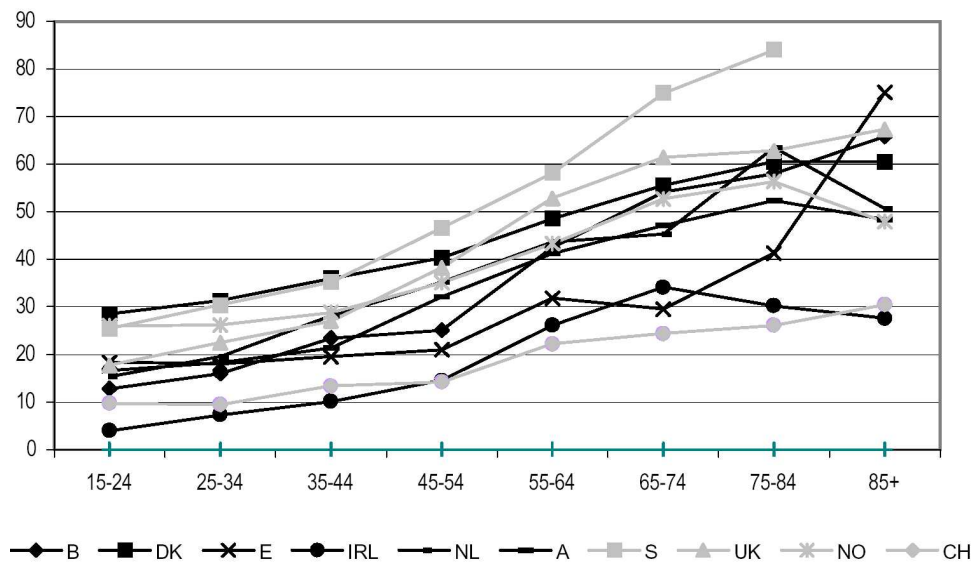
Economic inactivity due to chronic health conditions is clearly an important factor to consider in employment policy.

Figure 13 Percentage of female population with a longstanding illness or health problem, by age



Source: Eurostat (2003) Health in Europe, from National data

Figure 14 Percentage of male population with a longstanding illness or health problem, by age

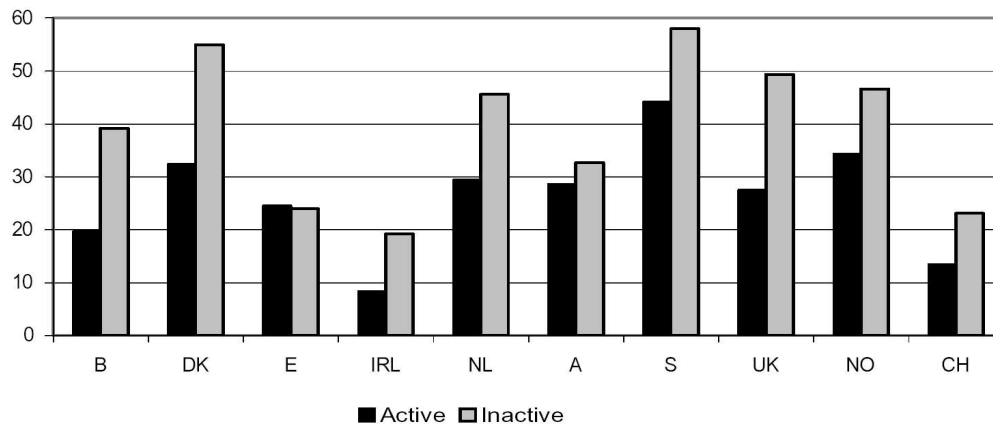


Source: Eurostat (2003) Health in Europe, from National data

Economic activity and longstanding illness or health problem

Not surprisingly, being economically inactive is associated with a higher probability of having a longstanding illness or health problem. This, however, is not the case for Spain and Iceland. The three countries that included only longstanding illnesses or health problems that limited daily activities or work (Spain, Ireland and Switzerland) have the lowest overall levels of longstanding illnesses or health problems. Ireland along with the UK, are the only countries with a higher rate for males than for females. The rate is less age related in Spain than in any other country, and a weak relation is also found in Switzerland, but not in Ireland. Ireland displays the strongest association of health problems with economic inactivity, and no effect (if not an opposite effect) is found in Spain.

Figure 15 Percentage of population with a longstanding illness or health problem, by activity status



Source: Employment – From: Labour force survey results 2002

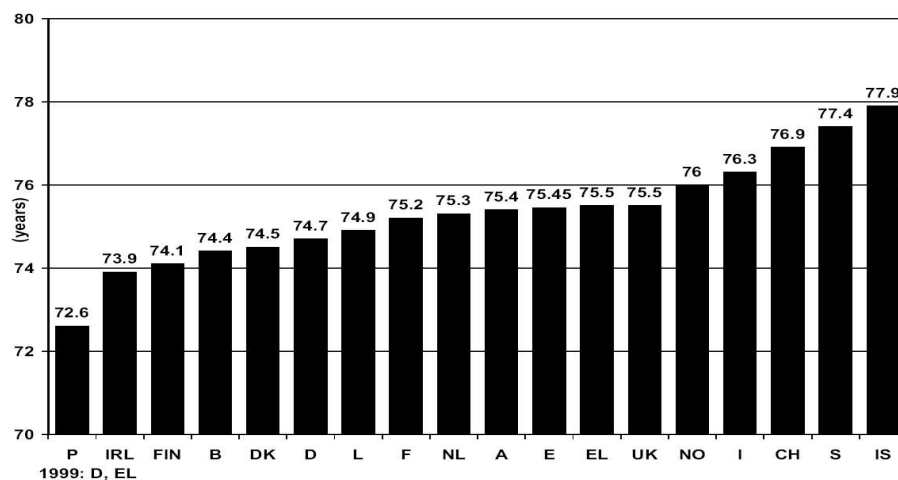
Life expectancy

Life expectancy at birth continues to rise and is now more than 81 years for women and 75 for men. In all Member States, women live longer than men. Healthy life expectancy across the EU has also increased; women can expect to live to 66 and men to 63 years of age without any disability. There are clear implications for employment policy from the increase in longevity, but more importantly of the increase in healthy life expectancy. If the working lifespan is to increase, this needs to consider healthy life expectancy.

Male life expectancy at birth

In the post-war period, there has been a virtually continuous increase in lifespan within the EU. Life expectancy at birth for men in the EU has risen by more than 10% over the past four decades, from 67.4 in 1960 to 75.3 years in 2000. Thanks to better health services and social conditions, life expectancy at birth for men is now well over 75 years in several countries. Men in Sweden and Italy have the longest life expectancy at birth in the EU - 77.4 and 76.3 years respectively - while Irish males have the shortest, at 73.9 years (Figure 16).

Figure 16 Life expectancy at birth, males, 2000

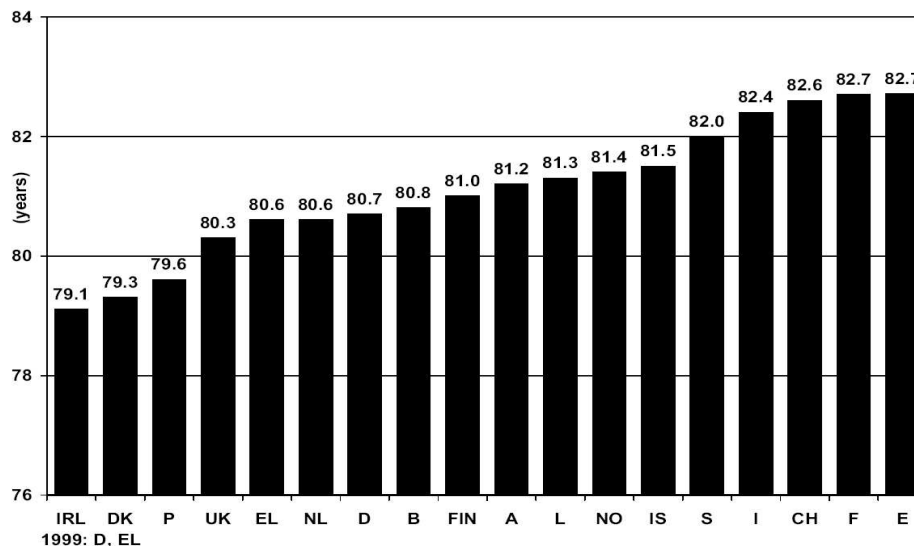


Source Eurostat, 2003

Female life expectancy at birth

Over the last forty years, the life expectancy at birth of women has evolved in the same way (but at a different level) as that of men, from 72.9 to 81.4 years. French and Spanish girls can expect to live 82.7 years, longer than in any other Member State. Female life expectancy at birth also exceeds 82 years in Sweden and Italy. Danish and Irish girls, on the other hand, have the shortest life expectancy, 79.3 and 79.1 years respectively (Figure 17).

Figure 17 Life expectancy at birth, females, 2000



Source Eurostat, 2003

4.6 Work-related injuries and health problems

Ensuring the health and safety of the workforce is of obvious importance to employment strategy: organisations need to be productive to be competitive, which needs a healthy workforce. They also need to protect workers from future incapacity or ill health, which may affect their ability to work. Employment and health will be discussed further in section 5.

Accidents at work

In 2000, around 4.0% of EU workers suffered injuries as a result of an accident in the workplace resulting in more than three days' absence; this rose to 6.3% if accidents where there was no absence from work are included. From 1994, the number of accidents at work with more than three days' absence decreased by 11%. During 1998-99 5.4% of employees per year suffered from work-related health problems. Thus there is a downward trend in workplace injuries. A total of around 210 million working days were lost in 1999 as a result of accidents at work. Across the EU-15 for each worker an average of 1.3 working days are lost each year because of an accident at work. 2.3 million people in the EU have a long-term health problem caused by an accident at work.

Figure 18 Non-fatal accidents at work and commuting accidents by Member State and severity. 2000

	Employment (1 000)	Non-fatal accidents at work							Commuting accidents (not included in accidents at work) 2001		
		with more than 3 day's absence					All accidents		Number	Incidence rate	
		Declared cases		Accidents			Number	Standardised			
		Number	Average declaration rate (%)	Number	Standardised incidence rate				% of all non-fatal accidents		
a	b	c	d = b / c%	1994	2000	f ^(e)	g = d / f%	h ^(f)	Number	Incidence rate	
All NACE branches											
EU-15	142 230	4 271 151	89	4 815 629	.	.	63	7 628 184 *	.	650 000 *	.
EUR-12	108 008	4 084 209	95	4 317 669	.	.	73	5 883 682 *	.	.	.
9 NACE branches ⁽¹⁾											
EU-15	101 551	3 595 133	89	4 078 455	4 539	4 016	64	6 364 025 *	6 267 *	430 000 *	410 *
EUR-12	78 498	3 440 691	93	3 704 251	.	4 665	73	5 069 657 *	6 377 *	.	.
National data from the insurance system covering accidents at work ⁽²⁾											
BE	2 021	81 420	100	81 420	4 415	4 213	.	.	.	.	.
DE	24 356	1 163 825	100	1 163 825	5 583	4 757	85	.	.	.	.
EL	1 352	11 307	32	35 765	3 702	2 595	.	.	.	.	.
ES	9 662	667 596	100	667 596	5 736	7 052	71	.	.	.	.
FR	13 119	631 135	100	631 135	5 515	5 030	.	.	.	.	.
IT	14 952	572 437	(^e)	628 156	4 641	4 049	62	.	.	.	.
LU	207	9 331	100	9 331	4 508	4 891	59	.	.	.	.
AT ⁽⁴⁾	2 713	72 626	(^e)	89 967	3 554	3 056	.	.	.	.	.
PT	3 200	152 032	(^e)	164 359	5 913	4 863	74	.	.	.	.
FI	1 604	48 325	100	48 325	3 914	3 046	44	.	.	.	.
National data from declarations made to another competent authority ⁽³⁾											
DK	1 738	22 538	46	48 969	2 653	2 866	43	.	.	.	.
IE ⁽⁴⁾	978	5 154	55	9 399	1 494	1 027	51	.	.	.	.
NL ⁽⁴⁾	4 334	25 503	(^e)	174 973	4 287	4 095	.	.	.	.	.
SE	2 587	19 003	51	37 056	1 123	1 475	23	.	.	.	.
UK ⁽⁵⁾	18 728	112 901	39	288 178	1 915	1 607	33	.	.	.	.
NO	1 239	21 063	(^e)	52 658	.	4 593	.	52 658	4 585	.	.

(¹) 9 NACE branches : Agriculture, Manufacturing, Electricity gas water supply, Construction, Wholesale and retail repairs, Hotels and restaurants, Transports communications, Financial intermediation, Real estate business activities.

(²) Public insurance (e.g. social security) or private insurance, according to the Member State.

(³) Usually Labour Inspectorate.

It should be stressed that the data inside both groups of Member States (insurance data and Labour Inspectorate data) are comparable but that they are not fully comparable between the two groups.

(⁴) Austria and Ireland : 1994 rate = 1996; Netherlands : based on 1994 data, revalued in proportion to the evolution 2000/1994 of the number of persons in employment in Netherlands.

(⁵) UK : Great Britain only.

(^e) Italy : 100% excluding self-employed craftspeople: 65%; Austria : 100% excluding agriculture and public administration; Portugal : almost 100%; Netherlands : <30% or 30-70%, depending on the branch; Norway : between 25% and 100%, including accidents with 1-3 days' absence from work.

(^f) Number per 100 000 persons in employment : e = (d/a) x 100 000, h = (g/a) x 100 000, then standardisation.

(^g) All branches. Based on the distribution of accidents of "3 days or less" and "more than 3 days" of absence in the LFS 1999 ad hoc module.

* Estimated data.

Sources: Accidents with more than 3 days' absence : ESAW;

All accidents : based on the ad hoc module in 1999 Labour Force Survey, including accidents without absence from work or with absence of less than 4 days;

Commuting accidents : estimates based on available data for 10 Member States.

Employment : persons in employment covered by the ESAW data on accidents.

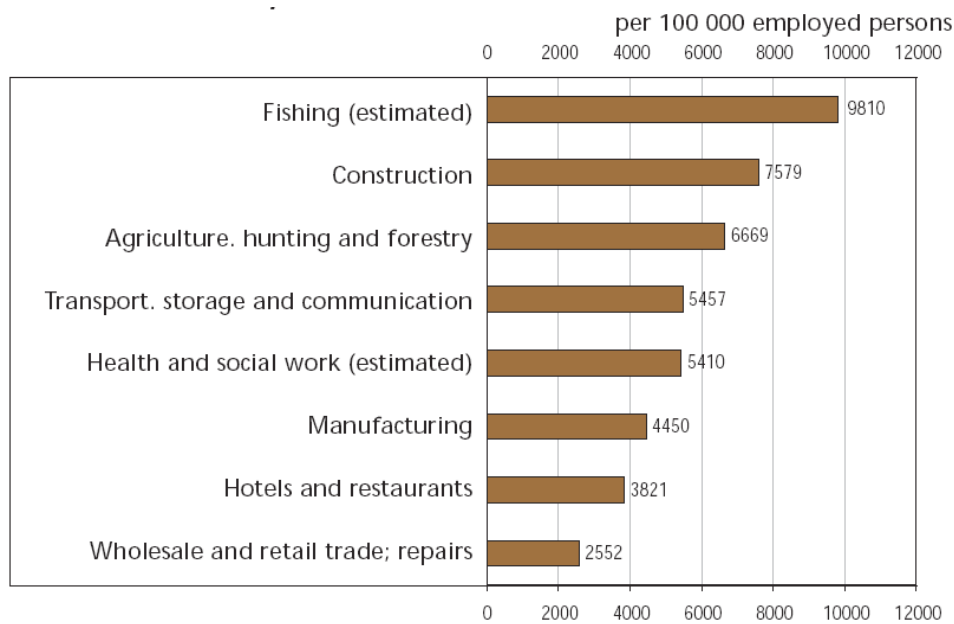
Source: European Communities (2004) Work and health in the EU, a statistical portrait - 2003 Edition. Luxembourg Office for the Official Publications of the European Communities.

Male workers are more likely to have accidents at work than female workers; around three times more likely to have a serious accident and eleven times to have a fatal accident. The difference is partly due to men working more in the sectors with a high risk of accidents and doing more full-time work, i.e. being exposed to the risk of accidents for a longer time each day, and also by differences in the tasks performed by men and women even within given occupational sector. For example, in construction, men tend to work more on building sites and women more in offices (Eurostat, 2004a). There is also a social gradient in the incidence of workplace accidents (WHO, 2003). Age also affects accidents at work with those aged 18-24 being more than 50% more likely to have an accident than any other age group. For fatal accidents it is the opposite with them occurring most frequently in the 55-64 year old age group (Eurostat, 2004b).

Recent LFS data (1999) identified specific occupational groups who were at a particularly high risk of accident at work (Figure 19). The incidence of all accidents in workers in fisheries and aquaculture was 43 % greater than for all workers; this is based on an analysis of all accidents, with or without absence from work. Accidents in short-term construction jobs

were especially risky: where the job was temporary, the incidence was 132 % greater than the norm, and where the worker had been in post for less than two years it was 71 % greater. In addition, temporary workers in health and social work had an incidence rate 91% greater, and workers of under two years seniority in hotels and restaurants showed a rate 72 % over the norm. The groups at high risk of accidents resulting in long-term absence two weeks or more were: workers in construction (70 % higher than the norm), in agriculture, hunting and forestry (44 % greater), and in mining and quarrying (39 % greater). Moreover, shift workers in general had a rate 34 % greater than the norm, and night workers 27 % greater.

Figure 19 Accidents at work by type of activity, EU-15, 2000



Source: Eurostat - European Statistics on Accidents at Work (ESAW)

Occupational health problems

According to the results of the EU LFS ad hoc module 1999, it is estimated that in 1998-1999 nearly eight million people in work or having been in work in the EU were suffering from non-accidental health problems caused or made worse by their current or past employment (Eurostat, 2004b). Different data sources suggest both an increasing (3 sources) and a decreasing (7 sources) trend in occupational diseases (OSHA, 2000). The Third European Survey of Working Conditions (ESWC, 2000) also showed that of the 1,250 million working days lost across the EU due to health problems in general, 340 million are due to health problems caused by work; this represents 2.1 days lost per worker per year because of work-related health problems. Older workers are not more frequently sick than younger workers, but when they are sick they are on average absent for longer from work (Morschhäuser, 2002).

Table 9 Percentage of most serious work-related health problems by sex and Member State (with or without absence from work)

	EU-9	DK	EL	ES	IT	LU	P	FI	SE	UK
Men										
Total	100	100	100	100	100	100	100	100	100	100
MS disorders	51.4	57.3	38.8	53.0	50.3	44.3	45.6	58.6	59.7	44.1
Stress etc	16.5	8.4	10.7	7.3	12.6	7.3	15.2	11.2	14.2	30.5
Pulmonary disorders	8.4	4.8	17.5	12.6	10.3	12.6	11.3	11.8	5.8	3.7
CV disorders	5.4	2.5	0.0	11.2	5.4	9.0	6.3	5.1	3.6	3.2
Hearing disorders	4.2	1.9	4.9	2.3	8.3	2.5	4.5	4.2	3.8	2.5
Headache etc	2.8	3.3	9.2	2.1	4.4	7.7	2.3	1.6	1.7	2.9
Skin problems	2.4	1.6	14.1	1.1	3.2	3.7	4.4	2.9	1.0	2.5
Infectious diseases	2.3	3.3	0.0	1.6	3.0	6.1	2.2	1.2	1.2	2.8
Other	6.7	16.8	4.9	8.7	2.5	6.8	8.2	3.3	9.0	7.8
Women										
Total	100	100	-	100	100	100	100	100	100	100
MS disorders	54.4	63.4	-	66.1	48.3	33.6	26.8	63.9	60.7	40.4
Stress etc	20.2	9.3	-	8.7	17.0	13.7	34.3	11.5	20.6	36.5
Pulmonary disorders	6.4	2.5	-	5.3	9.4	13.6	13.1	10.4	3.2	4.5
Headache etc	3.7	3.9	-	2.1	6.6	8.0	7.5	2.5	1.7	4.5
Infectious diseases	2.8	3.1	-	1.4	5.3	9.1	0.8	1.4	1.9	3.6
Skin problems	2.6	2.3	-	1.3	3.7	1.1	4.2	3.7	2.3	1.9
CV disorders	2.5	1.0	-	6.1	3.3	7.4	1.9	2.8	1.4	1.4
Hearing disorders	1.0	1.4	-	0.4	2.8	0.4	0.5	0.8	0.8	0.4
Other	6.4	13.1	-	8.7	3.6	13.0	10.9	2.9	7.4	6.8

MS = Musculoskeletal CV = Cardiovascular

Source: 1999 LFS ad hoc module

The prevalence rate of work-related health problems for EU employees was 5,372 cases per 100,000 workers per year (LFS, 1999). Of these cases:

- 53% were musculoskeletal disorders (MSD),
- 18% were stress, depression or anxiety,
- 8% were pulmonary disorders.

For MSD recognised under the European Schedule of Occupational Diseases, it is estimated that there are 8,900 cases of tenosynovitis, 7,600 cases of epicondylitis and 4,100 cases of carpal tunnel syndrome across the EU-15. Risk factors associated with MSD include genetic, physical, ergonomic, psychosocial and behavioural factors.

Indicators that have been used to measure psychosocial work characteristics (ESWC, 2000) that contribute to psychological and physical health problems include working at high speed, occurrence of unforeseen interruptions at work, lack of ability to choose the working methods, and matching skills and work demands. In the Third European Survey of Working Conditions (ESWC, 2000) 43% of women and 45% of men reported working at very high speed at least half of their working time. This was particularly so in the hotel and restaurants and construction sectors. There was also an age gradient for this with younger workers working at high speeds for longer. 31% of women and 27% of men said that work tasks were repeatedly interrupted because of an unforeseen task. Interruptions were more common in the health and social work, hotel and restaurants and financial intermediation sectors. There were virtually no age disparities for this. 35% of women and 36% of men indicated that they

have no ability to choose or change the order of their tasks. This was more common in transport, manufacturing and hotels and restaurants sectors. These problems were also more common with younger workers. Finally, 84% of women and 85% men feel their skills match the demands imposed on them by their job. There was little difference by age or occupational sector.

According to the ad hoc module of the 1999 LFS, about 1.2% of respondents said that they suffered from stress, depression or anxiety, which they believed was caused or made worse by work. Extrapolated this means that 1.4 million EU workers (current or past) have such psychosocial health problems. However very few of such disorders are included in national systems of reporting. There are also no disorders of a psychological nature included in the European Schedule of Occupational Diseases, although Member States have been encouraged to enhance studies exploring the occupational origins of psychosocial health problems.

0.3% of respondents to the LFS (1999) also reported a respiratory health problem, which they believed was caused or made worse by work; this equates to 600,000 workers across the EU. This compares with recognised occupational respiratory disease which is estimated at 9,700 across the EU-15. 0.1% said that they suffered from a skin disease, which they believed was caused or made worse by work; this means 200,000 workers (past and present) in the EU have such skin problems. This compares with 7,600 recognised occupational skin diseases. Various irritative and allergy provoking agents have been identified as causing occupational asthma as well as other respiratory or skin disease.

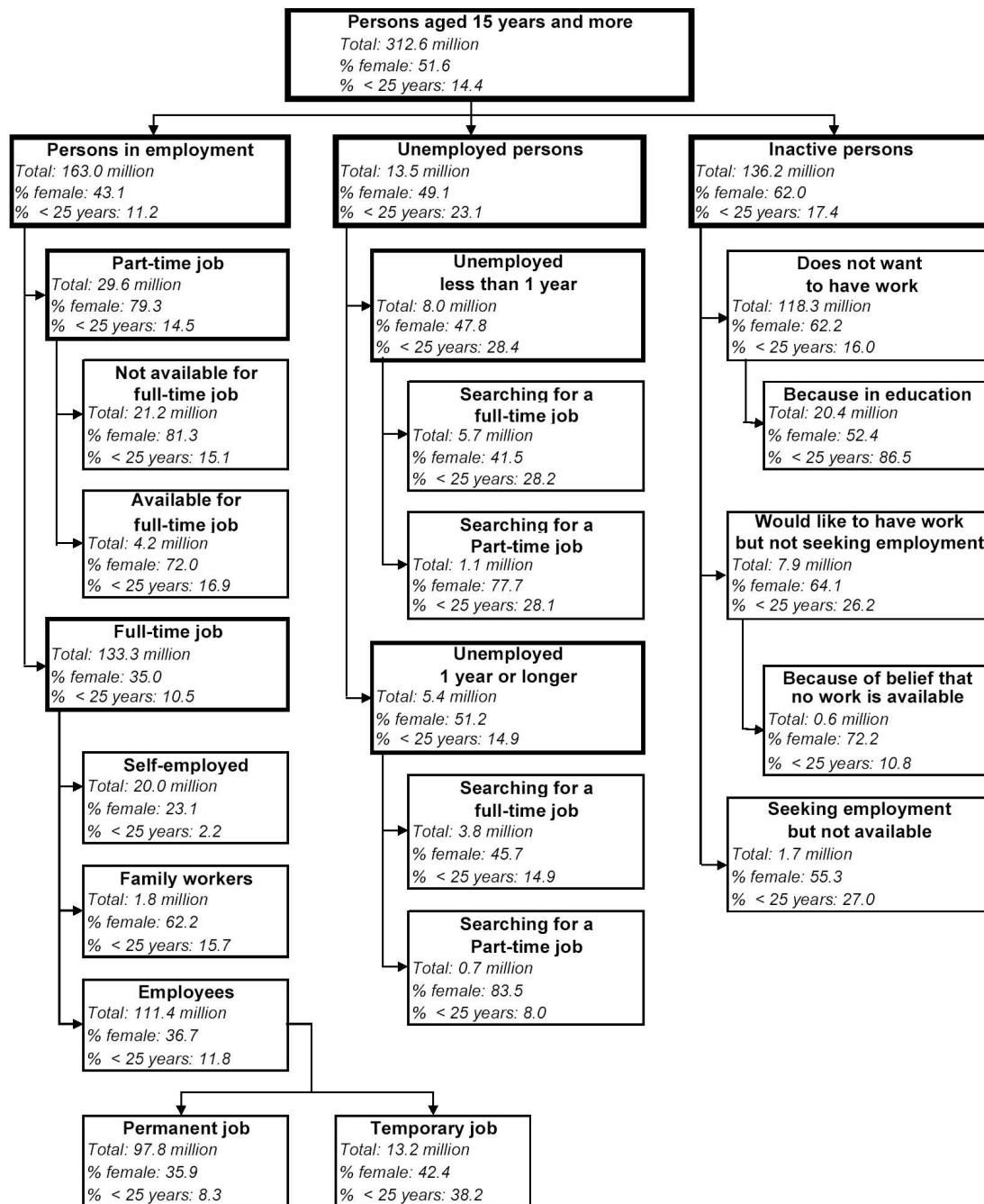
Noise induced hearing loss is reported most frequently in nearly all national occupational disease compensation or reporting schemes. Estimates for the EU-15 are of approximately 6,700 cases. This is particularly high in the manufacturing and construction sectors. Because of the time lag developing noise induced hearing loss, about half the incidence rates are seen in the over 55 age group. About 97% of the cases were reported to be men (Eurostat, 2004b).

The European Foundation for the Improvement of Living and Working Conditions' (EFILWC) found that, 60% of workers across the EU considered that their work affects their health (Paoli and Merllié, 2001). 28% of workers believe their health or their safety is at risk because of their work. Here there is a different outcome for men and women. The situation for women has slightly deteriorated (20% in 1990 compared with 23% in 2000), while the situation for men has improved (from 37% in 1990 to 31% in 2000). In Europe, the most commonly reported health impacts were stress (28%) backache (33%), fatigue (23%) and headaches (15%); this differs slightly from the LFS prevalence rates. There is a rising trend for these problems (Daubas- Letourneux and Thebaud-Mony, 2003 at 20). An average of 9% of workers were absent from work due to a work-related health problem in the previous 12 months. In 2000 more than one in four (28%) workers were affected by some kind of MSD. 29% of female workers in Europe report work related stress which is slightly more than the men (28%). There are large differences between countries. Top of the list are Greece (53%), Luxembourg (37.7%), Sweden (37.4%), Finland (35.1%) and Italy (33.1); in contrast to Ireland (11.9%), Portugal (18.2%) and Austria (18.5%) (Paoli and Merllié, 2001). There are also occupation differences with 40% of professionals reporting stress in comparison to 17% in elementary occupations (Paoli and Merllié, 2001). 11% of workers report suffering from irritability, 8% sleeping problems and 7% anxiety. Indefinite contract workers also report more stress (30%) than non-permanent workers.

4.7 Employment

The spring 2002 Labour Force Survey provided the following estimates for the 374.8 million people living in private households in the EU. 163 million had a job during the reference week of the survey. 64.2% of the population aged 15-64 were employed. The employment rate was as high as 70% or more in Denmark, the Netherlands, Sweden and the United Kingdom, and also in the three EFTA countries. It was less than 60% in Belgium, Greece, Spain and Italy. From 1995 to 2002 the proportion of people in employment increased by 10% (14 million). The figure below provides a summary of the principle results of the Labour Force Survey 2002.

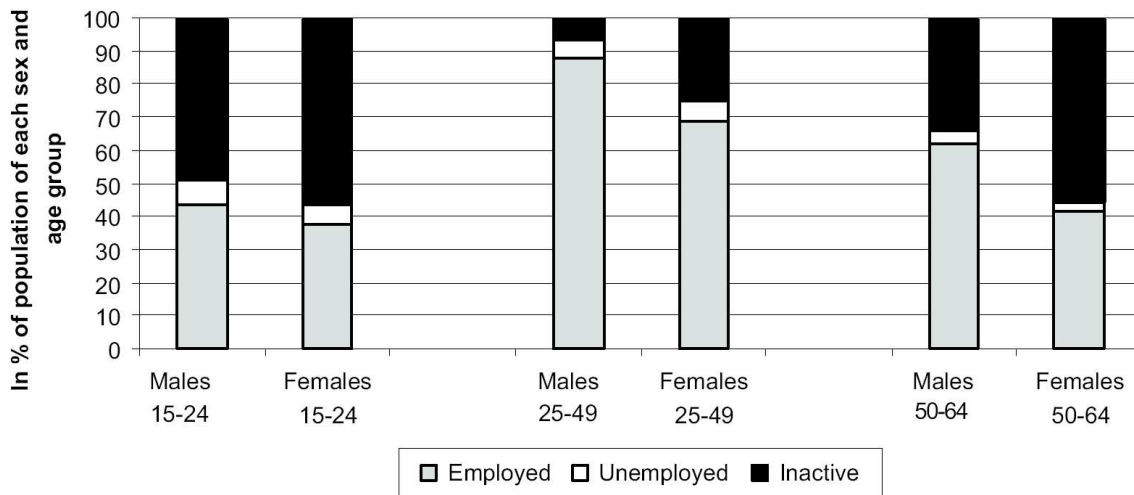
Figure 20 Work status of persons aged 15 years and more, EU-15, 2002 (1)



(1) Due to non-response, certain sub-totals may not exactly sum up to the corresponding aggregate

The employment rate was on average 17.4% higher for males than females (72.9% at EU level against 55.5% for females). Between 1995 and 2002 there was an increase in 14% of women in employment. The figure below displays the aggregate employment status data for the working age population within the EU-15.

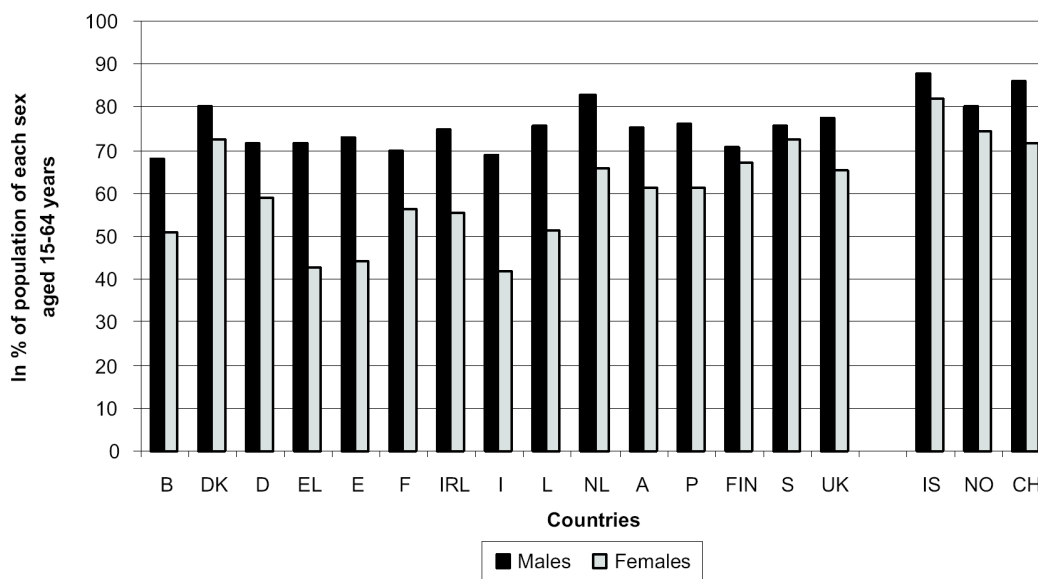
Figure 21 Population aged 15-64 by employment status, age groups and sex for (EU-15, 2002)



Source Eurostat, European Labour Force Survey

In Finland and Sweden, the differences between male and female employment rates did not reach 4% compared to 24% or more in Greece, Spain, Italy and Luxembourg. From 1995 to 2002 there was a 2% increase in employment of 15 to 24 year olds and a 16% increase in people aged 55 to 64 years. The figure below displays the gender specific employment rates for each of the EU member states.

Figure 22 Employment rates of population aged 15 to 64 years old (2002)

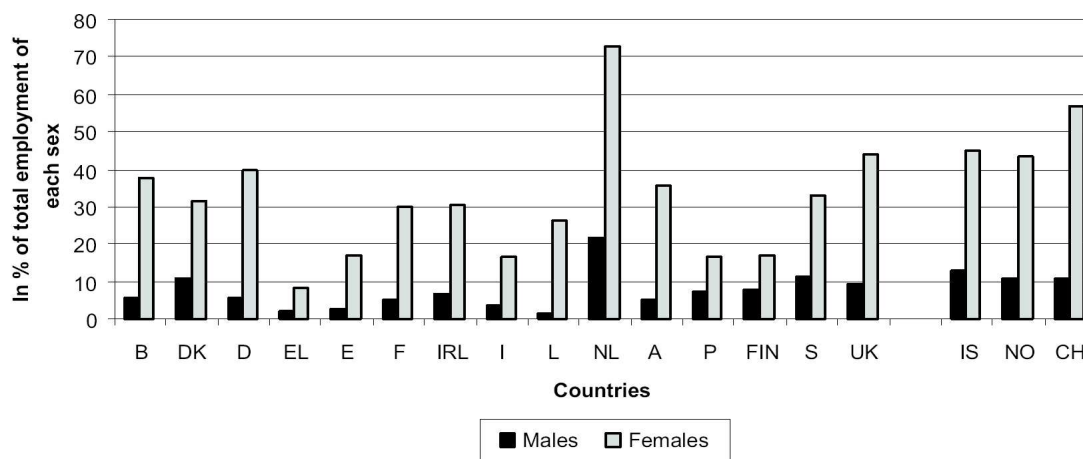


Source Eurostat, European Labour Force Survey

Part-time employment

18.2% of employed persons worked part-time. In general more women work part-time than men. Part-time employment represented 33.5% of total female employment (from 8.1% in Greece to 72.8% in the Netherlands) compared to 6% for men (see Figure 23). Moreover part-time work has increased more among EU women than for men, rising by 4.7% in the 10-year period compared with a rise of 2.4% for men. It is more widespread in the countries of northern Europe than in those of southern Europe. The highest presence of part-time workers can be observed in the Netherlands (43.8% of total employment), followed by an intermediate group comprising the United Kingdom (25.0%), Sweden (21.4%), Germany (20.8%) and Denmark (20.6%). The lowest presence of part-time employment can be found in the southern European countries: Portugal (11.3%), Italy (8.6%), Spain (8.0%) and Greece (4.5%). These national differences are caused by a combination of factors including differences in the state of the economy, the labour market, the organisation of childcare, education, and tax and social security systems (O'Reilly and Fagan, 1998).

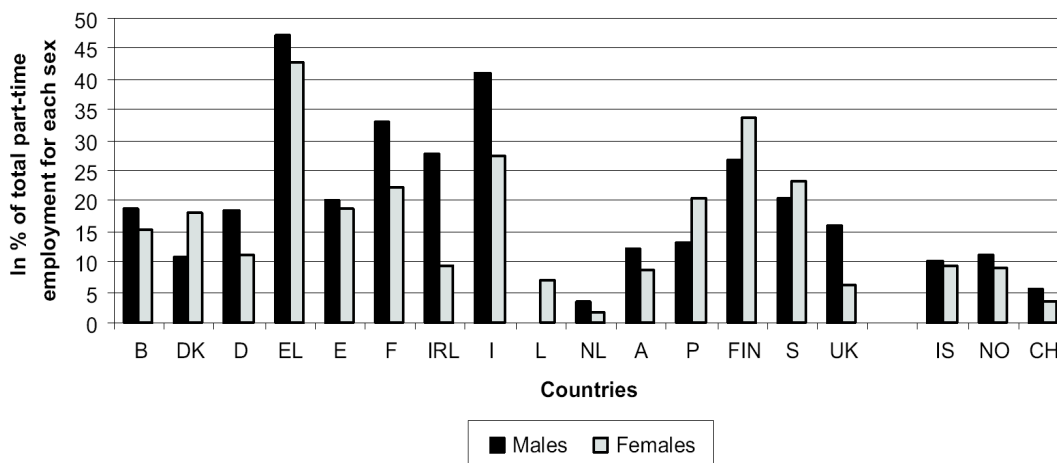
Figure 23 Part-time as percentage of total employment (2002)



Source: Eurostat, European Labour Force Survey

Not all workers choose to work part-time. Figure 24 shows involuntary part-time employment as a percentage of all part-time employment. Around 14% of EU part-time workers are in this situation involuntarily due to a lack of full-time employment opportunities.

Figure 24 Involuntary part-time as percentage of the total part-time employment (2002)

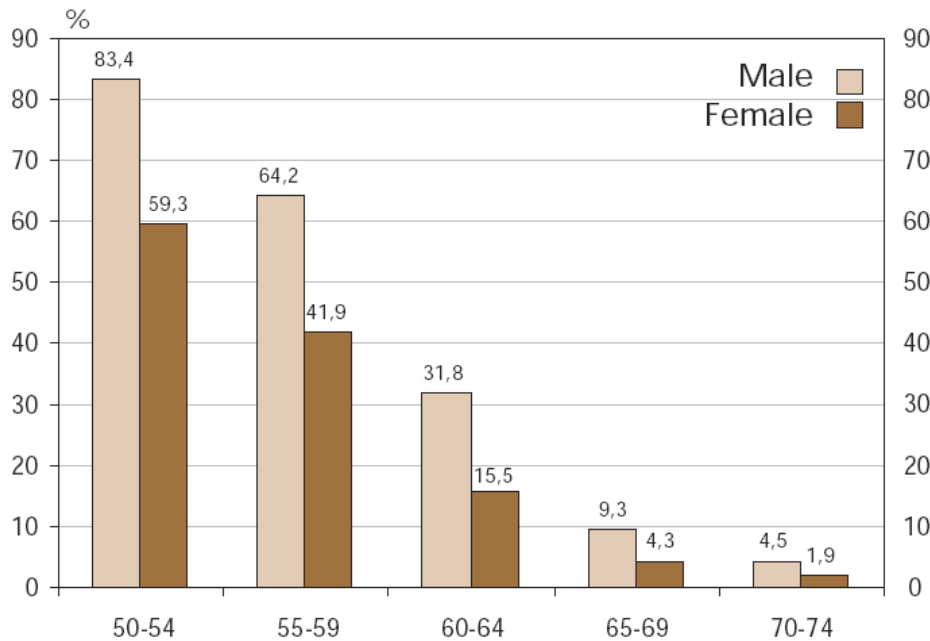


Source: Eurostat, European Labour Force Survey

Employment of older workers

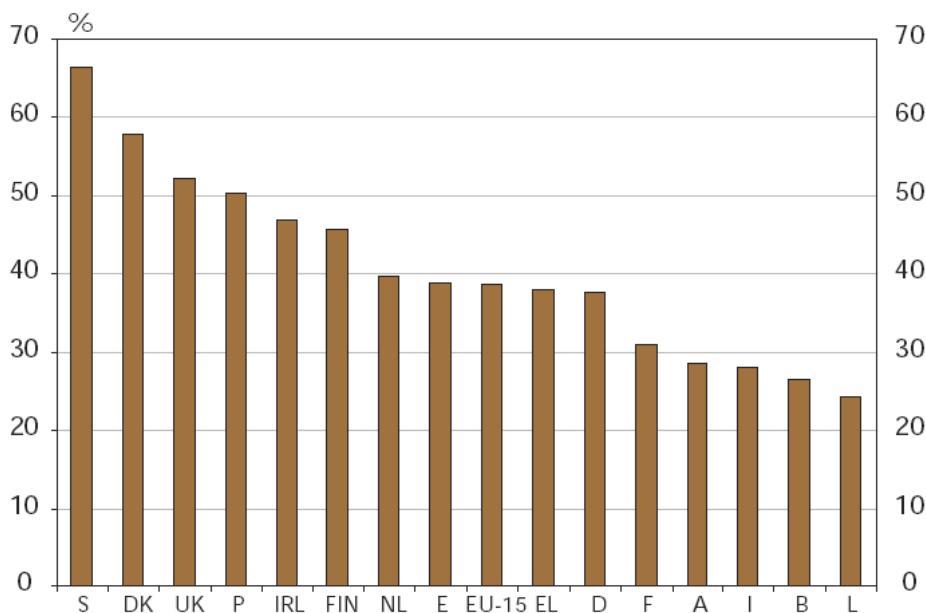
Although in the past four years, the EU employment rate of 55-64 year old men rose by 1.5% to stand at 48.7% in 2001, it is still below the 1991 rate (51.2%). In contrast, the comparable female rate increased steadily to reach 29% in 2001. Overall, 38.6% of the population aged 55-64 were in employment in 2001. In 2001, men exit the labour force on average at the age of 60.5 while women did so about 1.5 year earlier. The overall exit age was 60 years.

Figure 25 Employment rates by age-group and sex, (EU-15, 2001)



Source: Eurostat - European Labour Force Survey (LFS)

Figure 26 Employment rates of older (aged 55-64) workers, 2001



Source: Eurostat - Quarterly Labour Force Data (QLFD)

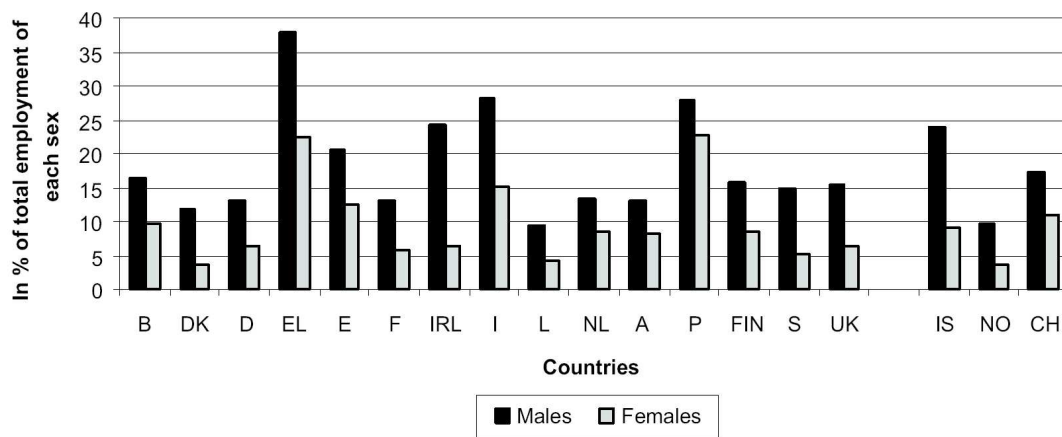
Fixed term employment

137.5 million workers are employees (84.4% of total employment) and 13.1% of them have a contract with limited duration. This ranges from less than 6% in Iceland, Ireland and Luxembourg to 21.8% in Portugal and 31.2% in Spain. The numbers of workers with a limited or fixed term contract increased by 29% in 1994-2001 whilst the number of workers with an unlimited duration of contract increased by only 9%. Contracts of unlimited duration are still the most common type of employment contract (87% of salaried workers in 2002), however more men than women are likely to be permanently employed.

Self-employed

20 million people were self-employed (23.1% female) this represented approximately 12.3% of the total EU-15 working population.

Figure 27 Self-employed as percentage of total employment (2002)

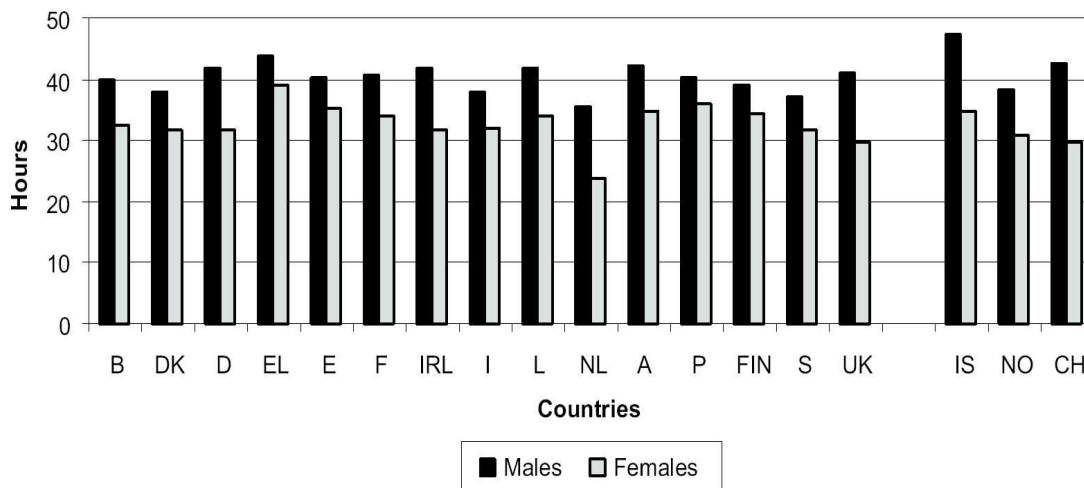


Source: Eurostat, European Labour Force Survey

Working hours

The average usual working hours were 40.0 hours a week for full-time employees and 19.7 hours for part-time employees (from 37.7 hours for full-time employees in France to 43.3 hours in the United Kingdom, 47.3 hours in Iceland). The three diagrams below provide additional information in relation to working hours within the EU.

Figure 28 Average actual weekly hours of work for all in employment (2002)



Source: Eurostat, European Labour Force Survey

Figure 29 Average actual weekly hours of work by type of employment (2002)

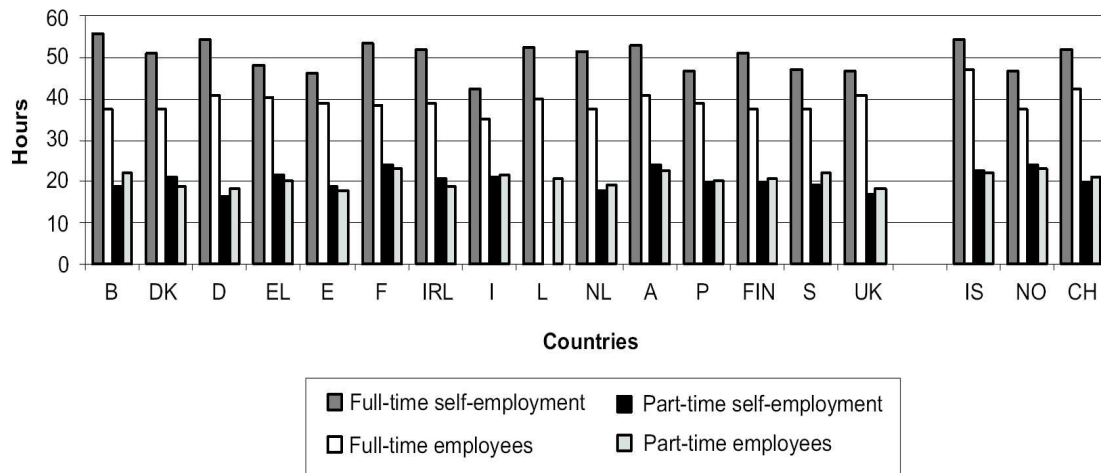
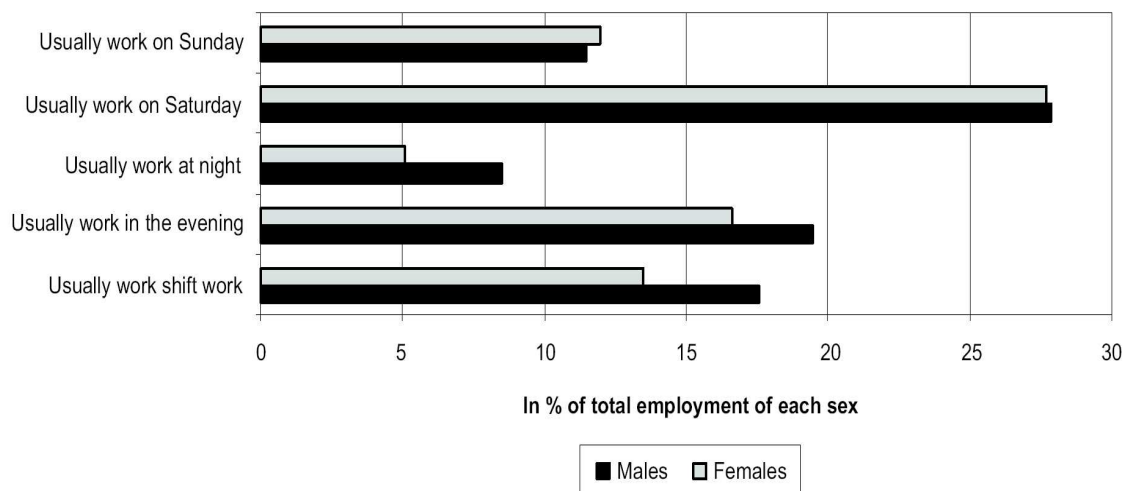


Figure 30 Population in employment working atypical hours (EU-15, 2002)



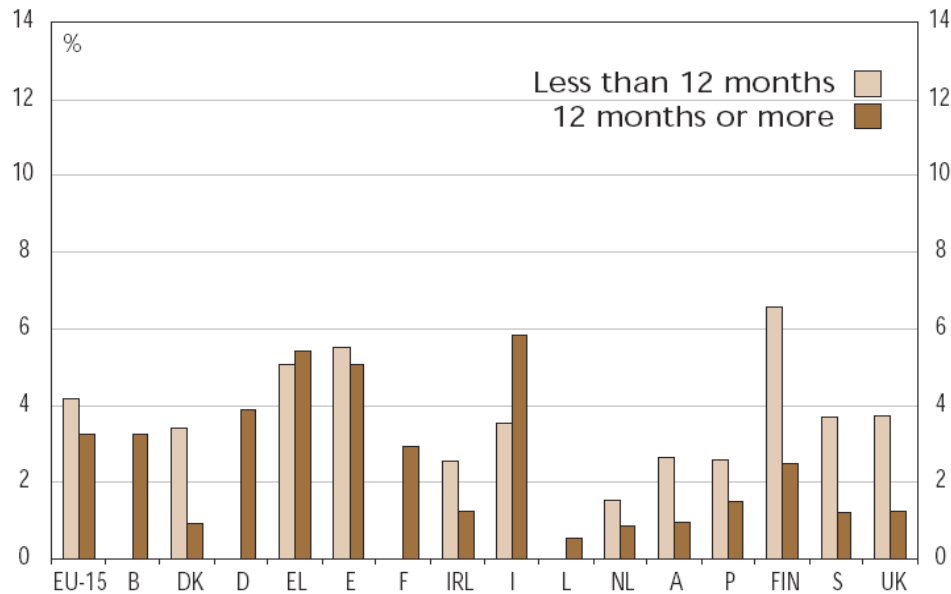
Source: Eurostat, European Labour Force Survey

Unemployment

13.5 million people were unemployed, which represented 7.6% of the overall EU labour force (8.6% for women).

Long-term unemployment (one year and more) represented 40.2% of unemployment as a whole, more than 50% in Greece and Italy, less than 25% in Denmark, Austria, Finland, Sweden, the United Kingdom, Norway and Switzerland.

Figure 31 Unemployment rates by duration, 2001

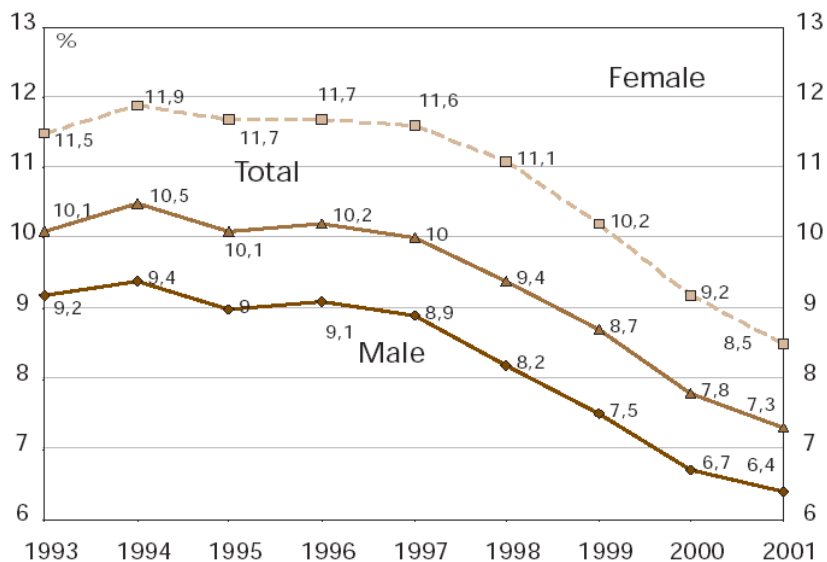


Source: Eurostat - Quarterly Labour Force Data (QLFD)

14.6% of the labour force aged 15-24 years old was unemployed (against 6.7% for the age class 25-64) which represented 6.9% of the total population of the same age. 136.2 million people aged 15 years and more were inactive. See Figure 32 and Figure 33 for an illustration of unemployment rates within the EU.

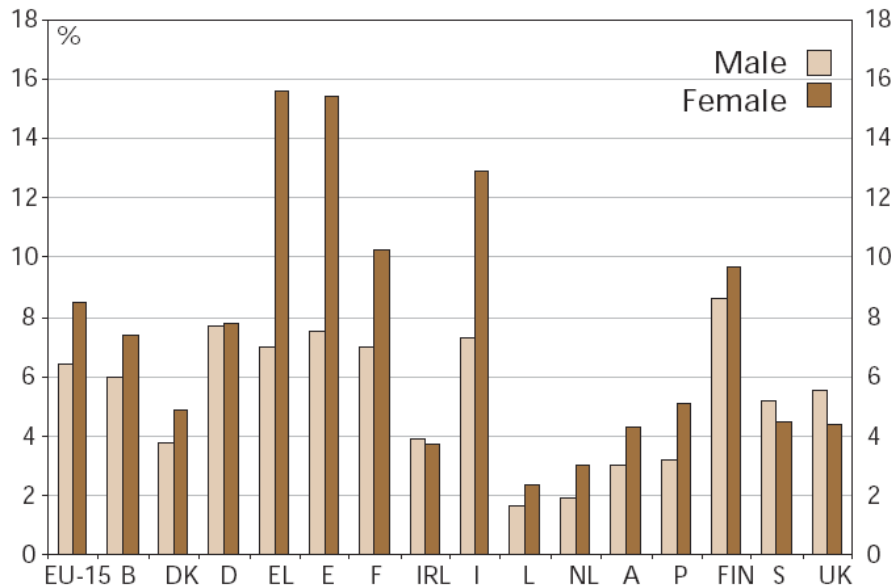
Unemployment trends within the EU are illustrated below.

Figure 32 Trend in the unemployment rate by sex, EU-15, 1993-2001



Source: Eurostat - Unemployment rates (ILO definition).

Figure 33 Unemployment rates by sex, 2001



Source: Eurostat - Unemployment rates (ILO definition).

Youth unemployment

EU-wide, 7.3% of young people (aged 15-24) were unemployed in 2001. The unemployment rate (as a percentage of the labour force) among young people was 14.7%. The differences between these two percentages vary significantly between countries, and may, in part be explained by the fact that a significant number of people in this age group remain in education. Youth unemployment/population ratio between 2000 and 2001 has not followed the overall, declining trend in unemployment: in five Member States it increased, in five remained the same, and in five decreased.

Unemployment and disabled people

The participation rates of disabled people are considerably lower than those of the non-disabled and those disabled people who are in employment appear to do less well than the non-disabled. Burchardt (2000) and Blackaby et al (1999) both show that even holding other characteristics constant (age, gender, etc.) disabled people are less likely to be in employment.

The disabled people that are working tend to earn lower wages and work in lower occupational groups. Disabled people also tend to work fewer hours. If they become unemployed it takes them longer to find a new job. However, once they are in employment, they tend to stay longer with their employer (EIM Business and Policy Research, 2001).

Disability affects the participation rate more than the unemployment rate. Consequently, the main labour market problem for people with disabilities is their low participation rate, i.e. entry into the labour market (Step 1), rather than the unemployment rate, i.e. the problem of accessing a job (Step 2) (EIM Business and Policy Research, 2001).

People with disabilities who are not in work are in general older, less well educated and more likely to be female than those who are not disabled. All of these characteristics are associated with groups in a relatively unfavourable labour market position. This suggests that disabled people are 'doubly disadvantaged' in the labour market, and that specific labour

market policies for disabled people are required, irrespective of whether they are employed, unemployed or inactive.

Unemployment/employment non nationals

The integration of immigrants and minorities is to a considerable degree determined by their opportunities to actively participate in employment. On the other hand, the pervasive exclusion from the labour market of certain groups of immigrants and minorities places these groups at a distinct disadvantage in terms of income, wealth, social mobility, housing, training, participation in social life and a number of other dimensions (International Centre for Migration Policy Development, 2003). This of course has both short and longer-term consequences for their health.

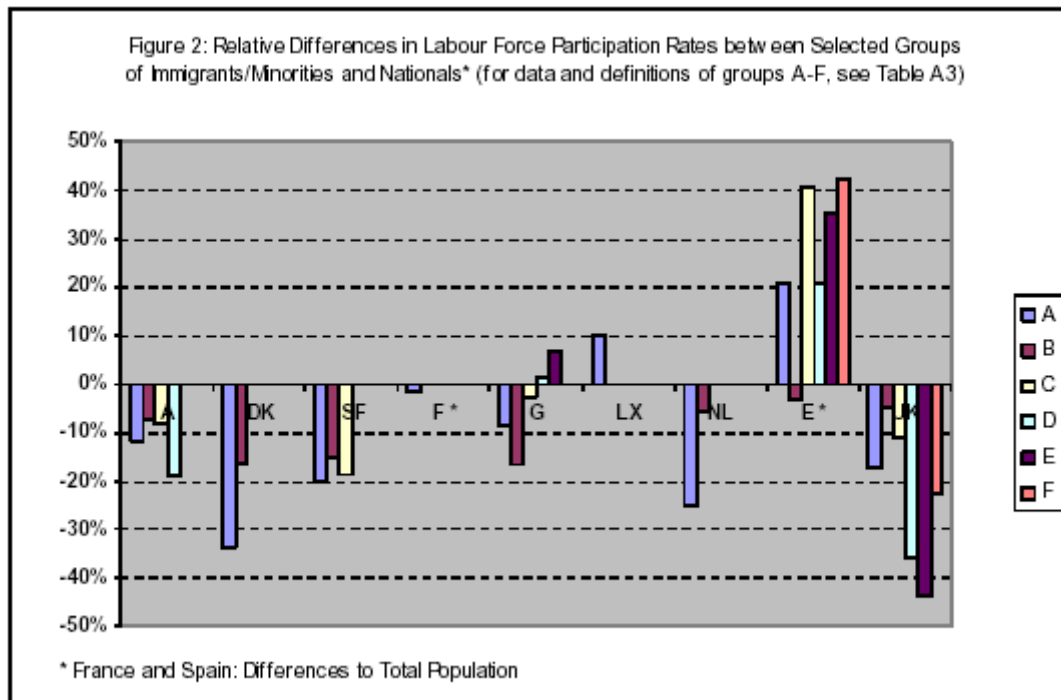
In all EU countries, the unemployment rate of non-nationals is considerably higher (usually double) than that of nationals. This situation has not improved since the early 1980s. Unemployment rates for the young foreigners, in particular, have remained alarmingly high. The overall unemployment rate for non-nationals conceals marked differences among nationalities. If made visible, these statistical differences would underscore the precarious situation of certain groups (for example, Turks in Germany). Moreover, granting citizenship does not automatically eliminate all barriers to employment (Werner, 2003).

It is more difficult for foreign women to find a job than it is for national women or foreign men. The unemployment rate for female non-nationals is generally higher than the overall rate for non-nationals. Across the board, employment rates for foreign women are far below those for national women, and no major convergence has occurred over time (Werner, 2003).

According to OECD data¹, there are about 20 million non-nationals in Western Europe, about 40% of whom are employed.

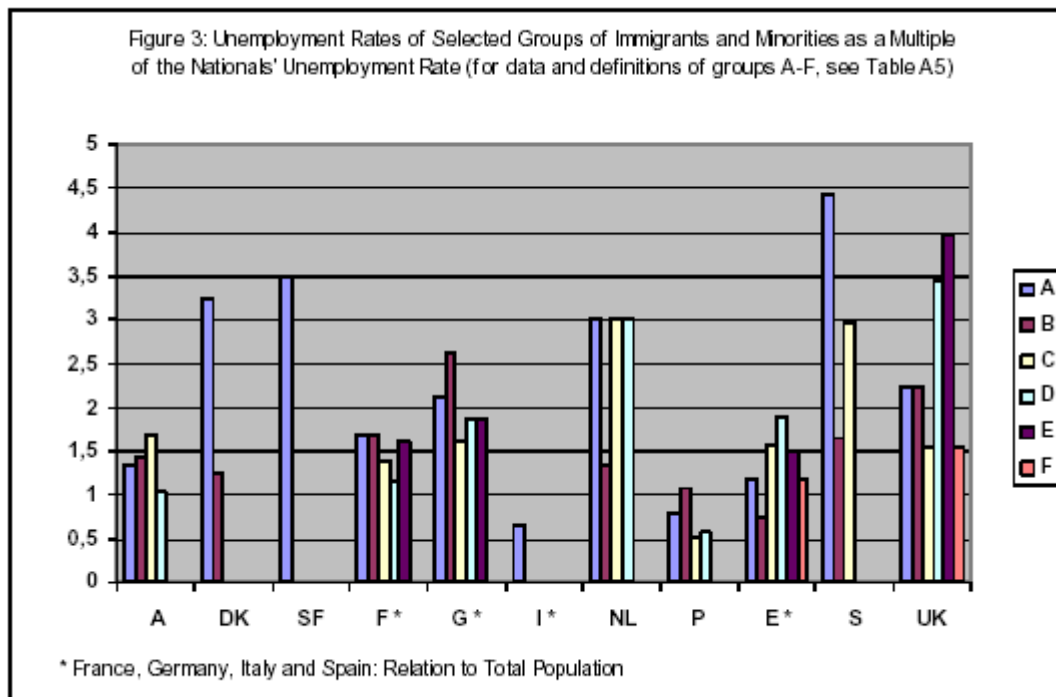
As a rule, the unemployment rate for EU nationals living in another member state lies between those for third-country nationals and the national population. Reasons why EU nationals fare better than third-country nationals may be their longer residence period, better knowledge of the language, and better qualifications and skills. A further reason may be the free movement of labour within the European Union, which allows EU citizens to go back to their home countries if they become unemployed and return to the host country whenever they want. As third-country nationals do not have that option, they tend to stay in the host country, even when without work.

Figure 34 Relative Differences in Labour Force Participation Rates Between Selected Groups of Immigrants/Minorities and Nationals*



For data and definitions of groups A-F see Table (& 11) in the Appendix.

The figure below shows that the unemployment rates for minority groups are generally significantly higher than for the rest of the population.



For data and definitions of groups A-F see Table 12 (& 13) in the Appendix.

Caring and employment

Whereas for men under 50, looking after children does not seem to have much effect on whether they are employed or not, for women it appears to make a significant difference. The proportion of women carers under 50 in work was lower than for non-carers in all countries apart from Denmark, Greece and Austria.

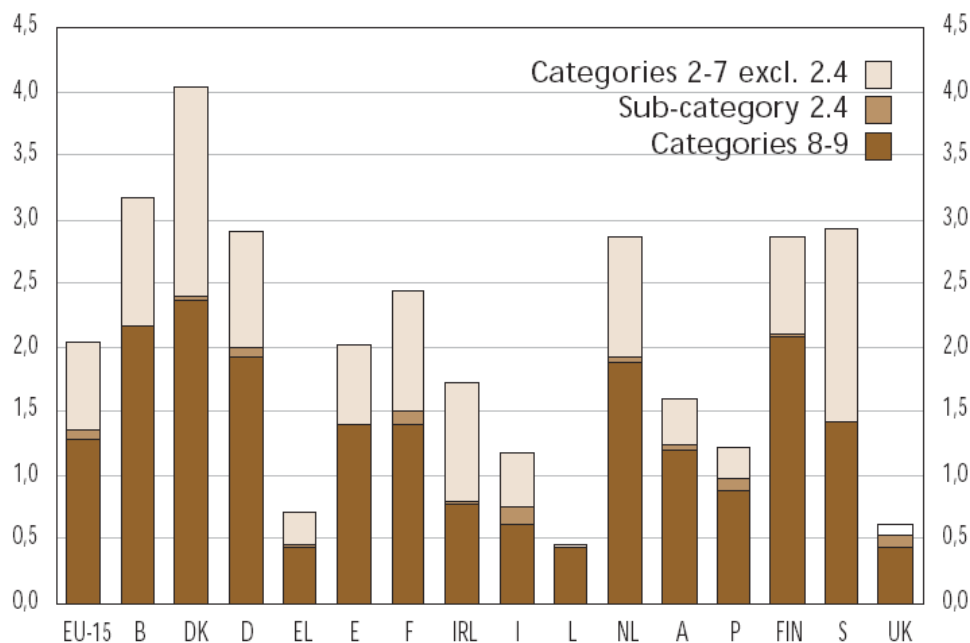
For those in the 50 to 64 age group involved in looking after someone in need of care other than a child, much the same pattern is evident. In the Union as a whole, the average proportion of both women and men carers in employment was significantly lower in 1998 than for non-carers and this was the case in most Member States. More specifically, for men in this age group, they are less likely to be in employment if they look after an adult in need of care.

Across the Union as a whole, men aged 25-49 who had dependent children were more likely to be employed than non-carers (90% compared with 80%). In the UK, however, equivalent proportions were in work.

4.8 Labour Market Policy expenditure

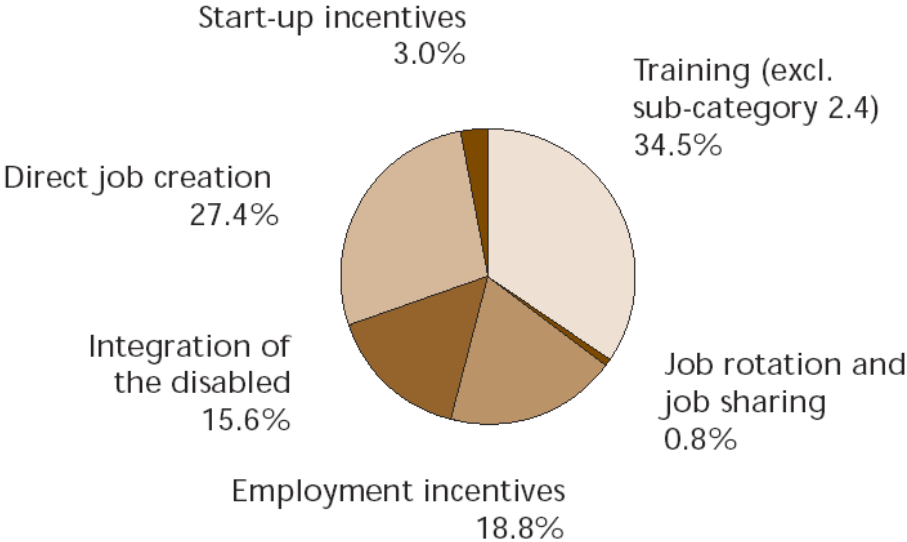
In 2000, total Labour Market Policy expenditure represented 2.04% of GDP, out of which 0.68% was dedicated to active labour market policy measures. There are considerable differences between Member States although there is no clear north/south divide. Two countries spent more than 3% of GDP (Belgium and Denmark), six countries spent between 2% and 3% (Germany, Spain, France, the Netherlands, Finland and Sweden), and six countries spent less than 2% (Greece, Ireland, Italy, Austria, Portugal and the United Kingdom).

Figure 35 Total public expenditure on LMP measures as a percentage of GDP, 2000



Source: Eurostat - Labour Market Policy Database (LMP)

Figure 36 Labour Market Policy expenditure by type of action (categories 2-7), EU-15, 2000



Source: Eurostat - Labour Market Policy Database (LMP)

5. Evidence from the literature, key informants and stakeholders

5.1 Introduction

This section examines relevant evidence from the literature associated with the EES and Employment Guidelines. The review builds on the work carried out by the country level pilot HIAs as part of the EU Policy HIA project, where each carried out their own literature review, but is placed within a European level perspective. The literature search focused on the effects of unemployment, low income and employment on health, and prioritised evidence from systematic reviews. It also looked at the effects of active labour market interventions and practices from evaluations that have been undertaken, for example, on 'welfare to work' programmes, and of labour market flexibility. Over 200 documents from the published and grey literature were reviewed. This section also presents data on the perceptions of health impacts related to employment and health and unemployment and health from key informants and stakeholders.

5.2 Employment and health

Improving health through employment

There is a body of knowledge on the effects of employment policies and other policies on employment, and the related health effects. These studies usually compare the unemployed with the employed. The general trend revealed in the findings from these studies is that higher employment leads to better health of the population. For example, a study on the impact of unemployment rates on mortality in EU countries showed a clear decline in mortality rates when unemployment declines (Brenner, 2002). In addition, Brenner demonstrated that increases in employment decreases all-cause mortality within 10 years across the EU-15 and the US. Whilst in general it can be said that increases in employment lead to improvements in public health, there appear to be exceptions to this rule. This will be discussed later.

The World Health Organisation identifies a number of ways in which employment benefits mental health. These include:

- structuring time – the absence of such a structure can be a major psychological burden,
- social contact – work provides a linkage for the person to work colleagues, friends, family and society in general,
- involvement in a collective effort or an activity associated with certain contributions to society,
- regular activity.

Impacts of health on employment

It is important to mention the impacts of health on employment. A healthy is a major prerequisite for economic success and improvements in health will help to increase efficiency and productivity. This association may differ according to occupational class. For manual workers limitations caused by disease are a stronger barrier to the labour market than for those with non-manual work (Bartley and Owen, 1996). Although evidence indicates that unemployment and health is unlikely to be due to 'direct health selection', that is poorer health itself increasing the risk of unemployment, it has been shown that ill health is clearly a risk factor for initial job loss and subsequent re-employment (Clausen et al, 1993). This suggests a double disadvantage that people who are sick or disabled may face.

Key health impacts associated with work

Employment is one of the most important socio-economic determinants of health. In general, having a job is better for health than having no job (WHO, 2003). However the type of job a person has, including the level of income, and the working conditions he or she is exposed to will also affect health. There is also evidence that there is a differential distribution of

health effects according to occupation, skill level, contract type, hours worked, gender, age, ethnicity. As indicated in section 4, health problems most often associated with work are:

- musculoskeletal disorders (MSD);
- psychosocial disorders;
- injuries from accidents at work.

There are various risk factors associated with specific work-related health problems. For example, MSD risks include genetic, physical, ergonomic, psychosocial and behavioural factors. Similarly there are specific occupational risk factors, for example, injuries from falls at height in the construction industry and occupational asthma from flour dust in the manufacturing sector. However, there is a growing evidence-base showing psychosocial factors at work that transcend occupations and increase the risk of various health conditions.

Research has shown that:

- Health tends to suffer where the demands of a job are high but the ability to control the demands are low. The risk of cardiovascular and other diseases is higher in people with jobs characterised by low control (Ferrie, 1999);
- The anticipation of job loss or job insecurity in general has been shown to negatively affect mental health (particularly anxiety and depression), self reported ill health, heart disease and risk factors for heart disease (WHO, 2003);
- Cardiovascular risks are high in people in jobs with high effort and low reward (Ferrie, 1999);
- Insecure jobs tend to involve higher exposure to work hazards of various kinds (Benach et al., 2002);
- Working conditions of non-permanent workers are generally worse than permanent workers (Benach et al., 2002);
- High levels of perceived co-worker, supervisor or trade union support can help to offset some of the negative effects of job insecurity (European Foundation for the Improvement of Living and Working Conditions, 2002).

Health impacts associated with the psychosocial work environment factors

Low control

In general working conditions that are 'low control' and make high psychological demands on workers ('job strain' model) are associated with increased risk of MSD (Hemingway et al, 1997), psychological disorders (North et al, 1993), cardiovascular disease (Hemingway & Marmot, 1998; Schnall & Landerbergis, 1994; Marmot et al, 1991) and sickness absence (North et al, 1996).

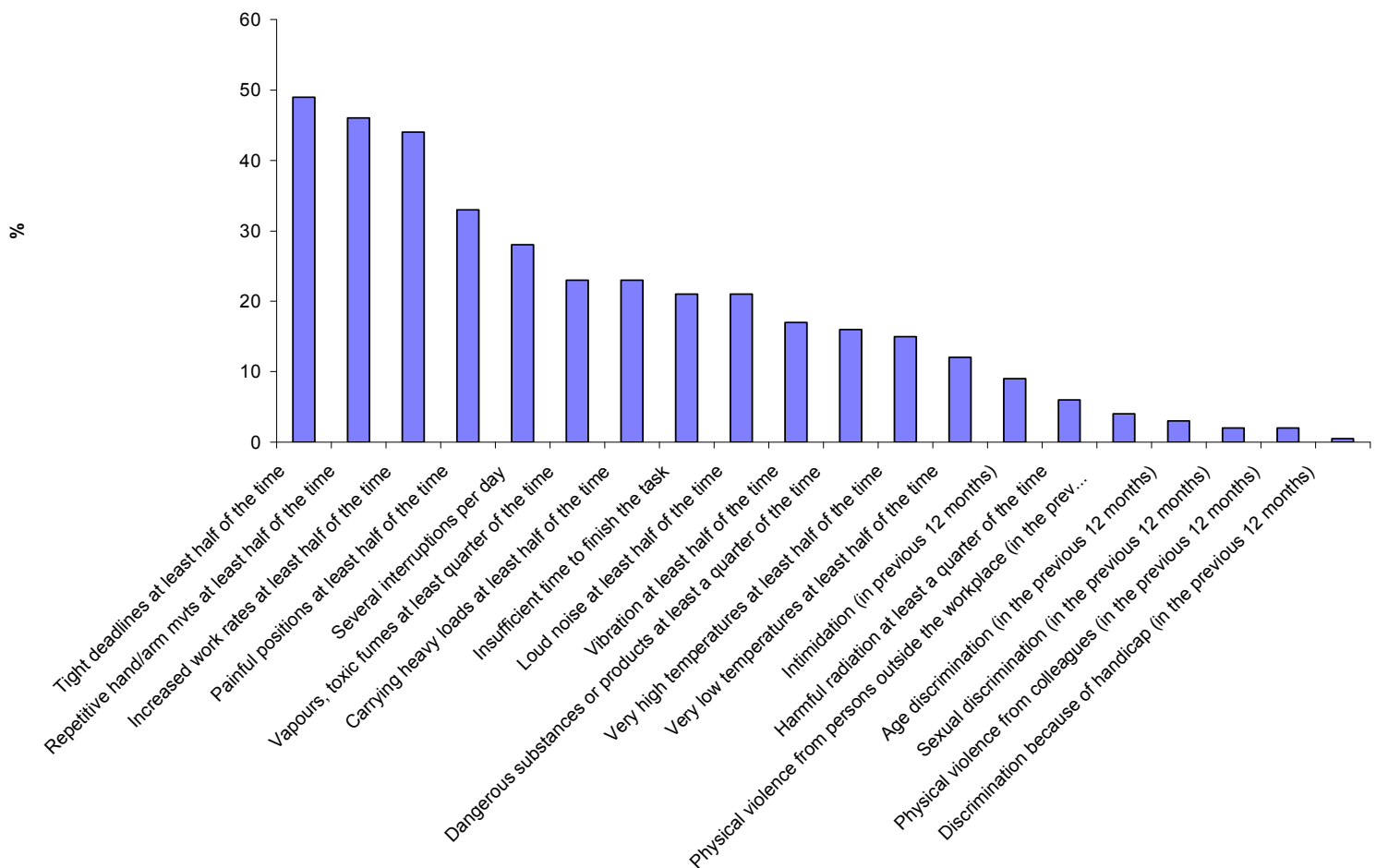
Specific psychosocial ('job strain') work characteristics associated with health-related problems at work include:

- Changing nature of work (e.g., 'non-standard' employment contracts, 'numerical' flexibility associated with job insecurity)
- Organisational factors, such as high levels of repetitive and stressful work
- Increased time pressures
- Increased intensification of work (pace-related)
- Increased multi-skilling (e.g., 'functional' flexibility) (Working conditions: Health and wellbeing, 2003)

The EFILWC found that in Europe, 64% of workers have control over their methods of work, including the pace that they work at and the order in which they conduct their tasks (Paoli and Merllié, 2001). However, these levels of autonomy are unequally distributed, with more skilled workers experiencing more control. Levels of control for temporary agency workers are lower than for permanent workers. The survey shows that 44% of workers have an influence over their working hours, although again this is higher for skilled than non-skilled workers.

A strong link between the degree of work intensity and reported health problems has been found, particularly due to tiring and painful positions (Paoli and Merllié, 2001). Working at a high speed (1 in 4 in Europe say they work at a high speed all or almost all of the time) is also associated with reported health problems. 73% of those who say they work at high speed all or most of the time report resulting health problems (such as backache, muscular pain, stress and fatigue), compared to 50% of those who do not work at a high speed. A comparison over the last ten years shows there has been deterioration in perceived working conditions. Working to strict deadlines has shown the biggest change up from 29% for women in 1990 to 43% in 2000 and from 42% for men in 1990 to 53% in 2000.

Figure 37 Proportion of European workers exposed to working conditions presenting risks to health (2000) (Daubas- Letourneux and Thebaud-Mony, 2003)



Effort-reward imbalance

There is evidence of the negative health effects associated with a perceived 'effort-reward' imbalance; this model suggests that when individual needs (e.g., self-esteem, career opportunities, job security) and efforts at work are not reciprocated, emotional distress results. Studies testing this model have indicated a two- to six-fold increase in relative risk of cardiovascular disease incidence compared with those free from chronic stress (Bosma et al, 1998; Siegrist et al, 1996). An increase in relative risk of new psychiatric disorders has also been shown: 2.6 for men and 1.7 for women (Stansfeld, 1998). Other reported health effects of effort-reward imbalances include:

- musculoskeletal disorders,
- gastrointestinal symptoms (Peter et al, 1998),
- fatigue,

- sleep disturbances,
- sickness absence (short and long term) (Peter & Siegrist, 1998),
- Coronary restenosis (Joksimovic et al, 1998).

The effort-reward model can be used to explore links between health, work and labour market dynamics. For example, a potential increased risk of negative psychological health effects with trends and policy interventions to increase labour market flexibility (e.g., increase in fixed term contracts, occupational mobility) and 'welfare to work' programmes (e.g., employment with no increase in income from benefit, little prospects for improvement and poor job quality).

Job insecurity

As data in section 4 reveals, there is an increase in demand for labour market flexibility, for example part-time hours and fixed term contracts. The health effects of job insecurity associated with this trend are worthy of a special mention. Job insecurity can be 'actual' job insecurity, for example, through reduced working hours, temporary work/fixed term contracts, or threatened unemployment. It can also be 'perceived' job insecurity, the loss of valued features of a job. Both negative physiological and psychological health effects have been observed (Burchell, 1995; Ferrie, 1999; Robinson, 1986), as well as increases in the use of health care services (Beale & Nethercott, 1985; 1986). Ferrie (1998; 1995) showed that civil servants in the UK experienced a phased deterioration in health status when a department was privatised: an 'anticipation phase' saw an initial deterioration followed by significant increase in cardiovascular risk factors immediately before the transfer. Chronic job insecurity in civil servants transferred to an agency exhibited relatively higher blood pressure compare with those who remained in the civil service. One study has related these changes to the degree of financial uncertainty (Matthiason et al, 1990). Ferrie and colleagues (2001) observed an increase in smoking and reduced activity in women with both 'anticipation phase' and chronic job insecurity; there was also an increase in control, demand, and loss of skill discretion and support. Compared to full-time permanent workers, employees with temporary contracts were twice as likely to report job dissatisfaction (Benavides & Benach, 1999; Benavides et al, 2000). Other effects have also been reported including reduced organisational commitment and performance (Sverke et al, 2002).

In addition to the negative health effects associated with increased labour market flexibility and job insecurity there are also positive health impacts associated with part-time working. An analysis of the Third European Survey of Working Conditions survey results (Benach et al, 2002) indicates that for all employment contract types, part-time workers report better health than full-time workers.

Consultation, social support and information provision in the workplace

Research indicates that the negative impacts on health of working conditions and organisational change can be offset when workers are provided with information and are given the opportunity to discuss possible changes. The EFILWC 2000 Survey shows that in Europe 71% of workers were able to discuss their working conditions with their employers. However, these opportunities are not evenly distributed across all types of workers, with unskilled workers being the least engaged in exchanges. The EFILWC 2000 survey also indicates that social support in the workplace ameliorates the effects of job strain and that low levels of social support and high job strain was associated with the greatest increase in psychological distress.

In 2000 82% of workers said they could rely on colleagues in case of problems. There was a very slight difference between men and women with men reporting more support (women 81%, men 83%). A culture of good two-way communication between employer and employee should also benefit health by enabling a joint approach to tackling the causes of poor health. For example, the EFILWC 2000 survey showed that 75% of those consulted by their employers believe that their discussions led to improvements in their workplace (Platt et al, 1999).

Intimidation in the workplace

Different forms of intimidation in the workplace will have a direct impact on health. Violence will have an obvious direct negative impact. Bullying and sexual harassment will cause psychological stress and may have an impact on mental and physical health. The European Survey of Working Conditions (Paoli and Merllié, 1996) indicated that 8.5% of workers were subjected to some form of intimidation. Women are slightly more exposed to intimidation than men (10% compared with 8%). There were also large country differences reported with Finland (15%), Netherlands (14%) and the UK (14%) reporting the highest amount of intimidation compared with Portugal (4%) and Italy (4%). However this difference is probably a reflection of awareness of the problem in different countries.

The role of employment in structuring a person's life

Employment is a major determinant of how a person's life is patterned and these life patterns in turn may have an impact on the health of the individual and their family. For example, irregular working patterns and long commuting times are becoming more common. The EFILWC defines work/life balance as "an individual's attempt to find suitable time arrangements and time options that allow the best possible co-ordination of requirements of work with requirements for personal life. To this extent, work/life balance is not automatically about working less but about having control and flexibility over when, where and how to work" (Paoli and Merllié, 2001).

Commuting

A European comparison in 2000¹ showed that 14% of the workforce spent between 1 and 2 hours travelling from home to work and back ranging from 17.4% in Finland and 17.1% in Ireland to 9.9% in Austria and 10.8% in Greece. The largest proportion of workers (32.3%) spend between 20 and 40 minutes commuting each day.

Working hours

The average hours worked per week is 38 with 14% of people working more than 45 hours a week. Country differences in average working hours are to a certain degree linked to the levels of part-time work in the country. For example Netherlands has a lot of part-time workers and has an average of 32.9 hours weekly compared to Greece with 42.5. Women generally work on average 9 hours less per week in paid employment than men.

Long working hours can have a negative impact on health. Spurgeon et al (Spurgeon et al., 1997) claim that despite the restricted nature of research to date there is "sufficient evidence to raise concerns about the risks to health and safety of long working hours". Van Der Hulst (van der Hulst, 2003) refers to links between long working hours and cardiovascular disease, diabetes, poor self-reported health and fatigue. Hoshuyama (Hoshuyama, 2003) in a Japanese study and Park et al (Park et al., 2001) in South Korea demonstrate negative effects of regular overtime on the cardiovascular system.

Irregular work patterns

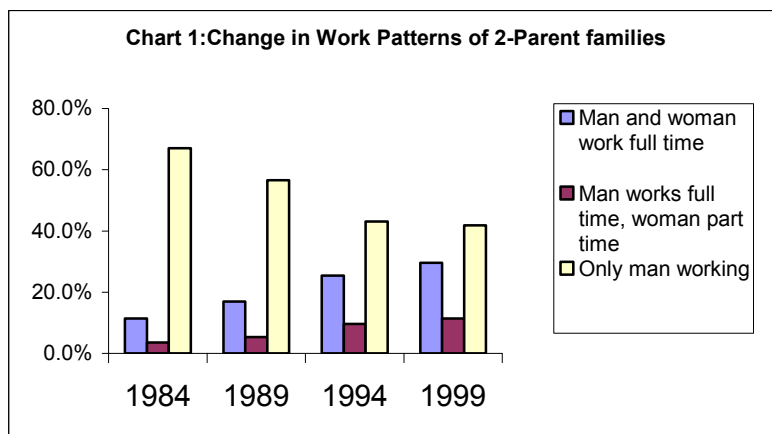
Irregular working time patterns (where people do not work the same number of days every week or the same number of hours every day) also has the potential to disrupt family life. Table 10 below illustrates the pattern of the working week.

Table 10 Working Patterns in the EU

Working patterns	Male - Europe	Women- EU
Standard Weekdays	28%	37%
Some long days	17%	9%
Regular long days	14%	6%
Some evening/nights	6%	6%
Shifts/nights	19%	18%

Source: (Paoli and Merllié, 2001)

The same survey asked whether workers felt their working hours were compatible with their family and social commitments. Not surprisingly the percentage that reported that their working hours fit 'poorly or not at all' increases as working hours increase. Data from the OECD demonstrates the changing work patterns of 2 parent families with children, as illustrated in Chart 1 (European Foundation for the Improvement of Living and Working Conditions, 2003).



Source: OECD

Nightwork and shift work

The EFILWC 2000 Survey shows that in the EU 19% of people work at least 1 night per month and that 19% do shiftwork (Paoli and Merllié, 2001). Rajaratnam (Rajaratnam and Arendt, 2001) discusses a number of health impacts on night shift workers, including “poorer daytime sleep, reduced night time alertness and performance and an increased accident rate compared to those on day shift”. This can lead to health problems such as chronic sleep disorder, increased incidence of cardiovascular disease and an increase in late-onset diabetes. Harrington (Harrington, 1994) cites a strong link between cardiovascular illness and mortality and shift work. He states that the “inherent conflict between the interest of the worker and the enterprise over unsociable hours can be mitigated by improvements in working conditions and by advice to the worker on coping strategies.”

5.3 The flexible labour market and health impacts

Labour market flexibility covers different types of flexibility: flexible employment type (also 'atypical', 'non-standard' or 'precarious' employment), functional flexibility (adapting the job tasks) and numerical flexibility (adjusting the size of the workforce, e.g., 'downsizing'). Before discussing the potential health impacts of flexible employment, it is important to recognise the difference between cases where flexibility is freely chosen as a means of improving a person’s work/life balance and cases where it is non-voluntary or ‘imposed’ by labour market conditions. The health impacts are more likely to be positive in the former than the latter. Much of the research referred to here does not make this distinction.

In addition to the general literature review on the topic of employment and health, a specific review of existing literature on the relationship between flexible employment and health was carried out with a particular focus given to research carried out in Europe. This literature review was not intended to be exhaustive but the inclusion of leading reviews (Brenner, 2002; Dooley et al., 1996; European Foundation for the Improvement of Living and Working Conditions, 1999; Quinlan et al., 2001; Underhill, 2002; van der Vliet and Hellgren, 2002) means that a wide range of existing literature was covered. The purpose of the following summary of possible effects of flexible employment on health is to provide a knowledge basis for predicting the types of effects the EES might have on health in Europe and also the possible magnitude of these effects.

International trends in employment are demanding greater labour market flexibility. OECD and European Employment Guidelines also advocate policy measures that promote labour market flexibility. This trend has led to an increase in different types of flexible employment. In Europe, 'flexible' employment is defined as part-time workers, workers with a temporary contract, teleworkers and self-employment. These flexible employment types increased by 15% between 1985 and 1995. The EFILWC 2000 survey indicates that throughout Europe different types of flexible employment have negative impacts on health compared to more 'standard' types of employment.

Part-time work

Where part-time work is desired and it enables a satisfactory work/life balance, it is likely to have a positive health impact. Part-time employees reported less health related absenteeism than full-timers and temporary and part-time workers report less stress than full-time workers (Benach et al., 2002). However, as the EFILWC indicates, part-time work is not always voluntary. In Europe, 23% of those working part-time would prefer to work full-time. This may have negative health impacts associated with low income and share some of the characteristics of psychological stress associated with unemployment (Paoli and Merllié, 2001).

The EFILWC also examined cases where people would prefer to work part-time rather than full-time to gain a better work/life balance. They analysed (European Foundation for the Improvement of Living and Working Conditions, 2000) reasons that people gave for not working part-time. Table 11 shows these reasons (respondents were allowed to give more than one answer, bringing the total to over 100%).

Table 11 Reasons for not working part-time (%)

Reasons for not working part-time	EU
Not possible to do my current job part-time	58
Employer would not accept it	59
Would damage career prospects	48
Part-timers have worse employment rights	43
Could not afford to work part-time	44

Source: EFILWC

Fixed term and temporary work

Fixed term and temporary workers suffer particularly from job insecurity. The following impacts have been reported:

Poor self-reported health: In a study carried out in Germany it was found that full-time employed people with fixed term contracts were about 40% more likely to report poor health than those full-time workers with permanent contracts (OR 1.38, 1.10-1,72) (Rodriguez, 1999; Rodriguez, 2002).

Lower control: Non-permanent workers are subject to greater demands, have lower control over the work process and low rewards — all of which have been associated with adverse health outcomes (Bosma et al., 1998).

Erosion of OSH procedures, strategies: Workers in subcontracting situations or under non-permanent contracts suffer from present lack of OSH training (Goudswaard and de Nantueil, 2000). In Spain and France, for example, temporary workers showed much higher levels of occupational accidents as compared to permanent workers (Durán et al., 2001; François, 1993). In a report by the European Agency for Safety and Health at Work on the changing world of work (2002), it was concluded in Germany that with the erosion of traditional work structures there is also an erosion of the inherited procedures, strategies and concepts in occupational safety and health. Occupational safety and health must take account of the new patterns of work. (European Agency for Safety and Health at Work, 2002, 52).

Small employers, self-employed and full-time fixed-term employment showed significant high levels of fatigue compared to full-time permanent employment.

The EFILWC found that, even taking into account working conditions, the temporary status of a worker was still an important determinant of health (Paoli and Merllié, 2001). In other words, regardless of the type of work being done, just being a temporary worker increased the chances of experiencing poor health. Analysis by Letourneux (1998) shows that temporary employees work more often in painful or tiring positions when compared to permanent employees (57% and 42% respectively), are more exposed to intense noise (38% and 29% respectively), vibrations, hazardous products. They perform repetitive tasks more frequently (46% and 36% respectively) and have to work to tighter deadlines than permanent workers. The patterns are similar regardless of job category, economic sector or country. They are less likely to receive the type of training that would enable them to deal with workplace demands and may therefore be less capable of dealing with the stress of job strain. They are however less likely to report health related absenteeism than permanent workers.

Job insecurity

One of the by-products or consequences of increased labour market flexibility, including flexible employment and numerical flexibility, is increased job insecurity. As described in section 5.2, there are an increasing number of studies showing the negative health impacts of job insecurity. Vahtera and colleagues (1997) showed that low perceived employment security was associated with poor health, particularly among those who are in permanent rather than temporary or fixed term employment. They show that the negative effects of job insecurity on physical health may increase with time and the perceived intensity of job insecurity is strongly associated with symptoms such as aches and pains.

As new forms of work organisation and flexible employment are likely to share some of the unfavourable characteristics of unemployment, it seems plausible that they could also produce adverse effects on health (Benach et al., 2000). Downsizing, which can lead to increased job insecurity, has been shown to be a risk to the health of employees. A significant linear relation between the level of downsizing and long periods of sick leave, due to MSD and trauma, has been demonstrated (Vahtera et al., 1997). Domenighetti et al. (1999) carried out research on the health effects of job insecurity among employees in the Swiss general population and found an association between perception of job insecurity and health status, health related behaviour and social distress². It has also been found that the

² In particular, employees in high insecurity group, compared to those in low one, have significantly higher odds ratios for seven indicators out of ten [not being in good health OR 1.6 (CI 1.0-2.7); high level of subjective stress OR 1.6 (CI 1.1-2.3); low self-esteem OR 2.9 (CI 1.5-5.7); daily or weekly consumption of tranquillisers OR 2.1 (CI 1.0-4.3); regular low-back pain OR 2.0 (CI 1.3-3.2); regular smoking OR 1.6 (CI 1.0-2.4); avoiding medical consultation or caring for themselves for fear of missing work OR 3.4 (CI 1.9-5.9)].

advantages provided by a positive work situation do not compensate for the perception of job insecurity arising from a non permanent contract (Goudswaard and de Nantueil, 2000). Fear of unemployment seems to have a stronger unfavourable effect in high educated employees than in less educated, probably because investment in career and in personal expectations are, in that group, generally higher (Domenighetti et al., 1999).

As described above, research shows that self-reported health status deteriorates when people are anticipating job change or job loss. For example, the British Whitehall II study (Ferrie et al, 1995) evaluated the health of civil servants in a period of privatisation and showed significant declines in health among those anticipating job change. These health impacts are not evenly distributed. The position or status of the worker within the organisation was important. In another example, a study of a British water company (Nelson et al, cited in EFILWC Literature review) showed that the health impacts of anticipating job loss was particularly marked for manual workers.

The EFILWC (2000) showed that job insecurity is associated with negative attitudes to work and a range of negative impacts on health, including mild depression and poor self-reported health status. Insecure jobs tend to involve higher than normal exposure to work hazards of various kinds (Paoli and Merllié, 2001). As the less skilled, manual workers tend to be most exposed to low paid, temporary or insecure jobs, their health will tend to be more adversely affected than more skilled workers. People on fixed term contracts and temporary agency contracts reported overall higher levels of fatigue. They also showed less satisfaction with their working conditions (80% and 77% respectively compared to an average of 84% for permanent workers). They are significantly more exposed to carrying heavy loads and to working in painful positions. They have less control over aspects of their working life (as discussed in point 2.5.1) than permanent workers (Paoli and Merllié, 2001).

Studies have also shown the following:

Worse career prospects: Absence of career opportunities for non-permanent workers is a main contributing factor to insecurity (Goudswaard and de Nantueil, 2000). While part-time and temporary jobs can function as stepping stones into the labour market and facilitate labour market participation for certain types of persons, the evidence so far is that employees under these forms of contracts risk discrimination in pay and pension and have less opportunities to participate in continuous training and to improve their career prospects (Commission of the European Communities, 2004 135 /id).

Deteriorating self reported health status: Self-reported health status tended to deteriorate among workers anticipating job change or job loss in a group of middle-aged white-collar civil servants (Ferrie et al., 1995).

Psychological ill health: Job insecurity is often associated with psychological ill health (Burchell, 1995; Ferrie, 1999; Ferrie, 1999; Robinson, 1986). One study, for example, showed that perceived job insecurity was the single most important indicator of a number of psychological symptoms, such as mild depression (Dooley et al., 1987). Goudswaard and de Nantueil (2000) commented that new psychosocial risks do not replace, but rather combine with, on-going traditional physical factors.

Job dissatisfaction: Fixed term and temporary workers have significantly higher rates of dissatisfaction than permanent full-time employees (Benach et al., 2002)

Less access to training: In almost half of the case studies carried out by Goudswaard and de Nantueil (2000) flexible workers had little or no access to training. The demand for non-permanent contracts often follows, or at least goes together with, a redistribution of tasks among the permanent population, whereby the internal division of labour is increased. Within such a context, the chance for non-permanent workers to access regular training or to be promoted are strictly limited: this is only possible if they get a permanent position

beforehand, even at a low-skilled level, which means that the selective process to reach higher positions is re-enforced. The use of non-permanent workers seems to be part of a new recruitment process, whereby the probationary period is increased, without having to give those workers the commitment due to permanent workers (Goudswaard and de Nantueil, 2000).

Possible difficulties in planning for the future, getting bank loans, having children...

Flexible workers can have difficulty planning because of the insecurity or employment situation. For example, not being able to obtain a mortgage for a house affects a persons quality of housing – an important determinant of health. Pollack reports that “renting a home was found to be associated with poor self rated health” - and perhaps prevents a person from getting married (Pollack et al., 2004). Gardner provides evidence “that marriage has a much more important (positive) effect on longevity than high income does. For men it almost exactly offsets the large negative effect of smoking” (Gardner and Oswald, 2002).

Working conditions: Insecure status undoubtedly worsens working conditions - in identical jobs, poorer working conditions are more likely for precarious workers than for other workers (Letourneux, 1998). Quinlan, Mayhew and Boyle (2001) reviewed research in the area of precarious employment and occupational health and safety (OSH). 76 out of the 93 studies reviewed found a negative association between precarious employment and OSH. Since completing this research they have identified a further 20 published studies (Quinlan and Mayhew, 2001). Almost all of these studies reinforced the conclusion from their first study that precarious employment is associated with demonstrable adverse health outcomes. Goudswaard and de Nantueil state that flexible workers have an increased exposure to risk but that this risk is difficult to quantify (Goudswaard and de Nantueil, 2000).

Teleworking

Teleworking is often designed to enable a better work/life balance and to enable some sections of the population greater access to the labour market (e.g. people with disabilities or parents looking after children).

Where teleworking enables an improved work/life balance or enables access to the labour market where it did not exist before, the health impacts are likely to be positive. However, some of the potential negative health impacts of teleworking include inferior ergonomic arrangements outside of the workplace and working in isolation and without the benefit of teamwork and consultation (European Foundation for the Improvement of Living and Working Conditions, 1998).

5.4 Employment and vulnerable groups

Disabled

Disabled people generally suffer from higher job insecurity and lower employment status. For example in Germany, alongside a higher than average unemployment rate of 16.1% (national average 10.5%) the average length of unemployment is 13.4 months (2001). This is more than twice that of under 50 year olds (6 months). Disabled people may have more difficulty in moving back into the labour market after periods of unemployment, which is likely to be a feature of a flexible labour market. There is therefore the potential for them to be even more disadvantaged in the labour force.

Older workers

Like disabled people, older workers (> 50 years) also face difficulty in gaining new jobs leading to long-term unemployment and associated negative health effects. Older unemployed persons and, regardless of their age, disabled persons - have specific problems that need to be addressed to end unemployment. Although older workers suffer less from accidents at work, they are more likely to suffer a fatal accident at work than other age groups. They are also more likely to have longer periods of absence from work, although they are less frequently absent than younger workers.

Health considerations contribute strongly to decisions about (early) retirement. Mutchler and colleagues analysed the data on the 1984 and 1985 panels of the Survey of Income and Program Participation in the United States (Mutchler et al., 1999). They showed that for their cohort of men aged 55-69 in the mid-eighties, health was a major consideration for labour force exit or re-entry. However, the extent to which health determined this was shaped by other characteristics. Health was a stronger factor for those with working wives and those who had limited financial resources: the healthier they were, the stronger the probability that they would remain in the workforce or re-enter after unemployment.

A study of men over 70 years, showed that work beyond retirement age was positively related to good health, strong work commitment, higher educational level and being married to a working wife. A negative correlation existed with age and, again, with the level of income in absence of work (Parnes and Sommers, 1994).

In the Netherlands health is a very important reason for Dutch older employees to retire. The perception is that retirement will improve health. After retirement, 40% of the 798 people interviewed are of the opinion that retirement has benefited their health. Medical consumption decreased after retirement: i.e. those under supervision of a medical specialist decreased from 52% to 32% and medication use decreased from 52% to 47%. This, together with the better evaluation of their own health, indicates a slight improvement in these people's health (Van Solinge and Dijkhuizen, 2003).

A study comparing four groups of people 55-65 years however, consisting of older employees, those on pre-retirement, those unemployed and those unfit for work showed that people who were employed or unemployed, and those who had retired, did not differ much in self-reported health, their utilisation of GP services or in ADL activities. Those unfit for work were doing worse. This last group was also worse off with respect to social participation (measured as participation in organisations, and contacts with family and friends). The results suggest that leaving the workforce either voluntarily or involuntarily does not affect health and well-being adversely, but that those unfit for work are indeed in worse health than the other groups (Henkens and Bronsema, 2000).

Younger workers

As mentioned in section 4, younger workers have more non fatal accidents at work than other age groups. They are also likely to report having to work at a very high speed. Of those less than 24 years old, 53% work at very high speed at least half the time (Eurostat, 2004b). Younger workers are also more likely to report having no ability to choose or change the order of their tasks (49% of under 24 year olds in comparison to 31% of those aged 55-64) (Eurostat, 2004b). Younger workers have a particularly high percentage of fixed term contracts and therefore are more exposed to insecure work conditions and associated ill health. It could be presumed that young people may suffer less than some other groups from the negative health effects of flexible employment. However young people in fixed term employment may face additional difficulties in planning for the future, for example buying a house, decisions whether and when to have children, which could also negatively impact on health.

Women

Women are affected more often than men by flexible employment (Klammer, 2000a). Women on average work fewer hours than men and many work part-time (section 4). The average number of transitions between employment, unemployment, different kinds of employment, different amounts of working hours, periods out of the labour market etc. have gone up and the phases and borderlines have become less clear (Klammer, 2000b). Where this reduction in working hours is chosen as a way of improving a work/life balance, the health impacts are likely to be positive. However, part-time working, through limitation of occupational choices, control over work and financial reward, for example, may also lead to stress and reduce the well-being of women whose work is organised in this manner. It is also important to note that women are seen as 'buffers' within flexibility strategies. Goudswaard and de Nantueil (2000) state that women are likely to be impacted on by policies related to flexible forms of work, either benefiting from or suffering as a result of such overall policies.

Minority groups and non-nationals

Non-nationals are particularly at risk of social exclusion partly due to their high unemployment rate. Alongside older workers and disabled people, non-nationals may face particular difficulties finding new work at the end of fixed term contracts (high unemployment rate and long term unemployed). Foreign employees often work in worse working conditions than their national counterparts (International Centre for Migration Policy Development, 2003). There is a clear distinction between other EU-non-nationals in the labour market and those from third countries, especially those employed in the informal sector. The latter, through their lack of legal status, is an especially vulnerable group to exploitation in the employment sector (International Centre for Migration Policy Development, 2003).

In almost all countries immigrant workers more often have jobs that are insecure, sensitive to labour market fluctuations, lower-paid, based on the short-term contracts, without social prestige, dirty and with long working hours. In short, immigrants often take up jobs that are unpopular among nationals (International Centre for Migration Policy Development, 2003). Immigrants may also be subject to worse employment conditions than nationals, even when doing the same kind of job.

Although some vulnerable groups may be more exposed to some of the negative effects of flexible forms of employment, flexible forms of employment may also offer 'outsiders' the opportunity to enter the labour force. Research has shown a correlation between strict employment protection measures and the employment level of young people (Organisation for Economic Co-operation and Development, 1999). Strict employment protection may act to protect the 'core' workforce but keep outsiders (women, young people, foreigners etc.) out.

5.5 Perceptions of key informants and stakeholders on employment and health

Evidence from key informants indicates that organisational change that involves a decline in perceived levels of job security has more negative health effects than when there is no perceived change. An example from organisational 'downsizing' in the Finnish public sector was given. This showed that temporary workers experienced less physical ill health and sickness absence, but poorer mental health than permanent workers. It was also suggested that the 'job strain' model doesn't apply to the same extent when organisations are undergoing change. Reflecting evidence from the literature, a key informant stated that their study had shown 'insecure employment was as bad for somebody's health as unemployment'. Although evidence from key informants, stakeholders and the literature shows less negative health effects of organisational change on workers who are already in insecure jobs compared to those who move from secure to insecure jobs, it was pointed out that insecure jobs tend to involve greater exposure to physical and chemical hazards, are low paid and of poor quality (Robinson, 1986). Thus this group of workers have additional health burdens. This 'secondary' labour market tends to be populated by people who cannot get employment in the secure 'primary' labour market; women, ethnic minorities and people with poor skills are usually over-represented in this group.

Some stakeholders reported that discrimination in the workplace against certain groups was still common. Discrimination against older workers (50+) was said to be quite subtle, with older people being made redundant, job roles being adjusted slightly and younger people being brought in to fill these 'new' jobs. It was said that employers believed there were economic gains to be made by replacing older workers, for example, the jobs were lower paid. However, it was difficult to assess the relative merits of experience against being able to work at a faster rate. The discrimination was said to vary across Member States and across occupational sectors, but generally occurred in the 40-50-age range. The impacts on health and wellbeing were reported to be quite wide ranging from reduced self-esteem with a down-grading of job role and status to an increase in risk of mental health problems such as depression and even suicide, particularly in men. In some Member States this has led to support groups being set up for older workers who were recently made redundant.

Whilst there was support for the EES and the Guidelines emphasis on tackling discrimination and promoting active ageing, it was felt that there needed to be a better balance between increasing labour market flexibility and protecting the rights of workers. Currently this was perceived to be too much in the employers' favour. However women returners were said to be benefiting from flexible working arrangements, such as part-time work. It was suggested that measures such as 'progressive' retirement (converting from full-time to part-time or job sharing) be encouraged to facilitate active ageing. In addition working conditions needed to reflect the diversity of the labour force, including older people, people with ill-health problems. It was also felt that there should be more enforcement of anti-discriminatory legislation.

Employment was described by some stakeholders, as the main vehicle for 'mainstreaming' minority groups into communities. However it was emphasised that 'integration' needs to be a two-way process. Employment has been clearly singled out as the area in which people are most frequently disadvantaged, marginalised and discriminated against. This applies to selection procedures, recruitment, gradings, promotions and the working climate (bullying). It has been reported that organisations that successfully implement diversity management approaches, which are reflected in the business strategy and corporate identity, can greatly strengthen their positioning in the market. In contrast, the marginalisation of certain groups among the population and an employment market plagued by intercultural conflicts may result in long-term damage to the economy as a whole. Educational policy was also seen as key to successful integration. It was indicated that this should also apply to teachers and educators.

5.6 Unemployment and health

Unemployment affects both physical and mental health and is a major determinant of morbidity and premature mortality. It is a major cause of poverty and poor living conditions. The loss of a job or the threat of losing a job is detrimental to health. Unemployed people and their families are more prone to the risk of premature death. It is also a key determinant of health inequalities in people of working age, with people being hit hardest further down the social scale. The anticipation of the loss of a job or job insecurity generally also have an impact on mental health, self-reported ill health, heart disease and risk factors for heart disease. Jin et al. (Jin.R. et al., 1995) in their review of literature on the relation between unemployment and health found suggestions of a strong, positive association between unemployment and many adverse health outcomes. However, they pointed out that caution must be taken not to simply state that poor health is directly caused by unemployment, since many confounding factors have to be taken into account.

Unemployment affects both physical and mental health in a variety of ways. This section will look at the impact of unemployment on mortality rates, physical and mental health. Then, the principle mechanisms by which unemployment impacts on health - poverty, unemployment as a stressful life event, health related lifestyle behaviour and the effect of a spell of unemployment on subsequent employment patterns - are analysed.

Unemployment and mortality

International research has indicated that unemployment is a cause of premature mortality (WHO, 2003). A number of longitudinal studies in the UK and other European countries showed strong links between unemployment and mortality (Mathers and Schofield, 1998). For example, a UK study showed that unemployed people with no previous illness were 37% more likely to die over the following 10 years than the general population (Mathers and Schofield, 1998). A study in Denmark showed a 40% to 50% excess death rate among the unemployed after taking into account occupation, housing, geographical region and employment status (Mathers and Schofield, 1998). A study in the UK (Morris et al., 1994) indicated that stable employed middle aged men who experienced loss of employment were twice as likely to die in the following 5.5 years than their counterparts who remained permanently employed. And the British Medical Association (1998) estimated that for every 2000 unemployed men, there were 3 excess deaths.

Brenner (Brenner, 2002) analysed the relationship between unemployment rates and mortality for main causes of death in EU countries and the United States and showed that these rates had an independent and damaging effect on health nationally. He showed that increasing unemployment was associated with up to a 10-year lag in increased all cause mortality.

Unemployment and physical health

Research in the UK indicates a higher prevalence of ill health (Daniel & Stilgoe, 1979; Moylan & Davies, 1980; Cook et al, 1982; Moylan et al, 1984) in men and women. Social instability, unemployment and job insecurity are associated with high blood pressure and raised mortality rates (Schnall & Landsbergis, 1994). Self-reported health is also more likely to be reported as fair or poor by people who are unemployed.

Unemployment and mental health

Unemployed people also suffer a range of psychological effects from symptoms of depression and anxiety to self-harm and suicide (Shortt, 1996; Bartley, 1994); this seems to be independent of pre-existing health conditions (Montgomery et al, 1999). Gershuny (1994) and Bartley et al (1999) showed that improvements in psychological health were not immediate after unemployed people returned to work.

Unemployment and poverty

Unemployment generally entails a reduced income and long-term unemployment is associated with socio-economic deprivation. The links between poverty and poor health are well established and universally accepted (WHO, 2003). People in poverty die younger, have less healthy lifestyles and live in less healthy environments. Many studies link the health effects of unemployment directly to financial strain. For example, studies (Bartley and Owen, 1996) suggest that people who borrow money are twice as prone to depression as those who do not have to borrow.

Unemployment as a stressful life event

Employment is beneficial for health by virtue of the structure and personal fulfilment that it gives a person and the social contact that it enables. Conversely, the psychological impact of unemployment and the loss of these factors has a negative effect on health. Unemployed people have lower levels of psychological well-being ranging from symptoms of depression and anxiety to self harm and suicide. Having a job or an occupation is an important determinant of self-esteem. It provides one of the most vital links between the individual and society and is viewed by many as a way in which they can contribute to society and achieve personal fulfilment. The loss of 'position' or status associated with unemployment and the related loss of self-esteem are important determinants of health in addition to loss of income. There are many studies that show the link between low self-esteem and depression, which can also lead to the "activation of biological stress mechanisms that increase risk of diseases such as coronary heart disease" (Marmot, 2003).

Unemployment and lifestyle

Unemployment is associated with some forms of health damaging behaviour, although there is disagreement as to whether this behaviour or the loss of a job comes first (Bartley, 1994). In Ireland the Social Capital and Health Survey conducted by the Institute of Public Health (Balanda and Wilde, 2003) indicates that people who are unemployed are more likely to smoke and to drink to excess than people in other employment categories.

Table 10 Health damaging lifestyle by Employment Status in Ireland

	Currently smokes	Drinks excessively
Retired	22%	3%
Economically inactive	25%	5%
Unemployed	46%	14%
Employed	31%	10%

Source: (Balanda and Wilde, 2003)

Research in England and Wales shows that a spell of unemployment may have knock on effects that increase stress and affect mental health such as loss of home and relationship breakdown (Bartley, 1994). It appears that periods in and out of employment result in stress-related alternations of weight loss and weight gain which has been reported to be a significant risk factor for cardiovascular disease (Bosello et al, 1992). This has implications for increased demands for labour market flexibility.

Unemployment as a recurring event

When considering the relationship between unemployment and health, it is important to consider the potential long-term impacts of repeated episodes of unemployment. Bartley states that "a spell of unemployment is not usually a mere interlude, however unpleasant, which has no effect once it is over ... it can precipitate a self-perpetuating series of negative events well into the future, even after work has been regained "(Bartley, 1994). People from lower socio-economic groups will spend a disproportionately large amount of time in unemployment or move more in and out of employment. A person who is unemployed once runs a greater risk of being unemployed again. The repetitive nature of unemployment may lead to chronic job insecurity, a higher than normal exposure to poor quality jobs and a lack

of control over working life, all of which have health implications. Bartley (1994) refers to studies in the UK that show that the health status of people in insecure work was similar to the unemployed. Insecure work will also increase exposure to hazardous work conditions.

5.7 Unemployment, vulnerable groups and health

Gender

Women are particularly at risk of unemployment. However the health status reported by unemployed women tends not to be as low as for unemployed men, and similarly unemployed women report fewer health risk factors (Mathers and Schofield, 1998). One of the reasons for this could be differences in social pressure. Referring to the comparison between housewives and the unemployed, De Boer suggests that the detrimental effects of unemployment are perhaps not mainly caused by income aspects, but more by the societal norms about work (De Boer et al., 2003).

Older workers

Unemployment will have a particularly detrimental effect on older or middle-aged workers. In the UK, older workers are more likely to be long-term unemployed. Many are unable to find work subsequent to recession or industrial structural change and have a tendency to drop out of the workforce. Some who do return to the workforce may do so at a lower occupational status or level of seniority and on lower wages.

Young people

Youth unemployment is usually higher than unemployment under the general population. Also, youth unemployment fluctuates more strongly with changes in the economic tide than unemployment for the general population. The most important explanation for these facts is that in times of recession, it is cheaper for companies/organisations to lay off younger employees than older ones. Also, if the demand for workers shrinks, newcomers on the job market - young people - are affected more strongly. Less important, but still influential is the lack of work experience that young people have and - to some degree - 'shopping around' behaviour of young people (O'Higgins, 1997). However, it should be noted that stakeholder evidence suggested the opposite to this.

Although direct health effects of unemployment on young people are less prominent than on older adults (Breslin and Mustard, 2003; O'Higgins, 1997), it is very clear that unemployment for young people has serious health consequences. A study in an industrial town in Sweden showed that youth unemployment can contribute to health problems later in life. Early unemployment (defined as > 0.5 years unemployment between 16 and 21 years) significantly correlated with daily smoking, psychological symptoms and (for men) somatic symptoms at age 30, which was still significant when controlling for initial smoking, working-class background and unemployment (Hammarström and Janlert, 2002). Novo et al found similar results indicating that there is an association between unemployment and smoking in young people (Novo et al., 2000). A combined qualitative/quantitative study in Sweden showed an association between long-term unemployment and increase in systolic blood pressure, alcohol consumption and crime rate was found among boys. Somatic and psychological symptoms were stronger in long-term unemployed girls than in long-term unemployed boys (Hammarström, 1994).

An important factor determining the magnitude and severity of the health effects is educational level. A Dutch study showed differences between unemployed youth with low and high levels of education. Those with low education had more mental health problems than the highly educated ones. This difference seems caused by differences in coping styles and overall opportunities on the labour market (Schaufeli, 1997).

Youth unemployment also has permanent effects on opportunities in the labour market (O'Higgins, 1997). Hammarström found that young people who were unemployed within the

first two years of leaving school had a higher risk of being unemployed after five years' follow-up (2.39 Relative Risk for males and 1.76 for females) (Hammarström and Janlert, 2000).

Even precarious employment has negative impacts for young people's prospects. Job insecurity is a risk indicator for later unemployment among both women and men; for women, having few opportunities for development at work also predicts later unemployment. These occupational conditions are more important than ill health in explaining future unemployment among women and men (Bildt and Michelsen, 2003).

Minority groups

Evidence from the UK indicates that unemployment is disproportionately experienced by ethnic minority groups compared with the population as a whole, particularly Pakistani and Bangladeshi communities. They also experience poorer health by various health measures than the population at large. Direct job selection due to ill health is not felt to be the main cause of this poor health. Material deprivation is believed to be the prime reason for this, with many families exposed to multiple deprivation. There are also health implications for the children of families, for example, living in overcrowded accommodation.

5.8 Evidence from key informants and stakeholders on perceptions of unemployment and health

The effects of unemployment on poverty and subsequently on health were well understood by key informants and stakeholders. The importance of the social inclusion dimension of the EES was mentioned; it was felt that this, and the Guideline measures to reduce discrimination, was needed to be made explicit. However it was felt that action to address differences in unemployment varied across the EU; for example, different active labour market interventions. There were also concerns expressed by the increasing compulsory nature of 'welfare to work' programmes to get the unemployed and inactive 'back [into work] by any means'. The reported effects on health were mainly increased 'psychological pressure', including stress and depression, with the most excluded and disadvantaged being most affected. The UK 'welfare to work' schemes were described as good, although it was felt that it was too early to assess the impact of new measures to increase employment for people who are inactive due to ill health or disability. It was suggested that the peer review approach of the OMC could play a bigger role in influencing the type of activation measures implemented by Member States.

5.9 Unemployment/employment and the inactive

The EES aims specifically at increasing employment. This includes more than reducing unemployment, but also at including people in the labour market who are not registered as unemployed or do not perceive themselves as unemployed, such as women who do not work outside the home and the elderly (pensioners). It is not certain whether these groups would benefit as much from becoming employees as those officially unemployed. People without a job are not necessarily as badly off as the unemployed. De Beer suggests, referring to the comparison between housewives and unemployed, that the detrimental effects of unemployment are perhaps not mainly caused by income aspects, but more by the societal norms about work (De Beer, 2001). Even those who are employed are not always better off than the unemployed. Dooley (Dooley, 2003) uses the term 'economically inadequate employment' for those who have involuntary part-time or low-wage jobs. His review of literature on this topic suggests that the inadequately employed resemble the unemployed when it comes to mental health problems. Precarious (e.g. fixed-term) employment is associated with demonstrable adverse health outcomes as well (Quinlan and Mayhew, 2001).

5.10 Impacts of labour market interventions

The Netherlands has shifted to an 'active' welfare state over the last 20 years. This model aims to increase employment and employability, whilst reducing social assistance. The most recent reforms in 2003 introduced different levels of measures, e.g. training or work experience, according to the 'work readiness'. The 'work first' orientation is expected to have the following consequences:

- reduced opportunities for parental care of children - increased formal care,
- limited impact on reducing poverty for lone parents - low skill levels,
- long term reductions in social assistance for lone parents.

Policy measures to reduce youth unemployment were evaluated in a case study in the UK and Germany by O'Higgins (O'Higgins, 1997) The findings showed that training programmes could easily lead to a substitution effect, where some young people attain a better labour market position at the cost of other young people (youth groups). Moreover, such schemes tend to increase inequality in this respect, being most beneficial to those who already have a better position. Thirdly, programmes for unemployed youth are most helpful in times of economic prosperity. However, even when only fairly beneficial in terms of moving young people into jobs, these programmes protect them from some of the negative effects of long-term unemployment, especially of the effects on future risk of unemployment (Jensen et al., 2003).

The evaluations of the various 'welfare to work' programmes in the UK have shown various positive impacts on participants to include:

- increased confidence,
- increased motivation,
- reduced isolation,
- reduced anxiety,
- gaining and retaining employment,
- participants moving off benefit.

A key positive feature across all the programmes has been the value attached to the one-to-one relationship established between the participants and the Personal Advisors (PA) or their equivalents. Other important aspects of these programmes included flexible working arrangements, for example, part-time work or working at home, choice in training and work placements and positive relationships between the various employment or programme agencies and employers. The evaluation of the New Deal for Lone Parents impacts also showed a net saving of £1600 per participant to the Exchequer (DWP, 2003).

A systematic review of 16 studies to investigate the effectiveness of the UK's welfare to work programmes for people with a disability or chronic illness has shown that the five main programmes operating in the 1990s helped people with disabilities into work who were previously on benefits (Bambra et al, in press). The proportion of participants gaining employment varied from 11% to 50% depending on characteristics such as 'job readiness' as well as the wider labour market context.

Norwegian welfare policy reforms in 1998 aimed to combine childcare, education and paid work, but with a shift in emphasis to a time limited provision of 3 years and towards paid work. Importantly they explicitly sought to improve the financial circumstances of lone parents. Evaluated impacts have included:

- halving of the number of allowance claimants,
- one in four lone parent families' income at comparable population income levels,
- increase in employment (difficult to show direct association),
- no impact on occupational stereotyping - occupational demands on employee flexibility, low, unsteady income,
- no impact on gender inequality,
- reductions in long term education opportunities,

- low levels of involvement in BMO support programme,
- negative impacts on maternal well-being, e.g. maternal distress,
- negative impacts on children's well-being, e.g. normal healthy development.

Evidence from similar welfare to work programmes in the USA, which have been operating since 1996, indicate both positive and negative impacts. Positive impacts, including enhanced parental well-being, have been recorded when there is an increase in household income compared with the benefit position. There have also been positive impacts observed on the emotional, social and cognitive development of children from these families. Negative impacts were identified when the income in work was less than the income on benefit. There were also negative impacts on children.

5.11 Impacts of employment interventions

A recent systematic review of 121 studies on international workplace interventions indicates that an increase in workers' control, e.g. decision latitude, participation, can benefit physical and mental health, and mitigate against the harmful effects of job insecurity (Egan et al, forthcoming). Increasing job demands can have either no effect or harmful effects on health, although benefits can arise from lengthening working days to allow more days off. There was evidence that some well-intentioned interventions could have adverse health effects. This work supports an earlier review undertaken by Karasek (1992) which demonstrated that improvements in the psychosocial workplace environment can improve worker health. Although changes that were introduced needed to be specific to the particular workplace context, a number of common features for successful interventions were identified:

- commitment and effort from management,
- support by management and the workforce,
- participation of the workforce in planning and implementation,
- development of trust,
- factors that inhibited health improvement in the workplace included:
 - schemes which treated symptoms only, and not the causes of work-related ill-health,
 - technical solutions imposed from the top,
 - management-controlled communication.

Successful interventions follow principles of good management practice (WHO, 1995). Effective leadership and management are also associated with enhanced performance (Collins & Porras, 1994; Karasek, 1992). Some studies have indicated that the costs of interventions to improve workplace health can be met by improvements in productivity (Wynn & Grundeman, 1999; Cooper et al, 1996; Costa, 1996). Evidence from Scandinavia also indicates that good practice may also be promoted by explicit commitment at the national level (Levi, 1992).

High levels of perceived co-worker, supervisor or trade union support have been shown to offset some negative aspects of job insecurity (Shaw et al, 1993). Increased perceived personal control and the provision of information about what is happening, the decision-making process and who is involved are key to minimising the harmful effects of organisational change. However from the 1996 European Survey on Working Conditions temporary workers tend to be less involved in consultations about organisational change, receive less training and have fewer discussions about work problems with colleagues or supervisors.

6. The quantification of health impacts

6.1 Introduction

This section describes the mathematical modelling that was undertaken to predict the magnitude of potential health impacts of part-time employment on health, based on specific scenarios. The following description is based on modelling that was developed for the German HIA.

6.2 Estimation of the impact of part and full-time work on work-related absenteeism due to health problems

Research has indicated that there may be positive and negative health benefits of flexible employment. For example, analysis of the Third European Survey on Working Conditions carried out by Benach and colleagues (Benach et al., 2002) has shown that part-time workers report less absenteeism from work caused by work related health problems than full-time workers. Part-time and non-permanent workers also report lower levels of stress than full-time and permanent workers.

The Foundation for the Improvement of Living and Working Conditions carried out the Third European Survey on Working Conditions in 2000. The two previous surveys were carried out in 1990 and 1995. For the 2000 survey, a total of 21,703 workers were interviewed in face-to-face interviews, which were conducted in their own homes. Around 1,500 workers were interviewed in each Member State, with the exception of Luxembourg where the number of persons interviewed totalled 527. There were 15,558 people included in the analysis. Part-time workers were found to be almost 20% (Odds Ratio 0.81 95% Confidence Interval = 0.73-0.89) less likely than full-time workers to report being absent from work for at least one day during the last 12 months due to work related health problems.

Table 11 Absenteeism in Europe due to work related health problems

Covariates (baseline)	absenteeism OR (95% CI)
Age (15-24)	1
25-34	0.99 (0.85-1.17)
35-44	1.15 (0.98-1.34)
45-54	1.05 (0.89-1.23)
55 and over	0.98 (0.81-1.18)
Gender (Men)	1
Women	0.89 (0.82-0.97)
Company size (none/1 to 9)	1
10 to 499	1.51 (1.38-1.66)
500 and over	1.67 (1.44-1.93)
Hours per week (full-time)	1
Part-time	0.81 (0.73-0.89)
Work shifts (No)	1
Yes	1.66 (1.50-1.83)

OR = odds ratio; 95% CI = confidence interval

Note: All odds ratios (OR) are compared to the specific reference category

It was decided to use the results of the Third European Survey on Working Conditions and apply it to different scenarios. The scenarios were designed to provide an estimation of the

magnitude of the possible effect of increases in the proportion of part-time workers in Europe on absenteeism.

Methods

The reported odds ratio (OR) of 0.81 (95% CI =0.73-0.89) (Benach et al., 2002) was applied to the present employment situation in Europe and 3 scenarios. The three scenarios are;

- 5% of employees currently working in full-time contracts shift into part-time contracts,
- 10% of employees currently working in full-time contracts shift into part-time contracts,
- 15% of employees currently working in full-time contracts shift into part-time contracts.

In order to carry out this modelling certain assumptions were made:

- The OR of 0.81 is correct;
- The two groups maintain the same characteristics as now;
- The total number of people in the labour force stays the same.

Data from the European Labour Force Survey 2002 was used for the baseline situation. In the year 2003 out of a total of 163 million people working in Europe, 133 million worked in full-time positions and 30 million in part-time positions. In all scenarios the total number of full-time contracts remain the same (163 million).

According to the Third European Survey on Living and Working Conditions 14% full-time employees report health related absenteeism due to work within the last 12 months. The odds ratio was used to calculate the percentage of part-time employees who would also report health related absenteeism ($0.81 \times 0.14 = 0.113$). That is, 14% of full-time workers report health related absenteeism due to work whereas 11% of part-time workers report absenteeism.

These percentages were applied to the baseline situation and calculated how many part-time and full-time employees in Europe report absenteeism. At baseline (year 2003) it was calculated that 18.6 million full-time workers and 3.4 million part-timers would normally report absenteeism. In order to calculate the cases of reported absenteeism that were attributable to working in a part-time contract the difference between the two absenteeism rates was taken ($0.14 - 0.113 = 0.027$) and then multiplied with the number of part-time workers. That is, 2.7% of part-time workers don't report absent because they are working part-time, or alternatively, if the part-time employees had full-time jobs then an extra 2.7% of them (ex part-timers) would report absenteeism due to work related health problems.

The same calculation was undertaken for the three scenarios. For each scenario we first calculated the change in number of contracts. For example, in the 15% scenario out of 163 million employees the number of full-time employees drops from 133 million to 113 million and the number of part-time employees increases from 30 million to 50 million. The derived percentages were applied to the two groups and the number of people reporting absenteeism and the number of people reporting absenteeism that was attributable to having a part-time job was calculated. In addition to the attributable cases, the reduced number of cases that result from the shift in scenarios was also calculated. This is the impact on absenteeism due to the scenarios.

Results

Figure 38 illustrates the changes in the number of full and part-time contracts based on the three scenarios. The overall number of employees stay the same however the number of part-time employees increases from approximately 30 million to 50 million while the number of full-time workers decrease from approximately 133 million to 113 million. Figure 39 correspondingly shows the overall changes in the cases of absenteeism being reported with full-time workers dropping from 18.6 million cases of reported absenteeism to 15.8 million.

The part-time workers increase from 3.4 million to 5.6 million. Figure 40 shows the number of reduced cases of absenteeism. The coloured section between the baseline of 787 000 and the overall reduced number of cases of absenteeism is the number of reduced cases that can be attributable to being in part-time work (the impact). Figure 41 shows the overall reduction in absenteeism with 95% confidence intervals.

The results of the modelling are summarised in Table 12. The modelling shows that a shift from full-time contracts to part-time contracts could result in a reduction of between 177 000 and 530 000 reported absenteeism due to work related health problems. If 5% of workers in Europe currently working full-time shifted into part-time positions there could be a reduction of 963 000 (CI 95% 558-1369) cases of absenteeism due to work related health problems. 177 000 (CI 95% 102-251) of these reduced cases of absenteeism are attributable to being in part-time work (i.e. the 2.7% difference in absenteeism rates between full and part-time workers). A 15% change could lead to a reduction of 1.3 million (CCI 95% 763-1872) cases of reported absenteeism due to work related health problems. 530 000 (CI 95% 307-754) of those reduced cases could be due to the shift towards working part-time.

Figure 38 Number of part-time and full-time contracts according to scenarios (100s)

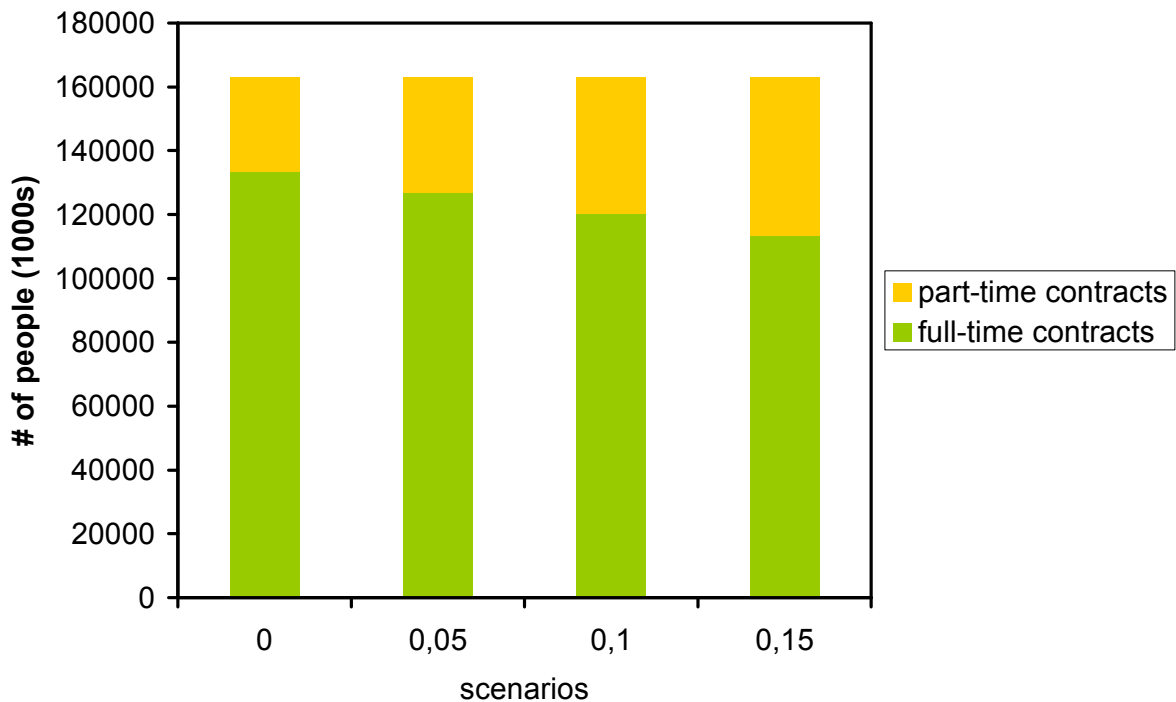


Figure 39 Number of cases of absenteeism due to work related health problems

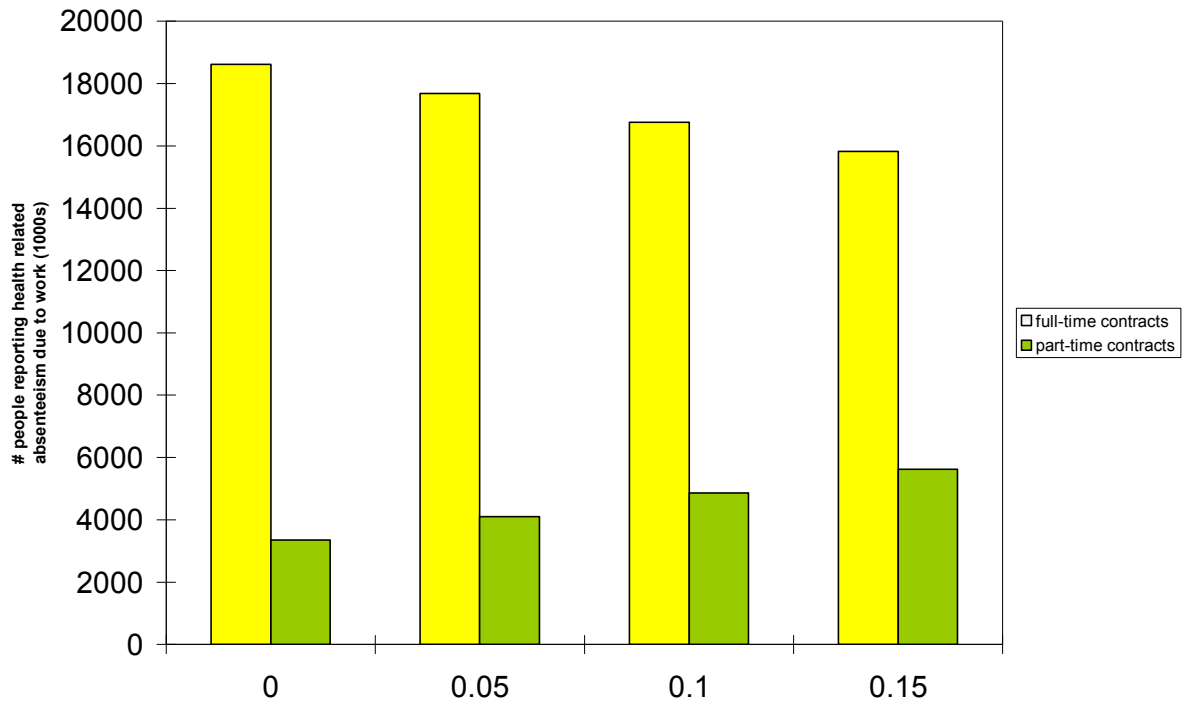


Figure 40 Number of reduced cases of absenteeism

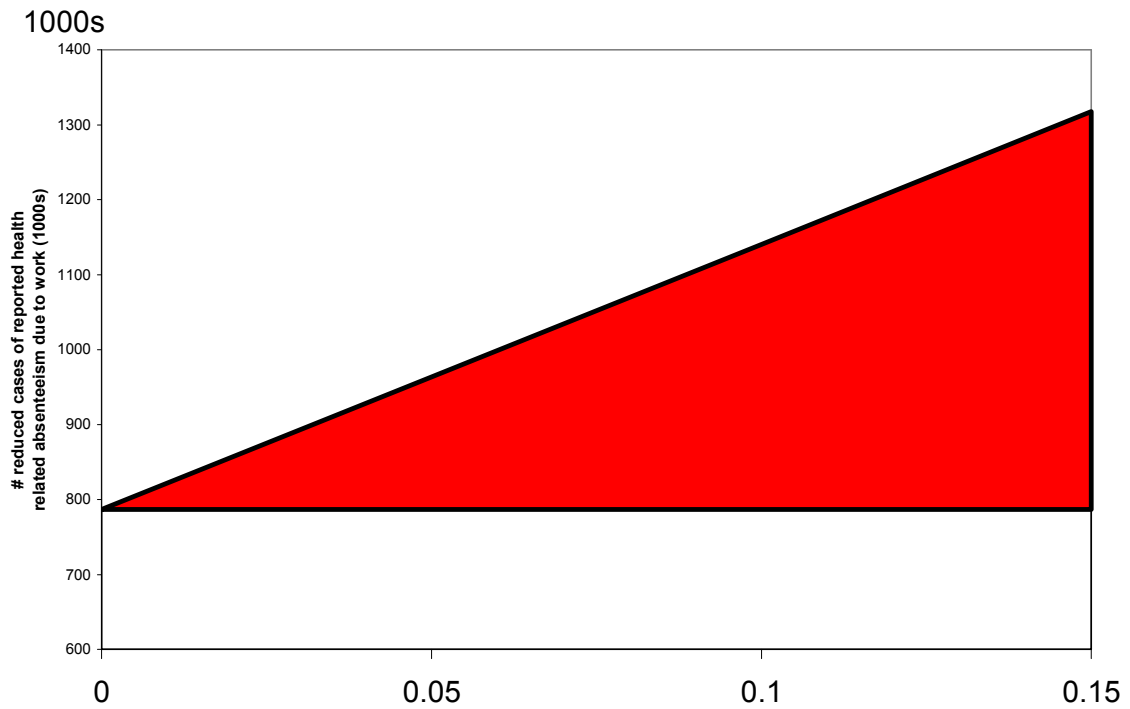


Figure 41 Reduced number of cases of reported absenteeism due to shift towards part-time contracts with 95% CI

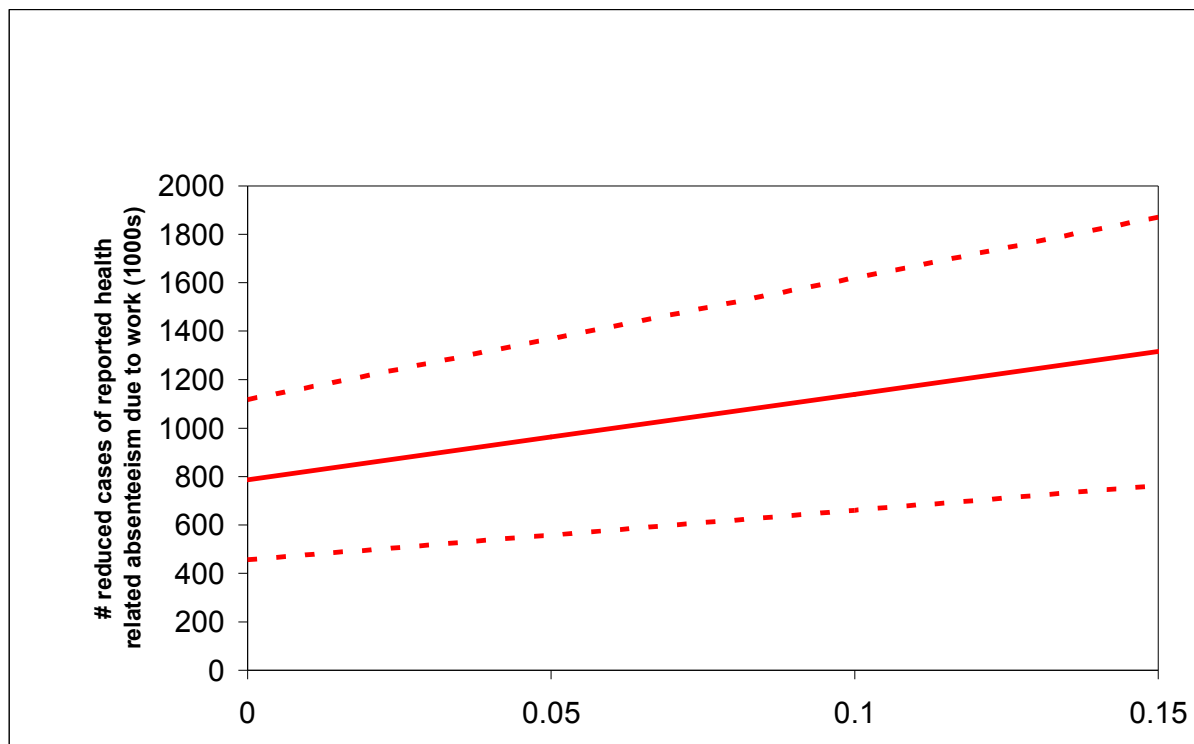


Table 12 Summary of results of modelling the effect of part-time employment on health related absenteeism

Scenarios	Total labour force (1000s)	Total part-time workers (1000s)	Total full-time workers (1000s)	Absenteeism part-time	Absenteeism full-time	no. of reduced cases due to part-time contract	Impact: attributable # of reduced cases due to shift towards part-time contracts (1000s)
0	162974	29661	133313	3354	18610	787 (CI 95% = 455-1118)	0
0.05	162974	36327	126647	4108	17679	963 (CI 95% =558-1369)	177(CI 95% =102-251)
0.10	162974	42993	119981	4861	16749	1140 (CI 95% = 660-1620)	354 (CI 95% = 205-502)
0.15	162974	49658	113316	5615	15818	1317 (CI 95% = 763-1872)	530 (CI 95% =307-754)

Discussion

From this quantification of health impacts, it is estimated that a shift from full-time to part-time employment will have positive impacts in health-related absenteeism at work. However it should be mentioned that additional modelling undertaken in Germany which developed scenarios for a shift from permanent employment to fixed term contracts estimated a potential increase in poor health status: a 15% shift to fixed term contracts could lead to an increase in 400,000 people in Germany with poor health status.

There is a lot of concern expressed in the available literature on flexible employment and health and the health risks associated with these types of work. Research is showing that the health of flexible workers is affected by their work. Benach et al. however made an apt comment when looking at the impact of flexibility on working conditions; "it is important to underline the fact that such impacts should not be locked into a narrow-minded view, for example one which propounds the idea that flexibility strategies inevitably lead to better or poorer working conditions" (Benach et al., 2002). There is scope for action against these negative health impacts.

Part-time work and absenteeism

Health effects related to part-time work will particularly impact on women. Part-time employment represented 33.5% of total female employment compared with 6.3% of total male employment. The research on which the modelling was based did not differentiate between men and woman. There may, however, be gender differences that affect the impact of part-time work on health. This could include differences such as the amount of non-paid work women do.

The indicator here was selected from available literature. One of the reasons for choosing the indicator absenteeism was the reliability of the research. However, even if research indicates that there is a correlation between two factors it is not always clear what causes the correlation. In the current example it is particularly interesting to note that there are two strongly contrasting possible explanations for why part-time workers report less absenteeism due to work related health problems;

- part-time workers are in general healthier than full-time workers,
- part-time workers are not generally healthier but do not remain absent from work when they are sick.

Both explanations are plausible. Research has shown that part-time workers generally report less stress at work (Benach et al., 2002). Working part-time may allow people to have a better balance between work and free time. They have more time for family, for leisure activities and generally keeping themselves healthy.

Evidence however also suggests that the reason for lower absenteeism may be fear of job loss rather than better health. For example research in Germany has shown that two-thirds of German employees fear negative repercussions if they report sick from work (Badura et al., 2004). More than half wait until the weekend to recover and 20% took a holiday day rather than report sick. Absenteeism in Germany is also generally decreasing possibly due to increased perceived job insecurity (Badura et al., 2004). Workers in atypical jobs, such as part-time work, may tend to have higher levels of job insecurity, which could lead to part-time workers having more fear of losing their jobs than full-time workers. Part-time workers may also be able to more easily delay 'being sick' to days when they don't work.

Research has also indicated that there is a stronger link between having a stable job and absenteeism as there is between work that entails discomfort and absenteeism. So a temporary worker who has always had to work in an awkward position is on average less often absent than a worker with a permanent contract who hardly ever has to work in such a position (Letourneux, 1998).

Here we have a situation where there is evidence indicating a negative relationship between working part-time and absenteeism due to work related health problems. However, it is unclear whether there is a clear relationship between absenteeism and health. This example illustrates the importance of analysing the available evidence adequately. It is recommended that further research examining the reasons for absenteeism is be carried out.

General discussion of modelling

One of the reasons for attempting to carry out modelling in health impact assessment is to improve the transparency of the impact assessment process. The assumptions made in the calculations are explicit, which means they are open to be challenged. This can provide a good basis for discussing health impacts.

There are some limitations to the modelling carried out:

The applicability of the modelling is limited by the narrow focus. There are a range of indicators related to employment and health available and research where these indicators were used. Indicators were selected that were used in research which produced significant results, were supported by other literature had a large sample size. However these were just two indicators from numerous possibilities.

A very simplified causal relationship was modelled with only one main variable taken into consideration. However, in reality the relationship between flexible types of employment and health is complicated. It is difficult to analyse the relationship between flexible forms of employment and health because within the multiple forms of employment there is also a wide range of different situations. Different aspects of flexible employment types can be focussed on but it is difficult to isolate these aspects from other factors. Benach, Gimeno and Benavides (2002) commented on the complexity of employment; there also exists a variety of dynamic forms of employment — ranging on a continuum from unemployment through underemployment to satisfactory employment or even overemployment (as in forced overtime). In addition, the frontier between many types of flexible employment and unemployment is becoming blurred. For example, Burchell (1995) has argued that there may be a vicious cycle in which many unemployed individuals are more likely to have been previously in temporary jobs and many of those temporary jobs, in turn, lead to spells of unemployment. In fact, many workers in flexible jobs hold similar labour market characteristics as unemployed people and go themselves through periods of unemployment (USD, 1994).

The scenarios used were very simple. The only factor that changed in the scenarios was the distribution of people working in particular types of contracts. We did not take into account issues such as changes in age structure of workforce or change in workforce size. Due to data limitations we were also unable to specifically examine population sub groups such as men/women, disabled people, migrants etc. It could be expected that there are sex and age related differences in outcomes. However Benavides and Benach (1999) found that associations between types of employment and health outcomes almost always persisted after adjustment for individual working conditions.

The study that was used to base our calculations was an analysis of the Third European Survey on Living and Working Conditions (Benach et al., 2002). The authors of the analysis recommend that in future the sample size should be increased. In the most recent survey in 2000 the sample size was 15558. This would assist in enabling more refined hypotheses to be tested and using more powerful epidemiological designs which "integrate individual and contextual variables" (Benach et al., 2002). A further recommendation was the developments of ways to further integrate quantitative and qualitative studies capable of understanding the relations between types of employment and health.

7. Impact Analysis

7.1 Introduction

Data from the profiling, literature, modelling and from the fieldwork have been collated and analysed to identify evidence of the potential health impacts of the EES across the EU. A distinction is made concerning the potential health impacts that can be directly related to the strategy itself and the health impacts that are a general feature of employment and unemployment. The matrices below define the *Potential Health Impacts* of the scheme on different health determinants and their subsequent effect on health outcomes (the impacts on health status are described after the impacts on health determinants and follow the arrow symbol). The *Direction* indicates whether this impact is a health gain (+) or loss (-). *Scale* is a measure of the severity of the impact (in terms of effects on mortality, morbidity and well-being) and the size/proportion of the population affected. The number of symbols represents this as follows:

Severity/population proportion	High	Medium	Low
Death	---- or +++++	--- or +++	-- or ++
Illness/injury	--- or +++	-- or ++	- or +
Well-being	-- or ++	- or +	negligible

The *Likelihood* of impact describes the probability that the impact will occur. The likelihood can be definite (in the case of retrospective HIAs), probable, possible or speculative - which in turn relates to the strength of the evidence. Where there is a close correlation between evidence from all data sets (which includes published literature and information from stakeholders/key informants), this is regarded as strong evidence.

The EES is a broad policy that can be implemented at Member State level in different ways. This makes it difficult to identify health impacts that can be specifically related to the EES. However, based on the evidence collected, an assessment of the potential health impacts of the EES on:

- increasing employment, reducing unemployment,
- increasing flexible labour markets, and
- increasing active labour markets

has been carried out by the research team.

In addition to the analysis of the potential impacts of the EES on the EU population as a whole, differential impacts on Member States and particular population sub-groups, and the associated impacts on health inequalities, are also discussed.

7.2 Increasing employment and reducing unemployment

Table 13 summarises the potential impacts of the EES in employment, job quality and social cohesion, and subsequently on health outcomes.

Table 13 Potential Health Impacts of the EES: employment, job quality, social cohesion

<i>Potential Health Impacts</i>	<i>Direction/ Scale</i>	<i>Likelihood</i>
Increase in employment		
EU		
The EES will contribute to a marginal increase in employment rate leading to:		
Reduction in all cause mortality (2-14 year lag);	++	Probable
Improvement in mental health;	+	Possible
Short/long-term health benefits for children in employed households.	+	Speculative
Member States		
Member States will continue to increase employment levels, but some will be at slower rates than others; the EES is unlikely to impact on this maintaining health inequalities between Member States	No change	Possible
Women		
The level of women in employment will continue to increase, but there will be a differential increase in employment for women across the EU; the EES is unlikely to impact on this leading to maintaining health inequalities between Member States	No change	Possible
Older People		
The level of older people in employment will continue to increase, but there will be a differential increase in employment for older people across the EU; the EES is unlikely to impact on this maintaining health inequalities between Member States	No change	Possible
Job quality		
Some indicators of job quality, e.g. injuries from accidents at work, suggest improvements in job quality in the EU leading to improvements in productivity and health outcomes	-	Speculative
Other indicators of job quality, e.g. work-related stress, suggests a deterioration in job quality in the EU leading to poor health outcomes	+	Speculative
Poor job quality, including low pay can be as detrimental to health as unemployment; the EES is unlikely to impact on job quality	-	Speculative
Social cohesion		
The EES may contribute to increasing social cohesion more in some Member States than others; this partly reflects different priorities of Member States.		
There are many health benefits associated with increased social cohesion: reduction in premature mortality, prevention of illness, increased mental health & wellbeing.	+/-	Possible

Data from the profile shows that employment is increasing across the EU, with a 10% increase between 1995 and 2002. Denmark, the Netherlands, Sweden and the UK all had employment rates over 70%. However, Belgium, Greece, Spain and Italy all had rates less than 60%.

There has been a greater increase in employment for women than for men, with 14% more women in employment in 2002 compared with 1995. However, from 2002 data there is a difference in employment rates for men and women across the EU of 17.4%. This varies between Member States with the biggest difference in Greece, Spain, Italy and Luxembourg (24%) and the smallest difference in Finland and Sweden (less than 4%).

There has also been an increase in older people (55-64 year olds) in employment, up 16% between 1995 and 2002. The EU employment rate for 55-64 year olds was 11% in 2002, with rates above this in Sweden (18%), Denmark and Greece (both 13%), and below Luxembourg (6%), Belgium and Austria (7%).

Data was not available to enable a reliable comparative analysis of trends in employment for disabled people and minority groups. It will be important to collect these data in the future if the implementation of the social inclusion objectives of the EES are to be monitored effectively.

There is evidence indicating the probable positive impacts of the EES in increasing employment across the EU. Although it is difficult to disentangle the contribution of different structural reforms and cyclical variations in the labour market from economic influences, it was estimated that the EES influenced an acceleration of the rate of decrease of long-term unemployment by approximately 1.4% at the end of the 1990s (EC COM (2002) 416 final). There was also evidence of a more responsive approach to labour market participation during that period, enabling employment to increase. The EES was assessed to have contributed to this. Whereas in 1998 only 6 Member states were considered to comply with the preventive and active targets of the EES, by 2001 only 5 Member States could not meet these targets (Commission of the European Communities, 2002b).

Any increase in employment will have positive effects on the health of the population as a whole. Brenner (2002) has forecast a reduction in all cause mortality in the EU using an unemployment-GDP model with a lag of 2 to 14 years after the increase in GDP and employment. It is believed that this is primarily due to the increase in per capita income resulting from GDP growth. There may also be improvements in mental health. Evidence from the US suggests there may be short and long-term health benefits to the children of families where parents move from unemployment to employment increases the household income and enhances the family environment (e.g. Hurston, 2003; Morris et al, 2001).

But evidence from the literature, stakeholders and key informants has also shown that not all employment is beneficial for health. Some work characteristics can be as damaging to health as unemployment. Workers in jobs that are of poor quality, including low paid, and precarious (insecure) have similar health scores to the unemployed (Burchell, 1996). Evidence from the US also indicates negative impacts on the cognitive, emotional and behavioural development of children of families where parents move from unemployment to employment where there is no increase in household income, and the job is of poor quality with few prospects (Hurston, 2003; Yoshikawa et al, 2003). Although the EES is also concerned with improving the quality of jobs, some evidence, for example, from trends in the incidence of injuries from accidents at work suggest improvements, some is ambiguous, for example, trends in the incidence of work-related ill-health; whilst others, for example, trends in the incidence of work-related stress, indicates a deterioration. The development of 'job quality' indicators (Commission of the European Communities, 2001a) is welcomed. The collective reporting of these, and the development of an overall job quality index, will be important in monitoring improvements in job quality.

Whilst the EES objectives and targets for full employment across the EU population as a whole coupled with strengthening social cohesion and inclusion are recognised and supported, the following suggests that the 'social' dimension of the EES needs greater attention. For example:

- The Joint Employment Report (OJ, 2003) indicates that the difference in some Member States employment rates, for example, Belgium and Greece, from the EU average may continue.
- Evidence from the JER and stakeholders make it unclear whether the differences in employment levels of some population groups, for example, women and older workers will be significantly impacted on.
- It was noted that levels of self-reported health for women and across some Member States, including Greece, were low. Whilst the data are not readily compared it suggests that the EES is unlikely to contribute to reducing existing health inequality gaps.
- With a target of 50% of older workers in employment by 2010, at current levels this means that between 2002 and 2010 there needs to be an increase of 7 million older people in employment. 2.6 million of this total is required purely to counteract the effect of an ageing population (de Jong and Broekman, 2000). From 2002 to 2010 there needs to be an annual increase of 900 000 older workers in employment per year.
- There is lack of comparable data for minority groups and people with disabilities across the EU has already been mentioned; this was also the case for people with chronic health conditions who are more likely to be inactive.
- It has been estimated that the under-use of available human resources in the EU and the wider costs of wastage in the economy (including ill-health, crime and related costs) could be between €1,000-2,000 billion (12-20% of GDP) (Fouarge, 2003).
- Documentary and stakeholder evidence has shown the discrimination that takes place in recruitment to employment as well as once in employment.

The complex sets factors associated with these labour market inequalities are recognised. Action at these root causes needs to be strengthened.

7.3 Increasing flexible labour markets

Table 14 summarises the potential impacts of the EES on flexible labour markets, and on health.

Table 14 Potential Health Impacts of the EES: flexible labour markets

<i>Potential Health Impacts</i>	<i>Direction/ Scale</i>	<i>Likelihood</i>
EU		
<i>Increases in flexible labour market - part-time work:</i>		
The EES will contribute to increases in employment flexibility, including increases in part-time work		
Part-time work is associated with increase in job satisfaction, reduction in health-related absenteeism, stress, fatigue, muscular skeletal disorders	+	Possible
5-15% shifts from full-time to part-time work could reduce reported sickness absence by between 177 000 and 530 000	+	Possible
Part-time employment is associated with 'poor quality' jobs, including lower income, poor working conditions, job isolation, less career development/training opportunities		
<i>Increases in flexible labour market - fixed term/temporary work:</i>		
The EES will contribute to increases in employment flexibility, including increases in fixed term/temporary work		
Fixed term/temporary work is associated with poorer health than permanent work; this is independent of the poor working conditions workers are often exposed to	-	Possible
Fixed term work is associated with job insecurity. Job insecurity is associated with poor health.	-	Possible
<i>Increases in flexible labour market - changes in contract</i>		
The EES will contribute to increases in employment flexibility, including changes in contract type		
Changes in from secure to insecure jobs are associated with various negative health effects, including increases in job dissatisfaction, changes in health-related behaviour, e.g. increases in smoking, reductions in physical activity, psychological health effects, e.g. increases in depression, anxiety, physical health effects, e.g. increases in cardiovascular risk factors, increases in use of health services	-	Possible
<i>Increases in flexible labour market - numerical flexibility:</i>		
The EES will contribute to increases in numerical flexibility, including redundancy. This may lead to a sharp decline in mental health at the onset of unemployment		
	-	Possible
Member States		
Member States will continue to increase part-time and fixed term work, but some will be at slower rates than others		

As described in section 5, flexible labour markets include the following types of flexibility: flexible employment type (also 'atypical', 'non-standard' or 'precarious' employment), functional flexibility (adapting the job tasks) and numerical flexibility (adjusting the size of the workforce, e.g., 'downsizing').

In Europe, flexible employment includes part-time, temporary contract, and fixed term contracts. The EES is likely to contribute to this increase in employment flexibility, particularly in those Member States where this has not been well established. However, Member States have introduced different measures to achieve this, which may have different degrees of success in increasing employment flexibility as well as different associated effects.

Evidence from section 4 indicates a trend for an increase in part-time employment across the EU. Part-time work increased by 3.5% between 1994 and 2001. The EU average for part-time work in 2002 was 18.2%; however for women this was 33% and for men, 6%. More part-time work is undertaken in the north of Europe: 43.8% in the Netherlands, 21.4% in the UK, 21.4% in Sweden and 20.6% in Denmark. In south Europe levels are lower: Portugal, 11.3%, Italy, 8.6%, Spain, 8% and Greece, 4.5%; however, they had all introduced labour market reforms, including legislation for part-time work between 1998 and 2002.

Evidence from section 5 shows that part-time workers are more likely to report better health outcomes for six indicators compared with full-time workers of any contract type (ESWC, 2002): job satisfaction, health-related absenteeism, stress, fatigue, backache and muscular pains. As discussed in section 6, there is inconclusive evidence to suggest that reductions in absenteeism are due to improvements in health. However, bearing this in mind, the modelling undertaken to forecast potential changes in sickness absence from work with a shift from full-time to part-time indicates a reduction of reported absenteeism of between 177 000 (5% shift to part-time work) and 530 000 (15% shift to part-time work).

However there are potential negative impacts associated with part-time work including, low pay, less involvement in the organisation, and less career development or training opportunities (including health and safety training). Part-time work is also often unskilled and with poor working conditions (EASHW, 2003); although exposure to hazards is obviously less than for full-time workers.

There has also been an increase in the proportion of fixed term contracts as opposed to permanent contracts. Between 1994 and 2001, these increased by 29%. In 2002, the EU average for fixed term contracts was 13.1%. Portugal and Spain had the highest levels of fixed term contracts at 21.8% and 31.2%, respectively. Ireland, Iceland and Luxembourg had the lowest at 6% each.

Workers with fixed term contracts or in temporary work are more likely to report poorer health compared to permanent workers (Rodriguez, 1999; Rodriguez, 2002). They are more likely to be exposed to physical and chemical hazards, such as working in painful or tiring positions, high noise levels and do work involving repetitive tasks or movements (Robinson, 1986). They are also less likely to be in control of their work and time, and have less opportunity to be involved in work decisions (EASHW, 2002). However, there is evidence showing that contract status has an independent effect on health outcomes regardless of working conditions (EFILWC, 1999). They are particularly likely to suffer from job insecurity. There is strong evidence showing the negative health impacts of being in an insecure job, although there appears to be different responses to this depending on contextual and individual factors, such as support within an organisation and changes in perceived security or a loss in a valued aspect of a job. In general, changes made to workers already in insecure jobs seem to have less negative effects, but this needs further research.

Negative impacts are most severe when jobs change from being secure to being insecure, for example:

- changes in health-related behaviour, e.g. increase in smoking, reduction in physical activity in women (Ferrie, 2001),
- psychological effects, e.g. increase in depression, anxiety,
- physiological effects, e.g. increase in cardiovascular risk factors (hypertension) (Ferrie, 1999),
- increase in the use of health services (Beale & Nethercott, 1986),
- increase in job dissatisfaction, e.g. twice as prevalent compared to permanent workers (Benavides et al, 2000).

Other reported negative effects include reduced organisational commitment and performance. There is also some evidence from qualitative studies in the UK suggesting that ethnic minority groups experienced more negative effects as a result of discrimination. Some studies (Burchell, 1996) have shown equivalent health scores for people in insecure jobs and unemployed people.

Evidence from UK studies suggests that the psychosocial work factors associated with changes in job security and possible mediators for the health effects were:

- increase in control,
- increase in demand,
- loss of skill discretion,
- loss of support.

This is contrary to earlier job strain models where the level of control was seen as the key psychosocial work characteristic that could predict cardiovascular and other health outcomes of employees (Marmot et al, 1997). However, evidence from Finland was that there was an increase in demand, but reduction in control and a loss of support. It has been suggested that during organisational change, the relationship between psychosocial work environment characteristics and health differ from a stable organisational state. Further research needs to be undertaken to explore this relationship.

There is strong evidence that increasing workers' control, for example, decision latitude and participation, can benefit both physical and mental health, and mitigate against the harmful effects of job insecurity (Egan et al, forthcoming; Karasek, 1992). Having information and co-worker, supervisor or trade union support, were also identified as valuable buffers to the negative effects of job insecurity during organisational change.

Flexible labour markets also mean people moving into and out of employment ('numerical' flexibility). However, the literature indicates that there is a difference between voluntary redundancy involving a good financial settlement, exit counselling and/or training for future employment (EFILWC, 1999). Although there is some evidence indicating that the steepest decline in mental health is in the early stages of unemployment, more research is needed to understand the effects of the employment-unemployment-employment transition on health. For example, it has been suggested that 'active coping' - focusing on the problem - has a more positive effect as opposed to 'passive coping' - focusing on the symptoms.

Thus there may be both positive and negative health impacts associated with the EES' promotion of increased labour market flexibility.

7.4 Increasing active labour markets

Table 15 summarises the potential impacts of the EES on active labour markets and their impacts on health.

Table 15 Potential Health Impacts of the EES: active labour markets

<i>Potential Health Impacts</i>	<i>Direction/ Scale</i>	<i>Likelihood</i>
Increasing active labour markets		
EU		
The EES will contribute to increasing active labour markets, including, getting the unemployed and inactive back into work or training etc		
Member States		
Member States have implemented different activation measures which have different impacts, including increased social inclusion, increase in labour supply, improvements in human capital, increasing national income (reduction in benefits), reducing wage pressure		
Increases in employment may lead to positive health benefits	+	Probable
Increases in social inclusion may lead to positive direct and indirect health benefits	+	Speculative
Improvements in human capital may lead to positive direct and indirect benefits to health	+	Speculative
Participants		
Impacts may include, increased confidence, increased motivation, reduced isolation, reduced anxiety		
	+	Possible
'Job ready' unemployed/inactive participants		
The 'job ready' may benefit most from 'work first approaches'		
'Job first' approaches may enhance well-being when household income increases above benefit	+	Speculative
'Job first' approaches may negatively affect well-being when household income is equivalent or below benefit	-	Speculative
Not 'job ready' unemployed/inactive participants		
The long term unemployed or those who are not 'job ready' are less likely to benefit from work first approaches		
Skills development & training may increase employability and benefits to well-being	-	Possible
Unemployed/inactive population who leave programmes & benefit		
Leaving benefits without employment may lead to adverse living conditions including overcrowded accommodation, food insecurity leading to increased infectious illnesses, hospitalisation		
	-	Speculative

From earlier evaluations (Commission of the European Communities, 2002b) there is evidence to suggest that the EES will continue to contribute to the unemployed in the EU being engaged early in measures to return them to work (Guideline 1). Belgium, Germany, France, Luxembourg, Netherlands, Portugal and the UK all introduced new programmes aimed at the unemployed during 1998 and 1999. However documentary evidence suggests there have been variations in the relative success in the implementation of these schemes; for example, the proportion of unemployed people who are still unemployed after 6 or 12 months.

There is some documentary and stakeholder evidence, as well as from the literature, that show a range of impacts associated with preventive and active labour market programmes. A summary of these positive impacts include:

Individual

- increased confidence (UK),
- increased motivation (UK),
- reduced isolation (UK),
- reduced anxiety (UK).

Socio-economic

- social inclusion of beneficiaries (FI, FR, DK, GR),
- preventing exclusion from the labour market (SW),
- increase in labour supply (LU, SW),
- improvements in human capital, less bottlenecks (DK, SW, UK),
- participants moving off benefit/increasing national income (UK),
- reduced wage pressure (UK).

These impacts varied by Member State, target group and age, as well as according to the measure and size of the programme. This was not evaluated in detail.

Evidence from the UK suggests that for people who are 'job ready', 'work first' approaches will potentially have short-term benefits to participants' mental health as a result of 'welfare to work' programmes. Evidence from 'work first'/'welfare to work' programmes in the US suggests positive health effects, for example enhanced well-being, are most likely to occur when there is an increase in household income compared with the benefit position. There is also evidence indicating that there may be associated benefits for the health and development of children in households where parents move into employment. This is primarily as a result of enhanced parenting practices, as well as improvements in standards of living. For families with young children ensuring good quality childcare could potentially maximise the cognitive, social and emotional benefits even further.

However, the long-term unemployed or inactive are less likely to be 'job ready'. The long term unemployed (one year and more) represented 40.2% of EU unemployment as a whole, more than 50% in Greece and Italy, less than 25% in Denmark, Austria, Finland, Sweden, the United Kingdom, Norway and Switzerland. Evidence from studies evaluating US 'work first'/'welfare to work' approaches indicates that the 'hard to employ' quintile were more likely to be placed in low paid jobs. When the income from work was less than the income on benefit, there were poor prospects and the job was of poor quality, the mental health of participants deteriorated. There were also negative impacts on children, including a reduction in cognitive development and school performance and an increase in anti-social behaviour. Very severe impacts on living conditions and health service use were also reported in the US when financial assistance was withdrawn after 6 months or sanctions were applied, for example, if participants refused a job (Greenberg in DWP, 2003).

Other potential health impacts from the move from unemployment or inactivity to employment could be changes in health-related behaviour and health service use. The changes in health-related behaviour could be either positive or negative; there was insufficient evidence to predict these with any reliability. Similarly it is not possible to predict

the change in health service activity, however it is probable that the frequency of use will change, which has implications for out of hours provision. In addition the focus on reducing inactivity due to ill health will undoubtedly impact on primary care professionals from the General Practitioners' initial certification to chronic disease management with practice nurses and rehabilitation with occupational therapists. The 'unemployment/inactivity to employment transition' may also have a number of stages in terms of the effects on mental and physical health; for example there may be an 'Anticipation Phase' for participants waiting to start a programme or be seen by a Counsellor or Personal Advisor. Analysis of other international welfare reforms suggest contextual factors appear to influence the impacts of interventions on participants, for example, when the changes are perceived as a net loss (financial, education, choice, esteem) or are introduced relatively quickly, the impacts on participants are more negative. This is reminiscent of the effort-reward imbalance model that has been used to explain the effects of psychosocial work characteristics on health outcomes. It is clear that more work needs to be done to construct a model explaining the relationship between different 'employment transition' factors and their impact on health.

8. Conclusion and Recommendations

8.1 Conclusion

The EES is likely to have contributed to a range of employment-related impacts during 2003. It is difficult to isolate the specific contribution of different elements of the EES from each other and from the impacts of different policy measures at Member State level; on top of this there are various other labour market and economic influences. However, there is evidence to support the impact of the EES on employment policy at national level. The extent of this influence seems to vary from providing a policy framework, to consolidation of policy plans, to no influence (policy in progress). In addition some Member States may prioritise particular employment policy objectives, for example, social cohesion, more than others. How Member States implement the objectives and meet targets is another variable.

It is probable that there will be employment gains in the EU in 2003. The extent of these gains is likely to vary in Member States and is not likely to make significant differences to their relative employment rates. Employment gains for women and older people are also likely, but in some Member States more than others. There was a paucity of comparable employment data for ethnic minority groups, people with disabilities and on people with chronic ill health conditions to comment on in detail.

There will be positive impacts on population health associated with these employment gains. These will include long term reductions in all cause mortality. Improvements in mental health are also possible in the short term. There may also be improvements in the health and development of children when household income increases, however these health impacts are speculative. Associated with the likely differential gains in employment are differential health gains. Some areas (e.g., Greece) and population groups (e.g., women) who may gain least in employment terms also have poorer self-reported health.

There is speculative evidence as to whether 'job quality' is improving (e.g., the incidence of injuries from accidents at work is falling) or getting worse (e.g., the incidence of work-related stress is increasing). 'Job quality' is associated with productivity and performance. Poor 'job quality' is also associated with poor health; workers in poor quality, low paid, precarious jobs have similar health scores to the unemployed.

Social cohesion may possibly improve in some Member States; however this is by no means universal. There are concerns that these employment gains are not being as universally shared as they could be which will have impacts on social cohesion and ultimately on health.

Developments in flexible labour markets in the EU are likely to increase; this includes the likely increase employment flexibility, for example part-time and fixed term/temporary work. Part-time work is associated with positive health impacts, including less sickness absence and stress compared with full-time workers. It has been estimated that a 15% shift from full-time to part-time working could reduce the incidence of reported sickness absence by 530 000 across the EU. Part-time work is also associated with various poor quality job indicators, including low income, fewer career opportunities, poor working conditions.

People in fixed term/temporary work report poorer health compared with permanent workers. There is a direct association between contract status and health although it is not a causal relationship. Employment flexibility that results in a reduction changes in perceived job security (e.g., permanent to fixed term contracts) or losses in valued aspects of work may also have negative health effects, for example, increased job dissatisfaction, changes in health-related behaviour, reduction in mental well-being, increase in cardiovascular effects. Increases in numerical flexibility may have implications for redundancy in the future. This will have health implications in the early stages of employment. However, the impact of the employment-unemployment-employment transition is unknown and has not been investigated in detail.

It is probable that the unemployed will be guided into various active labour market interventions, although there appear to be different emphases in Member States as to the intervention type (e.g., 'work first', training), different success rates regarding early interventions and various impacts associated with the interventions themselves. Impacts on participants may include increasing confidence, increasing motivation, and reducing anxiety. Socio-economic impacts may include increasing employment, social inclusion and human capital. These impacts are associated with both direct and indirect positive effects on population health.

'Work first' approaches are more likely to benefit 'job ready' participants. There are concerns that an over-emphasis of this intervention may have detrimental effects on the mental health of participants who are not 'job ready'; without adequate alternative interventions, it may also potentially exclude people who are not 'job ready'. There was some evidence that when the transition from benefit to employment results in an increase in household income there are positive health benefits to the participants and their children; however the opposite is true when there is no increase in household income. No data was available on the participants who exit active labour market interventions and leave benefit, but who are unemployed. There may be severe impacts on poverty and health for these individuals and their families.

8.2 Recommendations

Reduce the negative health effects of labour market inequalities by:

- Emphasising the priority to reduce labour market inequalities (LMI) between regions and population groups.
- Harmonising and collecting data (e.g., employment, health - see ECHI 2 indicator set) for different population groups, (e.g., ethnic minority groups, people with disabilities and on people with chronic ill health conditions) to enable monitoring and comparative analysis.
- Supporting action to develop a comprehensive picture of the underlying causes of these LMI within and between countries.
- Monitoring action to reduce LMI to ensure this is focused at underlying causes.
- Extending support for action to reduce LMI (e.g., EQUAL).
- Monitoring the enforcement of anti-discrimination legislation.
- Working towards the development of targets for reductions in LMI for a wider range of population groups and regions in the next Guidelines.

Increasing the positive impacts on health by improving 'job quality' by:

- Making explicit the importance of improving job quality, for example, publish triannual reports on performance of Member States against the 10 'job quality' indicators.
- Exploring the possibility of developing an overall 'job quality' index score based on the 10 dimensions and reporting on performance of Member States.
- Improving the psychosocial work environment and employee health by actively promoting evidence-based approaches, for example:
 - demonstrating management commitment to improving working conditions and worker health,
 - providing worker support from managers, co-workers and unions,
 - developing worker participation in the planning and implementation of individual business objectives.
- Review the UK Health and Safety Executive's pilot of Management Standards for Reducing Stress in the workplace, for application at EU level.

Increase the positive and reduce the negative health effects of labour market flexibility by:

- Actively promoting 'quality jobs' including characteristics that increase control, support, information.
- Supporting more detailed research into the health effects on different workers and population groups of :
 - Part-time and fixed term work,
 - Organisational and job security changes,
 - Improving work-life balance measures.
- Supporting more detailed research into the health effects on different workers and population groups of the employment-unemployment-unemployment transition.
- Supporting the introduction of early health care interventions for newly unemployed.

Enhance the positive and reduce the health effects of active labour market policies (ALMP) by:

- Encouraging a range of ALMP to cater for different participant needs.
- Supporting pilots reducing the time before unemployed enter active labour market policies, for example, by introducing an interview with Public Employment Sector advisor as soon as the unemployed or inactive register for benefits (as New Zealand model).
- Supporting pilots identifying each participant's labour market barriers (including health) and holistic action planning to address labour market barriers (New Zealand and Iceland models).
- Supporting pilots focusing on the inactive with chronic health conditions.
- Supporting pilots developing specialist Public Employment Sector advisors to provide support and guidance to those groups most disadvantaged in the labour market (people with health problems, from ethnic minority groups, or without basic skills).
- Undertaking prospective research to identify the short and long term health effects of 'welfare to work' programmes, including mixed programmes.
- Collecting data on the short and long term effects of 'welfare to work' programmes on household income.
- Collecting follow-up data on unemployed programme 'leavers' who do not re-register for benefits.
- Considering the potential health impacts of 'welfare to work' programmes during programme planning.

Increase the positive health effects of social cohesion by:

- In addition to above, making explicit the importance of social cohesion within the EES.
- Reviewing EC procurement policies regarding contractors requirement to submit evidence of their employment policies, for example, equality and diversity.

Enhance the impacts of the European Employment Strategy by:

- The systematic and regular evaluation of the EES, for example triannually.
- Building on the open method of policy co-ordination to share good practice between Member States.
- Considering the potential health impacts of employment policy during policy planning, for example, applying 'EPHIA' to future Guidelines.

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Appendix

Table A1 Immigrants and Minorities: Labour Force Participation Rates (1)

	A	B	DK	SF	F	G	GR	IRL
Total population				80 %	69 %		62.1 %	n.a.
Nationals	66.5 % ²	51.7%	80% ³			72 %		
Foreigners/ Immigrants/ Minorities ⁴ (A)	58.7 %	50.7%	53% ⁵	64 %	68 %	66 %	n.a.	n.a.
Source/year	1999 Statistik Austria; Public Employment Service (AMS). Author's calculations	1991 P. Arrijn, S. Feld, A. Nayer Geneva, ILO, IMP 23, 1998 ⁶	2001 Ministry of Interior	2002 Statistic Finland	1999, Insee, Census 1999	2000 Federal Statistical Office, Microcensus.	2001, EU DG Employment and Social Affairs: Employment in Europe 2002	
Specific subgroups or nationalities	(B) Former Yugoslavia: 61.6 % (C) Turks: 61 % (D) Other: 53.8 %		(B) EU and Nordic countries: 67% ⁷	(B) Former USSR: 68 % (C) Estonians: 65 % (D) Foreign Women: 57%	(B) Female Immigrants : 57.1% (C) Male Immigrants : 78.6%	(B) Turks: 60% (C) Former Yugoslavs: 70 % (D) Greeks: 73% (E) Italiens: 77%		

¹ The **labour force participation rate** (or: activity rate) is calculated as the percentage of labour force (employed, self-employed + unemployed persons), in relation to all persons between 15 and 64 years of age (working age population), unless otherwise specified.

² Labour force participation rate defined as (employed and unemployed) in percent of the working age population in 1999.

³ For the 16-66 year old Danes.

⁴ For definitions of the relevant categories of Foreigners, Immigrants and Minorities see Table A1 and Section 3.2.

⁵ For the 16-66 year old immigrants and their descendants from third countries only.

⁶ Discrimination in access to employment on grounds of foreign origin: the case of Belgium, Arrijn, P., Feld, S., Nayer, A., Geneva, ILO, IMP 23, 1998

⁷ For the 16-66 year old immigrants and their descendants from other EU and Nordic countries as well as from North America.

Table A1 (continued) Immigrants and Minorities: Labour Force Participation Rates

	I	LX	NL	P	E	S	UK
Total population		62 %	65 %	51.6 %	54 %		78.9 %
Nationals		60 %	67 %				79.8 %
Foreigners/Immigrants/Minorities ⁸	n.a.	66 %	50 % ⁹	n.a.	65.3 % ¹⁰	n.a.	66 %
Reference Year/ Source		1998; Jean Langers, STATEC, 1999 ¹¹	2001 CBS (2002)	2001 National Statistics Bureau	2000 National Statistical Institute (INE)		1998 Social Exclusion Unit ¹²
Specific subgroups or nationalities			(B) Western Immigrants: 63 % (C) Non-Western immigrants/ Males: 60 % (D) Non-Western immigrants/ Females: 40 %		(B) European Union: 52.3 % (C) Rest of Europe: 75.9 % (D) Morocco: 65.2 % (E) Rest of Africa: 73 % (F) Latin America: 76.8 %		(B) Black Caribbean: 76 % (C) Indians: 71 % (D) Pakistani: 51 % (E) Bangladeshi: 45 % (F) Chinese: 62 %

⁸ For definitions of the relevant categories of Foreigners, Immigrants and Minorities see Table A1 and Section 3.2.

⁹ Non-Western Immigrants only; Including: Turks, Maroccans, Surinamese, Antilleans/ Arubans.

¹⁰ These figures refer to foreigners (rather than all migrants) only, living in a household unit, which means that they do not include foreigners living in hostels or similar places. Source: <http://www.ine.es/inebase.cgi.um>, (20.04.2003)

¹¹ Langers, J., STATEC (1999) Migration assumptions in a small open economy: The case of Luxembourg, under www.restena.lu, (20.04.2003)(ressources)

¹² Social Exclusion Unit Policy Action Team 1 (no date), Jobs for All, p. 21. Department for Work and Pensions, <http://www.dwp.gov.uk/ifa/index-content.htm>.

(28.01.2003) The definition of "economically active" used is the ILO one, which includes employed, job seekers and self-employed of the age group 16-64 for men and 16-59 for women.

Table A2 Immigrants and Minorities: Unemployment Rates (1)

	I	LX	NL	P	E	S	UK
Total population		62 %	65 %	51.6 %	54 %		78.9 %
Nationals		60 %	67 %				79.8 %
Foreigners/Immigrants/Minorities ⁸	n.a.	66 %	50 % ⁹	n.a.	65.3 % ¹⁰	n.a.	66 %
Reference Year/ Source		1998; Jean Langers, STATEC, 1999 ¹¹	2001 CBS (2002)	2001 National Statistics Bureau	2000 National Statistical Institute (INE)		1998 Social Exclusion Unit ¹²
Specific subgroups or nationalities			(B) Western Immigrants: 63 % (C) Non-Western immigrants/ Males: 60 % (D) Non-Western immigrants/ Females: 40 %		(B) European Union: 52.3 % (C) Rest of Europe: 75.9 % (D) Morocco: 65.2 % (E) Rest of Africa: 73 % (F) Latin America: 76.8 %		(B) Black Caribbean: 76 % (C) Indians: 71 % (D) Pakistani: 51 % (E) Bangladeshi: 45 % (F) Chinese: 62 %

⁸ For definitions of the relevant categories of Foreigners, Immigrants and Minorities see Table A1 and Section 3.2.

⁹ Non-Western Immigrants only; Including: Turks, Maroccans, Surinamese, Antilleans/ Arubans.

¹⁰ These figures refer to foreigners (rather than all migrants) only, living in a household unit, which means that they do not include foreigners living in hostels or similar places. Source: <http://www.ine.es/inebase.cgi.um>, (20.04.2003)

¹¹ Langers, J., STATEC (1999) Migration assumptions in a small open economy: The case of Luxembourg, under www.restena.lu, (20.04.2003)(ressources)

¹² Social Exclusion Unit Policy Action Team 1 (no date), Jobs for All, p. 21. Department for Work and Pensions, <http://www.dwp.gov.uk/ifa/index-content.htm>.

(28.01.2003) The definition of "economically active" used is the ILO one, which includes employed, job seekers and self-employed of the age group 16-64 for men and 16-59 for women.

Table A2 (continued) Immigrants and Minorities: Unemployment Rates (1)

	I	LX	NL	P	E	S	UK (1)	UK (2)
Total population	11.4 %	2.6 %	3 %	6.7 %	13.4 %		6.2 %	
Nationals			3 %	6.7 %		3.2 %	5.8 %	4 %
Foreigners/ Immigrants/ Minorities ⁸	7.4% ⁹	n.a.	9 % ¹⁰	5.3 % ¹¹	15.7 % ¹²	14.2 % ¹³	13 %	11 %
Source/year	2001 Caritas, Dossier Statistico Immigrazione	2001, STATEC (LFS)	2001 CBS (2002)	1997 I.E.F.P.; National Statistics Office	2000 National Statistical Institute (INE)	2001 Swedish Government ¹⁴	1998 Social Exclusion Unit	2001 LFS (Spring 2001) ¹⁵
Specific subgroups or nationalities			(B) Western Immigr.: 4% (C) Non- Western immigrants/ Males: 9 % (D) Non- Western immigrants/ Females: 9 %	(B) Africa: 7.2 % (C) Europe: 3.5 % (D) Brazil: 3.9 %	(B) EU: 10.1% (C) Rest of Europe: 21 % (D) Morocco: 25.4 % (E) Rest of Africa: 20.2 % (F) Latin America: 15.8 %	(B) People born in an EU/EEA country: 5.3 % (C) People born in the Rest of Europe: 9.5 %	(B) Black Caribbean: 13 % (C) Indians: 9 % (D) Pakistani: 20 % (E) Bankladeshi: 23 % (F) Chinese: 9 %	

⁸ For definitions of the relevant categories of Foreigners, Immigrants and Minorities see Table A1 and Section 3.2.

⁹ Rate of resident workers with work permits but without employment.

¹⁰ Non-Western Immigrants only; Including: Turks, Maroccans, Surinamese, Antilleans/ Arubans.

¹¹ Unemployment rates estimated on the basis of the number of unemployed registered at the I.E.F.P. and the active population holding residence permits in Portugal. In the same period the unemployment rate among Portuguese was 6.7 % (1997). Source: <http://www.ine.pt/prodserv/series/serie.asp> (20.03.2003) In 2001, total unemployment stood at 4.1 % (Source: National Statistics Bureau).

¹² These figures refer to foreigners (rather than all migrants) only, living in a household unit, which means that they do not include foreigners living in hostels or similar places. Source: <http://www.ine.es/inebase/cgi.um> (20.03.2003)

¹³ Only people born outside of Europe

¹⁴ Swedish Government, Written Government Communication 2001/02:129 p. 37 (original source: SCB)

¹⁵ The UK Labour Force Survey distinguishes between "whites" and "ethnic minorities", only. Source: http://www.statistics.gov.uk/downloads/theme_labour/LMT_March02.pdf (27.01.2003)

Welfare policy in the US

In the United States similar welfare programmes were introduced under the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA); this aimed to increase paid employment, reduce welfare dependence, and to influence family structure by encouraging marriage and two-parent families. Figure A.1 provides a schematic representation of the conceptual model on which the policy has been based on and the intended effects. Figure A.2 identifies additional actual impacts.

Figure A1 Conceptual Model of PRWORA Policy Effects on Families (adapted from Hurston, 2002)

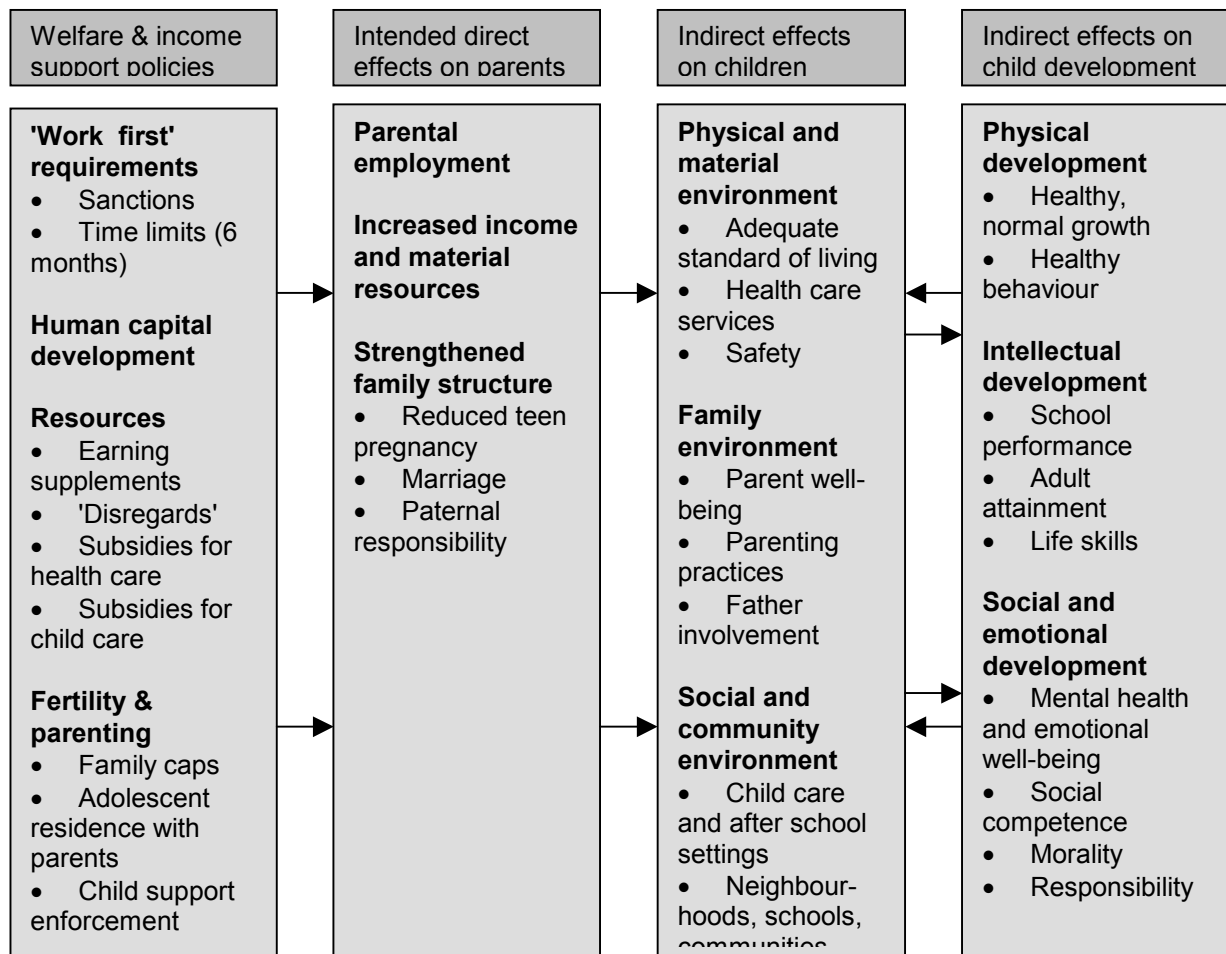
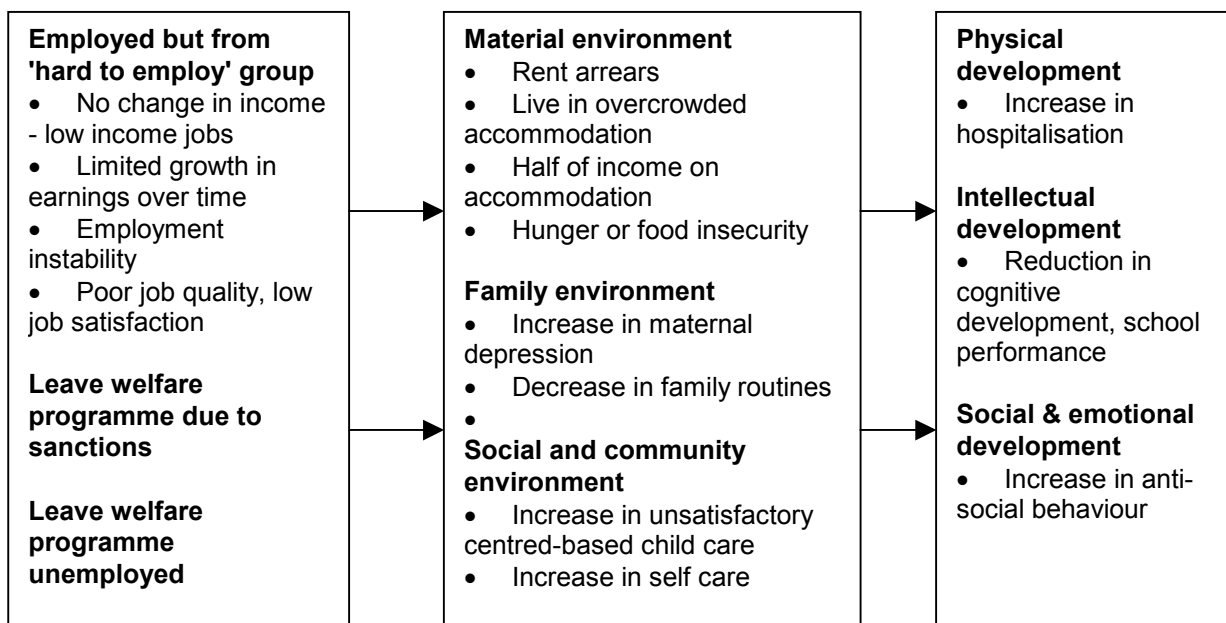


Figure A.2 Actual Policy Impacts on Families



Evidence from evaluations and other studies on the impacts of the PRWORA (Greenberg, in DWP, 2003) shows reductions in the number of families receiving welfare assistance and an increase in employment of lone parents. It has been difficult to estimate the direct impacts of the law and the different aspects of these welfare changes - expanded employment services, increased penalties and sanctions, time limits, 'make work pay' policies - as this period coincided with a very strong economy and other policy initiatives. Since 1996, there has been a large decline in welfare caseloads and a significant expansion in employment by lone-parent families. Studies consistently find that most of those who left assistance entered employment, typically in low-wage jobs. There is also evidence of limited earnings growth over time, of employment instability for a significant share of leavers, and of a group with multiple employment barriers that remains unemployed after leaving assistance. Although there have been reductions in absolute child poverty levels - a concern of the PRWORA - there is little evidence that the increased employment was associated with much, if any change in measures of child well-being; this is especially so when there is an increase in employment without an increase in income (Box A.1).

Box A.1 Effects of US welfare programmes on child health and well-being.

Decrease in children living in poverty levels (against absolute US poverty standard) - 22% in 1994 to 16% in 2001 (Proctor and Dalacker, 2002), with the strongest effects in minority families

Programmes that increased family income produced positive outcomes, eg school achievement (Morris et al, 2001); however welfare families from the very hardest to employ quartile or with adolescents or siblings showed less positive impacts, eg behaviour problems, poorer performance, grade repetition (Yoshikawa et al, 2003; Brooks et al, 2001).

Changes in parenting explain selected impacts of the programme on children's cognitive function (McGroder et al, 2002) social and emotional development via impact of working conditions, eg job quality on parental behaviour, maternal depression and home environment (Fuller et al, 2002; Parcel & Menaghan, 1997). Negative effects, such as poor behaviour, were mediated by an increase in maternal depression, reductions in family routines and centre-based child care (Yoshikawa et al, 2003).

Positive cognitive effects for children in high-quality centre-based care; stronger cognitive growth when caregivers are more sensitive and responsive, and stronger social development when caregivers have a post-High School education. Children in family child care homes show more behavioural problems but no cognitive differences (Loeb et al, 2004)

More self care for older children and adolescents increase risks of inactive lifestyles, eg more TV, behavioural problems (Pettit et al, 1997)

Youths who participate in structured activities approved by adults have better school performance and less deviant behaviour (Pettit et al, 1997)

Although there are many notable similarities to the NDLP programme, for example the 'work first' approach, essential differences with the US have been their funding mechanism (capped 'block' state grants, regardless of caseloads) and the ineligibility of legal immigrants to financial assistance. The former resulted in compulsion and penalties for those not working, as well as the time limit (6 months) to financial assistance. There have been significant difficulties in amending the law to strengthen employment retention and promote advancement for low-wage workers, and to develop more effective approaches for individuals with multiple employment barriers. It is recognised that if the associated aim of increasing employment of lone parents is to reduce child poverty, the US still has much to do to build skills, improve employment retention and advancement and to support low-income families. Key conclusions are that although there have been winners - individuals and the state - there have also been losers. The barriers preventing some welfare recipients becoming self-supporting were often beyond their control, resulting in extreme hardship for those who are unemployed and without financial support (Box A.2) and, even where support networks existed, less life satisfaction and reliance on subsistence coping strategies (Henly, 1995).

Box A.2 Barriers and effects of US welfare programmes

Barriers to work for unemployed leavers of US welfare programmes (Kubo & Richer, forthcoming).

- Ill health - cancer, hepatitis, mental health problems, diabetes - or caring for disabled or ill children (20-30%)
- Transport issues (50%)
- Childcare (20-30%)

Barriers to work for welfare leavers due to time limits (Taylor & Barusch, 2000)

- Domestic abuse within last 12 months
- Post Traumatic Stress Disorder
- Language barrier
- Transportation

Effects of leaving US welfare programmes on the health of unemployed leavers (Polit et al, 2001).

- Hunger or food insecurity (25-33%)
- Rent arrears (25-50%)
- Live in overcrowded accommodation - less than one room per person (20%)
- Half of income for accommodation and utilities (35-50%)

Effects of leaving welfare (due to sanctions) on children (Scalicky & Cook, 2000)

- Increased likelihood of food insecurity (50%)
 - Increased likelihood of hospitalisation (90%)
- compared with families without sanctions

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