D1.1 A Review of the Evidence

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ABSTRACT

This report has been produced by the restructured L*abour Market Changes and Welfare Perspectives In Europe* (LAW) project in order to examine the scope of labour market restructuring in the development of a European information society and the challenges this poses to European welfare systems.

First, it summarises the main labour market trends in the five largest EU Member States (France, Germany, Italy, Poland and the UK) drawing particular attention to the impact of ICTs, the flexibilisation of labour markets and the groups which have emerged as 'winners' and 'losers' in each country as a result.

It then goes on to summarise the characteristics of the welfare systems operating in each of these countries and the ways in which they have succeeded (or failed) to adapt to the restructuring of labour markets. It draws particular attention to anomalies in welfare systems as they interact with labour market flexibilisation and identifies the groups particularly at risk.

The third section summarises the policy debates about the future of welfare systems in the light of the European Lisbon agenda of proceeding towards a knowledge-based economy, firstly by conducting an overview of the European policy debates and then by following debates in each of the five countries under study.

The final section draws some conclusions from the earlier chapters, in some case supporting these arguments with evidence drawn from other research projects funded under the IST Programme.

CONTENTS

1. INTRODUCTION

A large number of studies and policy documents have drawn attention to the changing nature of employment and of labour markets in a knowledge-based economy. Indeed, the development of flexible and responsive labour markets is a crucial aim not only of most national government policies but also of the European Community's Lisbon Strategy, formulated in 2000, where it is seen as playing a crucial role in the fulfilment of the aim to make Europe the most competitive knowledge-based economy in the world by 2010. In addition to employment-related goals, European policy also includes the goal of modernising the European social model. This policy was adopted in 1997 as part of the European Employment Strategy and broadened and linked to the employment goals in 2000 in the aim 'more and better jobs and greater social cohesion'. However most research on work in the new economy has focused on the achievement of flexibility and the differential impacts on differing social groups in the here-and-now. Very few studies have addressed the question of the long-term impact of employment restructuring on welfare systems.

This lacuna is in some ways surprising: after all, it is generally accepted that most European welfare systems are facing a crisis as we enter the 21st century. This crisis has been created by a combination of factors. These include demographic changes (leading to an ageing population), the fall in the value of private pension funds (and the outright failure of some companies) and a range of demands created by the growth in long-term unemployment and other needs which were not foreseen at the time when these systems were originally set up. In most cases, European welfare systems were established during the period following World War 2, when it was anticipated that the employment norm would be of full-time permanent employment for male breadwinners, earning a 'family wage', which could support their dependents. Whilst these systems have been adapted over the years, most have yet to see fundamental reform. There are, however, large divergences between different European welfare models and most debates have been conducted at a national, rather than a European level. This contrasts with debates about changing employment practices which, despite major national differences, exhibit strong convergence and have lent themselves more readily to international comparative analysis.

The *Labour Market Changes and Welfare Perspectives In Europe* (LAW) project was set up with the aim of filling this gap. Funded by the European Commission under the *Information Society Technologies* (IST) Programme of its 5th Framework Programme, LAW's aim is to analyse the changes taking place in European labour markets in the transition to a Knowledge-Based Society in order to assess their impact on European welfare systems.

This document is produced as the first deliverable in the second phase of the project. The project has been extended to November 2005 and after undergoing a reorientation of objectives now specifically focuses on Changes in labour markets and welfare systems in the Knowledge-Based society. It comprises a synthesis of country reports from the five EU Member States with the largest populations: France, Germany, Italy, Poland and the UK.

Its purpose is fivefold:

- to gain an empirical overview of the changes that are actually taking place in labour markets across Europe;
- to examine the extent to which these vary between different national environments;
- to establish the extent to which these changes compare with those anticipated in the extensive literature about employment in the Knowledge-Based Society;
- to gain an overview of the welfare systems in these five countries; and

- to identify common trends, as well as significant divergences, between welfare systems across the EU.

The report draws on secondary analysis of national data as well as literature reviews by IRES in France, CISS in Italy, ISG in Germany, IPISS in Poland and Analytica in the UK as well as an overview of EU welfare policy by INPS.

This report does not attempt to draw general conclusions about the implications of ICT-related changes in the labour market for European welfare systems. These will be addressed in later outputs from the LAW project. It forms a necessary prelude to this, however, by providing an overview of the scope of the areas under discussion and identifying specific issues deserving further attention from researchers, policy-makers and other stakeholders in the European Information Society.

2. LABOUR MARKET RESTRUCTURING AND ICTS

The idea of an 'information society' is closely linked with the idea of an economy which has switched from producing goods to producing services. Christened 'la société post-industrielle' by Alaine Touraine (Touraine, 1969), and 'the information society' by Daniel Bell (Bell, 1973) the concept was coined to describe what many experts regarded as a key shift in economic evolution: an economy that has changed from producing goods to producing information and services; an occupational distribution dominated by professionals and technical classes; and the centrality of theoretical knowledge as the source of innovation and policy-making.

One of the distinguishing features of an information economy, therefore, is a shift from manufacturing to service industries, and from manual to non-manual occupations. In particular, a growth in the number of 'symbolic analysts' (Reich,1992) is to be expected, combined with a reduction in manual work.

A second strand in the literature points to a growing flexibilisation of employment. This may take the form of 'internal flexibilisation' (a breakdown of demarcations between different occupational groups, accompanied by a convergence of skills and an increase in multi-tasking) and 'external flexibilisation' (the increasing use of temporary, part-time or self-employed workers to enable a more rapid response to fluctuations in the demand for work) (Beatson, 1995, Atkinson, 1989). The spread of ICTs plays a major role in the development of these forms of work, according to most experts, because ICTs increase the speed of communication, and hence the speed with which firms have to react to market demands, and because they also increase the quality and quantity of information available, making it possible to develop systems for the management of 'just in time' delivery systems. Whilst internal flexibilisation cannot be identified from standard labour market statistics, external flexibilisation should be visible in the form of growing numbers of people employed under 'atypical' contracts of work, or with self-employed or (in Italy) 'parasubordinate' employment status. Furthermore, an analysis of these statistics by sector or occupation should make it possible to tell whether it is indeed the case that flexibilisation of employment is associated with the use of ICTs.

A third aspect of labour market restructuring associated with the development of a Knowledge-Based Society is the delocalisation of work. ICTs make it possible for work to be carried out at a distance whether this is in the form of home-based teleworking, mobile eWorking, or the large-scale relocation or outsourcing of information-based jobs.

These trends do not, of course, take place in a vacuum. They also interact with other demographic and economic patterns including such factors as an ageing population, increasing labour market participation by women, growth in immigration and the impact of the business cycle, factors which have implications for current and future demands on welfare systems as well as on the structure of national labour markets.

In this chapter we summarise by country the evidence relating to these trends for France, Italy, Germany, Poland and the UK.

FRANCE

Structure of the workforce

A statistical snapshot of the French population is shown in Table 1. This shows a picture of around 26 million economically active people in France supporting, directly or indirectly, approximately 12 million retired people, 11 million children under 14 and 10 million economically inactive adults. Five million are in full-time education.

Table 1. Statistical profile of the French population (thousands)

	Men	Women	All
Over official retirement age (over 60)	5247	6883	12130
School age or below (0-14)			11023
Of working age (15-59)	17751	18001	35752
O/w In full-time education (a)	2609	2744	5353
O/w Registered unemployed (b)	1115	1210	2325
O/w Economically inactive	3812	6196	10008
O/w part time	663	3217	3880
O/w self-employed	1741	833	2574
O/w on temporary or fixed-term contracts	712	699	1411
O/w working in agriculture	683	301	984
O/w non-nationals	1204	1210	2415

Source: INSEE, 2002: All people aged 15 and over; ILO definition of unemployment

Fewer than a million work in agriculture. The majority of the workforce is full-time and permanent. The number of workers on temporary or fixed-term contracts is 1.4 million, whilst 3.9 million (the great majority of whom are women) work part time. Just under one worker in ten is self-employed. Around the same proportion of the workforce is made up of non-nationals.

Industrial structure and recent trends

In 2002 (INSEE, 2002), the working population (salaried and non-salaried personnel) was distributed as follows: 4.1% in farming, 24% in industry as a whole[1] and 71.9% in the service sector (business, transport, finance, property, services to companies and private individuals, education, health, social policy, administration).

Employment in the manufacturing industry[2] in France is falling off in overall terms, down from 24% in 1980 to 16% in 2003 (not including temporary work) (CPCI, 2004). Since 1990, however, the added value of the manufacturing industries has increased faster than that of the economy as a whole. The manufacturing industry is also characterised by increased outsourcing: numerous manufacturers are refocusing on their core business and outsourcing services and other functions (maintenance, transport, etc.). Further, "core

1 In the broad sense of the word, industry is defined here as comprising the manufacturing industry (production of consumer goods, equipment and intermediate products), energy, construction, and the agricultural and food industries.

2 Production of consumer goods, equipment and intermediate products.

business" is not always centred around production; innovation and the marketing strategy are sometimes seen as priorities (thus in the clothing industry, for example, manufacturers are tending to prioritise design and distribution and are increasingly outsourcing production). Moreover, although rationalised production can often mean outsourcing services, the changing nature of the demand is prompting a large number of companies to combine an increasing proportion of their services with the supply of their products. At the same time, numerous service activities are becoming increasingly dependent on their purchases and industrial facilities (health, administration, tourism). In this context, the distinction between industry and service is becoming somewhat blurred.

Over the period 2000-2003, employment growth was 2.6%. However, total employment (waged employment and self employment) has decreased in agriculture and industry whereas it has increased in building and civil engineering and in market services.

Table 2. Total employment in France by industry (thousands)

	2000	2001	2002	2003	2000-2003 (% change)
Agriculture	1 033,6	1 028,3	1 014,6	1 012,0	-2,1
All Industries	4 002,7	4 045,7	3 980,2	3 893,4	-2,7
Building and civil engineering	1 430,4	1 470,7	1 492,6	1 501,8	5,0
Services (private)	11 108,5	11 403,1	11 561,9	11 650,0	4,9
Services (public)	6 732,6	6 771,8	6 838,1	6 876,1	2,1
Total	24 307,8	24 719,6	24 887,4	24 933,4	2,6

Source : INSEE, National accounts.

For the period 2000-2002, the figures for corporate added value per sector were as shown in Table 3.

Table 3. Value added (annual % increase, 1995 prices)

	2000	2001	2002
Agriculture	-2,2	-4,0	3,7
Industry	4,2	2,8	0,1
Food industry	0,2	0,2	1,4
Consumption goods	5,1	5,7	0,6
Car industry	9,0	5,5	0,3
Equipment goods	5,1	3,2	-0,2
Intermediate goods	5,0	1,9	-0,5
Energy	1,1	2,5	-0,1
Building and civil engineering	7,1	1,5	-0,5
Retail trade	3,3	2,3	0,3
Transportation	4,3	0,8	-0,1
Real estate	2,4	1,2	1,8
Services to enterprises	6,1	3,4	1,8
Services to private individuals	4,0	2,2	1,1
Total	4,0	2,2	1,3

Source INSEE, Informations rapides, 29.4.2003

Most recently, in 2003 (SESSI, 2004), activity picked up in the second half-year, although manufacturing dropped by an annual average of 1%. High technology (transmission equipment and electronic components, and aeronautics) recovered after a drop in 2002,

due mainly to the upturn in the information and communications technologies (ICTs). The end of the year saw intermediates get back to their 2002 level. The car industry maintained production at the level achieved in 2000, while pharmacy and perfumery maintained a steady rate of growth. On the other hand, the downturn continued to affect other consumer goods such as leather clothing and home equipment.

As regards manpower, the Survey Section (SESSI, 2004) of the Department of Industry, Information Technology and the Post Office and Telecommunications has shown that manufacturers reduced their direct manpower two years running: by 3% in 2003, and by 2.4% in 2002 (while the figures for temporary staff remained stable). The downturn marking the years 2002-2003 affected all sectors of industry. Pharmacy and perfumery, activities that traditionally create jobs, maintained their workforces at the customary level. Elsewhere, they declined. The downturn was especially felt in clothing, textiles, and the information and communications industry (home equipment, electrical and electronic components), all industries affected by the relocation of production. The car industry is an exception here: thanks to the positive results achieved, jobs only declined marginally.

Generally speaking, for a long time **restructuring activities** in France involved the employment pools in eastern and northern France, but things are different today: restructuring activities are more dispersed and are also extending to services, often the small and medium-sized companies (SMEs), and take in the whole of France. These new features of industrial restructuring tend to make it harder to compile accurate statistics (due among other things to the absence of recovery plans in the SMEs).

In France, industrial restructuring projects are identified according to their impact on the wage bill. Appendix 1 gives the job centre figures for the top twenty jobs registered in 2003 for reasons of redundancy.

Employment Growth by Sector

In twenty years, the number of jobs in Metropolitan France rose by 10% to reach 24 million in 2002. This increase was particularly marked towards the end of the period: up 8.4% between 1997 and 2001. Employment patterns have changed quite considerably: fewer jobs in farming, industry, building and public works; a very sharp increase in the service sector, heightened by the tendency of companies to outsource some of the maintenance and logistics tasks previously done by industry.

Services to private individuals is the area that has contributed most to the growth in employment, followed by health, administration and management. Thus certain cross-sector occupations, i.e. ones performed in numerous sectors of activity, have increased appreciably in the last twenty years: managerial personnel and technicians in the administrative, accounting and financial services and corporate administrative staff, for example.

Over the last twenty years, the general level of qualification has also risen: in 2002, 36% of all jobs were accounted for by managerial personnel or intermediate occupations, compared with just 27% in 1982. Further, there are now more white-collar workers than blue-collar workers. Employment in the tertiary sector now accounts for nearly three-quarters of the working population, as against only 60% in 1982.

Lastly, a survey conducted among 84 professional families showed that 50 of them had made a positive contribution to the growth in employment since 1982 : these occupations accounted for nearly 55% of all employment in 1982, this figure rising to 70% in 2002.

Growth was particularly fast in the IT sector (an average annual growth rate of 8.5% from 1997 to 2002), for transport employees (8.2%), transport managerial staff and flying personnel (6.6%), agricultural technicians and managerial staff (5.4%), technicians and supervisory staff in the light and graphics industries (5.1%), sales executives and technical sales personnel (4.2%), administrative, accounting and financial executives (4.8%), training and recruitment personnel (3.8%), child minders and home helps (5%) and study and research personnel (4.1%).

Changes in the composition of the workforce and workforce trends

Female employment rose sharply up until 1995, when it began to fall off, due chiefly to the wider parental allowance (to a parent who has stopped work to bring up a child) which brought about an appreciable reduction in the employment of women with two children. In 2002, nearly 8 women in 10 between the ages of 30 and 54 had a job and women represented 45.9% of the working population as against 38.5% in 1975 (DARES, 2004).

In 2003, 54.5% of all **immigrants** were either in or seeking employment, compared with a figure of 55.4% for non-immigrants (DARES, 2004). The narrowness of this difference is due to the age structure of the immigrants: those of working age are in fact more numerous. If their age breakdown were the same as for the rest of the population, the above figure would fall to below 50%. More male immigrants are employed as manual workers than non-immigrants: 50.1% as against 35.8%. Female immigrants account for more jobs than female non-immigrants and for a high percentage of employment in the home: 28.4% as against 11.4% for non-immigrant women.

Between 1982 and 1997, **part-time employment** increased sharply (DARES, 2004), followed by a slowdown with the introduction of the 35-hour week. Nearly 30% of the women and 5% of the men in employment worked part-time in 2002. The greater proportion of these were people with few or no qualifications working in the service sector (in hotels, cafés, restaurants, businesses, employment in the home). In 2002, 40% of the barely qualified and over 20% of the qualified employees worked part-time (as against 28% and 10% in 1982). For an increasing proportion of the employees concerned, working part-time is imposed rather then intentional, although with the economic upturn part-time work has declined since 1998.

From 1982 to 2002, the proportion of salaried employment in relation to total employment increased steadily, rising from 85% to 91% (DARES, 2004). Professional families in which the majority of persons were **self-employed** jobs all dropped off (apart from company heads). The concentration of farms drastically reduced the number of farmers. Similarly, the increase in hypermarkets and superstores in general inevitably brought about a decline in the number of small independent shopkeepers. At the same time, self-employed professional people tended more and more to work collectively (law firms, group medical practices, estate agencies, etc.). This meant that doctors, solicitors, estate agents and so on often became salaried employees of a service company whereas previously they had worked as self-employed professional people.

As regards salaried employment in the private sector, since the early eighties indefinite full-time employment had been losing ground with the increasing number of temporary and part-time work contracts. In fact, **fixed-term contracts** (FTCs), apprenticeship and part-time work account for an increasing proportion of salaried employment in the private sector, even though the different forms of temporary contracts represent only small minority in relation to total employment (nearly 9 out of 10 were open-ended contracts in 2002), except in the case of young people (aged 15 to 29) where they accounted for nearly

one job in three (DARES, 2004). On the other hand, temporary contract appointments were made on a massive scale. In 2001, in companies in the private sector with at least 10 employees (not including part-time personnel), 7 appointments out of 10 were made on a fixed-term basis.

Temporary work increased rapidly between 1995 and 2000, so much so that the number of temporary assignments more than doubled in five years.

In terms of employment, there was a total of 554 878 (whole-time equivalent) temporary workers in 2003, or 2% of the active population[1]. These figures represent 2 million people who worked under temporary work contracts during 2003. The year 2001 was a critical stage in the development of temporary work, with agency work stabilising after four years of strong growth. The 5.4% fall in temporary agency work in 2002 was partly explained by sluggish growth and partly by the observed process of deindustrialisation. In 2002, a diminution of 90,200 jobs was observed in industry, that is to say there was a 2.2% reduction of people employed in one year. Temporary employment work, with nearly half of its activity depending on industrial sectors, was directly affected by this process.

In 2003, number of full-time equivalent jobs in the temporary work sector decreased 2,7%. Temporary agency work is mainly done my men (70% men and 30% women). The average age of male temporary workers in 2003 was 30. The structure of temporary agency is heavily dominated by (skilled and unskilled) blue-collar workers (79% in 2003), although other categories are tending to grow: in fact, although blue-collar workers are still overwhelmingly in the majority in the temporary agency sector, they have gradually been giving ground to managers (« cadres ») since 1995. Temporary work agencies are trying to develop "high level" temporary work, a dynamic market segment with substantial added value.

A distribution of temporary work in 2003 in whole-time equivalent terms by user sector shows that industry still occupies a dominant share: 49% by industry, 18% by construction, 10% by services, 9% by trade, 7% by transport, 6% by others[2]. The use of temporary agency work in industry (6.4%) and construction (7.6%) continue to be higher than in the tertiary sector (1.5%)[3]. The four sectors that make most use of temporary agency works are automobile manufacture, intermediary goods, equipment and agri-food.

The Internet Rights Forum (IRF[4]) describes the increase in **teleworking** as "slow but steady". The IRF defines telework as follows: "Work performed under a work contract, at home or on other premises remote from any organisational environment and which relies on information and communications technologies". According to the IRF, this involves 7% of today's salaried personnel (this figure was put at 6% in 2003 and 5.6% in 2001). Conventionally, four types of telework are distinguished: networking within the company but on separate premises; working on premises shared by several companies; nomadic workers; and persons working at home[5]. The most recent surveys make no distinction

1 Source: Ministry of Employment and Solidarity-DARES.

2 Direction de l'animation de la recherche, des études et des statistiques (DARES), Premières synthèse, 2001, quoted in La France des services 2003-2004, INSEE, 2003.

3 Source: Ministry of Employment and Solidarity–DARES.

4 The IRF is defined as follows: "a government-funded private advisory body involving all the players on the Internet. Private companies, non-profit organisations, public authorities and users are invited to discuss and suggest the uses and rules of online activities. (…) The Forum has three main purposes: initiating consultation between Internet agents, informing the public and promoting international cooperation".

5 Teleworkers who work from home are employees who describe themselves as making extensive use of a computer and often or always working from home. Half of them (1% of the employees) say they work "always or

between the first two categories, which are considered to be minority cases. These surveys show that 2% of all employees would telework from home and 5% would be nomadic.

Teleworkers are basically highly qualified people: whether nomadic or home-based, nearly half of them are engineers or executive personnel (of whom 10% may be classed as home-based teleworkers) and nearly a third have an intermediate occupation (2% of them may also be classed as home-based teleworkers). Women are in the minority as regards teleworking (accounting for 43% and 24% of permanent home-based and nomadic teleworkers respectively). Two sectors use teleworkers on a massive scale: the financial sector (banks and insurance companies) and services to companies, where they represent 12% and 20% of the workforce respectively.

Technological change and the impact on employment

Recent studies focus primarily on the impact of the information and communications technologies (ICTs) on employment, productive organisations and the legislation encompassing the rapid growth of the new forms of work organisation associated with the ICTs.

Impact on skills and work organisation

A survey conducted by LENTIC (Laboratoire d'Etudes sur les Nouvelles Technologies de l'Information et de la Communication) and sponsored by DIGITIP, the Department of Industry, Information Technology and the Post Office and Telecommunications (Pichault *et al.*, 2002) dealt with the consequences of the development of the new technologies for employment and qualifications. The difficulties of recruitment in these fields, brought up time and time again by the companies concerned, were one of the DIGITIP's major concerns.

The survey first reviewed the literature centred around quantitative evaluation of ICT-related jobs. On this point, the survey emphasised the difficulty of quantifying the shortage of ICT personnel brought by the employers' organisations to the attention of the relevant authorities. The authors showed that in the absence of sufficiently reliable indicators it was not possible to confirm or refute the shortage of jobs argument. According to the authors, the ICT sector, whose boundaries are relatively vague, is detrimental to the traditional methods of classifying and quantifying jobs. The survey revealed the diversity of careers in this sector and the multitude of starting and leaving points in the various ICT fields.

That is why the authors prefer the concept of "occupational logic" to that of "activity", in order to take into account the changes engendered by the ICTs. The concept of "occupational logic", which is more flexible than that of "activity", is defined as "new combinations of knowledge, skills and the characteristics of professional fields previously regarded as separate, reflecting new relations vis-à-vis work organisation and the job market". It also incorporates the organisational and job market variables, which the authors see as essential to any assessment of the professional activities of persons working in ICT-related fields. The organisational variable makes it possible to integrate a number

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nearly always in the same place". If we take this to mean their home, they may be described as "permanent home-based teleworkers". The other half say that they use several different places of work; these are "alternating home-based workers" As for nomadic teleworkers, they use computers on a massive scale and divide their working time between a number of places and without doing very much work from home.

of major particularities of the ICT sector: the interface role between ICTs and other fields, self-definition of the work, new relationships to learning, less rigid organisational boundaries and the nomadic nature of one or another project. The job market variable takes account of career self-management, the difficulty of fitting the work into the existing categories, interorganisational nomadism and the lack of differentiation between career and private life. The survey concludes with the main issues arising from the growth of the ICT sector: changes in the tools used to monitor the job market, changes in legislation and developments in training policies.

Other studies (see among others Gollac *et al.,* 2003) presented at a conference organised by the EEC on the links between organisational changes insist on the fact that data processing is not just a new technique: some authors describe it as an "auxiliary" of new forms of economic organisation (network companies, "just-in-time" organisations, profit centres, outsourcing, extermination, etc.), which also facilitate other forms of social organisation (degree of employee autonomy, pressure and flexibility at work, increased mental workload). Lastly, they remind us that the social relationships created around IT tools are not radically new, but characterised to a very great extent by the traditional distinctions linked to cultural levels and qualifications.

The work done at LEST (Laboratoire d'Economie et Sociologie du Travail) is along much the same lines and is a useful reminder – especially to those seeking to evaluate the contributions of the new ICTs to corporate productivity – of the extent to which the effectiveness of the new ICTs hinges on the way in which they are integrated into the company *in conjunction with* organisational changes. One study (Maurice, 2000) also emphasises the need to foresee new forms of control, whether economic, legal, social or financial, so as effectively to organise the role of these ICTs. In this regard, the author states that collective negotiations need to be developed in companies and professional fields so as to protect the rights of employees finding themselves in new situations engendered by the ICTs.

Several studies point to the impact of the ICTs on the transformation of certain activities and certain jobs in the company, for example studies on changes in the Human Resources function and the emergence of "e-HR", with the introduction of Human Resources Information Systems (Barthe, 2001).

Furthermore, in April 2002 the CES (Economic and Social Council) published a recommendation concerning the role of the new information technologies in the field of health (Gros, 2002). This consisted of eight proposals, one of which was designed to facilitate the coordination of the players in the field of health through networking and by using the new ICTs to assist medical and social coordination. The report focuses among other things on the possible effect of the ICTs on collective facilities: keeping the elderly at home, new exercise methods for the health professionals, etc.

Impact on the location of jobs

Current studies being conducted on the new technologies by the ANRT (Association Nationale de la Recherche Technique) as part of its *Futuris* project describe the ICT sector in France in the following terms: an industry which is slowly recovering from the crisis, a service sector that is now in full expansion, a further move towards the delocalisation of software and IT services. The sharp increase in these services is due mainly to the growing number of intermediate players between the suppliers and the ICT users within the context of a trend towards partial or total outsourcing of companies' ICT infrastructures.

Recent surveys (Galliano and Roux, 2003) analyse the organisational and spatial factors bearing on the adoption of ICTs and the extent of their use by industry, and also identify the sources of inequality in the process of adoption. The authors show that, in keeping with the generally accepted idea in the literature, in France there exists "a technology gap between urban and rural areas". These surveys conclude, however, that if this spatial inequality is indeed a reality, that does not necessarily mean that companies' behaviour varies significantly between the rural and the urban areas. Even the manner in which the ICTs are adopted appears to vary relatively little from one type of area to the other. Behaviour is primarily a matter of the scope of the company's internal and external methods of coordination: the introduction of new organisational procedures (just in time, certification and quality control), which tend to reinforce interdependence between companies and their partners (customers, suppliers, subcontractors), militate strongly in favour of adopting the ICTs. Thus the company's spatial organisation would appear to be the key factor: indeed, the survey reveals a multi-entity effect, the legal translation of delocalisation. This shows the importance of ICT tools in the management of corporate fragmentation, both organisational and geographic. These results show that the ICTs can also be used to manage new methods of internal and external organisation through the networking of partners who work outside the strict boundaries of the company.

Impact on contracts of employment

In December 2004, the FDI published the results of a working party studying teleworking, with the idea of formulating an appropriate contractual law – following, it should be noted, the European outline agreement on the subject. Among other things, the report shows that teleworking can provide an opportunity for employers and employees alike, but that it is still marked by a degree of vagueness that impedes its development. That is why, according to the FDI, a climate of confidence needs to be created between employers and employees, and the following principles reaffirmed:

- The salaried teleworker must come under ordinary law (in particular, the FDI considers that the provisions of the labour regulations applicable to home-based workers are not geared to teleworking). However, ordinary law should possibly be adapted to include the procedures specific to this type of work (in the work contract, in a collective agreement, by law or simply in accordance with good practices).

- Teleworkers should enjoy protected legal conditions: the FDI recommends embodying teleworking clearly and transparently in a work contract (or a rider to the contract)[1], through consultation involving both staff and management at interprofessional level. It is also planned to institute a presumption of occupational accident once a specific work contract has been formalised. Special provisions will also be required in order to ensure the teleworker's health and safety at work (medical examination, possible checks by among others the work inspectorate, the Heath and Safety at Work Committee or the personnel representative).

- Telework should not cut the teleworker off from his or her colleagues, thus some thought should be given to the measures required in order to avoid isolating the teleworker. The FDI also recommends that the organisations representing the personnel (union delegates, works council, etc.) should be consulted.

1 Selon le FDI, le contrat doit notamment intégrer les points suivants : période d'adaptation au télétravail et réversibilité, mesure de la charge de travail, amplitude de la journée de travail et droit au repos, clarifier l'utilisation de l'équipement par le télétravailleur et son contrôle par l'employeur, local du télétravailleur.

- The FDI is of the opinion that telework should be voluntary (in line, on this point, with the final court of appeal).

To conclude, the FDI considers that the relevant authorities have a part to play in the development of teleworking so that it can be introduced to the advantage of employees and employers alike.

Lastly, and on more general note, it might also be noted that the rapid expansion of the new technologies militates in favour of the development of part-time work, thus accentuating the phenomenon of multiactivity.

Impact on number of jobs

At the request of the Ministry of the Economy, Finance and Industry, a report was prepared in 2000 by the BIPE, the Bureau of Information and Economic Forecasts (Gille, Marti, 2001). Taking the structure of the French economy in 1998, the BIPE set out to gauge the knock-on effect that the ICTs were likely to have on the economy by 2003. The authors of the report estimated that in 2000 the ICT sector accounted for around 21% of France's economic growth. The BIPE proceeded on the assumption that the influence of the ICT sector was far-reaching, with the bulk of its production used for intermediate purposes or as a means of investment by the rest of the economy. By stimulating all the other sectors of activity, the ICT sector promotes productivity gains in the economy as a whole. A further aspect of the activities of the ICTs that tends to mask their effects and which makes them difficult to measure is the part they play in job outsourcing. The BIPE pointed to three major contributions made by the ICTs to economic growth: the increase in overall productivity due to technical advances in the sector; the contribution to growth made by the other sectors through the increased work productivity achieved thanks to the ICTs; and an increased demand for all products (ICT or otherwise). The BIPE report also suggested quantification of the potential jobs to be created by the ICTs in future years, putting forward three hypotheses regarding their effects on growth and employment: at best, the ICTs would contribute 1.6 points to growth, that is to say 580,000 more jobs over three years or some 190,000 jobs a year; at worst, 74,000 more jobs a year; and, taking a middle path, around 1.2 growth points and 145,00 jobs a year.

GERMANY

Table 4 gives a statistical snapshot of the German population which can be compared with the profile for France presented in Table 1. Of a working age population of 55 million, nearly 30 million are economically inactive, compared with around 25 million who are economically active. The population over retirement age is around 15 million and there are some 12 million children of school age or below. Around 6 million women work part-time, compared with a million men. However men form rather more than half the 4 million workers on temporary or fixed-term contracts. Seven million non-nationals make up a relatively high proportion of the workforce and there are over four million registered

Table 4: Statistical profile of the German population (000's, May 2003)

	men	women	all
Over official retirement age	6,282	9,050	15,332
School age or below (0-14)	6,223	5,888	12,111
Of working age (15-64)	27,827	27,234	55,059
O/w* In full-time education*	1,514	1,447	2,961
O/w Registered unemployed **	2,427	1,915	4,342
O/w Economically inactive	11,481	18,117	29,598
O/w part-time	1,037	6,131	7,168
O/w self-employed	2,678	1,066	3,744
O/w on temporary or fixed-term contracts	2,298	1,835	4,133
O/w working in agriculture	591	304	898
O/w non-nationals	3,745	3,416	7,161

Source: Federal Statistical Office 2004e (Mikrozensus); except for * EuroStat (2002) and ** Federal employment services; *** inclusive of apprenticeships

Industrial structure and recent trends

Employment and growth according to economic sectors

Like all other developed nations Germany has been involved in a structural change from an industrial to a service society which has continued during the last couple of decades. While in the early 90s about 30% of the employees worked in the industries (manufacturing industry without construction, mining and quarrying, electricity, gas and water supply, this number declined to only about 21% in 2003 (see Table 4). In contrast in the service industry employment rates continued to grow 60% (1991) to 70%.

Economic output in the sectors developed in line with employment growth. While in 1991 the service industry accounted for about 62% of the macroeconomic added value, the sector's growth continued - in 2003 it accounted for 70 % of the macroeconomic added value (see Table 2). This expansion of the service industry must primarily be seen as a consequence of the increases of financial intermediation and business activities such as banks, consultants, or industrial cleaning. In this part of the tertiary sector the number of employees almost doubled from about 3.7 m in 1991 to about 6 m in 2003, while the

overall employment stagnated with about 38 m employees (see Institut der deutschen Wirtschaft – IW, 2004, p.4).

Table 4: Employees in Germany by economic sectors (NACE) 1991 to 2003

Year	Agriculture, hunting and forestry and fishing (A, B)		Industry (C-E)*		Construction (F)		Services (G-P)**		Total	
	1,000	%	1,000	%	1,000	%	1,000	%	1,000	%
1991	1,555	4.0	11,321	29.4	2,796	7.3	22,782	59.2	38,454	100
1992	1,325	3.5	10,458	27.6	2,914	7.7	23,181	61.2	37,878	100
1993	1,224	3.3	9,730	26.0	3,025	8.1	23,386	62.6	37,365	100
1994	1,172	3.1	9,229	24.7	3,165	8.5	23,738	63.6	37,304	100
1995	1,115	3.0	9,001	24.1	3,227	8.6	24,039	64.3	37,382	100
1996	1,008	2.7	8,745	23.5	3,126	8.4	24,391	65.4	37,270	100
1997	991	2.7	8,586	23.1	2,999	8.1	24,632	66.2	37,208	100
1998	994	2.6	8,596	22.9	2,902	7.7	25,124	66.8	37,616	100
1999	973	2.6	8,483	22.3	2,850	7.5	25,765	67.7	38,071	100
2000	964	2.5	8,522	22.0	2,761	7.1	26,501	68.4	38,748	100
2001	952	2.4	8,528	21.9	2,587	6.6	26,844	69.0	38,911	100
2002	939	2.4	8,338	21.6	2,427	6.3	26,967	69.7	38,671	100
2003	928	2.4	8,113	21.2	2,305	6.0	26,900	70.3	38,246	100

Source: Federal Statistical Office, own calculations. * Mining and quarrying (C), manufacturing (D), electricity, gas and water supply (E); ** Wholesale and retail trade (G), hotels and restaurants (H), transport, storage and communication (I), financial intermediation (J), real estate, renting and business activities (K),public administration and defence; compulsory social insurance; education, health and social work; other community, social and personal service activities; private households with employed persons (L-P)

In recent years, however, there have been an increasing number of indications that the process of de-industrialisation is slowly drawing to a close, or at least it seems to have clearly decelerated: At the beginning of the nineties the development in the industrial sectors (manufacturing, mining and quarrying, electricity. Gas and water supply) was compared to the other sectors clearly declining. As a matter of fact, the relative employment rate of the industry decreased in the first 4 years of the decade (1991-1995) by about 18% from 29.4% to 24.1%, in the last 4 years (1999-2003) the decline accounted for merely 5% (see Table 4). As measured by the economic power, the process of deceleration of the structural change becomes even more obvious: from 1991 to 1995 the share of the industrial sector in the gross value added declined from 30.4% to 25.3%, which is about 17%, whereas from 1999 to 2003 it merely declined by about 1%, from 24.6% to 24.4%.

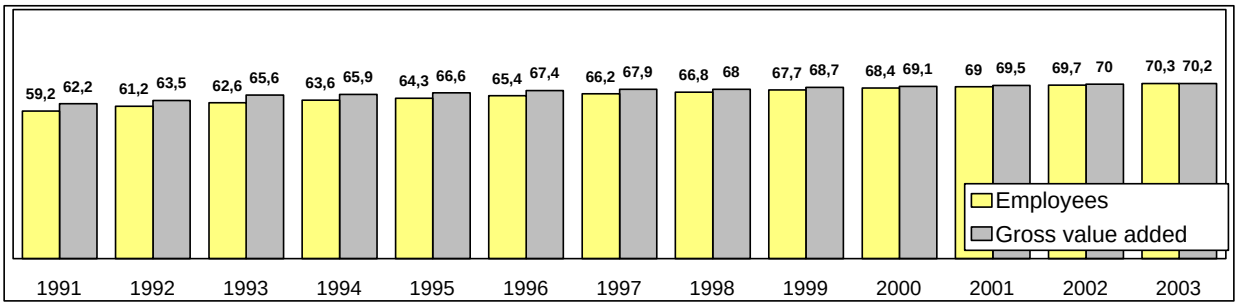
Table 5: Gross value added in Germany by economic sectors (NACE) in relative prices (in EUR) 1991 to 2003

Year	Agriculture, hunting and forestry and fishing (A, B)		Industry * (C-E)		Construction (F)		Services** (G-P)		Total	
	Mrd. EUR	%	Mrd. EUR	%	Mrd. EUR	%	Mrd. EUR	%	Mrd. EUR	%
1991	19.69	1.4	430.48	30.4	84.14	5.9	879.88	62.2	1,414.19	100
1992	19.98	1.3	434.69	28.6	99.92	6.6	964.31	63.5	1,518.90	100
1993	19.66	1.3	410.92	26.4	104.46	6.7	1,020.33	65.6	1,555.37	100
1994	20.82	1.3	420.11	25.8	113.69	7.0	1,071.46	65.9	1,626.08	100
1995	21.59	1.3	428.30	25.3	114.05	6.7	1,126.46	66.6	1,690.40	100
1996	22.65	1.3	430.06	25.0	108.96	6.3	1,160.40	67.4	1,722.07	100
1997	22.89	1.3	438.20	24.9	104.62	5.9	1,194.45	67.9	1,760.16	100
1998	22.58	1.2	455.22	25.1	100.77	5.6	1,231.68	68.0	1,810.25	100
1999	22.12	1.2	452.99	24.6	100.93	5.5	1,267.14	68.7	1,843.18	100
2000	22.54	1.2	463.30	24.6	97.56	5.2	1,301.92	69.1	1,885.32	100
2001	23.57	1.2	470.37	24.4	92.86	4.8	1,337.84	69.5	1,924.64	100
2002	22.08	1.1	477.03	24.3	89.03	4.5	1,372.11	70.0	1,960.25	100
2003	22.04	1.1	482.70	24.4	84.01	4.2	1,390.02	70.2	1,978.77	100

Source: Federal Statistical Office (national accounts), own calculations. *Mining and quarrying (C), manufacturing (D), electricity, gas and water supply (E); ** Wholesale and retail trade (G), hotels and restaurants (H), transport, storage and communication (I), financial intermediation (J), real estate, renting and business activities (K),public administration and defence; compulsory social insurance; education, health and social work; other community, social and personal service activities; private households with employed persons (L-P)

The close parallels between economic development and employment growth in the service industry, as well as the decelerating process of the structural change are illustrated in figure 1.

Figure 1: Economic and employment development in the service industry in Germany 1991-2003 (Service sector's relative shares in the overall economy and employment)

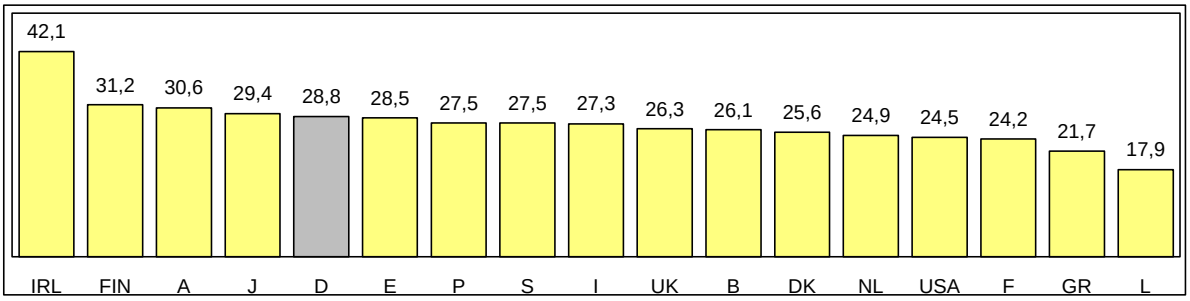


Source: Federal Statistical Office, own calculations

If one incorporates the construction sector into the industrial sector – we can then speak of complete manufacturing industry – the German economy, internationally compared, shows a relatively robust and significant industrial "spine". In 2002 about 29 % of the gross domestic product (GDP) was obtained in the industrial sector (including construction) (IW, 2004, p.4). This relatively high rate is exceeded among the EU-Member states only by Finland, Austria, and Ireland.[1] Referring to the relative importance of employment in industry, Germany, along with Italy, is even the most industrialized country (German Council of Economic Experts, 2004, p.497).

Due to the traditionally important position of the industry in Germany, which is particularly accountable for Germany's successful export, it can be assumed that the decrease of importance of the industrial output will not go as far as in other European countries or in the United States, where industrial manufacturing accounts for only ¼ of the GDP (2002). Nevertheless, we have to notice that the structural change in Germany is taking a similar course as in all of the most important European countries and the United States.

Figure 2: Industry's share in the gross value added (GDP) in Germany in 2002 (%)



Source: Institute of German Commerce. Industry: Manufacturing, construction, mining and quarrying, electricity, gas and water supply, Ireland, Japan, UK, Greece, Luxemburg: 2001; USA: 2000; source data OECD.

A differentiated examination of the development of the industries (see table 6) shows that the primary sector (agriculture, forestry and fishery), which has been shrinking for several decades, strongly diminished again in recent years. There the number of employees decreased between 1991 and 2003 by about 6,070,000, which is about 40 %. Based on the total number of employees, this means a decline of employment of –1.6 % (see column 8 and 9).

In the industrial sector the field of mining / quarrying has been the most affected by the reduction of jobs. Between 1991 and 2003 two thirds of the already few jobs disappeared. Only about 100,000 people, work in this part of industry. The second largest industrial shrinking process in the last years took place in the field of power and water supply. There, from 1991 to 2003 about one third (34.1%), which is about 140,000, of the jobs were cut.

Table 6: Employees in Germany by economic sectors (NACE) in 1,000 and %, 1991-

1 The remarkably high share of the industrial added value of about 42% in Ireland mainly results from the massive, EU-supported industrialization in the past years.

2003

Economic sector		1991	1993	1995	1997	1999	2001	2003	Diff. 2001/1991	
	Column	1	2	3	4	5	6	7	8	9
Agriculture, hunting and forestry and fishing	1,000	1,555	1,224	1,115	991	973	952	928	-627	
	%		-21.3	-28.3	-36.3	-37.4	-38.8	-40.3	-40.3	-1.6
Mining and quarrying	1,000	324	231	195	155	133	117	105	-219	
	%		-28.7	-39.8	-52.2	-59.0	-63.9	-67.6	-67.6	-0.6
Manufacturing	1,000	10,581	9,110	8,439	8,088	8,032	8,129	7,734	-2,847	
	%		-13.9	-20.2	-23.6	-24.1	-23.2	-26.9	-26.9	-7.4
Electricity, Gas and water supply	1,000	416	389	367	343	318	282	274	-142	
	%		-6.5	-11.8	-17.5	-23.6	-32.2	-34.1	-34.1	-0.4
Construction	1,000	2,796	3,025	3,227	2,999	2,850	2,587	2,305	-491	
	%		8.2	15.4	7.3	1.9	-7.5	-17.6	-17.6	-1.3
Wholesale and retail trade; repair of motor vehicles	1,000	5,636	5,672	5,742	5,829	5,920	6,045	5,857	221	
	%		0.6	1.9	3.4	5.0	7.3	3.9	3.9	0.6
Hotels and restaurants	1,000	1,274	1,350	1,408	1,492	1,642	1,743	1,812	538	
	%		6.0	10.5	17.1	28.9	36.8	42.2	42.2	1.4
Transport, storage and communication	1,000	2,423	2,319	2,159	2,026	2,055	2,126	2,051	-372	
	%		-4.3	-10.9	-16.4	-15.2	-12.3	-15.4	-15.4	-1.0
Financial intermediation	in 1,000	1,202	1,266	1,256	1,247	1,260	1,280	1,257	55	
	%		5.3	4.5	3.7	4.8	6.5	4.6	4.6	0.1
Real estate, renting and business activities	1,000	2,505	2,788	3,148	3,491	4,088	4,617	4,745	2,240	
	%		11.3	25.7	39.4	63.2	84.3	89.4	89.4	5.8
Public administration and defence; compulsory social security	1,000	3,142	3,035	2,957	2,876	2,802	2,705	2,627	-515	
	%		-3.4	-5.9	-8.5	-10.8	-13.9	-16.4	-16.4	-1.3
Education; health and social work; other community, social and personal service activities	1,000	6,600	6,956	7,369	7,671	7,998	8,328	8,551	1,951	
	%		5.4	11.7	16.2	21.2	26.2	29.6	29.6	5.1
Total	1,000	38,454	37,365	37,382	37,208	38,071	38,911	38,246	-208	
	%		-2.8	-2.8	-3.2	-1.0	1.2	-0.5	-0.5	-0.5

Source: Federal Statistical Office, own calculations.

For the two latter industries it is furthermore characteristic that the decline of employment didn't start until very recently, while in the other shrinking industries, as already mentioned, the reduction of jobs took place mostly in the early nineties. The larger part of reduction of jobs between 1991 and 2003 was completed in 1996/97. Of the total of about 2.8 m cut jobs in that time, 2.4 were already gone by 1996. Since the manufacturing industry is one of the fundamental pillars of the German economy, the decline of employment in this area weighs heavy for the economy. The jobs that dropped away there between 1991 and 2003 account for 7.4% of the total employment in Germany.

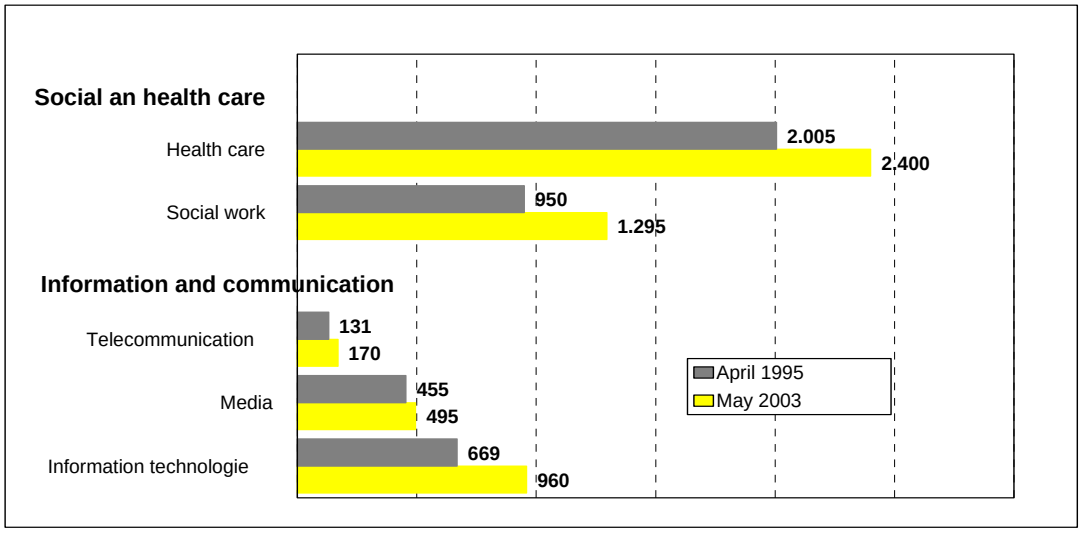
However, reduction of jobs did not only take place in the industrial sector. Also in the field of public administration and defence about one half million jobs, which is a decrease of about 16%, were cut in during the last 12 years – not least due to the increasing emptiness of the public budgets. Almost as regressive (-15.4%) was employment in the field of transport, storage and communication, a field, which in Germany is also characterized by mostly public employers.

"Real estate, renting and business activities" is the sector which shows the greatest increase in employment. Especially in recent years there has been literally a boom in this sector: From 1991 till 2003 the number of employees almost doubled from 2.5 m to 4.7 m. This amazing increase means a growth of the total employment of almost 6 %. The hotel and restaurant industry also shows considerable increases. There the number of employees grew by about 42 %, - about half a million jobs. Here we have to bear in mind that this growth is mostly due to an increase of marginal employment, this means a relatively insecure and disputed form of part-time employment without social insurance, which, however, has been launched again by the government ever since the "Hartz reforms" in form of the so-called *mini jobs* (see below).

Occupational growth potential

There are primarily two occupational fields that show outstanding growth potential: health and social work and IT work. Due to the demographic aging of the population and the resulting increased demand for medical and health care services, especially the field of health care and social work offers occupational potential for the future.

Figure 3: Number of employees in the occupational fields of health and social work and IT work in Germany, 1995 and 2003 (in 1,000)



Source: Federal Statistical Office.

Between April 1995 and May 2003 the number of employees in this field increased from about 3.0 m to about 3.8 m (see figure 3). This equals a growth rate which lies 11

percentage points above the total service industry's (+ 17 %). Responsible for this increase is mainly the field of social work, where the number of employees rose by about 70% between 1995 and 2003. Here, the continuing increase of importance of the social and health care services, such as care for the elderly, is reflected (Federal Statistical Office 2004c: 49), which are mainly offered by women, often in part-time jobs.[1]

The occupational field of information technologies turns out to be the quantitatively second largest growing area. Between 1995 and 2003 this field even showed a faster rate of expansion than health and social services. During this period the field of IT work grew about 29%, with the greatest increase in the area of information technology, where employment rose from 670,000 to 960,000, which equals about 29% (see figure 3). Above-average growth rates can also be seen in the field of IT-professions where increases were recorded for the data processing experts, resp. computer scientists (+53% to about 180,000), the software developers (+61% to about 184,000), and the DP consulting and marketing experts (+116 % to about 64,000). In the field of media, employment grew between 1995 and 2003 to 495,000, which equals 9% (Federal Statistical Office 2004c p 50).

Regional differences

Industrial change and economic development don't take place evenly in all regions, but they proceed along spatially and historically developed lines between the regions with a contrast between traditional industrial sites on one hand and these where industrial manufacturing has so far not been the primary economic system on the other hand.

In Germany, the "*Ruhrgebiet*" (Ruhr Basin) in the west is the most important example of the first mentioned type. Until well into the eighties it was an almost monocultural industrial area, mostly existing on heavy and steel industry as well as chemical industry. In the meantime there were and are various economic attempts to counteract the massive release of labour force due to the "dying off" of the heavy industry. These reconstruction efforts already show some effects, mostly in terms of the settlement of innovative, often smaller businesses, especially in the field of the 'New Economy'. But the traditional industrial areas of North Rhine-Westphalia are still affected by a high unemployment rate and structural strains, as shown in the typology of the job centre districts, developed by the Institute for Employment Research (IAB) (see figure 4: type II).

In addition to this regional distinctive line between "old" and "new" industries, there is another important distinction in Germany: the differences between east and west that arose with the German Unification in 1989. These to a lesser extent carry the characteristics of an industrial structure change, but rather represent the fundamental economic decline between the highly productive and competitive industrial areas on the grounds of the former FRG and the newly added *Bundeslaender* (federal states) of the former GDR, which, due to their history of 40 years of command economy, still show less productivity and lack international competitiveness, which last but not least is reflected in the very high unemployment in these areas (see figure 4, type I). In November 2004, unemployment in the New Laender was on an average of 17.7 %, while in the Old Laender the average unemployment was merely 8.3 %. Among the Old Laender unemployment ranges between 10.0% in North Rhine-Westphalia ("Ruhrgebiet") and 6.1% in Baden-Württemberg, which is one of the gainers of the structural change.

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1 In the field of health and social work the woman's rate was with 75% in May 2003 far higher than in the whole tertiary sector (55%). In health related jobs, women even account for 77% of all workers. (Stat. Bundesamt 2004c).

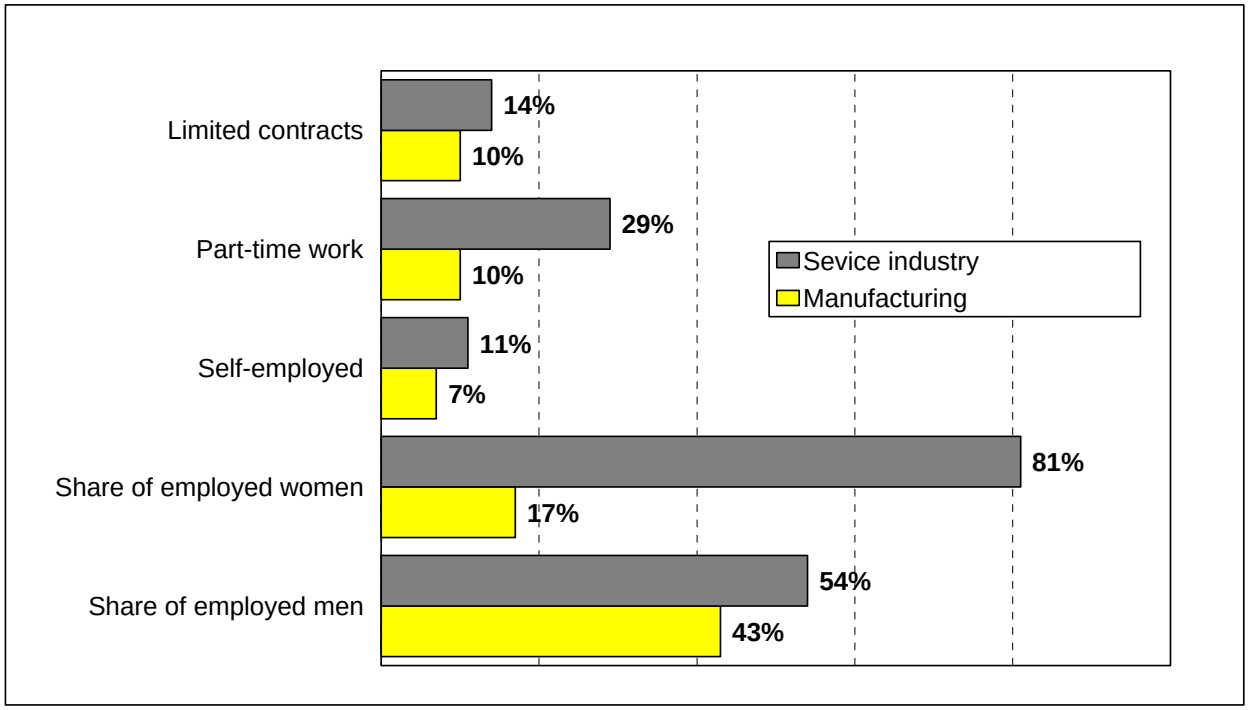
Figure 4: Typology of job centre districts in Germany

Changes in the composition and structure of the workforce

Labour participation of women

The tertiarization of the economy, which is typical for developed industrial nations, is obviously linked to the change of the form of employment. For regarding limitation, part-time employment, and self-employment, the service industry shows continuously higher rates than the manufacturing sector (see figure 5).

Figure 5: Forms of employment and gender distribution of employees in the service and manufacturing sectors in Germany in May 2003 (%)



Source: Federal Statistical Office. Own calculations.

The service sector is of immense importance especially for the employment of women. Eighty one per cent of employed women are currently occupied there, while 17% work in the manufacturing sector. By contrast only just over half (54%) of the employed men work in services. This means that in the field of industry there are about 8.5 m men and 2.7 m women, which equals a women's rate of 24% in this field, while in the service industry the women's quota is about 54%. As a result the share of part-time jobs in this sector is significantly higher (29%) than in the industrial sector (10%), this is due to the fact that part-time work is still more common among female workers (see below).

In Germany there is a clear connection between the labour participation of women and the number, and age of their own children. Only one third of the mothers with children under the age of three are employed and only 13% of these work full time. The quota of working mothers rises with the increasing age of their (youngest) child, so that among mothers with

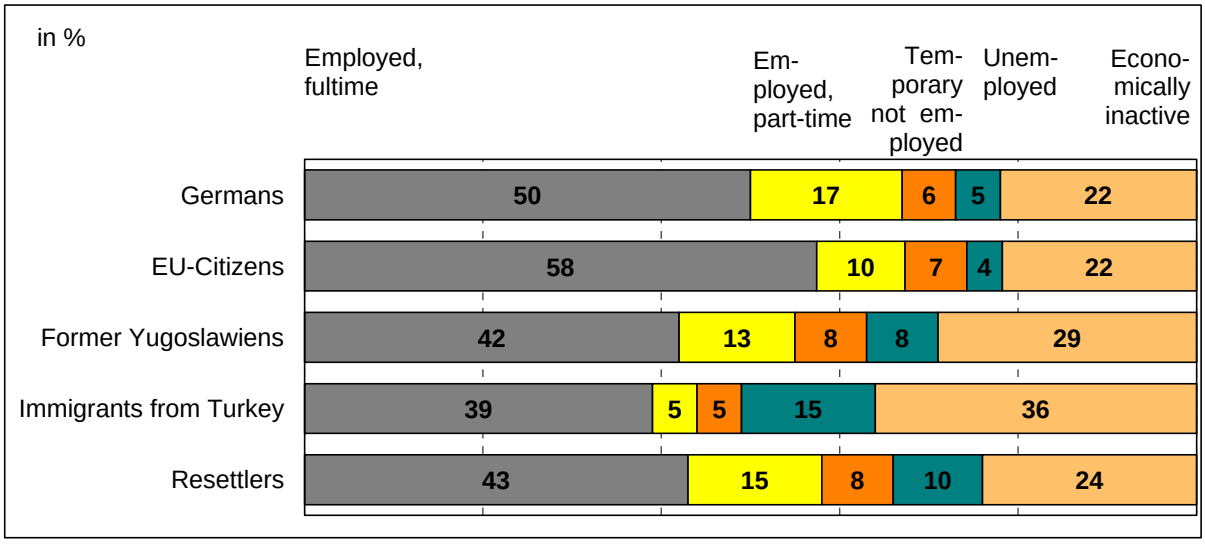
children between 15 and 18 years this rises to 37% working fulltime. Adding this to those working part-time brings the proportion in employment up to 75%.

This strong dependence of the willingness to work on the existence and age of children is in Germany mostly due to the (in international comparison) under-average supply of day care facilities for children and fulltime pre-schooling. In the New Laender, where in former socialistic times women were to the same extent employed as men, and where, as a result, the supply with day care facilities for children is good in comparison to the Old Laender, the dependence of the willingness to work on the existence and age of children is consequently much smaller. In the Old Laender the rate of women with children working fulltime is 21.0%, in the New Laender it is 55.3% (Federal Statistical Office, 2004c).

The situation of immigrants[1]

The participation of 15-65 year-old immigrants in gainful employment in Germany varies clearly with the different groups of immigrants. Figure 6 shows that more than one third of the immigrants from Turkey do not participate in gainful employment. This regards mostly Turkish women, who in the majority of cases do not work. Legal restrictions for the acceptance of gainful employment for non-EU-citizens also contribute to the low labour market participation of immigrants from Turkey and the former Yugoslavian states compared with other groups.

Figure 6: Economic activity of Germans and foreigners living in Germany 2001



Source: Federal Statistical Office 2004c, Database: SOEP 2001 (German Socio-Economic Panel)

1 The section about the labour market situation of immigrants is mostly extracted from: Federal Statistical Office 2004c, pp.579.

There are also obvious distinctions at the labour market. While far more than 60% of the Germans and the immigrants from EU-States are employed fulltime or part-time, among immigrants from the former Yugoslavian States this rate falls to just under 60%, and among immigrants from Turkey to only 45%. Part-time jobs are thereby performed by women mostly. Large differences exist among the unemployment rates. Here, primarily immigrants from Turkey and resettlers show the highest levels. All in all, the risk of unemployment for immigrants rose significantly in the nineties and now lies clearly above the risk for German citizens.

Table 7: Employment distribution of Germans and immigrants in West Germany 1996 and 2001

	Germans		Immigrants from ...						Resettlers	
			Turkey		EU (until 2003)		Former Yugoslavia			
	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001
	in %									
Occupational situation										
Unskilled workers	4	3	16	16	13	9	16	16	12	12
Semiskilled workers	8	9	37	38	23	23	43	32	32	32
Skilled workers/master craftsmen	15	13	23	22	17	17	20	19	28	23
Simple employees	12	12	10	7	8	10	7	10	14	12
Medium/white collar employees	41	42	9	10	32	26	10	18	12	18
Self-employed	11	11	5	8	7	15	4	6	2	3
Public servants	10	9	0	0	1	1	0	0	1	2
Income-quartiles										
1. Quartile low	22	23	28	21	21	18	32	23	35	30
4. Quartile high	33	28	9	12	20	29	8	7	7	8
Bad working conditions	15	15	2	29	18	21	27	17	21	22
women	7	8	19	9	12	6	20	9	10	14
2. generation	-	-	36	32	11	20	15	11	-	-
Flexible work structure	22	19	7	10	16	16	4	7	7	8
women	13	13	8	9	9	7	1	6	10	10
2. generation	-	-	8	14	21	20	5	17	-	-
gross income	Mean value									
total	2 230	2 320	1 630	1 870	2 050	2 390	1 590	1 700	1 600	1 720
women	1 580	1 650	1 230	1 520	1 400	1 530	1 240	1 360	1 300	1 410
2. generation	-	-	1 440	1 840	1 750	2 110	1 480	1 650	-	-

Source: Federal Statistical Office 2004c, Database: SOEP 1996 2001 (German Socio-Economic Panel)

Most immigrant workers are employed in the industrial sector as unskilled and semiskilled workers (see table 10). Occupational mobility, especially among the people that migrated to Germany as so-called "guest-workers" is low. They are among the main casualties of the economic structural change that has been taking place since the seventies. This is, again, an important reason for the high unemployment rates. Only immigrants from EU-States have employment rates over 30% and show a similar employment structure as the

Germans. The differences of the occupational qualifications are also reflected in the earnings. Immigrants from the former Yugoslavian countries and resettlers have the lowest incomes and could benefit only from a small increase of income between 1996 and 2001. It also becomes clear that women, partly due to the high rate of part-time workers among them, earn much less; the same is true for the younger second generation. A comparison of the lowest and the highest income-quartile comes to a similar result. Resettlers and immigrants from the former Yugoslavian countries are disproportionally represented in the lowest quartile.

Even more striking is the fact that, except for the immigrants from other EU-States, all other groups of immigrants are represented only to a very small extent in the highest income-quartile. This shows that high-skilled professional positions are seldom occupied by persons from these groups. Worse professional positions are accompanied by worse working conditions and little flexibility in the structure of work. Particularly 30% of the immigrants from Turkey report bad working conditions. Immigrants from EU-States again take up an intermediate position to the relatively good rating of the German employees. Overall, the professional situation of employees in Germany changed a little bit for the better between 1996 and 2001. However the differences between the immigrants and the Germans basically stayed the same.

Flexibilisation of employment (part-time, fixed-term, temporary, and self-employment)

For quite a while there has been a change in the mode of employment, not only in Germany, which is usually described by the term "erosion of the normal labour contract". This means particularly the continuing decrease of permanent, fulltime jobs, which are subject to social contribution, and their increasing substitution by fixed-term, temporary, part-time or self-employment. Permanent ("unlimited")fulltime employment in Germany declined between 1991 and 2003 by about 4 m jobs, representing about 15%, while in the same period part-time employment grew about 60% and fixed-term ("limited") employment about 17% (see table 8).

If part-time jobs are unlimited, they are sometimes regarded as normal labour contracts. Since these modes of employment, if performed permanently, don't guarantee a high enough old age pension for a secure existence, it seems to be appropriate to include them amongst the atypical modes of employment; especially in Germany, where part-time jobs are to an increasing degree performed in the mode of so-called "*Geringfügige Beschäftigung*" (marginal employment), which means working under a contract with limited earnings of at most 400 Euro and usually merely minimum social security contributions and benefits (no contributions to and benefits from unemployment insurance and very small contributions to and benefits from old age pension).

In the first quarter of 2004 about 15% of all employees were already performing their work under such "*Mini-Jo*b" contracts (German Council of Economic Experts, 2004, p. 203).

Table 8: Employees in Germany by part-time, limitation and self-employment 1991-2003

Year	Dependant employed*			Dependant employed*			All gainfully employed		
	Fulltime (1,000)	Part-time (1,000)	Part-time rate	Unlimited (1,000)	limited (1,000)	Limitation rate	Dependant (1,000)	Self-employed (1,000)	Self-employment rate
1991	29,151	4,736	14.0	29,545	3,674	11.1	33,887	3,037	8.2
1992	28,557	4,763	14.3	28,951	3,735	11.4	33,320	3,093	8.5
1993	27,822	4,901	15.0	28,644	3,590	11.1	32,723	3,174	8.8
1994	27,178	5,122	15.9	28,354	3,537	11.1	32,300	3,288	9.2
1995	26,968	5,261	16.3	28,147	3,641	11.5	32,229	3,336	9.4
1996	26,848	5,340	16.6	28,088	3,813	12.0	32,188	3,408	9.6
1997	26,258	5,659	17.7	27,679	3,934	12.4	31,917	3,528	10.0
1998	25,994	5,884	18.5	27,580	4,057	12.8	31,878	3,594	10.1
1999	26,173	6,323	19.5	27,791	4,431	13.8	32,496	3,594	10.0
2000	26,160	6,478	19.8	27,997	4,368	13.5	32,638	3,643	10.0
2001	25,946	6,798	20.8	28,309	4,307	13.2	32,744	3,631	10.0
2002	25,534	6,934	21.4	28,288	4,107	12.7	32,468	3,655	10.1
2003	24,875	7,168	22.4	27,797	4,133	12.9	32,043	3,744	10.5

Source: Federal Statistical Office; Only responses with information about kind of contract, resp. fulltime or part-time employment

Table 9: Exclusively low paid employment (*mini jobbers*) in Germany (2003/04)

Total (in 1,000)	4,659
men	32.5 %
women	67.5 %
of which:	
up to 25 years	18.9 %
55 years and over	29.5 %
Share of all dependant employees in the particular industry	
Agriculture, hunting and forestry, fishing, mining and quarrying	17.5 %
Manufacturing	7.8 %
Electricity, gas and water supply	1.9 5%
Construction	11.2 %
Wholesale and retail trade; repair of motor vehicles	20.7 %
Hotels and restaurants	37.4 %
Transport, storage and communication	16.1 %
Real estate, renting and business activities	23.3 %
Public administration, etc.	4.3 %
Other community, social & personal service activities, private households with employed persons	25.2 %
Ausschließlich geringfügig Entlohnte insgesamt	15.0 %

Source: German Council of Economic Experts 2004: 203

This form of employment, known since the Hartz reforms officially as "*Mini-Job*", and now once more state-aided, low-wage mode of employment is mostly performed by women. For the most part, this is their only employment (see table 9). The far largest share of *mini-jobs* is to be found in the service industry, particularly in the hotel and restaurant industry and real estate, renting, and business activities industry, as well as in other public and

private services. Especially in the field of industrial cleaning, the employment of these marginally paid employed women is very common.

Detailed analysis of the Microcensus 2003 showed that about two thirds of the *mini-jobbers* included there were women, of whom again almost two thirds were married.

Mini jobs undoubtedly constitute an unbureaucratic, flexible and cost-efficient low-wage mode of employment, liked both by employees and employers, which can absolutely contribute to the competitiveness of the German economy. Nevertheless, it is problematic that this mode of employment, which is for the most part free from social insurance burdens, is to an increasing degree substituting for jobs that are subject to social insurance contributions; in fact on the employee's account and not on the social insurance system's. This is because the social insurance systems generally make a profit from the compulsory lump sum payment of the employer, which brings along hardly any claims for the employee, rather than losing through it.

Given the currently challenging labour market situation, much hope is placed in an increase of the **self-employed employment modes**. These not only secure subsistence but can under certain circumstances also provide new jobs. In May 2003 there were about 3.7m self-employed in Germany - about 710,000 or 23% more than in 1991 (see table 10). Admittedly this increase has to be interpreted as a rise of mostly precarious jobs, because for the most part it is due to an increase of the number of those self-employed that don't employ other workers. Their share grew within the last years continuously; from 1991 to 2003 from 45.5% to 52.4% (see table 10).

Table 10: Self-employed with and without employees in Germany 1991-2003

Self-employed	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
With employees (1,000)	1,654	1,714	1,763	1,842	1,821	1,767	1,776	1,806	1,808	1,801	1,810	1,797	1,784
Without employees (1,000)	1,383	1,379	1,411	1,446	1,515	1,641	1,752	1,788	1,786	1,842	1,821	1,858	1,960
Share of self-employed without employees	45.5	44.6	44.5	44.0	45.4	48.2	49.7	49.7	49.7	50.6	50.2	50.8	52.4

Source: Federal Statistical Office. Own calculations.

This means that it was mainly the number of freelancers that rose, meaning persons, that often as a result of lacking the chance of an employment with social insurance contribution or of insufficient negotiating skills towards their former or potential employers, resort to self-employment to escape imminent unemployment. This phenomenon, then called pseudo self-employment, was at first discussed in Germany very critically and there was effort to stem it. However by now, it is again supported and state-aided under the framework of the latest reform of the labour market ("Ich-AG").

One fourth of the self-employed without employees were in the middle of May 2003 working in the field of public and private services (with employees: 19%). In the field of real estate, renting, and business activities another 21% of the self-employed without employees could be found (with employees: 15%). The latter, with about 21%, shows the highest self-employment rate– with the exception of agriculture.

Table 11: Part-time, limitation and self-employment by economic sectors in Germany (May 2003)

Economic sector	Dependant employed*			Dependant employed*			All gainfully employed		
	Fulltime (1,000)	Part-time (1,000)	Part-time rate	Unlimited (1,000)	Limited* (1,000)	Limitation rate	Dependant Employed	Self-employed (1,000)	Self-employment rate
Agriculture, hunting and forestry; fishing	375	71	15.9	351	93	20.9	895	298	25.0
Mining and quarrying; manufacturing	7,115	850	10.7	7,183	763	9.6	8,370	371	4.2
Electricity, gas and water supply	267	17	6.0	259	25	8.8	287		-
Construction	2,008	176	8.1	1,882	295	13.6	2,607	397	13.2
Wholesale and retail trade; hotels and restaurants	3,526	1,775	33.5	4,581	696	13.2	6,296	897	12.5
Transport, storage and communication	1,566	287	15.5	1,703	143	7.7	2,001	139	6.5
Financial intermediation	982	226	18.7	1,107	97	8.1	1,351	140	9.4
Real estate, renting and business activities	1,767	765	30.2	2,195	327	13.0	3,221	667	17.2
Public administration	2,535	464	15.5	2,505	480	16.1	3,001		-
Other community, social and personal activities	4,734	2,538	34.9	6,031	1,214	16.8	8,143	832	9.3

* Only responses with information about the kind of contract, resp. fulltime or part-time employment

Source: Federal Statistical Office. Own calculations.

Altogether, the service industry shows the biggest potential for flexibilisation, with respect to deviations from the normal employment modes: not only due to of the quite common part-time employment but also to the above-average limitation rate. In the field of public administration and public and private services the limitation rate (i.e. the proportion of employees with permanent job tenure) is 16 to 17%. In the real estate industry as well as in the field of trade and manufacturing industry the limitation rate is about 13%.

Admittedly, the agriculture, hunting and forestry and the fishing industry also show many elements of flexibilisation and uncertainty. Here, the limitation rate in May, which is not a typical harvest month, is about 21% and the part-time rate about 16%. Together with the traditionally high rate of self-employment (25%), the still shrinking agriculture, hunting and forestry industry, including fishing, turns out to be a field of employment characterised by a range of uncertainties. The mining and quarrying, industry, as well as electricity, gas and water supply, still offer the highest rate of traditional normal employment contracts.

Telework and homework

Studies about the future structuring of the business world forecast a spatial decentralization of the enterprises, with the effect that for an increasing part of employees the workplace will be moved to their own home. So far, the reality in Germany is still rather different: in spring 2003, only about 5% of the gainfully employed (including the self-employed) declared that they had worked mostly, which means at least half of all working days, at home in the period between February and April 2003. Another 9% of the employees worked sometimes, which means at least once, but less than half of the working days, at home during the same period (Federal Statistical Office, 2004c, p. 51). Therefore, the diffusion rate of gainful work at home has hardly changed in recent years. In April 1996, the share of the mostly at home working was again 5%, with 8% of employees reporting that they worked at home sometimes.

For self-employed, working at home is of greater importance. One fifth (20%) of self-employed men and one fourth (25%) of self-employed women in the period between February and April 2003 spent more than half of their work time at home. Among the self-employed without co-workers, 28% of the men and 33% of the women reported mostly using their own home to perform their job. The gender differences are probably due to family obligations.

Of dependant employees, at present only 2.2% work at least half of the time and another 6.5% sometimes at home (see table 12). Regarding gainful employment which takes place at home at least half of the time, as homework in a narrower sense, it is performed a bit more often by part-time employees (3.1%) than by fulltime workers (2.0%).

There is a clear relation to the level of education of the employees: employees with baccalaureate regularly work at home about three times as often (4.3%) as employees with a lower graduation (Secondary I level (9-10 years): 1.5%). Regarding the level of qualification of vocational education, this impression is intensified: of employees with university degree 7.9% work regularly at home, while only 1.4% of the employees with a vocational education do so. This means that in Germany homework still turns out to be an anomaly, which, if performed at all, is usually performed by well educated people, a little more by women than by men.

The here mentioned current figures about the spread of homework in Germany on the basis of the official statistics are not congruent to the definition of telework, as used for example in the SIBIS survey of 2002.[1] There, telework is differentiated into domestic telework, mobile telework, and self-employed telework in *SOHOs* ("small office, home office"). Basic criteria of the definition of telework is working with a computer with the use of the modern IT. This does not have to be true in an official statistic of homework. Furthermore, spatially telework does not only include work at home, but also in other places besides the actual main work place. For this form of telework in the SIBIS survey about 6m jobs were counted in Germany, this is about 16% of the employees.

With this rate Germany ranges a bit above the telework rate of the then 15 EU-member states of 13%. Because of these numbers, the SIBIS task force put Germany together with Sweden, Great Britain and Austria in the group of the better midfield, which after the precursor group of Netherlands, Finland and Denmark, placed second of four.

1 SIBIS – Statistical Indicators Benchmarking the Information Society. The project was aided by the EU in the framework of the IST program (1998-2002).

Table 12: Employees by homework February to April 2003 by economic sectors, amount of time of homework and graduation in Germany

	Employees without trainees*				
	total	mostly**		sometimes***	
	1,000	1,000	%	1.000	%
Economic sector					
Agriculture, hunting and forestry; fishing	413	13	3.1	14	3.4
Mining and quarrying; manufacturing	7,621	104	1.4	319	4.2
Electricity, gas and water supply	290		0.0	15	5.2
Construction	2,007	36	1.8	65	3.2
Wholesale and retail trade; hotels and restaurants	4,940	86	1.7	156	3.2
Transport, storage and communication	1,814	22	1.2	63	3.5
Financial intermediation	1,167	22	1.9	99	8.5
Real estate, renting and business activities	2,439	69	2.8	269	11.0
Public administration	2,942	40	1.4	150	5.1
Other community, social and personal service activities	6,923	294	4.2	911	13.2
Mode of employment					
Fulltime	23,460	468	2.0	1,680	7.2
Part-time	7,093	223	3.1	380	5.4
Gender					
Men	14,229	284	2.0	1,114	7.8
Women	14,844	380	2.6	836	5.6
Graduation					
Secondary I (9-10 years)	10,144	150	1.5	163	1.6
Polytechnic school (10 y. - former GDR)	3,158	29	0.9	69	2.2
Secondary II (10-11 years)	7,101	126	1.8	298	4.2
Abitur (University entrance diploma - 3 years)	7,987	346	4.3	1,436	18.0
Total	32,089	704	2.2	2,079	6.5
Total employees (including self-employed)					
total	36,172	1,634	4.5	3,096	8.6
Of which women	16,176	744	4.5	1,110	6.9

* Only with information about workplace, graduation or amount of work
** at least half of all working days
*** at least once within the last 2 months, less than half of all working days

Source: Federal Statistical Office. Own calculations.

In the short characterization in the summarisation of the results of the survey in the SIBIS-Report about the development of telework, Germany was described as follows: "Highest growth rate (of telework) among all countries. Only average in domestic telework. Among the top flight with self-employed telework in SOHOs and mobile telework." (Empirica, 2002, p.19)

The distribution of telework in the different fields of occupation in Germany is, according to a survey of the Fraunhofer Institute, presently as shown in Table 13.

Table 13: Distribution of teleworking in Germany, Fraunehofer Institute estimates

Occupational fields	diffusion rate
sale/ field work	58.7%
organisation/computing	52.0%
general administration	30.7%
consulting	25.3%
others	24.0%
research and development	21.3%
staff	20.0%
marketing	17.3%
controlling	17.3%
buying department	9.3%
manufacturing	8.0%

Source: /www.telework.de/twcc_mainframe_telearbeit.htm. 22nd. December 2004)

Technological change and the impact on employment

At the beginning of the 21st century Germany was confronted with a serious lack of information and telecommunication technology (ICT) experts, due to rapid technological changes – especially forced through a strong increase in ICT and the New Economy. The Federal Ministry of Economics and Labour published a study in 2001, which forecast a growth of ICT jobs from approximately 1.5 million in 2000 to 2.4 million jobs at the end of 2005. The study was based on current developments, which suggested an approximate annual increase of 11% for ICT-placements for the following years (ZEW 2001: 12).

As employers started complaining about this serious lack of experts, the German government agreed on a "special programme for the supply of IT experts", which became effective on August, 1st 2000. This programme, constructed as a so called "Green Card decree", gave work and residence permits for a maximum of five years to some 20,000 highly qualified foreign IT-experts.[1] Nearly 10,000 experts had immigrated temporarily up to the end of 2002. By now the situation has obviously changed. The IT-sector has been going through a crisis since the middle of 2001 - even though scientists consider this as a normalisation of a exaggerated development (Dostal, 2002). Nevertheless, this "normalisation" leads to unemployment, which also affects the recently recruited IT-specialists, who came to Germany with their "Green Cards". [2]

Despite this recent recession within the IT sector, the threads of a lack of IT experts stay virulent – especially as three developments come together:

First, the **demographic development** of a shrinking society that is constantly growing older aggravated the shortages among highly qualified specialists. If young students continue their current tendencies of choice of degrees, there will not be enough new specialists to cover the old-age drop out of highly qualified manpower within the technological-scientific sector. The commercial economy shows an unsecured need for

1 The German green card, different from the US-American green card, only supplies a temporary residence permit. The US-American „H-1B-Programme" for highly qualified specialists is comparable to the German green card.

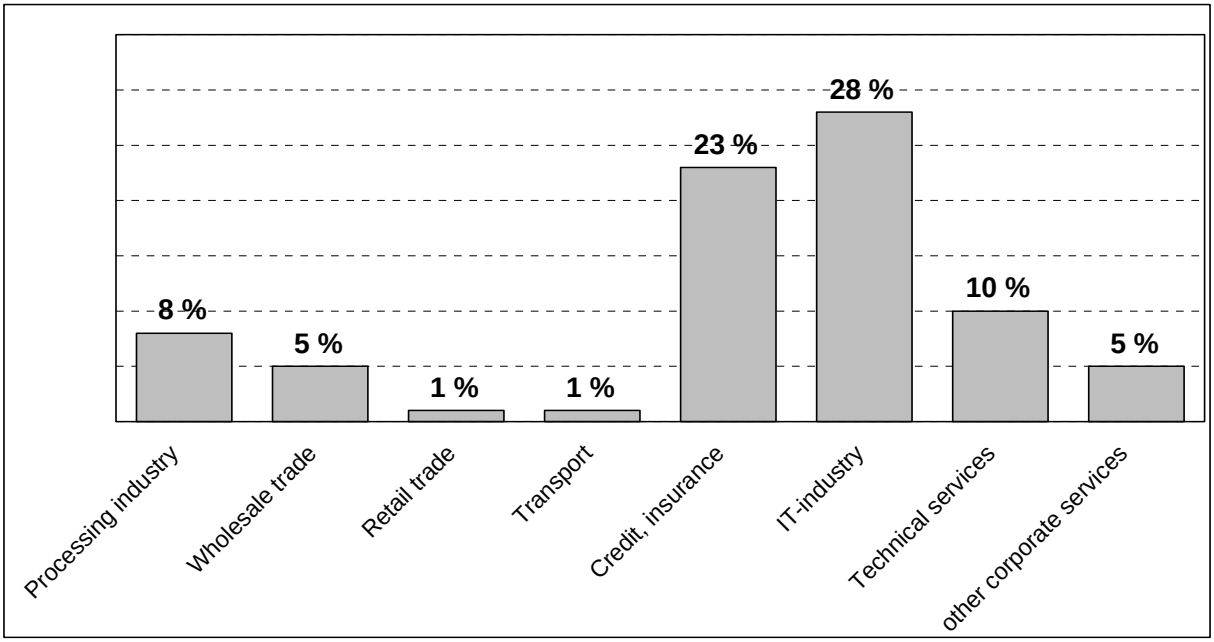
2 Not representative case studies let assume that approx. ten percent of the green card holders were confronted with unemployment until 2002 (Schreyer 2003).

substitution of about 250.000 engineers, scientists and other academics up to 2007. (Federal Ministry of Education and Research 2003, p.30).

Secondly, growth-based additional requirements lead to an increasing shortage of highly qualified high-tech-professionals. Additional requirements are mainly based on:
a constant increase of intense research and knowledge based branches of industry; a growing demand for high-quality services; and a tendency towards more and more demanding innovations of products based on a more intense and globalised competition of products (copies and improved products lose in market value)

Thirdly, Germany has to increase its investments in research and development just like other EU-member-states, if the country / the EU want to keep or reach an important position in the global high-tech-industry. Politicians and economy agree that the current status quo of "research and development" (R&D) -activities and R&D-investments has to be increased. R&D employment has to be expanded by about 100,000 to 200,000 jobs (depending on the rate of economic growth) if Germany wants to contribute to the European goal of a 3%-criteria (meaning an investment of three percent of the common GDP in R&D-activities) for 2010. (Federal Ministry of Education and Research 2003, p.30).

Figure 7: Enterprises with unfilled vacancies for IT specialists, by industry, first 6 months of 2000 in Germany (in %)



Source: ZEW corporate survey (ZEW 2001: 53).

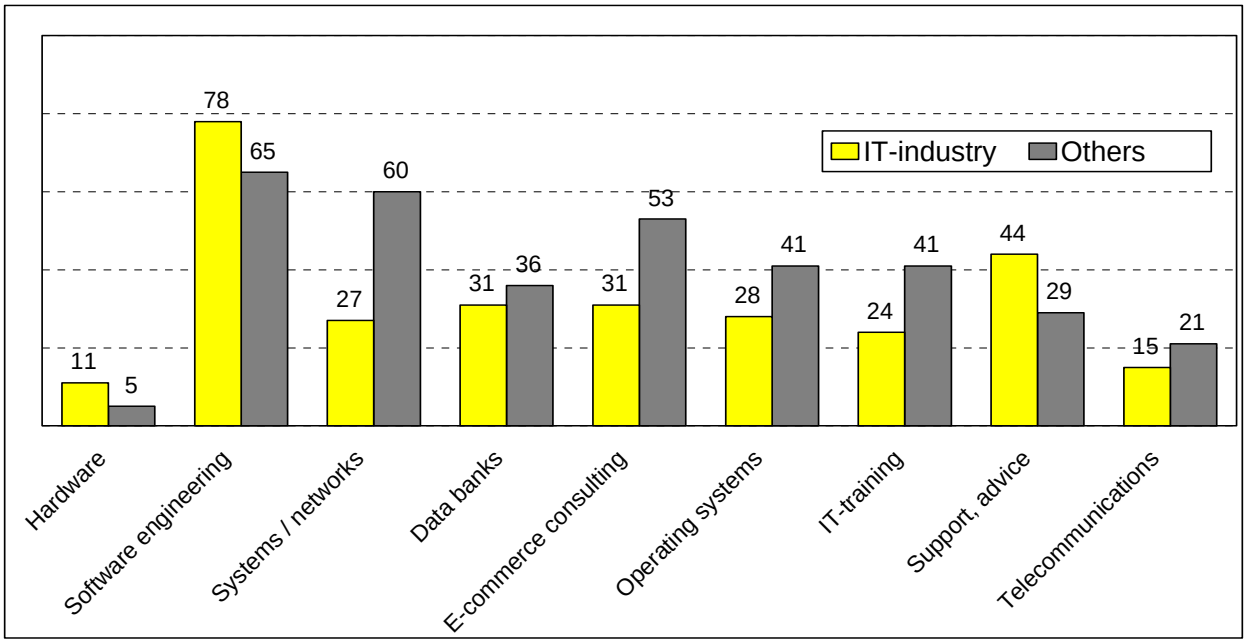
The German IT boom was less substantial than expected. Therefore the absolute numbers of the early 21st century's calculations regarding the needed IT-experts are not correct any longer. Nevertheless, empirical results and estimations from that time can still demonstrate the structure of qualification requirements with regard to branches, working fields and the level of qualification – at least in relative terms.

Considering the empirical results of figure 7 from the year 2000, it can be assumed that not more than about 30 % of the skills shortage for IT-experts come from the IT-sector itself. Most requirements can be found within other industries, of which the greatest need comes from the sector of credits and insurances. Here, about 23% of companies announce vacancies for IT specialists.

An analysis by working fields shows that IT-experts were especially needed for the development of software. Furthermore, there is a large requirement for system- and network administration, e-commerce consulting, IT-training and operating software. The latter are particularly required by companies outside the IT-industry itself. (see figure 8).

For these working fields, highly qualified IT-specialists are equally needed inside the IT-industry, where ICT is developed, and in other branches, where IT-technology is used. 80% of the placements for IT-experts in 2000 were open to young academics. (see table 10) Within this range, graduates of universities are slightly preferred to graduates of polytechnics / colleges. 48 % of the open placements require a university degree, 36 % require a college / polytechnic degree and only 17 % refer to a lower grade. Outside the IT-industry, this is nearly the same, even though the search for university degrees is a little bit lower while the search for lower grades is a little bit higher.

Figure 8: Shortage of IT-experts by working fields during 1st 6 months of 2000 in Germany (unfilled vacancies in %)



Source: ZEW corporate survey (ZEW 2001: 54).

Even though the mentioned numbers, which refer to the qualification structure of required IT-specialists, date from the year 2000, it is obvious that changes in the professional world were influenced by ICTs. This implies a continuing requirements for high ICT qualifications.

Table 14: Structure of qualification of IT-placements in Germany in 2000

	in % IT-industry	Others
	Unfilled vacancies	
	in %	
University degree	48	42
College / polytechnic degree	36	37
Master / technician	6	11
Vocational training	9	7
Without examination	2	2
	Filled vacancies	
University degree	39	37
College / polytechnic degree	33	32
Master / technician	11	12
Vocational training	13	16
No qualifications	4	3

Source: ZEW corporate survey (ZEW 2001: 54).

The drawback of this development is a clear decline in the need for less qualified manpower – this will be described in greater detail in a later section of this report.

In 2002 the governmental Institute for Labour Market and Vocational Research (IAB) published a study that shows approximate numbers of employees, who currently work with I&C-technologies (Dorstal, 2002). According to this study, there are about 600,000 IT-specialists employed in Germany (see table 15). Additionally there are about 3 Million placements that mix IT with other conventional tasks. In most cases, these experts continue to use their former job titles, which contain no explicit reference to ITC. Here we have to distinguish the third and biggest borderline group of IT-experts, whose tasks refer to the IT application only. About 18 Million people (which is half of all German employees), are part of this group.

Table 15: Number of IT-jobs in Germany (Estimation of IAB)

	in 1.000	Share of employees.
IT-specialists in a closer sense	600	1,5 %
IT-mixed placements	3.000	8 %
IT-border-employees (application only)	18.000	50 %

Source IAB (Dorstal 2002)

Technological changes demanded a great increase in highly an highest qualified vocational competences and qualifications. In order to improve the overall level of qualification, Germany has not only to expand its investments in high academic and vocational training, but even more in education in general. Therefore, the government's latest supplementary report concerning the "Technological capacities of Germany" spells out the

correspondence between Germany's educational system and its need for experts, based on the current technological changes in the following words:

> *"Technological research and development, innovation and its diffusion in growth and employment require well trained staff with internationally competitive prices (wages). In an international context, Germany has lost its pole-position with regards to its equipment with human capital. A lack of highly qualified employees already proved to be an obstacle in the late 1990s. This concerns the industry's economic capacity as much as the capacities of schools, universities, research institutes and hence the industry's basis of international competitiveness. An 'upgrading' of the capacities of German employees is necessary at all levels. Germany needs more and higher qualified experts in general. This requires higher investments in all areas of education, including and especially in pre-school and school, where the basis for later education is set. Moreover, further education will become more and more important, as the country - due to demographic changes – will be confronted with a lack of young talents. Currently, it does not play a particular role." (Bundesministerium für Bildung und Forschung, 2004, p.18)*

ITALY

Table 16 gives a snapshot of the Italian population in 2003 which can be compared with those for France and Germany shown in Tables 1 and 4.

Table 16: Statistical profile of the Italian population in 2003 (in thousand)*

	men	women	All
Over official retirement age	4308	5129	10437
School age or below (0-14)	4256	4013	8269
Of working age (15-64)	19388	19384	38772
O/w* In full-time education	2039	2210	4249
O/w Registered unemployed	996	1100	2096
O/w Economically inactive	4908	10017	14925
O/w part-time	401	1429	1830
O/w self-employed	4050	1695	5745
O/w on temporary or fixed-term contracts	771	804	1575
O/w working in agriculture	701	320	1021
O/w non-nationals	777	726	1503

Source: Labour Force Survey source; data on Non nationals is based an ISTAT (Italian National Institute of Statistics) analysis of data from the Ministry of the Interior.

Approximately 23 million economically active people in Italy can be seen to be supporting, directly or indirectly, over 10 million retired people, over eight million children below the age of 15 and nearly 15 million economically inactive adults of working age. Over four million are in full time education. Just over a million work in agriculture.

The number of part-time workers is approximately 1.8 million, of whom the majority are women. Around a million and a half are employed on part-time or temporary contracts. A high proportion of the workforce is self-employed, with 5.7 million, predominantly men, recorded in this category.

Industrial structure and recent trends

After a phase of economic stagnation during the nineties, recent years have been characterized by a remarkable increase of **employment** between 1999 and 2003, with an addition of almost 1.400.000 new jobs in the labour market. It is noteworthy that about two thirds of the new employment is due to **women**, confirming a trend initiated in the second half of the nineties.

The mix that composes the backbone of the employment structure has changed profoundly. Processes regarding restructuring and outsourcing had a deep impact on the industrial sector; its proportion of employment diminished from 25,9 to 23,6 per cent. But it is important to take notice of the fact that following 1997, employment in the industrial sector has kept up and, recently, even raised its level in absolute terms.

Table 17: Italian population aged 15-64 by gender and workforce participation trends

	1999		2001		2003	
	000's	*%*	*000's*	*%*	*000's*	*%*
Employed						
Males	12920	63.5	13201	62.4	13438	61.9
Females	7437	36.5	7968	37.6	8272	38.1
Total	20357	100.0	21169	100.0	21710	100.0
Unemployed						
Males	1262	47.4	1063	47.0	992	47.5
Females	1398	52.6	1196	53.0	1095	52.5
Total	2661	100.0	2259	100.0	2087	100.0
Labour Force						
Males	14183	61.6	14264	60.9	14430	60.6
Females	8835	38.4	9165	39.1	9367	39.4
Total	23018	100.0	23429	100.0	23797	100.0
Total population						
Males	19378	49.9	19377	50.0	19388	50.0
Females	19428	50.1	19388	50.0	19383	50.0
Total	38805	100.0	38765	100.0	38771	100.0

Source: ISTAT, Labour Force Survey, 2004

The service sector has shown continuous growth since 1997, fuelling the general increase in employment, reaching in 2003 63,3 percent of total employment. Taking into account that this rate is considered below average for an advanced economy, most analysts forecast that this trend will consolidate in the future.

Table 18: Employment in Italy by sector

	1995	1997	1999	2001	2003
	%	*%*	*%*	*%*	*%*
Agriculture	6.7	6.2	5.5	5.2	4.9
Total Industry	33.8	33.0	32.6	31.8	31.8
- Industry (except construction)	25.9	25.2	25.0	23.9	23.6
- Construction	7.9	7.7	7.6	7.9	8.2
Other Activities	59.6	60.9	61.9	63.0	63.3
- Distribution (wholesale and retail)	16.0	16.0	16.0	15.9	16.0
Total	100.0	100.0	100.0	100.0	100.0

Source: ISTAT, Labour Force Survey, 2004

Agriculture is the sector in which we will see a continuous reduction in employment in relative and absolute terms.

Industry and, particularly, manufacturing is the area which specifically shows, in some sectors, signs suggesting a risk of decline, either structural, or from the point of view of employment (Gallino, 2003). By contrast, services are generally a developing area, even though some sub-sectors are relatively stagnant. The following analysis takes into consideration a structural aspect (the added value of selected sectors) as well as employment trends.

By analysing the most important sectors within the industrial area, we can observe the growth of the food industry, timber products, machinery and equipment, paper and publishing; while other sectors, such as automobiles and textiles, have floundered during this period.

These two sectors also present major risks, from the employment point of view for several reasons. In the automobile sector, there is a strong lag in relation to the innovation of the product line. Concerning textiles, there is a distinction between very high level of value added production, where the country retains a position of excellence, and the lower value added production, where the competitiveness of the emerging industries in China and the area of South-Eastern Asia set an important and difficult challenge.

Table 19: Added value at current prices and employment in selected industrial sectors in Italy (%)

	1999		*2001*		*2003*	
	Added value	**Employment.**	**Added value**	**Employment**	**Added value**	**Employment**
Industry (except construction)	100.0	100.0	100.0	100.0	100.0	100.0
Food & beverages and tobacco	10.2	9.1	10.2	8.8	11.5	9.4
Textile	8.1	13.7	8.4	13.8	7.7	12.6
Wood products	2.1	3.7	2.1	3.7	2.2	3.7
Paper and publishing industry	5.0	5.8	5.2	5.8	5.5	5.8
Plastic and chemicals	6.5	4.6	6.3	4.5	6.0	4.4
Machinery and equipment	9.0	10.4	9.2	10.7	8.9	10.9
Consumer electronics	7.0	8.8	7.2	9.1	6.6	9.1
Transport& Automakers	4.9	5.5	5.1	5.3	4.7	4.9
Electricity and gas supply	10.7	2.8	11.1	2.7	11.5	2.4

Source: ISTAT, Elaborazioni su dati di Contabilità Nazionale

As already noted, the service sector has been exhibited a consistently upward trend with regards to employment. However, we can see that the most relevant growth in employment has been concentrated in the tourism and retail industries, while the telecommunication industry, because of the processes of restructuring and rationalisation that it had to go through, has manifested a progressive contraction of the amount of employment it can absorb.

Employment in education and the health service have been rather stable, but also prisoners of budget constraints.

Table 20 - Services sector- Added value at current prices and employment in some services sectors (%)

	1999		*2001*		*2003*	
	Added value	**Employm.**	**Added value**	**Employm.**	**Added value**	**Employm.**
Services	100.0	100.0	100.0	100.0	100.0	100.0
Retail trade, repairs, hotel and restaurants, transport and communications,	33.3	41.1	33.1	41.1	32.2	40.7
- Retail (wholesale & detail)	18.9	23.7	18.3	23.3	17.7	23.1
- Hotel and restaurants	4.9	7.9	5.1	8.4	5.0	8.2
- transport and communications	6.4	7.7	6.6	7.8	6.5	8.0
- Post and communications	3.2	1.8	3.1	1.6	3.0	1.4
Financial intermediation	37.9	19.0	38.8	19.7	39.6	20.8
Other-	28.7	39.9	28.1	39.2	28.2	38.5
- Education	7.2	10.4	7.1	10.2	7.2	10.1
- Health and social services	6.5	8.7	6.8	8.5	6.6	8.3
- Public and personal social services	7.0	11.5	6.6	11.6	6.6	11.7

Source: ISTAT, Elaborazioni su dati di Contabilità Nazionale

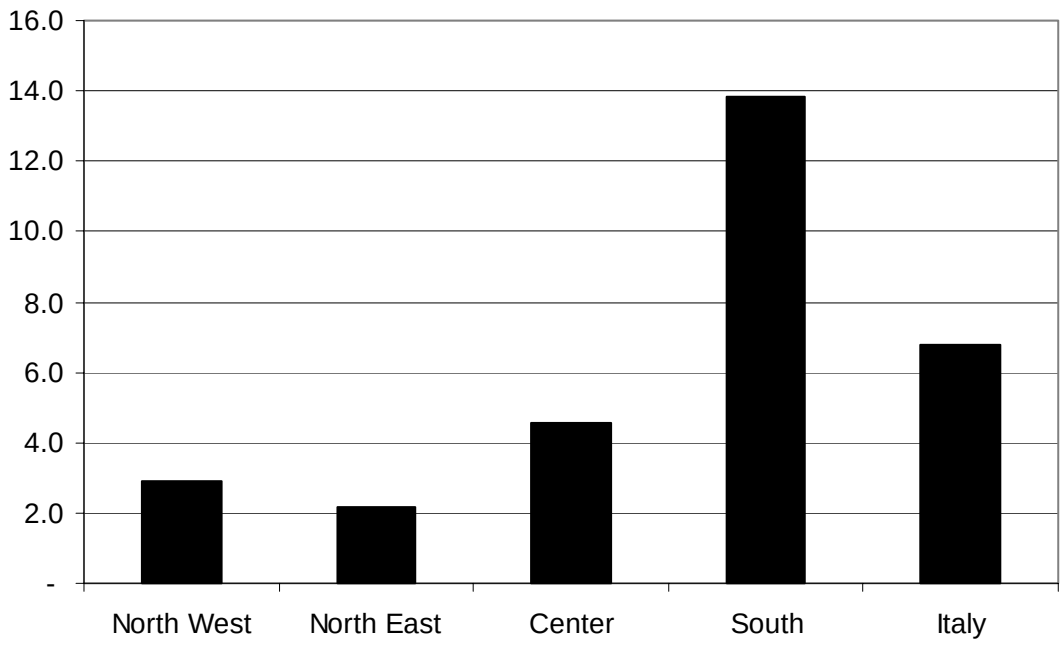
The analysis of the structural trends shows a permanent **risk** for workers in the manufacturing sector, characterized by a continuous process of restructuring and, as we have seen, by the intensification of the process of globalisation. Concerning services, it is worth noting the stagnation of employment within some national public services such as education, post and communications, which were in the past years important sources of jobs. The risks are particularly intense for the work force of the *Mezzogiorno*, as we are going to explain.

The Regional dimension

Italy is characterized by a wide economic divide between the Centre-Northern regions and the Southern ones (the "*Mezzogiorno*"), where about a third of the total population lives. This divide is particularly visible by observing the deeply different rate of unemployment which, in the *Mezzogioro* is more than double the Italian average. But the difference is even more significant if we compare the southern regions with the other main areas of the country: as the graph shows, Central Italy has an unemployment level below the European average, and the Northern regions are not very far from the target of a full employment.

The divide becomes even more dramatic if the socio-economic scenario of the *Mezzogiorno* is taken into account, by analysing, in parallel, the economic performance from the point of view of the added value of industry and service sectors and the levels of employment, shown in Table 9. In manufacturing, the added value was in 2002 as low as 16,1 percent of the national average, whilst the employment made up 18,2 per cent. It is worth to note that all the total industrial added value of the *Mezzogiorno* is lower than the added value created by a single northern region such as Lombardia.

Figure 9: Unemployment rates in Italy by region, 2003



Source: ISTAT, 2004

Table 21 - Added value at current prices and employment, Centre-north and Mezzogiorno Italian regions by macro sectors

	1999		2000		2001		2002	
	Added value	**Empl.**	**Added value**	**Empl.**	**Added value**	**Empl.**	**Added value**	**Empl.**
Industry (except construction)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Centre-North regions	84.5	82.7	84.5	82.6	84.4	82.4	83.9	81.8
Mezzogiorno	15.5	17.3	15.5	17.4	15.6	17.6	16.1	18.2
Services	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Centre-North regions	73.9	70.5	74.0	70.7	73.9	70.7	73.8	70.6
Mezzogiorno	26.1	29.5	26.0	29.3	26.1	29.3	26.2	29.4

Source: ISTAT, 2004

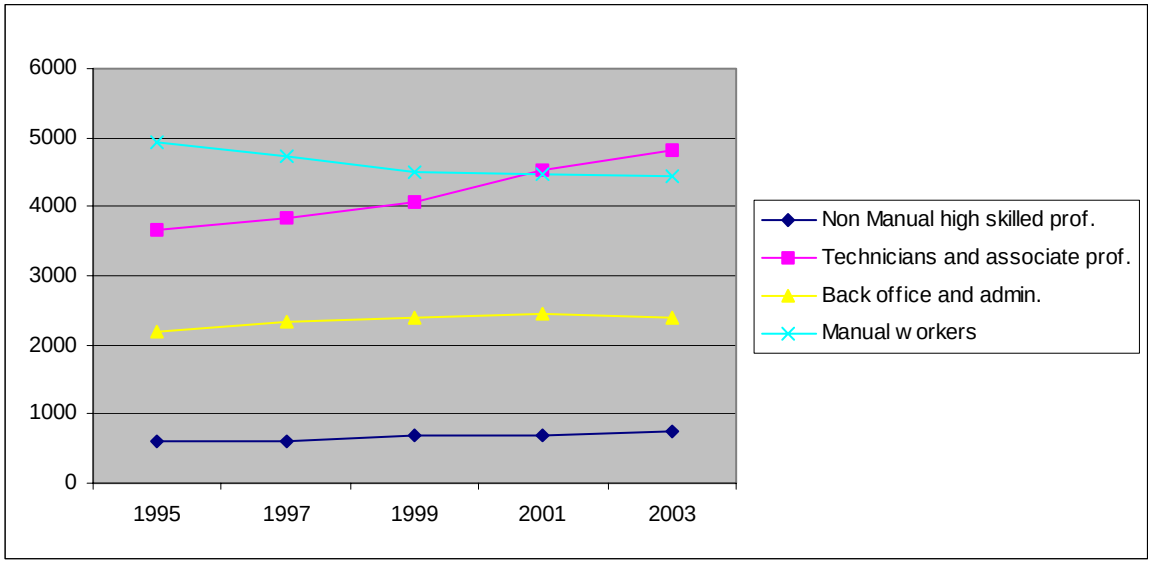
The percentage of employment created in the service sector reaches almost 30 percent of the national figure, but the added value is lower, indicating, also in this case, a lag in the process of innovation.

Changes in the composition and structure of the workforce

Occupational structure

Concerning the **structure of occupation**, the number of non manual-high skilled shows a slight increase, but their strength in percentage has been relatively stable. The numbers regarding intermediate technicians and associate professionals have shown a strong growth: in percentages, their strength has shifted from 18.2 per cent of the workforce in 1995 to 21.8 per cent in 2003. On the contrary, "back office staff" (clerks and administration staff) have maintained their positions in the labour market, albeit with a slight reduction of their overall numbers. The most important shift, on the reduction side, has been on the numbers of manual workers. In percentage terms, their number declined from 33.9 per cent in 1995, to 29.4 per cent in 2003.

Figure 10: Employment in Italy by occupation, 1995-2003 (millions)

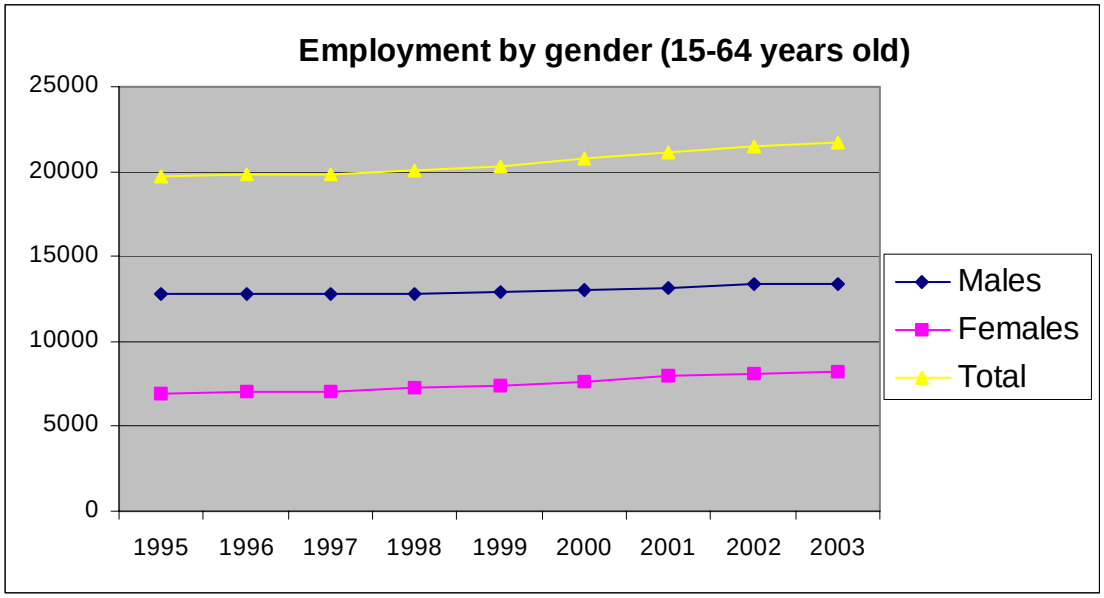


Source: ISTAT, 2004

Gender composition

The average participation rate of women remains low (less than 40 per cent of the employed) comparing to the European standard. And this is the consequence of a very low Figure 3 shows the trends from 1995 to 2003 demonstrating that during this period, the portion of employed men in relation to the total employment decreased from 63,5 to 61,9 percent; while that of women grew from 36,5 to 38,1 (ISTAT, *Indagine sulla forza lavoro,* 2004).

Figure 11: Employment of 15-64 year-olds by gender in Italy, 1995-2003



Source: ISTAT, 2004

Along with an overall increase in employment there has also been a significant increase of **immigrant workers**. The size of this group is a controversial issue, since a number of immigrants are present in the informal economy. However the increase is confirmed from administrative sources and is linked to the process of immigrant's regularization due to apposite laws. After the last regularization, immigrants in Italy are estimated to be 2.194.000 according the Interior Ministry, while Caritas (a specialized NGO) estimates that their presence is close to 2.600.000 (Caritas, 2004). Concerning the figure on the immigrant workers, at the end of 2002, there were 1.225.000 immigrants registered at INPS – the Social Security Institute – of whom 50 per cent are employed in the services sector, 42 per cent in industry, and 8 per cent in agriculture.

Concerning the regional distribution, the very large majority (about 70 per cent) are in the Northern regions, where the employment is remarkably high. In relation to gender, women are, according to the population survey of 2001, little more than the half of overall immigrant workers manifesting strong presence in the family care services.

Part-time employment

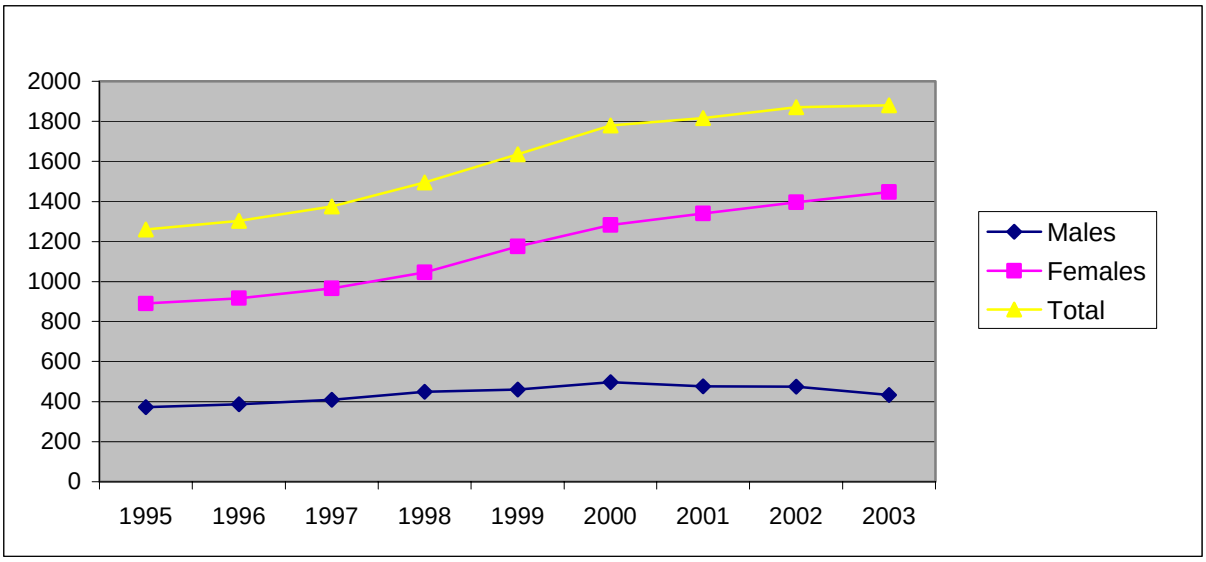
The increase of **part time** work reflects the overall growth of the employment, even though it remains low in relation to the European standards. In fact, in 2003, only 8,5 of employment was part time. The large majority (about 80 per cent) is performed in the service sector.

Table 22: Employment in Italy by sector and working time

	1999		2001		2003	
	000's	*%*	*000's*	*%*	*000's*	*%*
Agriculture						
Full-time	993	87.6	977	86.7	946	88.0
Part-time	141	12.4	149	13.3	129	12.0
Total	1134	100.0	1126	100.0	1075	100.0
Industry						
Full-time	6455	95.6	6523	95.4	6688	95.3
Part-time	296	4.4	317	4.6	331	4.7
Total	6750	100.0	6841	100.0	7019	100.0
Other activities						
Full-time	11608	90.6	12198	90.0	12540	89.8
Part-time	1199	9.4	1350	10.0	1421	10.2
Total	12807	100.0	13548	100.0	13960	100.0
Total economy						
Full-time	19056	92.1	19698	91.6	20173	91.5
Part-time	1636	7.9	1816	8.4	1881	8.5
Total	20692	100.0	21514	100.0	22054	100.0

Source: ISTAT, Labour Force Survey

Figure 12: Part-time employment in Italy by gender, 1995-2003 (thousands)



Source: ISTAT, 2004

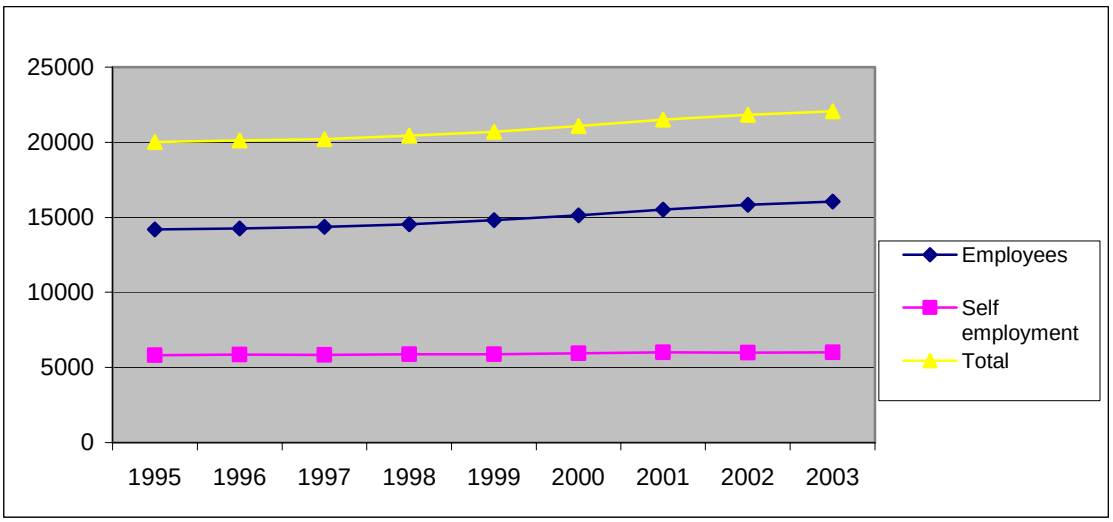
About 75 per cent of part time employment is made up by women. It is noteworthy that, according a number of studies, this kind of work presents strong risks of precariousness (Santucci, 2004).

Employment status

With regard to **employment status**, it there has been a continuous increase in dependent workers, accompanied by a relative drop of self- employed. Effectively, 91 per cent all the new employment is made up by employees, resulting in a percentage decrease of self-employment. The drop in self-employment becomes more readily understandable, if it is taken into account that a remarkable portion of these workers are "pseudo-independent", a form of employment status specific to Italy, known as "*parasubordinati*" or "collaborators".

Many people employed in the call centre industry have been accorded this status.

Figure 13: Employment in Italy by status (1995-2003)



Source: ISTAT, 2004

The use of **fixed-term contracts** has increased along with the growth in total employment. In 2003 dependent workers with fixed-term contracts were about 10 per cent of the total. But if this figure is apparently low in relation to the European average, it should be remembered that a consistent part of self-employment is in practice dependent work, with a very precarious status (Santoro Passarelli, 2003; Fontana, 2004).

Individuals registered at INPS as "collaborators" (*parasubordinati)* number more than two million, even though roughly one million of these individuals pay contributions since they are effectively working as employees.

Table 23 - Employees by sector and job permanence

	1999		2001		2003	
	000's	%	000's	%	000's	%
Agriculture						
Permanent contract	278	61.9	286	61.6	284	62.8
Fixed-Term workers	171	38.1	178	38.4	168	37.2
Total	449	100.0	464	100.0	452	100.0
Industry						
Permanent contract	4873	92.8	4925	92.7	5060	92.6
Fixed-Term workers	380	7.2	386	7.3	405	7.4
Total	5253	100.0	5311	100.0	5465	100.0
Other activities						
Permanent contract	8262	90.6	8791	90.2	9119	90.0
Fixed-Term workers	859	9.4	950	9.8	1010	10.0
Total	9121	100.0	9742	100.0	10129	100.0
Total economy						
Permanent contract	13413	90.5	14002	90.2	14464	90.1
Fixed-Term workers	1410	9.5	1514	9.8	1583	9.9
Total	14823	100.0	15517	100.0	16046	100.0

Source: ISTAT, Labour Force Survey, 2004

Teleworking

At the moment there is no official data regarding "*teleworking*" in Italy, mainly because the phenomenon is still not very widespread, and also due to the lack of the right instruments and definitions to be able to measure it. (Gaeta, Pascucci, 2001).

In the last few years different European research projects have provided diverse data but which do not give the whole picture of the phenomenon. The ECATT survey in 1999, estimated that there were around 9 million "teleworkers" in Europe (which make up 9 per cent of the European labour market), of whom 720.000 were in Italy (around 3.6% of the Italian labour market).

Even if there are no official statistics regarding telework, the Office of national statistics produces interesting statistics and indicators, and even though they are not strictly defined, they allow us to estimate the spread of this type of work, or at least to measure the potential use of this type of work, by using a sample of people which are regarded as representative.

As an example, there is a survey regarding people who had a full time job but also worked in their free time in the year 2000, which made it possible to estimate that of 100 people interviewed, 5.8 per cent declared that they worked in their free time as teleworkers or some other type of work from home. The other survey conducted for the year 2001, still contained a question about work from home. The results will be available in the early months of 2005.

It is effectively difficult to measure this phenomenon also because "teleworking" is not strictly a type or a category of work, but one of the possible means to conduct diverse

types of activities in the market place. It cuts through many activities as it is multidimensional, and as such it needs a set of indicators to be measured, indicators that point out its principal features as the workplace, the technologies utilised, and the time and frequency of the work done from distance. (Della Ratta, Oteri, 2004). However, because there is a lack of such indicators, data provided by ISTAT are a good enough proxy in regards to this phenomenon.

Technological change and the impact on employment

The majority of firms have been affected by technological changes, even though in different ways, depending on the sector and size. From the point of view of labour re-organization within the firms, it is possible to distinguish between workers with a very modest change in the way they perform their job, and those whose activity has been affected in a more fundamental manner.

According to the most up-to-date surveys (Federcomin, 2004), taking into account this distinction, it is possible to observe that about 7 million dependent workers could be defined as ***generic users*** of information technology, while about 4 million are defined as ***power users*** - that is workers, whose activity has been more deeply affected by technological change. With regard to the latter figure, it is worth noting that 30 per cent of power users are workers who are less than 35 years old.

Other estimates regarding this phenomenon can be obtained from a research study on the use of technology done by Multiscopo (ISTAT, 2000). According to this research, in the year 2000, for every 100 people (from 3 year olds onwards) who said that they used the computer at home (equivalent to 29.6% of the population), 25 percent used it for work (28.4% among males and 20.9% among females). Naturally this estimate does not provide the true proportion regarding as teleworking as strictly defined, but it provides an estimate on the proliferation of working outside the work place, together with an evaluation of the potential pool of teleworkers.

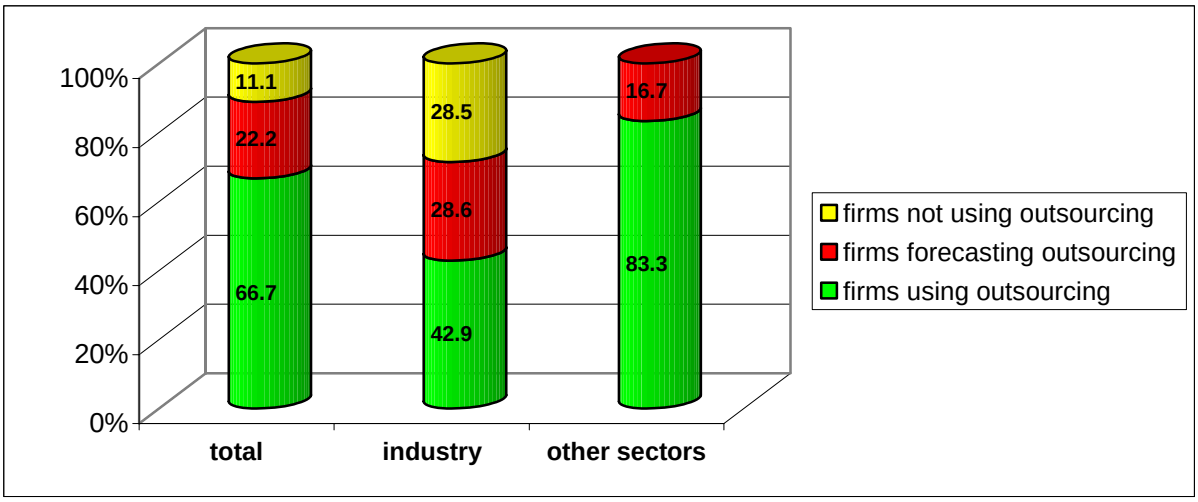
A more precise estimate regarding the numbers of teleworkers (adopting a definition that implies as fundamental the use of telecommunication technologies) can be obtained by using this same research, principally regarding those who reported using the Internet at home for work. This produced a total of about 1.512.000 people, equivalent to 6.4 per cent of the working population and it mainly comprising workers classified as clerical or equivalent (45%) and managers (27%). These numbers however only provide an approximate evaluation, because they do not differentiate between occasional and systematic telework, and exclude mobile telework and telework which is carried out from a fixed centre.

With a regard to the employment level, according to a survey of ISTAT in the framework of the Community Innovation Survey, about 70 percent of firms in the industrial sector have declared that innovation has not affected their employment level; in 25 percent of firms the outcome has been an increase of employment and only in 5 per cent a reduction (ISTAT, 1998-2000).

Anyway, this is only one of the aspects of the impact of technological change. **Outsourcing** is the phenomenon that has mostly influenced re-organization of firms. According to the above mentioned Report (Federcomin, 2004), about 66 percent of all firms utilise services from outside, having outsourced a number of, more or less, large activities previously performed inside. This aspect of re-organization concerns 43 percent of firms in the

industrial sector, while within the services sector this percentage is close to 85 per cent. Regarding those firms which have not made use any form of outsourcing (about 33 per cent), the majority predict a future use of outsourcing.

Figure 14: Use of outsourcing by firms in Italy



Source: Federcomin, Occupazione e formazione nell'ICT, 2004

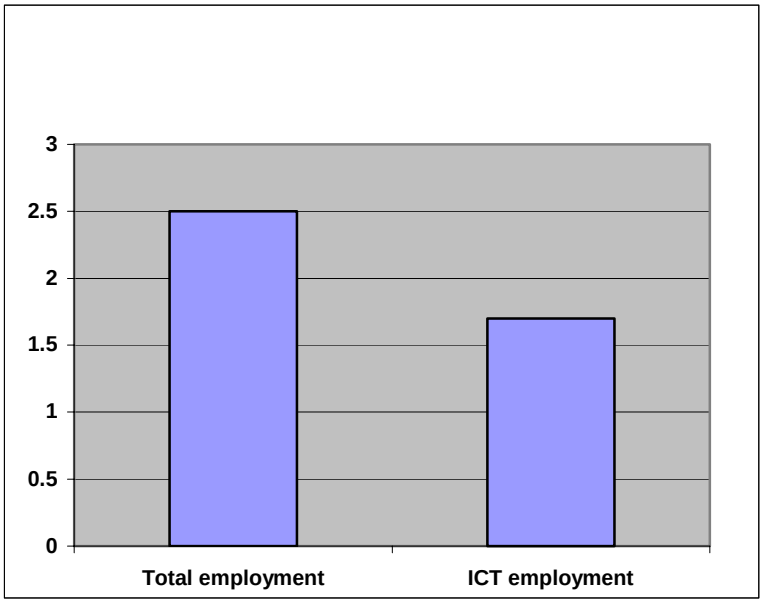
Surveyed firms mention three main reasons for outsourcing internal activities: the reason mostly cited (50 percent of the firms surveyed) is cost reduction; little more than 30 percent cite rationalization, and about 20 percent lack of competence (Federcomin, 2004).

The most relevant impact of technological change on employment must be found in the growth of firms directly involved in the ITC sector. According to the annual surveys conducted by enterprise associations in cooperation with the Statistics Department of the University of Milan, there were about 85.000 firms in the ICT sector in the year 2003,. The number of workers in the ICT sector was estimated at 608.000, of whom, some 342.000 were linked to software and services firms. This analysis of the ICT employment also takes into account employees who perform specific ICT activities within the firm's users or client organisations. It was estimated that in 2003 there were 404.000 such workers.

Regarding these figures, the surveys indicate two relevant aspects. The first is that the number of workers within the ICT sectors continues to grow, but the rate of growth has slowed during recent years: it was 5,5 percent in 2001; 0,2 percent in 2002 and 1,5 in 2003 (a similar trend can be observed within the user organisations). Secondly, if the total figures are correlated to full time equivalent units, the trend shows a reduction of the overall ICT employment. The difference is explained by an increasing flexibility in the working time organization, accompanied by a larger participation of part time workers.
In order to evaluate the impact on the overall female employment, it should be remembered, as we have seen in the above analysis of the labour market dynamics during recent years, that two thirds of the total employment increase is due to the component related to females. Concerning the ICT sector, the participation of women is about 35 percent of employees and 26 per cent of the self-employed.

According to one survey (Federcomin, 2002), dependent workers within the ICT sector are about 60 per cent; 11 per cent are self employed; the remaining 30 per cent is made up by *Parasubordinati*, or the pseudo-independent workers. The latter type of contracts is more flexible from the firms' point of view of, but in many aspects it is more precarious for the workers. Regarding dependent workers, during the last few years it is part time work that has been growing.

Figure 15: Increase of total employment and ICT employment in Italy, 2001-2003 (%)



Source: Federcomin, Occupazione e formazione nell'ICT, 2004

Summing up, technological change increasingly affects the industrial and service sectors, either from the point of view rationalization and modernization, or from the point of view of outsourcing.

Specifically concerning the ICT sector, there has been a speedy expansion until 2001, while afterwards, growth has been less than of the general increase of employment.

POLAND

Table 24 gives a statistical snapshot of the Polish population which can be compared with those of France, Germany and Italy shown earlier. Of the working population of nearly 27 million, some 14 million are economically inactive and there are over three million registered unemployed. Nearly 6 million people are over official retirement age and there are nearly seven million children below the age of 15. Over four million students are in full-time education. Compared with older EU member States, the numbers working in agriculture are high, at over 4 million. Self-employment stands at five and a half million, and there are over two million working on temporary or fixed-term contracts.

Table 24: Statistical profile of the Polish population, 2002 ('000)

	Men	Women	All
Over official retirement age[1]	1850,2	3914,8	5765
School age or below (0-14)	3484,3	3320	6804,3
Of working age (15-64)	15271,9	11254,7	26526,6
O/w* In full-time education[2]	-	-	4270,5
O/w Registered unemployed[3]	1571,2	1645,8	3217,0
O/w Economically inactive[4]	5544	8468	14012
	3013	4014	7027
O/w part-time[5]	260,9	347,5	608,4
O/w self-employed[6]	2903,8	2591,3	5495,1
O/w on temporary or fixed-term contracts[7]	-	-	2397
O/w working in agriculture[8]	-	-	4281,5
O/w non-nationals[9]	17,4	16,7	34,0

Source: Polish Statistical Yearbook

Industrial structure and recent trends

Since the year 1989 the Polish economy and the Polish labour market have undergone a huge transformation. The process of adapting the Polish economy to a free market economy resulted in changes in the structure of employment: the number of persons employed in the public sector decreased from 9.3 million of individuals in the year 1989 to 3.9 million in the year 2002 while the number of persons employed by the private sector

1 Men above the age of 65, women above the age of 60

2 Number of students at the age of 15 and above

3 Men in the age group 18-64 women in the age group 18-59

4 Upper line: age 15 and above, lower line: men in the age group 18-64 women in the age group 18-59

5 Total number, not considering age group

6 Total number, not considering age group

7 III quarter of the year 2004

8 Total number, not considering age group

9 Total number, not considering age group, on the basis of National Census of the year 2002

increased respectively from 8.3 million to 11 million individuals. Transformation has also resulted in a dramatic increase of the unemployment rate from 0.3% in January 1990 to 18% in November 2004. This is the context for analysing flows of work force between these three sectors of economy.

The characteristic feature of the Polish labour market is still a great importance of agriculture. Between the years 1989-2002 the number of persons working in agriculture decreased only slightly from the level of 4.6 million to 4.3 million. However the proportion of persons working in agriculture to the total work force is again approaching the level of 29%.

Table 25: Structure of employment in Poland by economic sector (%)

Year	Agriculture	Production	Services
1988	29.7	35.1	35,2
1990	26.6	36.1	37,3
1991	26.8	35,0	38,2
1992	26.8	32,0	41,2
1993	26.7	30.6	42,7
1994	27.2	30.6	42,2
1995	27.0	30.4	42,6
1996	28.2	29.9	41,9
1997	27.5	29.5	43,0
1998	27.4	28.9	43,7
1999	27.5	27.6	44,8
2000	28.5	26.1	45,4
2001	29.3	25.2	45,5
2002	28.7	23.9	47,4

Sources: W. Kwiatkowska, Zmiana struktury pracujących w Polsce w kontekście integracji z Unią Europejską, [w:] Wzrost gospodarczy, restrukturyzacja i bezrobocie w Polsce. Ujęcie teoretyczne i praktyczne, [The Change in Employment Structure in Poland in the Context of Integration with the EU (in:) Economic Growth, Restructuring and Unemployment in Poland. Theoretical and Practical Approach] conference papers, Katedra Ekonomii Uniwersytetu Łódzkiego 2000, p. 210, since 1999 GUS Rocznik Statystyczny.

As in the majority of advanced countries there has been a decrease in the number of persons employed in production (between the years 1990-2002 this decline was 12,2 %) and a growth in the service sector (10.1 % increase). In recent years within the framework of the production sector we can distinguish declining industries with a significant decrease in the number of employees, between the years 1995-2002: in mining industry – 41,5%, in manufacturing – 21,2%, in construction – 18,2%.

The proportion of persons employed by the services sector has grown from the level of 35% at the beginning of the 1990s to 47% in the year 2002. The most significant increase in actual numbers was observed in trade and repairs and proportionally in financial broking (during the period of 8 years by 80.5%). The number of persons servicing companies and real estate market has also significantly increased. It is noteworthy that the number of persons employed by public administration and national defence has also increased.

Research covering the period 1994-1998 showed that mobility of the workforce between different sectors was decreasing. During the researched period this mobility decreased by

50%. In particular, there was very little mobility of persons employed in agriculture, forestry and fishery.

Generally speaking it seems that outflow of persons from the labour market is a more important trend in Poland than the flow between sectors. Between the years 1989 and 2001 employment in the production sector fell by 2.4 million, in agriculture by 0.7 million while in the service sector there was an increase of employees by 0.75 million. This barely compensated for the fall in the production sector.

Changes in the composition and structure of the workforce

Women in the labour market

A characteristic feature of women's activity in Poland is a high level of education in comparison to men. Results of the last census confirm this thesis and show even stronger tendency in this respect. Presently, the proportion of women with higher education in the total population is somewhat higher than proportion of men. In the year 2002 women with higher education made up 10% of the total adult population while highly educated men comprised only 9.3%.

This is an important phenomenon since there is a strong correlation between a woman's level of education and her professional activity. Better education improves her situation in the labour market. However women are paid less than men having the same level of education and similar position. It is one of paradoxes that in spite of equally good education women receive lower wages than men. In the year 1999 the average salary of women was 20% lower than the average salary of men.

The participation of women in the job market is determined by many factors related to their social role, such as maternity, family responsibilities. It determines women's flexibility and availability. It explains the relatively low number of women from the age group 24-34 in the job market. On the other hand the number of women at the age 45 and above has increased in comparison to the beginnings of the 1990s.

In spite of disadvantageous changes in the job market during the period of transformation the proportion of women in the job market has not decreased although the economic activity of both men and women has decreased. Between the years 1992-1999 men made up most of the workforce while the proportion of women was about 45%. (Balcerzak-Paradowska, 2001) The number of women working in the private sector has increased although it is still lower than the number of men. Women still have more jobs in the public sector (women: 51%, men: 40.7%) (Balcerzak-Paradowska, 2001). There is also a higher proportion of women in the group of employers although the total number of employers is lower.

External migrations versus labour market during the period of 14 years

From the beginning of 1990s we have observed an increasing number of foreign employees in the Polish job market. Legal employment of foreign citizens is quite new in Poland. There is no systematic, full evidence concerning work undertaken by foreigners. Data collected by various institutions cannot be compared because of different methods for classifying information gathered by these institutions. In addition, available data to a great extent concerns legally employed persons. The most comprehensive and reliable data is

collected about legally employed foreigners, who are not inhabitants of Poland. It should be stressed that available data does not show actual employment of foreigners but only potential job opportunities.

According to official data the number of working foreigners does not exceed 1% of the total working population in Poland. It is estimated that there are 40,000 legally employed foreigners in Poland. Half of this number is made up of permanent residents. The number of illegally employed foreigners was estimated by the National Labour Office as between 100,000 and 150,000 individuals. During the last 14 years we could observe quite significant changes in this area. Between the year 1991 and the first six months of the years 1992 the number of issued work permit was growing. In mid 1994 we could observe a decrease or stagnation of this tendency. Higher numbers of the issued work permits were observed in the second half of the year 1994, the third and fourth quarter of the year 1997 and of the year 2000. Although the number of work permits has increased there was no change with regard to the size of employment.

The most popular form of employment of foreigners is illegal, seasonal work. We can also observe the beginnings of concentration and specialisation of certain groups of foreigners. One of the characteristic features of work migration is its strong territorial concentration. The most attractive job market is in Warsaw and its surroundings.[1]

Similar concentration may be observed with regard to sectors of economy. In the year 2000 the highest number of legally employed foreigners worked in education (31.7%), followed by industry (22.8%) and trade (13.7%).[2] A "grey" job market is observed in construction and agriculture (Okólski, 2002).

Most foreigners seeking legal employment in Poland have a good education. They take the jobs of experts, managers or they are owners of companies(Okólski, 2002)[3].

Part time jobs

Part time jobs are defined as those with shorter working hours than in case of full time job in a given sector or company. Part time jobs are quite advantageous for companies due to better adjustment of personnel and their working hours to the needs of a given company. It also makes it possible to reduce costs. Employees often consider this type of employment as less advantageous in comparison to a standard full time contract. However, this form of employment is accepted due to a difficult situation on the job market.

In Poland the majority of employees are employed in full time jobs; however a slight growth was observed in the number of part-time jobs (between the years 1997 and 2000 from 10.1% to 11.2%). The private sector of the economy uses this form of employment more often than the public sector (respectively: 14.1% and 5.4%).

Between 1992 and 2000 women were more often employed in part time jobs than men (in the year 2000 11,2% of women worked part time compared with 8,7% of men.

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1 In the year 2000 half of the 80% of all foreigners who obtained work permit found employment in Mazowia Region.

2 iI the year 2000 - 82,7% of applications concerned permission to start own business.

3 Migrants from Europe: Experts – 27%, Managers – 22%, Owners – 21%; UE: Experts– 26%, Managers – 35%, Owners – 18%.

This form of employment is typically used for employing workers and specialists. It is rarely seen among managers. Part time jobs are attractive for persons combining work and education and for retired persons or persons with disabilities.

Part time employment is the most popular among atypical forms of employment. In Poland the least popular forms of atypical employment are temporary and casual work[1].

Self-employment

According to the opinion of labour market experts we could observe during last two years a growing tendency of replacing full-time work contract with self-employment arrangements. Data collected by the Central Statistical Office lists a category called self-employed persons, which includes a much broader group of individuals.[2]

More and more companies offer their employees self-employment arrangements as a replacement for full-time work contracts in order to reduce non-wage labour costs financed by the company (social insurance contributions).

It is interesting that the growth in the number of self-employed persons is observed mainly in sectors having high rates of employment injuries, such as the transport industry and the construction sector. In case of work accident a given company does not have to pay compensation to self-employed persons as opposed to injured employees.

In the opinion of experts this change of employment arrangements may be profitable only in case of well-paid jobs while the growing tendency, which is observed in Poland, concerns mainly persons from low-income groups. The fact that this group of individuals decides to register as self-employed confirms the hypothesis that in many cases employees are presented with this option as the only alternative to unemployment. This hypothesis is also confirmed by analysis of relations between a former employer's company and a newly established firm. It is clear that employees are often forced to change their legal status and employment arrangements while the actual work relations remain the same.[3]

Technological change and the impact on employment

The available statistical data and research results do not allow for evaluating the influence of technological changes on employment and its selected characteristics. We can say that presently the Polish authorities have undertaken intensive efforts aimed at developing and popularising ICT with a view of developing employment in its quantitative and qualitative aspects.

Poland has signed the EU *eEurope* policy document entitled and therefore committed itself to active participation in the European process of developing an information society through the implementation of the Action Plan *ePoland*. On the basis of partial plans prepared by various ministries and institutions in the year 2002 the Ministry of Infrastructure prepared the detailed Action Plan *ePoland 2006- Plan of Activities Aimed at Developing Information Society in Poland*. This plan lists ten major objectives. Some of them are particularly interesting: preparing Polish society to challenges presented by new

1 Temporary work, similarly to part time job, is the most common among workers.

2 Employers and self-employed: owners, co-owners and tenats of individual farms; owners and partners running own business beside agriculture as well as other self-employed persons.

3 Self-employed have the same responsibilities but they are in a worse legal situation.

job market and new work methods; creating conditions for stable and sustained regional development; adjusting the Polish system of education to the needs of the information society as well as counteracting information exclusion. The basic element conditioning the development of the information society is a common, cheap and fast access to Internet information resources.

The first Progress Report from the implementation of the *eEurope+* plan, which was presented during the European Conference of Ministers, *Information Society – Connecting Europe* (3-4 June 2002 Lublana) shows that Poland is facing a need to overcome an educational gap separating us from more advanced countries. *ePoland - The Strategy on the Development of the Information Society in Poland for the years 2004-2006* (The Ministry of Scientific Research and Information Technology) defines those areas in which the prevailing social, economic and political conditions both demand and promise a successful implementation of planned projects

Impact of technological changes on qualifications

Modernising the Polish system of education is a necessary investment for developing society entering a digital century. The document *ePoland 2006- Plan of Activities Aimed at Developing Information Society in Poland* in its Objective 4 'Investing in people and skills – a) Education in information society' states that: " *use of telecommunication allows for dynamic development of new form of education – e-learning, which becomes more and more important for the continuing education process.*"

In practise e-learning includes almost all areas of education. In case of primary schools and high school education this technology is mainly used as a support tool for traditional teaching techniques. In academic education e-learning is used to support the whole process of studying. e-learning is the most popular form in **training courses**. The e-learning is used for enhancing qualifications and skills of employees. The advantages claimed for companies resulting from this form of training include: scale advantage due to better adjustment of time and place of training to individual preferences, unified message, better monitoring and supervision of training process, easier identification of training needs, reduced costs, increased efficiency of work, training "on request", and optimal work of training departments.

With regard to higher education (Polski Uniwersytet Wirtualny, Centrum Edukacji Niestacjonarnej Politechniki Gdańskiej, Wirtualna Politechnika – established by seven technical universities, other higher schools using blended e-learning - supplementing traditional training courses with Internet courses) studies and courses via Internet provide high quality studies available at any time in any place. It offers new opportunities for disabled and unemployed persons, for working individuals and all persons seeking knowledge, which is available „everywhere and always". The first Polish educational TV station (EDUSAT) transmits "life" academic lectures from lecture room at the university.

The role of *the Polish Information Processing Society (Polskie Towarzystwo Informatyczne)* includes the popularisation of informatics and specific IT applications among the general public and the organisation of training courses. An important task for the Society is the implementation of activities related to the *ECDL* – [European Computer Driving Licence]. At the end of year 2004 30,205 persons received the European Computer Skills Card and 11,746 the European Computer Driving Licence. The Society has established cooperation with the Ministry of National Education with a view to providing better access to the European Computer Driving Licence for all Polish citizens regardless of their place of

residence. Within the framework of this cooperation ECDL examiners will be appointed from among interested IT teachers. It was a beginning of the project ***"ECDL in every locality"*** within the framework of the *"Interkl@sa"* program as partner project of the Ministry of National Education and the Polish Information Processing Society.

Projects implemented by the Polish authorities

The Polish Internet Library (PIL) –was started in December 2002. The main goal of creating the PIL is to grant an equal access opportunity to publications for the inhabitants of small towns and villages, and other areas distant from academic and cultural centres, where a computer with Internet access may be the only possibility of contact with scientific and cultural achievements. The PIL also provides students and scientists with universal access to books and publications that are not commonly available. It is one of the pillars of the Program of Information Education for All, which aims at increasing creativity of students, mobilising for self-studies and independent use of sources for all age groups.

The aim of the **Ikonka** project is to open Public Internet Access Points (PIAPs) in local libraries and community centres across Poland, especially in small towns and villages. The project is specifically targeted at alleviating problems created by the digital divide through the provision of cheap, easy and common Internet access in accordance with the Lisbon Strategy and its implementing document the he Strategy on the Development of the Information Society in Poland.

Influence on location of jobs (including e-work, outsourcing etc.)

The Polish legislation does not provide any particular definition of e-work. Therefore e-work may be conducted on the basis of freely chosen legal arrangements. It creates certain information problems for statistical purpose and makes it difficult to demonstrate links between the development of information technologies and increased employment in e-work system. Information regarding the implementation of e-work can be found in research projects: including "Telepraca szansą dla kobiet"[e-work as an opportunity for women] – Centrum Promocji Kobiet (2001-2002), Eastern Europe E-work (2001–2003); pilot program for supporting employment of disabled persons in new, innovative jobs in demand, using the IT technologies" - Fundacja Fuga (2001–2003); Emergence – IPiSS (2000-2002); Elastyczne formy zatrudnienia a popyt na pracę – IPiSS; Case Study w wybranych firmach np. IBM [Flexible forms of employment and demand for jobs – Institute of Labour and Social Studies. Case Study in selected companies i.e. IBM (2003-2004).

The main reason for a relatively low proportion of persons in home-based forms of e-work is a difficult access to technical devices, Internet and low qualifications of individuals. The last cause concerns both the potential employees and managers who often can not see advantages of the e-work and they are unable to organise such work. Opinions regarding e-work show fears regarding proper data protection and psychological barriers related to isolation of employee working at home.

The Foundation for Assisting Disabled Mathematics Scholars and IT Specialists was the first organisation in Poland, which has noticed advantages and opportunities offered by the e-work for disabled persons with mobility problems. The Foundation was awarded with Tele@ 2002 prize.

Risks of social exclusion caused by technological changes and restructuring of employment

Information exclusion is a term used for describing a precipice in access to modern communication technologies, which exists between advanced and underdeveloped societies. This problem can be also observed in our country – Polish companies do not sufficiently invests in its research and development activities, while lack of resources in the budget combined with insufficient infrastructure and high cost of Internet access hinder rapid creation of information society.

Exclusion caused by technological changes and threats for Poland resulting from this exclusion were analysed in the UNDP National Human Development Report 2001 "Poland and the Global Information Society: Logging on". The summary of this Report indicates the problem of social exclusion as the main threat for Poland on its way toward a global information society. It has two meanings. Firstly, it should be seen as an actual (not theoretical) exclusion of the Polish society from among more advanced societies creating the global information society. Secondly, it means a division of the Polish society into two groups – one group participating in the global information society and another group, excluded from such participation.

Technical capabilities offered by new information technologies, such as telecommunication, IT as well digital audio and visual media presented the Polish government with the challenge of implementing efficient and well-coordinated computerisation of the country covering all vital for its development are of social and economic activity.

"*ePoland - the Strategy on the Development of Information Society in Poland for the years 2004-2006*" adopted by the Council of Ministers on 13 January 2004 defines those areas in which there are conditions for a successful implementation of planned projects. These areas include:

common availability of electronic content and services,

development of diverse and valuable content and services available via the Internet,

common ability to utilise computer and communication systems

The Item C presenting activities with the highest priority specifies:

C1 – common computer literacy – it is planned that each graduate of any high school will be able to use computer and to profit from accessing the Internet,

C2 – **preventing a digital divide** – providing infrastructural support in order to ensure equal opportunities for full participation in information society in groups of citizens requiring additional training, "middle age group" and persons with disabilities through e-learning and promoting e-work as a method for increasing occupational activity.

C3 – developing information technology component of readiness for employment – supporting organisation of computer training for adults, particularly training for unemployed persons

In the framework of Item C2 PFRON Państwowy Fundusz Rehabilitacji Osób Niepełnosprawnych [The State Fund for Rehabilitating Disabled Persons] implements several programs aimed at preventing digital exclusion (Monitoring realizacji działań Strategii informatyzacji RP, [Monitoring the Implementation of Information Strategy for Polish Republic] 2004):

Computer for Homer 2003 – 564 persons have completed training in computer skills for disabled persons
eWork – pilot special purpose program supporting employment of disabled persons in demanded new jobs using computer techniques – 379 persons have completed this training

There is a systematic IT training programme for unemployed persons. These training sessions are financed by the Labour Fund and organised by the local and regional labour offices. Implementation reports show that IT training is one of the most popular types of training. 3,946 persons from among the total number of 40,327 trained unemployed persons completed computer training during the firs six months of the year 2004.

UNITED KINGDOM

The fifth of the 'big five' EU economies (in terms of population) to be examined here is the United Kingdom. Table 26 gives a statistical snapshot of the UK population, which can be compared with those of France, Germany, Italy and Poland. Here, of the nearly 39 million who are of working age, nearly nine million are economically inactive. A similar number work part-time, of whom the majority (over seven million) are women. There are also some 700 thousand women on temporary or fixed-term contracts – not that many more than the 600 thousand men with this status. However men predominate among the self-employed, making up 2.5 million of the 3.4 million with this status. The numbers working in agriculture, at 300 thousand, are very low.

There are some nine million people over the official retirement age and nearly 11 million children of school age or below. Three million students are in full-time education and over a million people are registered unemployed.

Table 26: Statistical profile of the UK population, 2004

	men	women	all
Over official retirement age	3,950,782	5,137,338	9,088,120
School age or below (0-14)	5,539,794	5,300,369	10,840,163
Of working age (15-64)	19,022,498	19,543,920	38,566,418
O/w* In full-time education	1,522,707	1,594,139	3,116,846
O/w Registered unemployed[1]	777,511	570,698	1,348,209
O/w Economically inactive	3,144,743	5,841,313	8,986,056
O/w part-time	1,662,308	7,112,579	8,774,887
O/w self-employed	2,450,259	912,503	3,362,762
O/w on temporary or fixed-term contracts	624,267	729,053	1,353,320
O/w working in agriculture[2]	256,632	71,002	327,634

Source: UK Labour Force Survey, ONS, Spring 2004

Industrial structure and recent trends

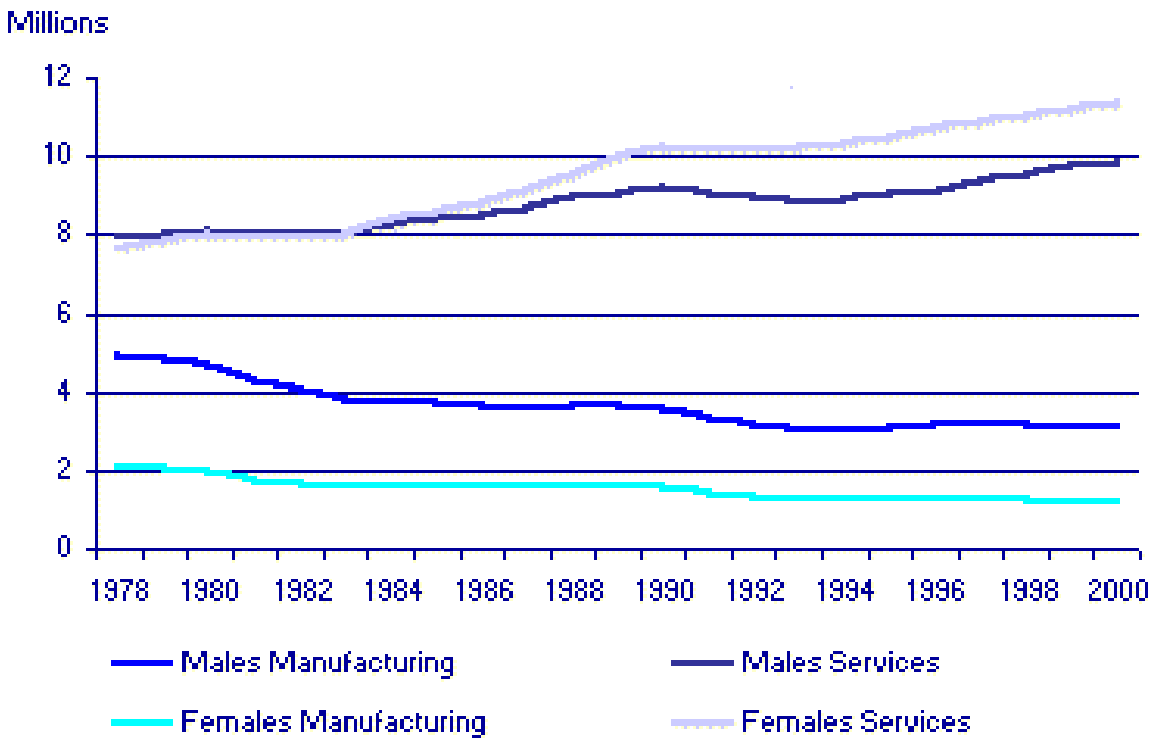
The financial and business services sector experienced the largest increase in jobs between 1981 and 2001 which is part of the post-war growth in the service industries and the decline in manufacturing. Twenty years ago one in three jobs held by men was in manufacturing. By 2001 the ratio had fallen to one in five.

More findings from the UK Labour Force Survey 2003 showed that two industry groups accounted for almost half of the people in employment (48 %), the first industry is 'public administration, education and health' and the second group 'distribution, hotels and restaurants'. Forty two percent of women were working in the 'public administration, education and health' sector, compared with only 16 percent of men(Begum, 2004).

[1] ILO def
[2] Based on Code ' Agriculture & Fishing'

These trends are shown graphically in Figure 16.

Figure 16: Trends in employment in UK services and manufacturing industries, by gender 1978-2000 (millions)



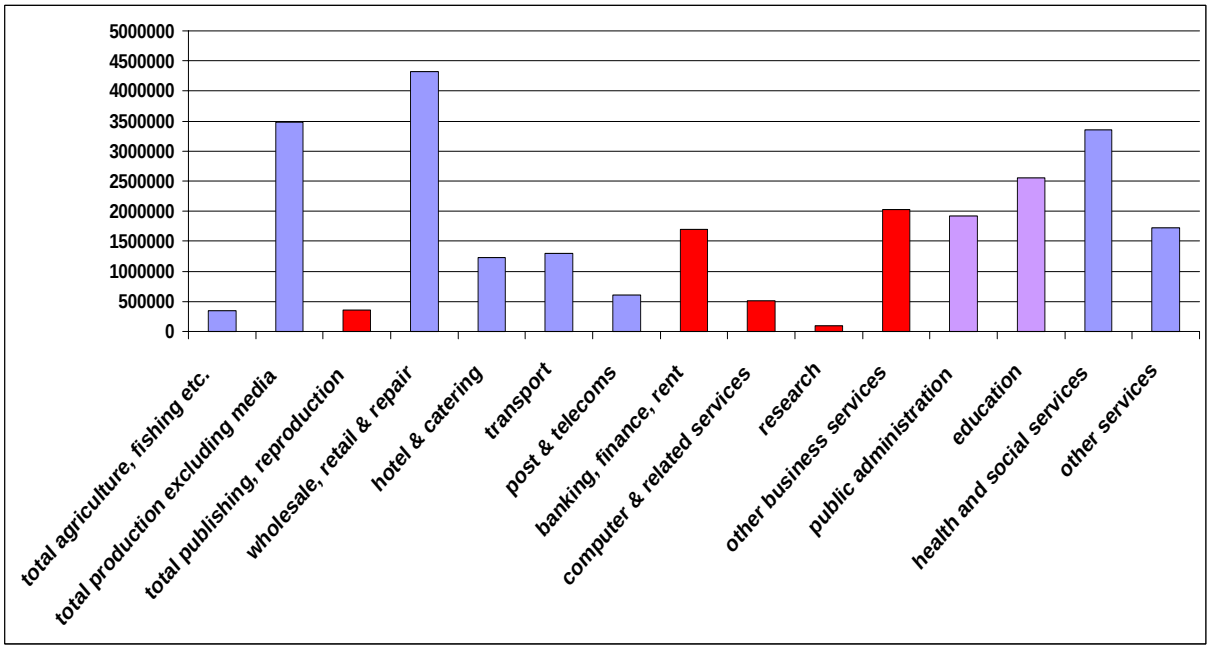
Source, ONS

Between 1998 and 2003 the number of jobs decreased in agriculture & fishing, energy & water and manufacturing. In all other sectors the numbers have increased. This undoubtedly represents a significant deindustrialisation. However an analysis of these statistics by sector does over-represent this picture. Some of the apparent growth in service employment, especially in the business and financial services sectors, can be accounted for by the increasing trend to outsource these functions from other sectors.

Not all service employment, however, is connected with the development of an information society. Table 27 shows a more detailed breakdown of UK employment by sector in 2004. Here, those sectors which are highly knowledge-intensive and can be expected to have a high use of ICTs have been isolated. These are the publishing and recording parts of the manufacturing sector, computer-related services, financial services, research and other business services. Between them they account for some four and a half million employees. Two other sectors can be regarded as very knowledge-intensive although not all their employees can necessarily be regarded as ICT workers. These are the public administration sector, which accounts for approximately two million employees, and education, which accounts for some three million. To put these numbers in perspective, there are around six million working in the wholesale and retail sector and

the hotel and catering sectors combined, over three million in heath and social services, and nearly another four million working in transport, post and telecommunications and the remaining services.

Figure 17: UK workforce by sector, 2004



Source: UK Labour Force Survey, Spring 2004, ONS, own analysis

Nevertheless, there is evidence of strong growth in the 'knowledge sectors' as well as most other service industries. The UK call centre (or "contact centre") industry represents one of the fastest growing industries with a growth rate estimated at 250% between 1995 and 2003. The financial service sector is the biggest growth sector within the call centre industry, employing more than twice as many employees as other sectors. (DTI, 2004).The South – East and London, West Midlands and the North West have a highest concentration of call centres, the North East, Wales and Northern Ireland have the fewest (Contact Babel, 2003).

Changes in the structure and composition of the workforce

Participation of women

The participation of women in the UK labour market has grown steadily. Between 1997 and 2001 the total number of women in employment increased by 8 percent. In 1981, men held 3.2 million more jobs than women, but by 2004 the numbers were fairly equal with men accounting for 12.8 million jobs and women for 12.7 million. This apparent similarity conceals major differences, however. The UK labour market still exhibits strong patterns of gender segregation: by occupation, by sector, by seniority and by working hours.

Occupational differences are striking: about a quarter of female employees do administrative or secretarial work, while men are most likely to be managers, senior

officials or in skilled trades. Similar proportions of men and women work in 'associate professional and technical' occupations – computer programmers, technicians and nurses, for example – while one in eight performs low-skilled jobs, such as those in farming, construction, hotels and restaurants.

Increased flexibility and change in traditional working patterns are closely connected to female labour market participation. A shift in employment from agriculture and manufacturing to service industries increased the demand for variations in working time and working space. The growing trend of increased female participation in the labour market has been attributed to a "dual breadwinner family model" with both women and men contributing to household incomes (Drew and Emereck 1998). Moreover, it is suggested that the increase in women's labour market participation is strongly related to the growth in atypical working patterns (Crompton 1997). Thus, increasing employment flexibility is responsive to the supply of, and, creates opportunities for previously underrepresented groups. This "feminisation" of the labour market (Holtmaat, Hurstfield and Huws, 1986) has a downside: women often make more use of atypical patterns, or non-standard forms of working, which are often linked to increased employment precariousness. Precarious work situations emerge when a worker is exposed to reduced employment rights, the working of unsocial hours, no premium payments and contractual insecurity (Crompton 1997).

Researchers also remarked that often, despite part-time work, women remain dependent on the male breadwinner and thus the gender division within the hone remains largely unchanged (Perrons 1999).

Participation of immigrants and ethnic minorities

In recent years, the UK has seen a net increase in immigration. In 1991, the outflow of British citizens (at 190,000) exceeded the inflow of new citizens (at 103,100). By 2003, both inflows and outflows had increased, but with the net inflow (of 236,200) exceeded the net outflow (of 85,200) by 151,000. An estimated 14,200 more EU citizens migrated to the UK than left in 2003 (ONS, 2003).

In addition to new immigrants, the UK has established ethnic minority populations, summarised in table 28.

Minority ethnic groups have a younger age structure than the white population, reflecting past immigration and fertility patterns. The first large-scale immigration was from the Caribbean shortly after the Second World War, followed by immigration from India and Pakistan, mainly during the 1960s. These groups have a progressively ageing population compared with more recent immigrant groups including African-Asians who entered the UK in the 1970s, Chinese and Bangladeshi groups who mainly arrived during the 1980s and more recent arrivals from Africa and elsewhere.

The ethnic distribution of the UK population is strongly skewed by region, with 48% of minority ethnic people living in London, a proportion which rises to 78% amongst Black Africans. Elsewhere, the main concentrations are in urban areas, in many cases urban areas which have experienced major deindustrialisation, in the North West, West Midlands, East Midlands and Yorkshire.

Table 27: UK population by ethnicity, 2002 (%)

	% of total population	% of minority ethnic population
White	92.8	n.a.
Mixed	0.8	11.0
Asian or Asian British	1.7	21.7
Indian	1.3	16.7
Pakistani	0.5	6.1
Bangladeshi	0.4	5.7
Other Asian	0.4	5.7
Black or Black British	1.0	13.6
Black Caribbean	1.0	13.6
Black African	0.9	12.0
Other Black	0.1	1.5
Chinese	0.3	4.2
Other	0.6	7.4
Not Stated	0.2	n.a.
All minority ethnic population	7.6	100.0
All population	100.0	n.a

Source: ONS, *Focus in Brief: Ethnicity and Identity, 2002*

There are marked differences in labour market participation between different ethnic groups. Bangladeshi men have the highest unemployment rate, four times that for white men. Unemployment is particularly high amongst the young, with over 40% of young Bangladeshi men unemployed. Young Black African men, Pakistanis, Black Caribbeans and those belonging to mixed groups also have unemployment levels ranging from 25% to 31%. The comparable rate for young white men is 12%. Recorded unemployment rates for minority ethnic women are lower, but there is a considerable 'hidden unemployment' – Bangladeshi women, for instance, have an economic activity rate of only 22%, compared with 74% for white women.

People from certain ethnic groups are more likely to be self-employed than others and men are more likely than women to be self-employed (73% of the 3 million self-employed people in spring 2001 were male). Around one fifth of working Pakistanis and Bangladeshis are self-employed, compared with only one in ten white people and fewer then one in ten black people. Chinese and Indian people are also more likely than white or black people to be self-employed. Sales and distribution, hotel and restaurant work account for two thirds of the Chinese, over half of the Indians and two-fifths of the Pakistanis and Bangladeshis who are self-employed.

These different labour market positions have implications for income. People from minority ethnic groups are considerably more likely to live in low-income households. Among the white population, 16% are living in low-income households, a proportion which rises to 21% after housing costs are taken into account. Among Pakistanis and Bangladeshis this proportion rises to 60% (68% taking account of housing costs).

Flexibilisation of working patterns

During the 1980s, the UK was a pioneer in Government-encouraged labour market restructuring, with extensive privatisation of public services, labour market deregulation and encouragement of flexibilisation. Achieving increased flexibility represented some significant benefits for employers. During the early 1980s, companies started to lay off major parts of their workforce to meet demands of recession and a slow down in productivity. At the same time, however, in order to increase productivity and to have access to manpower, flexibilisation of employment and working conditions (involving changes in the location of work, work hours and work contracts) were common (Stanworth, Stanworth and Purdy, 1991). In addition, increased international competition, privatisation of public services, diffusion of ICTs and shifting perceptions of 24 hours organisations and thus increasing demands on customer service all played a key part in changing the UK labour market (Wallace, 2002).

In 1997, the New Labour Government came into power, with a continuing commitment to the development of a deregulated labour market but with a social agenda committed in principle to the promotion of social inclusion and social assistance. A number of measures were implemented designed to promote equality of opportunity and the labour market participation of women, including childcare initiatives, tax credits for low-earning parents and a legal right for parents with young children to ask for (but not necessarily receive) flexible working time or teleworking arrangements from their employers.

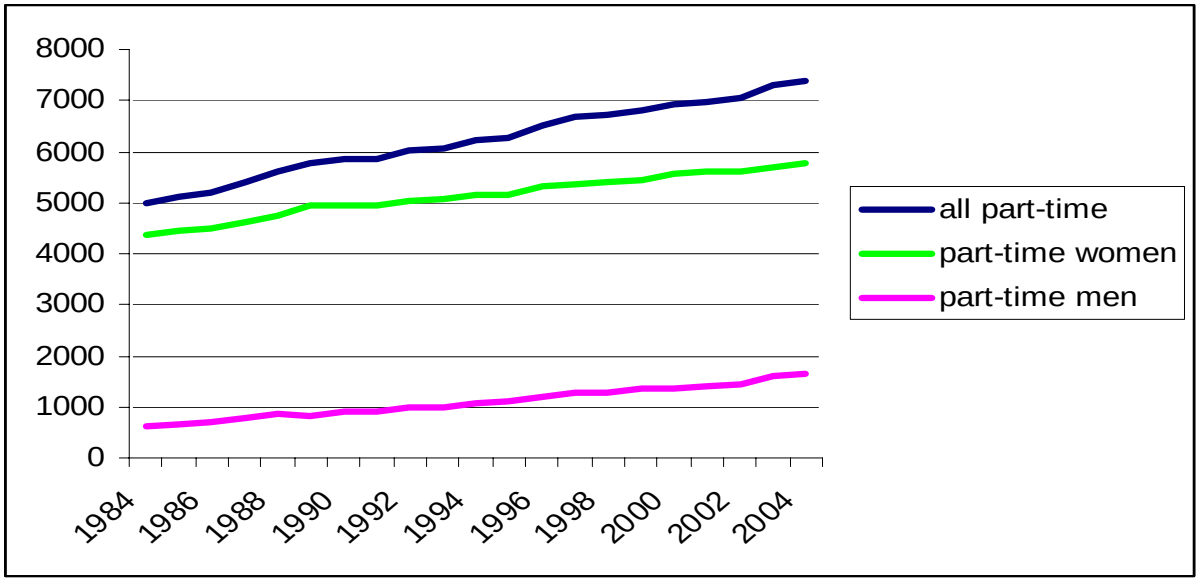
Whilst it is too early to assess the full impact of these policies it seems likely that their main effect has been to reinforce the further development of existing trends.

Part-time working

Figure 18 summarises the trends in part-time working by gender over the past 20 years and shows a steady rise in part-time working for both men and women between 1984 and 2004, from five million to seven million in all, with a slight acceleration in the rate of increase for men during the past two years. Women nevertheless remain the overwhelming majority of part-time workers.

In 2004 over 43% of women employees in the UK worked part-time. Whilst part-time employment has been on the increase in the UK across most of the economy, it remains highly concentrated in certain sectors: wholesale & retail, hotels & restaurants and education and health. Part-timers are also highly concentrated in workplaces belonging to large organisations or private sector workplaces with no skilled labour requirements.

Figure18: Part-time employment in the UK by gender 1984-2004 (in thousands)

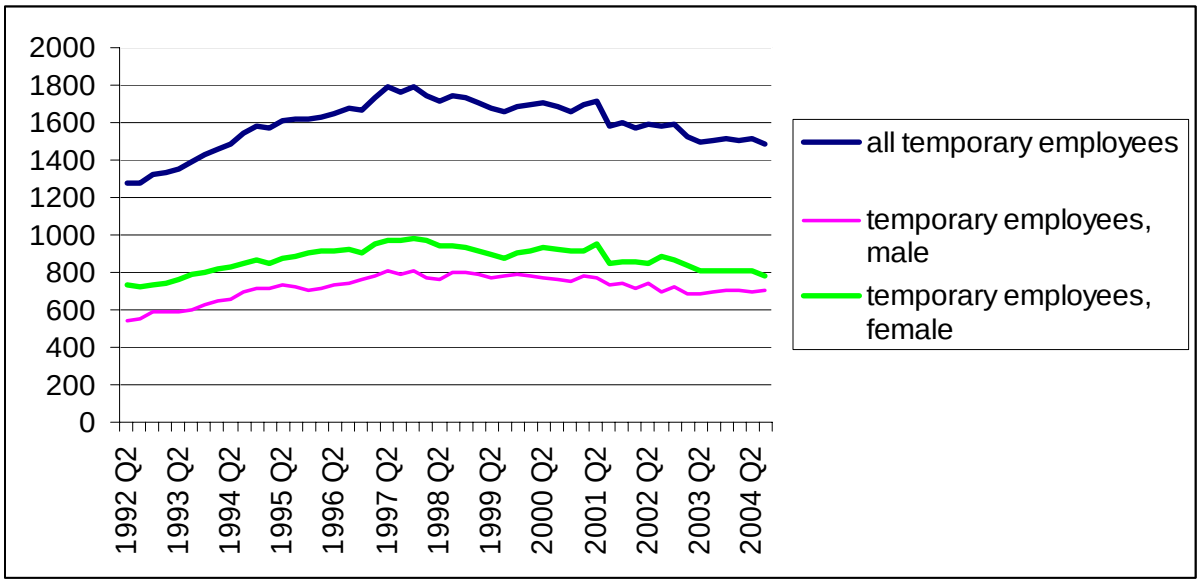


Source: ONS Labour Force Survey, 1984-2004, own analysis

Temporary working

Trends in temporary working (or work on fixed-term contracts) are more volatile in the UK, as can be seen from Figure 19.

Figure 19: Trends in temporary working in the UK by gender, 1992-2004 (thousands)



Source: ONS Labour Force Survey, Spring quarter, 1992-2004, own analysis

Between 1992 and 2004 we see this form of work rising to a peak between 1995 and 2000 (a period when the economy was buoyant) and falling thereafter. This suggests that to some extent British employers are indeed using temporary workers to cope with fluctuations in demand relating to the business cycle. Restructuring in the public sector has led to an increase in temporary fixed-contract work amongst public sector managers, teachers, lecturers, social workers and nurses (Wallace 2002).

There are also supply-side factors to be taken into account however. A considerable amount of temporary working in the UK is involuntary. A quarter of all temporary workers (25.2%) stated in 2004 that they had taken temporary employment because they couldn't find a permanent job. This proportion rose to 30.9% among men but was somewhat lower, at 20.1%, amongst women in temporary work.

A complicating factor in the UK labour market in relation to the measurement of part-time work is the relatively weak protection for permanent workers. Unless there is a collective agreement or contract guaranteeing greater protection, there is no right to claim unfair dismissal for a worker who has worked for less than a certain minimum period. This means that employers may hire workers on contracts of unspecified duration in the knowledge that they can get rid of them with impunity during the first two years of employment. There is often, therefore, no need to issue a temporary contract and employers can keep their options open as to whether they wish to continue the employment beyond this minimum period. This means that in practice the recorded numbers of temporary workers underestimate the real extent of precariousness in the directly-employed labour force.

Not all temporary employment is direct, however. Another trend has been the expansion of employment by temporary staff agencies. Temporary agency workers are typically amongst the more vulnerable UK workers, often found in the lower paid, low-skilled jobs, particularly in the catering, call centre and care sectors. The agency workforce is also significantly younger than the average working population.

Self-employment

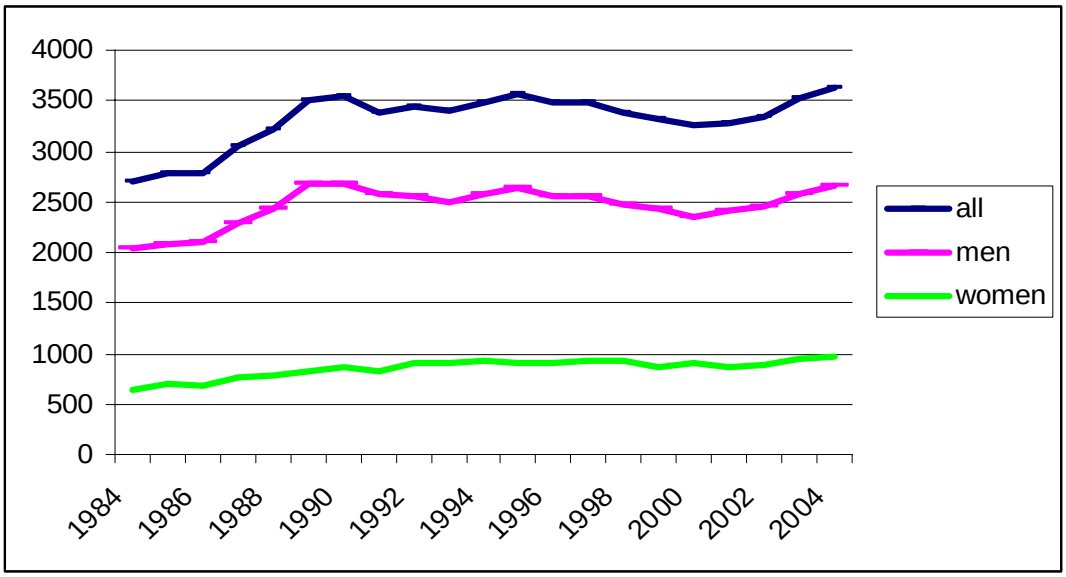
Although there was some increase in self-employment in the UK during the 1980s, levels of self-employment remained more or less constant during the 1990s with a slight dip at the end of the decade, as can be seen from figure 20.

Despite the lack of change in their overall numbers, the evidence from the UK suggests that the composition of this group is changing over time, in the direction of the casual end of the spectrum. One study found that the proportion of self-employed people with employees fell from 39% to 31% between 1981 and 1991 (Campbell and Daley, 1992) and another found that new entrants to self-employment were more likely than their earlier counterparts to be young, female and entering relatively low value-added service activities. An analysis of data from the British Household Panel Survey showed that the chances of a self-employed person being in the lowest earning category (the lowest 10%) were three times those of an employee. Even when an allowance was made for the under-reporting of income by the self-employed, the chances were still twice as high (Meager and Moralee, 1996).

Recent trends in self-employment, including the slight growth which has taken place since 2000, show similarities across gender, full-time and part-time work and are evenly spread across UK regions (Lindsay & Macaulay 2004). Around a fifth of all self-employed people work in construction, with similar proportions in sales and distribution, hotels and

restaurants; and in banking, finance and insurance. Recent growth demonstrates a slight shift in self-employment towards non-manual occupations in service industries and professions, with increases in IT occupations, accountancy and financial analysis.

Figure 20: trends in self-employment in the UK by gender, 19884-2004 (thousands)



Source: ONS Labour Force Survey, 1984-2004, own analysis

The impact of technological change on work location

Teleworking

The UK Labour Force survey has included questions about teleworking since 1996, making it possible to chart the growth of this form of work with some precision. As figure 2 shows, during the eight years from that date to 2004 the number of teleworkers (including occasional teleworkers) in the UK doubled from nearly a million to nearly two million. The majority of these were 'regular' teleworkers, who work at least one day a week from their homes relying on the use of a computer with a telecommunications link to the employer or client.

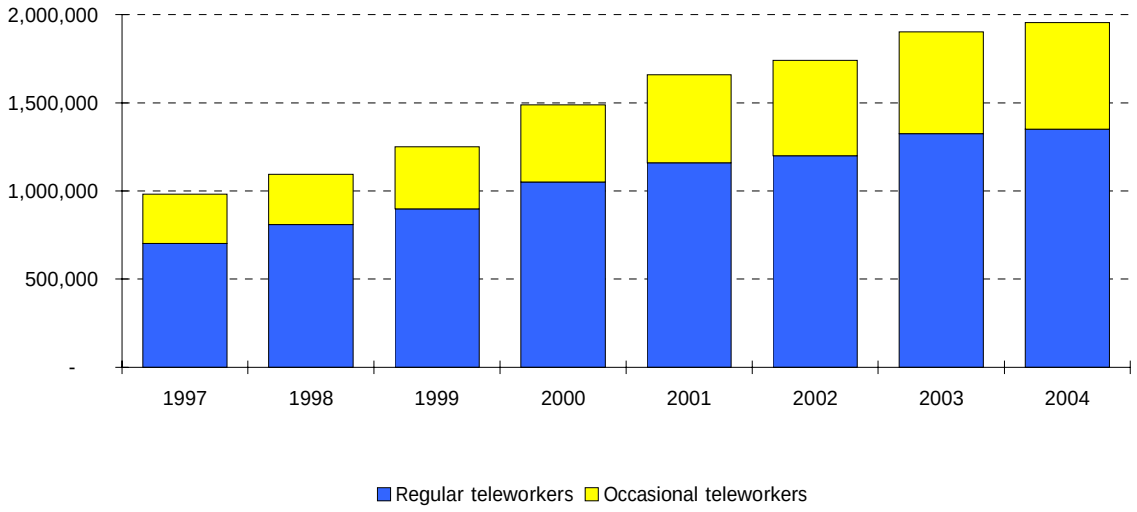
The population of teleworkers can be broken down in a number of ways for analytical purposes.

Here, a distinction has been made between:

- 'telehomeworkers' (those who work at their homes)
- 'multilocational eWorkers' (those who work from many different locations using their homes as a base).
- 'occasional teleworkers' (those who do not say that they normally work from home but who reported having worked from home during the previous week when surveyed)

- 'eEnabled homeworkers' (self-employed people who work from home in occupations unconnected with information processing but who nevertheless rely on ICTs to run their businesses)

Figure 21: Growth of regular and occasional teleworking in the UK, 1997-2004



Source: ONS Labour Force Survey data, Spring quarter, 1997-2004, analysis by Peter Bates, IES

In figure 21, all those who work regularly at or from their homes have been amalgamated into the single category of 'regular' teleworkers.

Nearly 80 per cent of teleworkers and e-enabled homeworkers are in full-time employment; among non-teleworkers the proportion is closer to three-quarters of those employed. However, teleworkers form a very heterogeneous group of workers, and while occasional teleworkers are almost universally likely to be full-timers (90.1 per cent) the proportion of full-time workers among telehomeworkers is nearer to one-half (54.7 per cent).

Teleworking in the UK is dominated by men, who account for nearly two-thirds of all teleworkers (see Table 6). However, these figures mask a considerable variation in the sex distribution among different forms of teleworkers. Although men account for nearly eight out of ten multilocational eWorkers (77.1 %), and two-thirds of the occasional teleworkers (65.0 %) they represent a minority among telehomeworkers (43.7 %). Women who work wholly from their homes are typically involved in lower skilled work such as data entry, secretarial and administrative work , whereas male teleworkers were more likely to be working in engineering and financial services(Huws, 1996).

Teleworkers are generally older than their non-teleworking counterparts. While one in six workers in the total UK workforce is between the ages of 16 and 25, among teleworkers, the proportion is closer to one in every 40. At the other end of the age spectrum, nearly one-half (45.6 per cent) of teleworkers are over the age of 45, compared to one-third (34.9 per cent) of all workers. Compared with the rest of the population, teleworkers are very well educated. While one-fifth of the working population in the UK have a degree or equivalent qualification, among teleworkers that proportion is closer to two-fifths (38.3 per cent). Conversely, while around one in ten of the working population has no

qualifications, among teleworkers the proportion is less than one in every 25, and among occasional teleworkers only around one in every 50 reported having no qualifications

This pattern is reflected in the occupational profile of teleworkers, shown in table 28.

Table 28: Teleworking in the UK by occupation, 2004 (%)

	Managers and Senior Officials	Professional occupations	Associate Professional and Technical	Other occupations	Total
Telehomeworkers	26.4	15.0	26.4	32.2	100.0
Multilocational eWorkers	22.0	18.5	24.1	35.4	100.0
Occasional teleworkers	37.8	32.5	18.9	10.8	100.0
All teleworkers	27.9	22.1	23.0	27.0	100.0
e-enabled homeworkers	14.0	30.2	14.8	41.0	100.0
Other workers	13.7	11.6	13.1	61.7	100.0
Total	14.6	12.5	13.8	59.0	100.0

Source: ONS Labour Force Survey data, Spring quarter, 2004, analysis by Peter Bates, IES

Figure 29 shows the breakdown by sector.

Table 29: Teleworking in the UK by sector, 2004 (%)

	Primary	Production	Business and finance	Other private services	Public admin	Total
All teleworkers	2.1	23.3	32.7	23.7	18.1	100.0
Telehomeworkers	1.0	18.4	41.5	26.7	12.3	100.0
Multilocational eWorkers	2.3	29.8	32.2	26.2	9.5	100.0
Occasional teleworkers	2.7	17.1	27.3	17.9	34.7	100.0
e-enabled homeworkers	4.0	24.5	16.3	22.3	33.0	100.0
Other workers	2.2	21.1	14.2	33.7	28.8	100.0
Total	2.2	21.3	15.5	32.9	28.1	100.0

Source: ONS Labour Force Survey data, Spring quarter, 2004, analysis by Peter Bates, IES

This picture of relatively highly educated professional teleworkers contrasts strongly with the profile of more traditional groups of homeworkers in the UK not using ICTs. In 2001 around 0.7 million people in the UK were homeworkers a number which was unchanged compared with 1996. Most (0.5 million) were women. Homeworking was most common among women in personal and protective services, professional and craft and related occupations. Most of those in personal and protective services were working in childcare and related occupations. Much of this work is low-skilled (such as assembling and crafts) and extremely low-paid. Nearly all such work is carried out by women and includes a high proportion of ethnic minority women (Huws, 1994, Crompton 1997, Felstead and Jewson 1996).

ICT-enabled Outsourcing

Another form of work relocation facilitated by ICTs does not involve the 'individualised' relocation of single workers to their homes or to other locations but the relocation of entire functions to collective locations such as remote offices or call centres, either in

another region of the same country or to another country. Relocation may take place either as part of an outsourcing arrangement or when a company itself sets up a remote branch in another country (sometimes known as 'insourcing'). The word 'offshoring' is used to encompass both of these types of relocation when they involve moving jobs to another country.

Most market research studies agree in estimating that, although US businesses dominate the global market for 'offshore outsourcing', with a market share of 70%, the UK holds the largest share in the European offshore outsourcing market, largely because of more liberal employment and labour laws (McKinsey, 2004).

The UK's lead in EU outsourcing is confirmed by the Roland Berger consultancy, which found 61% of UK companies outsourcing compared with only 15% of their German counterparts (Roland Berger, 2004).

Forrester Research concur with this view, estimating that the UK will account for three-quarters of all European offshore outsourcing by 2009 with software development being the main service provided. This is in the context of a predicted overall growth in offshore service spending in Western Europe (Peynot, 2005).

Gartner predicts that almost a third of leading European businesses will include an offshore element in their IT plans by 2005. As a result of this shift of IT services overseas, up to 25% of Western IT jobs could go to the emerging markets by 2010. But Gartner also predicts that the new European countries will become popular for 'nearshore' outsourcing of some operations, although not on the sort of scale that will pose a threat to India (Gartner, 2003).

A report by Pierre Audoin Consultants, suggests that Romania and other eastern European countries are virtually ignored by UK firms but are predominantly the first choice for the rest of Western Europe. The report further reveals that the average price for offshore software development in Romania is around £100 per person per day and that the cost of employing a recently qualified graduate from an approved specialist university is approximately £4,100 a year. One advantage of 'nearshoring' instead of offshoring is the ready availability of well-educated and highly skilled workers who have a better understanding of the Western European culture. The same report estimated that in 2003 Romanian revenue from European countries would reach £78m, mostly from France, Germany, the UK and the Netherlands (Pierre Audoin Consultants, 2003).

In the UK. a survey of 150 member companies of the Confederation of British Industry (CBI) in 2004 found 51% reporting that pressure to offshore had increased over the past two years, with 21% describing these pressures as 'very great', 30% reporting that they had already relocated some activities overseas and almost a quarter considering doing so in the future (CBI, 2004). It should be noted, however, that this study included production activities as well as business and IT services.

Another study of the impact of offshoring on the UK by the Evalueserve consultancy, sponsored by the Indian IT trade body, the National Association of Software and Service Companies (NASSCOM), estimated that 272,000 UK jobs will have been moved offshore to countries such as India by 2010 at a cost of £5.7bn to the UK economy in unemployment benefits and retraining costs. The study predicted that around 19,000 consulting, legal and management jobs will be created as a result but that there will be a net loss of approximately 253,000 jobs. This study also attempted to offset the employment losses resulting directly from offshore outsourcing. Evalueserve claims that the cost to the UK of

not offshoring would be five times higher than the estimated loss, at £34bn, due to a drop in output and a subsequent slowing of GDP growth (McCue, 2004).

Other UK studies include a report by the Management Consultancies Association which predicted a 25% growth in offshore outsourcing of call centre work between 2003 and 2008 and a forecast from Dimension Data that nearly 200,000 call centre posts will relocate to lower cost countries between 2004 and 2006 (CWU, 2004). The service sector trade union, Amicus (quoting a forecast by Deloitte Research that two million financial service jobs will be outsourced from western countries to India by 2008) estimates that 1000 UK jobs a week are lost to offshoring and that 200,000 UK jobs, especially in IT support, will be offshored by 2008. Amicus further claims that 15,000 jobs have been offshored since October 2003 (Amicus, 2004).

The UK Department for Trade and Industry (DTI) published a comprehensive report in 2004, looking at the UK call/contact centre industry, the current market trends and the potential threat that the global, call centre market means for the UK industry. The report summarises that there are 790 000 people are employed in the industry, it is forecasted that agent positions will grow to 650 000 by 2007, taking the total number of individuals working in the industry to over 1 million. Analysts do not see this as a major threat as this one of the fastest growing industries in the UK. Trade Unions' responses however have more urgent, demanding more protective measures from the government.

3. NATIONAL WELFARE SYSTEMS

In the last chapter we presented an overview of labour market trends across the four very different national economies of France, Germany, Italy, Poland and the UK.

Before going on to assess whether the development of a European Information Society appears to be accompanied by the generation of new challenges to welfare systems, it is first necessary to gain a comparable impression of the nature of these welfare systems and the extent to which they are geared up to cater for the needs of dynamic, flexible, knowledge-based economies in which some groups on the labour market may be permanently at risk whilst others may need support to protect them during transitional periods.

There is, some would argue, a tension between the EU goal of developing labour market flexibility and the goal of avoiding social exclusion. The risk is that the introduction of flexible working practices may itself lead to negative effects for some groups, including an increase in unemployment, precariousness of employment, informalisation of employment relationships and loss of social protection. In the view of some experts, these practices can lead to the relegation of a growing proportion of the workforce to a marginal and contingent position, outside the scope of the social dialogue and excluded from the forms of protection which have been negotiated over the years between trade unions and employers and which are, in most countries, embedded in labour legislation, codes of practice and other forms of social regulation (Vendramin and Valenduc, 2000).

Because growing proportions of the population are effectively placed by these developments either outside the labour market altogether or in an insecure and intermittent relationship to it, any strategy for ensuring the well-being of the whole population (which is surely the aim of European social policy) must take account not only of the labour market itself, but also of the social protection system as a whole.

If there are mismatches between these two institutional frameworks (on the one hand, the labour market; on the other, the social protection system) there is a risk of increasing poverty and precariousness in Europe and any such mismatches must be addressed if labour market flexibility is not to result in a deterioration of living and working conditions amongst groups who are not adequately protected.

Many modern European welfare states were formed during the 1940s and 1950s in the intermediate aftermath of the Second World and during the formative period, it can be argued, a number of historically-specific circumstances combined to create a particular paradigm of work which assumed a normative quality and was embedded in the very structures of most European welfare states. These have of course been greatly adapted since that date and in the new member states in Central and Eastern Europe major changes have been made in the adaptation to a market model. However some features of this normative model persist, to differing degrees and in differing forms. These features include:

- an assumption that full employment is possible and normal for all physically able men between the official age of leaving full-time education and/or military service (where this applies) and the official age of retirement.

- (as a corollary of this) an assumption that the state of unemployment is both temporary and exceptional

- an assumption that employment is permanent unless exceptional circumstances apply

- an assumption that the working week is a 'full-time' one, typically defined as 40 hours, and that any hours worked in addition to these will be treated as overtime, attracting extra payment

- an assumption that these working hours are regular and predetermined, typically regulated by statute or collective agreement (and therefore not to be changed by the arbitrary decision of either employer or worker) with a further assumption that these are normally distributed over 5 or 6 days a week, typically for 7 or 8 hours per day.

- an assumption that the place of work is the employer's premises and that working hours are defined as those which are spent on these premises;

- (as a corollary to this) an assumption that the employer takes responsibility for the worker's health and safety and ensures suitable working conditions on these premises

- an assumption that the male wage is sufficient to support a dependent family

- an assumption that a nuclear or extended family is the basic unit of society, and, by implication, that each male worker benefits from the domestic labour of an economically inactive housewife

With many national variations and, in some cases, exceptions, this has given rise to a European social protection model characterised by:

- a contributory, insurance-based model of social protection in which contingencies like sickness, unemployment or (more recently) maternity, are seen as exceptional circumstance against which insurance can be taken out

- pensions systems based on the assumption that the retiring worker and that worker's employer have been contributing continuously throughout a working lifetime

- the household as the basic claiming unit for social benefits (except in Scandinavia)

- exclusion of, or inferior treatment of part-time workers, temporary workers and the self-employed by social protection agencies

- rules governing the claiming of benefits which assume that the worker is either permanently employed or permanently unemployed, making it difficult for those in intermittent or casual employment to claim benefit during periods of economic inactivity.

We have already seen in the last chapter that many of the assumptions underlying this normative model of the labour market no longer hold. In this, we will examine the extent to which national welfare systems reflect these changes.

As Evans, Paugam and Prélis have noted in their comparison of the French and British approaches to social welfare, current debates may embody entirely different conceptual frameworks, derived from different paradigms. Thus, for instance, the French approach, which evolved from a more theoretical and sociological tradition, emphasises the concept of 'social solidarity', expressing a widespread social acceptance of the idea of redistribution from the rich to the poor within a society, while the British approach is more empirical, deriving from Protestant individualism, and substitutes the concept of 'poverty' for that of 'social exclusion', seeing the solution as lying in improved economic performance rather than in social cohesion. As a result, it is possible in France to regard state provision of benefits to the socially excluded as part of the solution to the problem of economic underperformance and high unemployment while in Britain the social security system is more usually seen as part of the problem. A detailed comparison between any other pair of EU member states reveals many other differences as fundamental as these (Evans, Paugam and Prélis,1995).

One of the most influential attempts to categorise European welfare systems which has been made in recent years has been by Gøsta Esping-Andersen who proposes a three-fold typology. Central to the theoretical justification of this differentiation are the twin notions of equality and of de-commodification, the latter defined by Esping-Andersen as 'the degree to which individuals or families can uphold a socially acceptable standard of living independently of market participation' (Esping-Anderson, 1990).

In this analysis, the first type is the 'liberal' or 'residualist' state, of which the UK is the prime example in Europe, although Ireland also belongs in this category. In this model, market forces are believed to be the best method for maximising the social welfare of citizens, with state benefits (typically means-tested and stigmatising to their recipients) only being brought into play as a safety net when other systems have failed. The liberal model is regarded by Esping-Andersen as producing both a high degree of commodification of labour and considerable inequality. The household, rather than the individual, is the basic economic unit in this model.

The second type may be variously categorised as 'conservative' or 'corporatist' or even 'catholic' or 'Bismarckian'. Germany, France, Italy and Austria, according to Esping-Andersen, fall into this category, which is characterised by status differentiation, with church and family playing an important role in the provision of welfare. Compulsory labour market insurance, usually differentiated by occupation, is typical of this model, with receipt of most benefits being dependent on an unbroken period of labour market participation. In this model too the family breadwinner is normally the welfare recipient, with married women frequently excluded from eligibility to claim unemployment benefit or pensions in their own right. This type of regime allows for a considerable degree of decommodification for some members of society but the benefits are not distributed equally.

Esping-Andersen's third category is the 'social democratic' welfare state. This model is typified by universal benefits, financed by taxes, for which eligibility is not conditional on labour market participation or head-of-household status but granted as a right of citizenship. The basic economic unit is the individual citizen, rather than the household. Such regimes, which are primarily found in Scandinavia, offer a high degree of decommodification combined with equality.

This typology is open to criticism on several counts. Firstly, it fails to take account of the types of regimes to be found in Greece, Spain, Portugal and other more recently developed Mediterranean countries, which could be seen as sharing some features of the 'liberal' type with some of the 'corporatist' but are characterised by low levels of welfare spending and a high dependence on the extended family and religious organisations to relieve social hardship. These systems should not, of course, be regarded as a homogenous type; they differ markedly from each other, reflecting the very different cultural, economic and political forces which have shaped them.

Secondly, Esping-Andersen's categorisation makes it difficult to account for many of the hybrid systems which have developed in Europe. The Netherlands, for instance, has, under political regimes which would normally be regarded as 'conservative', consistently exhibited the high level of decommodification associated with 'social-democratic' regimes while nevertheless sustaining a strong 'breadwinner' model of the household.

The British system, too, has historically exhibited some features of a 'social democratic' model (for instance in its universally-accessible National Health Service, and in the separate taxation of women) while retaining a strongly 'liberal' approach to most benefits. Ireland represents an even more unusual case, in which a 'liberal' system, largely modelled on that of the UK, nevertheless contains many features more usually associated with a 'conservative' regime, notably in the more prominent role accorded to church and family in the provision of welfare.

A third difficulty arises when we attempt to integrate the former state socialist regimes into this framework. While sharing many features of the 'social democratic' model, they also exhibit significant differences.

Finally, and perhaps most importantly of all, Esping-Andersen's typology is open to criticism for failing to take sufficient account of gender in its analysis. As has been pointed out by a number of commentators, this classification has very limited value for providing an explanation of differences in the relative positions of men and women under different welfare regimes (Lewis,1993).

In recent years, most European Member States have introduced major reforms in their welfare systems, meaning that many of these distinctions may have become outdated, even though they still retain an important place in the literature.

In this chapter, we outline the basic features of the welfare systems of France, Germany, Italy, Poland and the UK.

FRANCE

The French definition of ”social protection” is broader in scope than "social security”. Social security is a set of mechanisms and institutions whose purpose is, on the basis of philosophies of shared risk ("solidarités") of varying extent, to guarantee individuals protection against the consequences of various events classed as risk. For historical reasons, Social Security does not include unemployment insurance schemes in France. Social protection encompasses the entire range of provisions, whether or not compulsory and whether or not organized by law, by means of which individuals are protected against social risks. In particular, it includes *social welfare* arrangements, which extend beyond the coverage provided by social security.

The outlines of the French system were laid down in 1945-46, combining the basic option of the *social insurance* approach with the philosophy of solidarity or shared risk within particular occupations. Since then, the system has developed and integrated various elements inspired by the idea of a solidarity or shared risk at national level. If we refer to the typology proposed by Gösta Esping-Andersen (1990), France is to be included in the conservative-corporatist welfare regime. That means that most social benefits are linked to the employment status.

Main characteristics of the welfare state

Health insurance schemes

Health insurance schemes provide benefits in kind, as well as cash benefits, to compensate for the loss of income in certain kinds of situations (illness, disability, maternity, occupational injury/diseases.

The French system of Health Insurance is composed of two tiers. The first tier provides basic coverage through different mandatory schemes. There are not as many basic Health Insurance schemes as there are pension plans, but the principle of employment-based coverage still exists.

The General Scheme (*Régime général*) delivers 80% of the benefits, and covers private sector employees, public servants (benefits-in-kind), as well as different categories of people who were not originally covered by a scheme (for example, students, war veterans, persons benefiting from certain guaranteed minimum incomes such as certain family allowances). The General Scheme *(Régime général)* has thus been used over the years as a "catch-all” scheme, to provide access to medical coverage for the entire population.

A variety of small special schemes cover different categories of workers (for example, railway employees, employees of the Paris public transportation system, seamen, employees at the *Banque de France*). Cash benefits for public servants are funded by the State through the general budget. Two other schemes cover people working in the agricultural sector (*MSA*) and entrepreneurs, tradesmen and artisans, as well as professional people and lawyers (*CANAM*).

The second tier consists of an optional supplementary coverage provided by mutual (not-for-profit) or private insurers.

Since 2000, a means-tested Universal Medical Coverage *(CMU)* has been implemented, to insure equity of access to the health care system for any legal resident in France whose income is below a certain limit. Both basic and supplementary coverage is provided by the *CMU*.

Pensions

Pensions in France are provided through a great variety of schemes organised on a professional or sector-related basis. Pension schemes can be divided into several categories

The first category encompasses employees in the private sector and features two different mandatory pillars. A first-level pension is provided through the General Scheme (employees working in the agricultural sector belong to a different set of pension funds). Mandatory supplementary pensions are provided by a variety of funds, co-ordinated by two head institutions: *AGIRC* and *ARRCO*.

The second category consists of the different schemes covering people who are not employees.

The third category comprises different special schemes covering public servants and public-sector employees.

There is also a guaranteed minimum income scheme ("*minimum vieillesse*") for people aged 65 and over.

Unemployment benefits

Unemployment Benefits were created outside the Social Security system by a national agreement negotiated between the social partners in 1958. Over the years, the scheme has been extended and now covers all private-sector workers.

The scheme is in charge of managing two different kinds of benefits. The first one (the insurance part of the scheme) consists of earnings-related benefits financed through contributions from both employees and employers levied on wages. Contributions and benefits are set by the social partners during periodic negotiations. People entitled to unemployment benefits are those who have been previously employed, who have lost their position through no fault of their own, and who are actively looking for a job.

The second kind of benefit (the "solidarity" part of the scheme) is funded and determined by the State, and is aimed at insuring a minimum income to unemployed workers who do not meet the requirements for being entitled to insurance benefits. This part of the scheme is funded by the State and provides payments to the long-term unemployed whose entitlement to the Unemployment Insurance scheme has come to an end. It also provides

payment to certain types of job seekers who lack work references, and who experience special difficulty finding a job.

Family benefits

French family policy is based on a large variety of arrangements, some of which have been developed outside Social Security programs, such as the fiscal *quotient familial* (child-related fiscal reduction), the funding of day-care centres, or the mandatory free elementary and high school programmes. Certain family benefits are offered by the Social Security system, but are family-related aspects of other plans (health insurance, retirement plans). The benefits provided by the French Family Fund are thus a only part of a broader family policy.

In 1978, the entire population of France became eligible for family benefits, with no condition of employment. Today, the General Scheme's national fund for family support programs (CNAF) provides family benefits to every eligible person legally residing in France. The Family Fund is thus the only really universal part of the General Scheme *(Régime général)*. There are universal benefits and means-tested benefits.

Means-tested benefits

Family means-tested benefits target low- to medium-income families facing a variety of situations (birth, adoption, large family, schooling expenses, special needs children, etc.). The level of income required for eligibility varies from one allowance to another and usually depends on the number of children and the situation (single, couple) of the parents.

There are also in France a variety of guaranteed minimum incomes for specific populations (elderly, disabled, lone parents, unemployed, widows) as well as a general guaranteed minimum income (*Revenu minimum d'insertion*, *RMI*) for people aged 25 and over and not entitled to any specific guaranteed minimum income. Most of these means-tested benefits are based on the income of the whole household, with the exception of guaranteed minimum income for unemployed for which the individual's personal income as well as the spouse's or partner's income are taken into account.

Coverage

There are different possible definitions of coverage. The coverage may be viewed from a strictly legal point a view: a person is covered when he/she is entitled to some type of benefit. The coverage may also refer to the concrete situation of individuals: a person is covered when he/she is entitled to some type of benefit and actually receives it. This approach takes into account the phenomenon of "non take up". Finally, one might also consider that a person is covered when he/she receives a benefit which is adequate in order to protect him/her from some specific social risk as, for instance, the risk of poverty. This is typically the reason why the CMU was introduced in France. Because the basic health insurance scheme provides a partial or very partial coverage of medical expenses, adequate coverage for health is only possible if people have a significant supplementary health insurance scheme. This was also the rationale behind the creation of

the various guaranteed minimum incomes, especially for the elderly. Most elderly people who receive the *minimum vieillesse* are, in fact, covered by some pension scheme but at such a very low level that they need some social assistance benefit. Depending on the definition of coverage and the social risk, populations who are excluded are not the same.

Family benefits: all legal residents are entitled to universal benefits. Illegal residents are excluded but there is no official estimate of the number of people in this situation. Non take up concerns mainly means-tested benefits although some universal benefits are also concerned (van Oorschot and Math, 1996). Estimates of non take up for France are scarce, but figures vary from some percentage points up to 15%-20% and even more according to the type of benefit.

Unemployment benefits: in the working age population (15-59 years old), the only persons to be potentially entitled to unemployment benefits are those people who are in salaried employment. Other people are "excluded": roughly 14.4 millions people out of a working age population of 35.7 millions people, approximately 40%. Some wage earners are also excluded because they do not qualify for unemployment insurance benefits, i.e. they do not have enough employment records (182 days or 910 hours in the last 12 months; 426 days or 2123 hours in the last 24 months; 821 days or 4095 hours in the last 36 months). Some unemployed workers are also excluded from solidarity benefits because they do not have enough employment records (5 years in the 10 years preceding unemployment). There are no estimates of the number of unemployed workers excluded from these insurance or solidarity benefits.

Pensions: people who do not have any employment (whether waged employment or self employment) do not qualify for contributory pension benefits and are therefore excluded from coverage for a given year. A rough estimation for the year 2002 is 9.5 millions of inactive people, i.e. 26.5% of the working age population. However, this does not mean that these people will not qualify (and thus being covered) for pension benefits when they retire, because this will depend on their employment records during their whole life-cycle. For people actually in the labour force, some wage earners may not qualify for a basic pension if their annual wage is below 1522 € in 2005. This is a rather low threshold and one can guess that very few workers are in this situation. For a full year worker working part time at the minimum wage, this means that this worker will not be covered if he works less than 4 hours a week.

Health care: despite the fact that the principle of employment-based coverage still exists for basic health insurance, most of the population is covered. Employees must meet certain minimum requirements in terms of paid employment in order for them and their families to be covered. However, these conditions have become less and less stringent over the years. A contribution to the scheme from employment income amounting to 60 times the minimum hourly wage is enough to cover the contributor and his/her dependants for a period of 4 years. If need be, special rules apply to maintain the coverage beyond that. With these rules, it is estimated that a little less than 1% of the total population still remain excluded from coverage for basic health insurance. Nevertheless, the reimbursement rates vary according to the services or medical goods provided and may be extremely low in some cases (optical lenses, dental services for instance), so that the formal basic coverage is not adequate. It is therefore necessary to consider coverage in supplementary voluntary schemes.

Coverage by collective agreements

In France, collective bargaining takes place at various levels: national cross-sector, sector, section of industry, and company level. There are also agreements whose field of application is either local, or specific to categories of the workforce (managerial staff, clerical staff, manual workers, etc.). All employees entering the field of applicability of the Labour Code are likely to be covered by a collective agreement of one kind or another. This is the case for all private-sector employees and some of those in the competitive public sector. All civil servants (employed by central government, local government or public hospitals) are excluded from collective bargaining. The case for employees of state-owned utilities with a specific legal status (EDF, GDF, Aéroports de Paris, etc.) is less clear, since in addition to their special status, their working and employment conditions are also governed by company-level agreements. However, in the sense traditionally attributed to the term 'coverage rate', its calculation is based on all sector and company-level agreements, not including those in state-owned utilities with a specific legal status.
Wage bargaining and classifications - Sector-level collective bargaining coverage is around 93% in firms with 10 or more employees (not including state-owned utilities with a specific legal status). If we move beyond the traditional definition of collective bargaining coverage, this figure rises to almost 97% of staff in workplaces with 10 or more people who are covered by a sector or company-level agreement, or have the status of state-owned utility employees.

Unemployment insurance and pension schemes - The various cross-sector agreements for unemployment insurance and supplementary pension schemes apply to all private-sector employees and some in the competitive public sector.

Health insurance supplementary schemes - If we consider the coverage of employees concerning supplementary health insurance schemes, a recent survey shows that around 40% of workplaces offer such a scheme to their employees. Employees working in these firms account for around 70% of the workforce in the private sector (Couffinhal *et al.*, 2004).

Main 'poverty traps' or 'loopholes'

Issues related to "loopholes" and poverty traps are very distinct ones.

When discussing the issue of loopholes, one is faced with the question of what would be an adequate social protection system. Since the level of most social benefits in France depends on the employment status, the increase in atypical work is a key issue for an adequate coverage of workers. In the last twenty years, there has been a dramatic increase in atypical work and especially part-time work. This increase in part-time work has led to a rapid growth in low-wage employment (Concialdi and Ponthieux, 2000; Concialdi, 2002). That is the reason why there is a growing concern for the adequate social protection of these workers.

Other debated loopholes concern the unemployed: just a little more than 50% of the registered unemployed get an unemployment benefit. Lastly, another important issue is the age limit for being entitled to the *RMI*. Because this general guaranteed income may only be granted to people aged 25 and more – with the exception of households having children – this excludes many young people (Belorgey, 2000).

A poverty trap may de defined as a situation in which an increase in income results in a loss of benefits so that people are no better off. These situations may concern people who are entitled to means-tested benefits.

In recent years, the debate in France has mainly focused on unemployment traps, i.e. the idea that unemployed people do not look for or take a job because they do not have enough financial incentives to act so. A lot of studies and official reports have stressed the fact that there could be some situations where people entitled to the RMI might be caught in such unemployment traps especially if they work part-time (CAE, 2000 ;CSERC, 1997; Belorgey, 2000). A study produced by the national statistical office estimated that half of the registered unemployed would be in so-called "voluntary unemployment" (Laroque and Salanié, 2000).

These reports and studies have been heavily criticised for many reasons. A first criticism relies on the fact that the methodology of these studies is very fragile (Husson, 2000; Sterdyniak, 2000). Another criticism is based on the fact that the theoretical model used is too simplistic (Laurent and L'horty, 2000) as it has been stressed in international studies by Atkinson and Mogensen (1993). Finally, another criticism lies in the fact that these studies do not look at the actual behaviour of people (Concialdi, 2001b). Empirical evidence shows that the extent of these unemployment traps is very small and that these situations only concern a few people (Afsa, 1996; Afsa, 1997; Afsa, 1999; Guillemot et al., 2002; Piketty, 1998). However, many people have stressed the fact that the exemptions of social contributions for "low wage employment" might create low-wage employment traps and, possibly, poverty traps (Concialdi, 2001a).

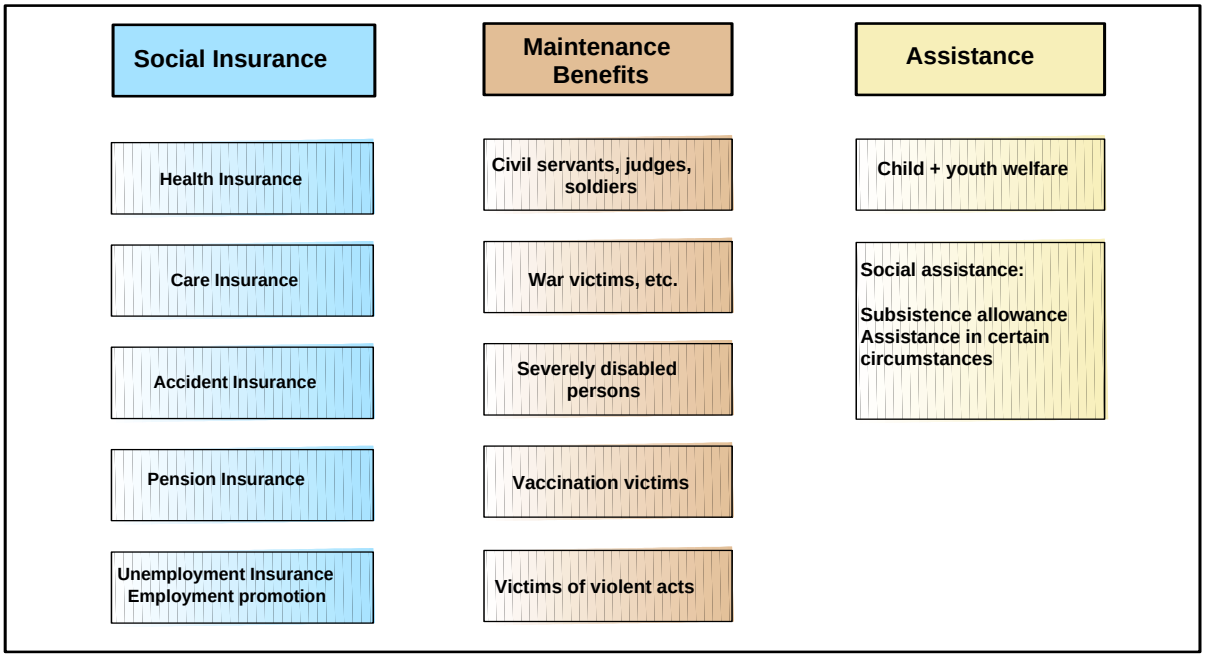
GERMANY

Characteristics of the welfare state

The German social system has two main components: social insurance, and state social benefits, both together constitute the statutory social insurance. Originally introduced by Bismarck in the 1880s, the basic principles are still in place today, but have evolved over the years into a complex system, consisting of some 750 independent and self-governing agencies.

The conventional benefit system rests on three pillars: a) social insurance, b) maintenance benefits, and c) assistance (s. figure 9) which are explained below.

Figure 22: Pillars of the German Social Security System



Source: ISG

- The five different types of social insurance coverage comprise:
- **Statutory health insurance** is the second largest branch of social insurance. Its 600 autonomous national, regional or branch-specific insurance funds provide direct or indirect coverage for almost 90 % of the population.
- **Long-term care insurance** is a supplementary form of health insurance that is mandatory for the same population groups as those who take out health insurance. Like the health insurance system, it is based on adjustable contributions.

- **Pension insurance** is the largest branch of social insurance. The statutory white- and blue-collar funds comprise the most important institutions within this sector. These include the federal insurance for white-collar workers, 23 regional insurances for blue-collar workers, and branch agencies such as the fund responsible for the mining sector.
- **Unemployment insurance** and **employment promotion services** are the responsibility of the Bundesagentur für Arbeit (Federal Employment Service).
- **Statutory occupational accident insurance** is provided by some 100 professional associations and accident insurance agencies.

As a rule, membership of a social insurance agency is a prerequisite for receiving social insurance benefits. Exceptions are children or spouses who are covered by health insurance schemes and survivors who receive pension benefits. Membership of the different social insurance agencies is mandatory for most employees and for some employers and self-employed (e.g. farmers, artists). The insurance agencies are predominantly financed by the contributions of their members and their employers.
Membership of the social insurance agencies is regulated by law. In principle, every employee must have health, care, unemployment and pension insurance. In addition, some categories of entrepreneurs and self-employed such as farmers, artists and seamen, are also legally required to join social insurance funds. Members are obliged to pay contributions.

The most important terms of membership are as follows:

- **Health Insurance**: Coverage is provided for: all persons in paid employment, trainees and those receiving vocational training; pensioners with a minimum period of insurance; unemployed persons or those receiving unemployment insurance benefits; handicapped persons in sheltered employment; trainees in vocational rehabilitation schemes; students of recognised higher education institutions; farmers and members of their family working on the farm; artists, writers, and persons with individual insurance. Children are insured with their parents. Non-working spouses are insured with the income earner.

- There is an upper earning limit beyond which no compulsory membership is required and closing a private health insurance contract is possible, what in addition is mainly the case for self-employed. In principle there is barely no possibility in Germany to be outside the national health care coverage. With the exception of asylum seekers and self-employed there is hardly any possibility to live without health care insurance. And the latter actually do not venture it.

- **Care Insurance**: to a large extent the regulations governing this are identical to those for health insurance.

- **Pension Insurance**: Coverage is provided for employees and certain categories of the self-employed (voluntary insurance). To receive benefits a person must have paid a minimum of 60 months of insurance contributions and have attained the specified age limit. There is a lower- earning limit beyond which insurance is not compulsory (marginal employment, so called "mini-Jobs"), and an upper limit at which contributions are capped. Widowed persons without pension entitlements of

their own receive a certain share from their partner's pension. In case of no or too little pension entitlements people over 64 years can apply for basic old age pension, a recently (2003) introduced tax financed means-tested minimum pension floor.

- **Unemployment Insurance**: Coverage is provided for all employees (including trainees and young handicapped persons). To qualify for benefits a person must have paid contributions for a minimum of 12 months over the past 3 years – since 2005 over the past two years. Generally unemployment benefits are obtainable for one year. After that spell (long term) unemployed receive "Arbeitslosengeld 2", the recently introduced tax financed means-tested minimum assistance (s. below).

Occupational Accident Insurance: Coverage is provided for employed persons, some categories of the self-employed, students, pupils, pre-school children, and persons undergoing rehabilitation treatment). The voluntary insurance system provides coverage for entrepreneurs, their collaborating spouse and self- employed entrepreneurs in stock or partnership companies.

The funds are largely financed by contributions paid by insured persons and their employers. In principle, both the employer and employee each pay half, except in the case of accident insurance when the full contribution is paid by the employer. Contributions are paid as a percentage of the wage, and the employer deducts the employee contribution from the wage packet and pays it directly together with his own contribution.

Maintenance benefits

Unlike social insurance benefits, maintenance benefits are generally financed by tax revenues.

Non-contributory maintenance benefits are paid out in the event of contingencies such as illnesses or old age to civil servants, judges and soldiers who are under no obligation to take out social insurance. They receive their benefits directly from their respective employment body. These payments also cover part of the costs of medical treatment.[1]

Maintenance benefits are used to compensate for some damages for which the community bears a large degree of responsibility (e.g. indemnification for war victims).

Assistance

Unemployment assistance is means tested and payable to unemployed persons if their entitlement to unemployment benefit has been exhausted.[2]

Assistance benefits are provided by the state on the basis of individual need. In principal these are secondary to social insurance, maintenance or even family support benefits. Assistance is largely financed by local authority tax revenues.

Assistance benefits can be roughly divided into two groups: special assistance in the form of education grants, child benefits, child allowance, housing benefits etc; and general assistance to provide a basic income level for those not covered by social insurance in the

1 For the remainder of the costs - in the case of illness and maternity - the civil servant is expected to take out supplementary voluntary insurance, either with a private or statutory health insurance company.

2 Unemployment benefits vary according to contribution payments and age. The duration of the payments ranges from 6 to 32 months.

event of illness, or disability. The benefits are generally means-tested, mainly based on the household income.

The recently – in 2005 – introduced new assistance benefit called "*Arbeitslosengeld* [2]" for long term unemployed and former employable recipients of social assistance belongs to that category of means-tested grand-aided maintenance, allocated on the basis of the household income.

Coverage and loopholes of the welfare system

Due to the existence of the means-tested minimum assistance for job-seekers (*Arbeitslosengeld*[2]), the minimum assistance for elderly and the supplemental social assistance for all others, there is hardly any risk to fall below that income level which is defined by these funds as the *de facto* welfare standard. This level prevents poverty but does not really permit a liveable living. There is a combated discussion in Germany whether the assessment of the recently introduced minimum assistance for job-seekers (*Arbeitslosengeld* [2]) is appropriate.

That means that the actual losers in the prevailing welfare system are those who have hardly any chance to leave that minimum level at all. These persons are described in the following chapter as groups at most risk: first and foremost low qualified people, elder worker and senior citizens who have not acquired adequate pension claims, which is predominantly the case for elderly women, either because they haven't had independent or little earnings. Latter is the typical situation of women, who have worked for longer time-periods in marginal employment (*mini-jobs*).

Coverage of collective agreements[1]

The collective agreement, which trade unions make with employers' associations, is a typical, German construction. It is valid for a branch or parts of that branch and refers to a specific region or to the whole country. The sectoral division is very fine and includes more than 200 different branches of wage agreements within the old states of Germany. The new states have got a less detailed division.

Besides the collective agreement there are also enterprise wage agreements in Germany. Enterprises wage agreements are made between trade unions and specific enterprises that do not belong to any employers' association. Even though the number of enterprise wage agreements is relatively high, their macroeconomic significance is relatively low.

The wage register at the Federal Ministry of Labour contained about 47,300 valid wage agreements for Germany at the end of 1997. Approx. 43 % of the ca. 23,200 original wage agreements (the rest are parallel-contracts, changes or follow ups) are union- and about 57 % are enterprise wage agreements.

About 53 % of the enterprises and about 76 % of the employees are seized by the wage agreements in West-Germany. About 33 % of the enterprises and about 63 % of the employees are seized by the wage agreements in East-Germany. (see table 30)

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1 The following paragraph depicts the meaning of „Tarifabschlüsse" and comes from the „WSI-Tarifarchiv" of the Hand-Böckler-Stiftung. (http://www.boeckler.de/cps/rde/xchg/SID-3D0AB75D-7C83F656/hbs/hs.xsl/564_21316.html).

Table 30: Wage maintenance of West- and East-German employees in 2001 (employees concerned in %)

Branch	Trade related wage agreement		Entreprisewage agreement		Without wage agreement(following a wage agreement)	
	West	East	West	East	West	East
Agriculture and others	56,4	19,9	2,6	8,2	41,0 (24,7)	71,9 (50,7)
Mining / Energy	84,1	76,5	12,7	17,8	3,2 (65,6)	5,8 (64,3)
Raw material processing	69,6	41,8	9,0	14,3	21,4 (67,2)	43,9 (54,8)
Capital goods	63,9	29,1	9,3	14,0	26,8 (67,4)	56,9 (57,4)
Consumer goods	68,7	31,4	7,7	14,1	23,5 (59,0)	54,5 (52,8)
Building trade	77,6	43,0	3,0	8,5	19,4 (61,2)	48,6 (68,3)
Trade / repairs	66,0	36,3	4,7	7,8	29,3 (57,9)	55,9 (47,9)
Transport / information	57,0	24,1	17,5	39,0	25,5 (41,1)	36,8 (63,6)
Credit / insurance	86,3	86,7	5,4	0,0	8,3 (61,2)	13,3 (39,1)
Services for enterprises	32,2	36,9	6,4	5,9	61,5 (36,1)	57,2 (43,0)
Other services	60,5	44,8	6,5	10,7	33,0 (56,5)	44,5 (59,7)
Org. without commercial goals	45,2	34,0	11,4	18,3	43,4 (60,8)	47,7 (64,6)
Regional corporations /social insurance	83,6	89,3	11,4	9,4	5,0 (47,8)	1,4 (56,9)
Total	63,1	44,4	7,6	11,8	29,3 (52,2)	43,8 (55,3)

Source: IAB-business panel, 9th wave west/6th. wave east 2001.

ITALY

Characteristics of the welfare state

In Italy, all health care services are universal, independently from individual and household amount of income. However by contrast, pension benefits, unemployment benefits and sickness benefits are conditional on employment. Childcare provision is also conditional on household income.

Means tested benefits

Health service There are "fees" to pay to be able to use some health services (ex. Radiology tests and various blood tests) but also in these cases, there are exemptions due to income or particular type of illness.

Pensions are not means tested except in some specific cases, such as integrated to the minimum (where the integration depends from the income of the husband and wife) and widower's pensions. Even the *"assegni sociali" (social cash benefit)* depend from the income of the married couple; they are granted to the woman who has reached 65 years of age and doesn't get any income, and neither does the husband.

The cash **benefits towards families** (*assegni familiari*) are based on *the family's income*. The benefits are measured on how many overheads are dependent in a family, and they decrease in relation to the increase of the household income. They are due to all employees and pensioners who were previously employees. The *"parasubordinati"*, which are workers who are formally self-employed but in practice are dependent *(pseudo-independent)*, have the same rights as employees, as above described.

Farmers and the self employed,(e.g, retailers, craftsmen) receive much smaller amount of benefit.

All female employees are entitled to paid maternity leave, which corresponds to five months, (one or two months before birth, and correlatively three to four months afterwards). Self-employed women are entitled to a cash benefit if they are somehow linked to the national institute of social security (INPS).

City councils hand over cash benefits to all women, who are below a certain level of household economical conditions, which are calculated taking into account the household income and assets, which must not exceed a certain limit.
Lastly, there is a €1000 cheque given by city authorities, to all Italian and EU women for their second child regardless of income.

Unemployment benefits

Employees who are laid off are entitled, at specific conditions, to different kind of benefits:

- ***"Cassa Integrazione ordinaria",*** which is related to the last income, and is generally paid to workers which have been temporarily laid off for temporary cut of production.

- ***"Cassa Integrazione straordinaria"*** is due to workers laid off in relation to the restructuring of the firm, maintaining their normal working relationship with the firm.

- An ***"indennità di mobilità"*** is provided when employees can't be re-employed by the same firm because of a structural crisis. It is aimed to provide income coverage, generally of one year, to ease the transition from one job to another. All these arrangements are of collective nature and are negotiated between the social partners and public institutions (ex. the Ministry of Welfare).

Beyond these entitlements, the ordinary **unemployment benefit** is paid to all employees who lose their employment, conditional to a previous period of contribution. The duration of this entitlement varies from six month to twelve months, and the value of the benefit is equivalent to 40 per cent of the last wage.

The *reddito minimo d'inserimento* is meant to help people of working age (particularly the young) in search of employment, which was piloted in the last legislature, has been practically abolished and delegated to the regions.

Coverage

Regarding the working age population's social protection coverage, a number of distinctions may be summarised as follows (Ministero del Lavoro, Libro bianco sul Welfare State, 2003):

Benefits which are not dependent on employment or unemployment:

- Health care
- Maternity benefit and child care provided by city authorities, in relation to the individual or household income
- "Assegno sociale" : Means-tested social pension for women over 65 years.

The other various benefits previously described, are interrelated with participation in the labour market. Given the transformation of the labour market, this framework of social protection is generally considered inadequate to match the risks stemming from the wide precariousness of jobs and the instability of earnings (Geroldi, 2003).

From this point of view, it is also important to emphasise that among the inactive population of working age, there is a significant number of people involved in the informal economy. According to the official statistics, the informal economy amounts to around to 15% of GDP (ISTAT, La misura dell'economia sommersa, 2004). If we consider the corresponding amount of undeclared work, it amounts to more than three million full time equivalent workers. Of course, regular workers who are entitled to social security benefits perform a consistent part of this undeclared work. However there are also a certain number of workers, who are not in any way linked to the regular labour market, who are therefore, completely cut off from social security entitlements. In this last case, we find a certain percentage of working age population who, even though they actually have a job, are officially outside the labour market, and therefore excluded from the social benefits which are conditional on employment.

Collective agreements

In principle, all dependent workers are covered by a national collective agreement related to the sector in which they are employed. This depends on the fact that the norms set by national collective agreements are considered the regular base for all individual contracts, even when the individual worker or the firm for which he works are not affiliated to any trade union or enterprise association. This coverage stems from a constitutional norm, in accordance to the constant judicial interpretation of Article 36 of the Constitution. It is noteworthy that around 40% of workers are trade union members, and this can be considered a high level of participation, since many of these members work in small sized enterprises.

Collective agreements are negotiated at two main levels: the first is on national sector level, where the most important rules are set, e.g. basic wage levels for each professional category, weekly working hours, holiday and various levels of other leave entitlements. The second level (*contrattazione articolata*) is on company level, where working conditions and wage integration are negotiated. At this level trade unions are entitled to be informed and to give their advice on investment and employment strategies. While first (national) level agreements concern all workers of the sector, the second level is practiced where the trade unions are organized, as it generally the case for large and medium-sized firms.

It is necessary to add that teleworking is an issue hardly regulated by negotiation. In the second half of the nineties, some sectoral agreements have been set, but generally collective agreements have been stipulated at the firm level, in a framework of weak workers' organization. Sociologists and labour jurists consider important the analysis of the "good practices" at national and international level (Ichino, 1996; Di Nicola, 1997) but, at the same time, they stress the need of a more advanced labour law regulations (Giugni, 1995; Gaeta e Pascucci, 2001).

Poverty traps

In regions where there is a very high level of unemployment, with small and fragmented entrepreneurial system and low productivity, workers are available for irregular and unprotected jobs. In this context of more or less informal economy, firms flee tax and contribution obligations, thus lowering the labour costs. The workers have then a wage level that is inferior to the ones negotiated by the trade unions and they are deprived of the social protection that other workers are able to use. In this environment, most of these irregular workers live in relative or on the threshold of poverty. This is especially the case of "*Il Mezzogiorno*", where there is the highest level of the informal economy and the highest level of poverty (ISTAT, La misura, 2004).

Given this framework, the lower labour costs reduces the incentive to invest and to innovate, in order to increase productivity. At the same time, workers are not given training opportunities to improve their skill sets easing the possibility to find better jobs in the same or different areas.

POLAND

Characteristics of the welfare state

The material scope of social security in Poland includes the following social risks: reaching the retirement age, invalidity, death of a family's bread winner, sickness, employment injury and occupational disease, unemployment and difficult economic situation (Szczur, 2004; Jończyk, 2001).

The national social insurance system comprises several schemes having various personal and material scopes. Depending on the scheme there are differences in level of benefits, even between benefits covering the same risks.

The Polish social insurance system was originally established according to the German system (Bismarck's type) and it is mainly based on insurance (Golinowska, 1994). It means that the entitlement to benefits is related to payments of income related insurance contributions.

Social insurance is obligatory to a large extent, with regards to both: its personal and material scopes. Social insurance benefits are not income related.
Besides social insurance schemes there are non-insurance schemes which are related to income level of the whole family.

According to current Polish legislation within social insurance schemes are: two "social insurance" schemes and health insurance scheme. According to theoretical literature though, the health insurance scheme is a part of social insurance as well (Jończyk, 2001).

The social insurance (according to the legal act names) comprises two different parts separated due to its personal scope: employees' social insurance scheme and farmers' social insurance scheme. The scheme for employees provides more generous benefits than the agricultural scheme.

The non-insurance social security schemes include: a scheme providing benefits to persons facing economic difficulties (family benefits and social assistance benefits) a scheme of benefits for unemployed persons and a social pension scheme.

Insurance Schemes

The Social Insurance Scheme for Employees covers the working population (except of farmers). This scheme can be divided into the following categories with regard to its material scope (INFOR, 1999):

Old-age insurance -This category of insurance concerns the social risk of reaching retirement age. It is a compulsory insurance providing old-age benefits. The old-age insurance scheme was reformed in the year 1999. The old pay-as-you-go system (PAYG) with a defined benefit was replaced by a mixed financing with a defined contribution (a

certain part of elder insured persons is still covered by the old system) (Chłoń-Domińczak, 2002; Góra, 2003).

Invalidity insurance - This category of insurance concerns the social risk of invalidity and death of family's bread-winner. It provides two major types of benefit: invalidity pension and survivor's benefits. It is a compulsory insurance with defined benefits.

Sickness insurance - This category of insurance concerns the social risk of incapacity for work due to sickness or maternity. Basic benefits include: sickness benefit, maternity benefit and child-care allowances. This insurance is either compulsory or voluntary depending on the category of insured persons.

Employment injury insurance - This category of insurance concerns the social risk of disability, death or occupational disease caused by work. These benefits are compensatory (a single compensation, health care benefits) or they are related to disability for work (pension for accident at work, survivor's pension, sickness benefits).

This insurance is either compulsory or voluntary depending on the category of insured persons. Certain categories of insured persons are not entitled to be covered by this insurance.

The **Social Insurance Scheme for Farmers** covers farmers and includes employment injury, sickness and maternity insurances . These benefits include a single compensation due to accident at work on the farm, sickness and maternity benefits. The scheme also includes old-age and invalidity insurance. Here, the main benefits include: old-age benefits, invalidity pension and survivor's benefits.

The **Health Care Insurance Scheme** (providing benefits in kind) covers all employed persons covered by social insurance, voluntary insured persons and their family members as well as numerous other categories of persons listed in the law (i.e. clients of social assistance, unemployed persons). In practise it is a universal scheme with regard to its personal scope. The catalogue of the provided health care benefits is broad. It includes basic health care, specialised health care, hospital treatment, dental care and medicines.

However, daily practise shows that access to benefits is limited due to extensive needs of the society exceeding the capability of the system. Access to medicines is often limited by their high prices (CASE, 2002).

Non-insurance Schemes

Poland has several benefits for persons facing difficult economic circumstances:

Family benefits are benefits for families with children having insufficient income. The main benefits include: family allowances nursing benefits and child-care benefits. These benefits are granted on the basis of mean tests, for families with low income per head. These are obligatory granted benefits.

Social assistance is aimed at persons and families facing difficult economic situation. There are benefits in kind and in cash. They are mainly means tested benefits, granted on the basis of meeting certain income criteria but they are discretionally granted both with regard to a decision as well as the level of benefit.

Unemployment Benefits

The unemployment benefit scheme in principle includes all unemployed persons within its scope. Its main benefit is a unemployment benefit paid in different amounts depending on work tenure and different period of time depending on the unemployment rate in a given region. All persons registered as unemployed are entitled to health insurance regardless of the fact if they are entitled to a financial unemployment benefits.

Social pension

The personal scope of this insurance includes persons totally incapable for work provided a disability occurred before the age of 18 or 25 (if still in school). It is an obligatory lump sum benefit, not related to any income criteria.

Employment within collective agreements and welfare

In Poland collective agreements were not very popular due to binding legislation, which in practice prevented employers from their termination. In the year 2002 149 collective agreements at the above-company level covered 750.000 employees. There are 13.000 collective agreements concluded at the level of single firm. (CASE, BRE BANK, 2004). It should be noted that in Poland the above-single-company level agreements often refer to several companies but not necessarily a majority of companies within a sector. Therefore they should rather be referred to as multi-company-level rather than a sector-level agreements.

There is no sufficient data to give the accurate number of working population covered by collective agreement. However the estimated proportion of those covered is about 30%.

The welfare obligations of importance that can be included in collective agreement are basically supplementary pension scheme and the social fund. However the collective agreements cover also other benefits like holiday grants, housing allowances for the pensioners (in case of the company apartments), company credit unions. The research of collective agreements show a variety of different material and personal scopes offered in various collective agreements. (Uścińska, 1997). The general opinion is that the practices of companies, even those where collective agreements exist, is rather poor (especially comparing with the socialist company era – before 1989) (Morecka, 1999).

UNITED KINGDOM

Characteristics of the welfare state

The UK system was developed within a Beveridge–type welfare model and is 'liberal' in the Esping-Andersen typology. It is often perceived as having a very reduced and non-preventive welfare system in place compared with some other EU countries. The system is complex and bureaucratic, with a large number of different benefits administered by different bodies.

Health

The British National Health Service (NHS) is in principle 'free at the point of delivery' to all British citizens, but in practice there are a number of limitations to this free access. Optical and dental services operate more or less outside the system although free treatment is available to children, old-age-pensioners and those in receipt of some social benefits (including the *Jobseekers Allowance, Family Credit* or *Income Support)*. It is also necessary to pay 'prescription charges' for medicines and medical supplies used in the home. These charges have increased steeply over the last two decades and are sometimes higher than the cost of buying the medicines in the private market (assuming that these are not restricted drugs and are available over the counter in pharmacies). Again, the charges are waived for children and those on certain benefits.

A more serious limitation is the distinction, introduced under the Thatcher Government in the 1980s, between 'treatment' and 'care'. The former is available freely in hospitals, but the latter must be paid for in privately-run convalescent homes or old-age residences. This situation has now been challenged by the Scottish Parliament so that in Scotland some types of residential care are now once again provided without cost.

Another limiting factor has been a *de facto* rationing of health services through scarcity. Long waiting lists for many services has increasingly driven British people to seek private health insurance coverage or private treatment.

Pensions

A minimum State Retirement Pension (RP) is provided in the UK. Receipt of a state retirement pension is dependent on National Insurance contributions or is reliant on the spouse's National Insurance contributions. The current retirement age is 60 years for women and 65 for men but the women's retirement age is being progressively increased to bring it in line with that for men. Since the 1970s, however, the state scheme has been regarded as a minimal safety net rather than a system which provides a liveable income in retirement. Consequently there have been a number of government efforts to encourage private schemes either provided through companies (and, where these are unionised, partially regulated through collective agreements) and partly through individually purchased private schemes. A number of tax incentives have been developed to

encourage the use of such schemes but in general they are undersubscribed. In recent years, several highly publicised bankruptcies and serious underperformance of many of these schemes against the benefits originally promised have damaged public confidence in them. This has been one of the factors contributing to rapid inflation of property prices in the UK as people have looked for alternative investments to produce an income for their retirement.

Housing benefits

The cost of housing in the UK is extremely high and rising fast, especially in Inner-city areas where a disproportionate number of people on low incomes live, including the majority of people from minority ethnic groups.

Housing benefits are available to subsidise the cost of rent and **council tax benefits** to subsidise the cost of local taxes on a means-tested basis, based on the total household income. People in intermittent employment frequently have difficulty proving their income level and therefore often find it difficult to claim this benefit. These benefits must be claimed from the local government (at the 'borough' or 'commune' level)

Tax credits

In an attempt to resolve some of the 'poverty traps' identified under previous systems, the New Labour government in the UK has introduced a series of means-tested tax allowances.

Child tax credit is a means-tested allowance that is paid to parents and carers of children or young people still in education.

Working tax credit is a means-tested allowance for people in paid employment who meet certain other conditions based on income and circumstances. The means test is based on household income and couples may apply jointly for this allowance.

Pension credit is a means-tested benefit for people aged 60 or over. A **guarantee credit** tops up weekly income to a guaranteed level and a **savings credit** is available for people who have a small amount of income or savings. Again, eligibility is assessed on total household income.

National Insurance

All employees who earn more than a defined minimum earning threshold are required to pay national insurance (NI) contributions, as are their employers. Both rates vary according to the level of earnings and various other criteria. Self-employed people pay at a rate based on a percentage of their profits or gains.

In addition to ensuring eligibility for a state pension, National Insurance coverage (based on an unbroken record of contributions for a specified period) entitles an employee who loses his or her job to claim a **contribution-based jobseeker's allowance** for six months.

Those who have been unemployed for longer than six months or who have not been paying NI for a continuous period of at least two years are not entitled to this allowance but must instead claim an **income-based jobseeker's allowance.** This is means-tested, based on household income, and to be eligible unemployed people must fulfil various requirements in order to demonstrate that they are 'available for work' within 48 hours (including having childcare arrangements already made). Jobseekers may also be asked to attend training course or provide proof that they have been genuinely seeking work.

The national insurance system also provides for some earnings-related benefits in the case of illness or industrial injury, notably **statutory sick pay** and **incapacity benefit**. They also entitle women who have met the right conditions to claim **statutory maternity allowance** for 26 weeks; fathers who meet the conditions may claim **statutory paternity pay** for two weeks.

Other benefits

In addition to the **income-based jobseeker's** allowance already mentioned, a range of other benefits are payable in particular circumstances.

The only one which is provided entirely unconditionally is **child benefit** paid to the main carer of every child up to the age of 16 (or 19 if in full-time education).

These other benefits include a **disability living allowance** and a **carer's allowance.**

By far the most important, however, is **income support.** This is the basic means-tested benefit which is relied on for survival by all those who, for whatever reason, cannot sustain themselves by other means. It is a 'passport benefit' in that those who claim it are automatically entitled to a series of other benefits including free school meals for their children, free prescriptions, free dental care, vouchers for optical aids, free milk and vitamins for expectant and nursing mothers and for children under five and maximum housing benefit and council tax benefit.

Collective agreements

In the UK there is no national system of collective bargaining such as exists in some other EU countries. Industrial relations have developed in a more *ad hoc* manner with a large number of different trade unions, some organised on the basis of crafts, some on the basis of industries, some of companies and some on levels of seniority.

The types of collective agreement in existence have been equally heterogeneous: some being negotiated at a company level, some at a sector level, and some for small sub-sections of the workforce, based on particular occupational groups or departments, known as 'bargaining units'.

The 1990s saw a drop in coverage by union agreements and of union density. In 1990, only 36% of workplaces had no union members. By 1998 this proportion had risen to 47%. Table 31 shows the breakdown of union presence by company size in that year in the UK.

Table 31: Union presence by workplace size in the UK, 1998

	Union density	Any union members	Union recognition
Workplace size	% of employees who are members	% of workplaces	% of workplaces
25-49 employees	23	46	39
50-99 employees	27	52	41
100-199 employees	32	66	57
200-499 employees	38	77	67
500 or more employees	48	86	78
All workplaces	36	53	45

Note: base = all workplaces with 25 or more employees, weighted figures based on 1,889 managers' responses

Source: Cully *et al* , 1998

According to the Trades Union Congress, this decline is partially due to industrial restructuring (TUC Report, 2004).

'Poverty traps' and loopholes

Despite the introduction of tax credits, designed to avoid many of the poverty traps which were identified in the UK welfare system during the 1980s and early 1990s, there are still a number of ways in which the system fails to provide a reliable safety net for the entire UK population.

Some of these relate specifically to forms of 'flexible' work which, as we saw in the last chapter, have been growing in the UK.

Part-time workers often fall below the National Insurance lower earning level that also means exclusion from the right to receive benefits. Moreover, eligibility for sick pay and maternity pay is dependent on earnings. Thus individual part-timers with low earnings and without personal or occupational pension risk major marginalisation and reliance on means-tested social assistance in old age. The self-employed, too, are ineligible for many benefits. Even when their earnings are low enough to qualify them for some of these, difficulty in proving what their income is (in the absence of regular weekly or monthly payment receipts) often makes it impossible for them to claim. Temporary workers who may move in and out of work at very short notice (especially when they are working 'on call') also find it extremely difficult to provide convincing evidence of low income.

Other vulnerable groups, including home workers and newly arrived immigrants, find it difficult to discover what their entitlements are and often fail to claim benefits, or live in fear that the work they are doing is illegal.

4. RISKS AND CHALLENGES – THE POLICY DEBATES

The developments described in the last two chapters have not gone unnoticed. Indeed, there have been lively discussions at both the European level and at national level throughout the EU on the implications for welfare systems of the major structural changes that are taking place in economies at all levels.

The very different characteristics of national labour markets and welfare models have given these discussions a different flavour in each national context and, indeed, have drawn attention to a number of issues which are not universal but are peculiar to each national context.

From the foregoing chapters it is clear that although the various forms of flexible employment are growing in all the EU countries we have studied, there is considerable diversity both in the specific forms which they take and in their social impact. Phenomena which are apparently similar may have very different social meanings and economic outcomes depending on the specific social, economic, political and ideological context in which they occur. Because the debates are rooted in different policy contexts, it also seems likely that they are drawing on different assumptions both about what constitutes normal, or desirable forms of employment and about what forms of social protection a society should offer to its citizens.

Despite these many differences, however, some common themes emerge in the policy debates:

- How can economies be modernised with the minimum social damage?
- How can the escalating costs of providing social benefits to EU citizens be brought under control?
- How can flexible workers be provided with social protection?
- How can social solidarity be sustained in the face of growing unemployment?
- How can the unemployed be reinserted into the labour market?
- How can new employment be created?
- How can the new opportunities opened up by ICTs be exploited?

In this chapter we first summarise the situation at a European level before presenting a more detailed analysis for each of the five large Member States.

For each country, the discussion first focuses on those groups which are most perceived to be at risk in the current situation and then summarises the national debates about possible policy responses to the challenges which have been identified.

THE EUROPEAN PERSPECTIVE

Welfare systems present one of the key factors for future sustainability of European social and economic models. Their financial impact and influence on employment and quality of life for the European citizens can be very influential.

The year 2003 was situated in the middle of a coordination process about welfare systems, it is envisaged that this could be the beginning of a better future integration of welfare systems.

The main reasons that make improved coordination necessary are:

full flow for workers and capital, that can happen only if the right to retirement is transferable from one country to another;

the demographic emergency for the whole of Europe;

the changes occurred within national labour markets;

the consequences of national budget deficit, that represent a burden for all countries of the European Union.

There are three relevant pillars of European pension systems:

the first one is the benefit-defined scheme, and it is managed by Public Institutes,

the second one is the defined-contribution plan, which is ruled by private subjects,

the third one is based on personal volunteer contribution.

The current debate tries to define the measure of the retired persons income, depending on the three variables involved. The choices adopted in practise are oriented towards difference balances, which will of course vary in each national context and over time. However, they can be compared on three dimensions: on the public–private ratio; on the system type (either benefit-defined scheme or defined contribution plan); or on the measure of contributions and taxes.

Obviously, the similarities come from the necessity to face common situations, referable to two main factors. The first one is the ageing of European population, which exerts very significant pressure on society, labour market, productivity and public finance sustainability.

The response of the European Union to this challenge is aiming to promote the active ageing of elderly workers, through reforms of the labour market and to the modernization of welfare regime.

The proposed prolongation of working life requires an action facing four aspects:

incentive to work longer;

promotion of life-long learning, to avoid the obsolescence of competences;

improvement of the working conditions;

keeping of the general health state among elderly people.

The second common factor is related to the transformation of the labour market and "atypical" working careers.

Young people at their first employment and in general all active workers have working careers that are much less stable than those of their parents. This makes it impossible for them to obtain the welfare guarantees that were received by earlier generations. At the same time, a reduction of contributions can be observed. shifting the present welfare systems towards the benefit-defined scheme.

The European Union pursues actions fostering employment, in particular those involving women, elderly workers and immigrants. Moreover, it seems very suitable to integrate labour policies with welfare reforms. That implies considering a drop in social protection and to offer useful alternative instruments to keep regular contribution and to obtain the right to social security benefits.

However, the conclusion of all the recent Councils of the European Union is that the present welfare systems are essential components of our model of development. European welfare has contributed to an affluent society, together with the economic growth and represents a unique experience in the world.

The high social quality of life of the European citizens is a source of social integration and, at the same time, a reference value to be guaranteed in the debate about pension sand, more in general, social security reforms.

Policies of the European Union on Social Protection

Social protection does not fall with the EU's legally defined competences. Under the subsidiarity principle, welfare systems are left under the influence of every State, but today the interconnection between member countries are very clear and a supranational approach seems to be necessary, in order to elaborate common strategies.

The objective of such a strategic approach would be to promote the positive aspects of every system and to adapt the instruments to national contexts. Many European Councils have agreed upon the principles and methods used for social protection.

The European Council of Lisbon (March 2000) was very important in this context. This was when the objectives of sustainability and suitability of the European pensions systems were defined. The concept of open coordination among national policies was introduced with the key aim to include people left out from communitarian law (as social protection).

The European Council of Goteborg (June 2001) approved three specific principles for the reform of the social security systems:

suitability of the benefits, to prevent social exclusion;

financial sustainability;

flexibility of systems, to adapt to flexible models of employment.

In the European Council of Laeken (December 2001), the application of the open coordination method to the pensions sector was decided, to help member States formulating common policies of reform. The three key actions were renamed "suitability, sustainability, modernization" and were specified into eleven concrete objectives. On this occasion, the member countries agreed to produce an integrated report about national strategies, drawing together the different national experiences and approaches to developing methods to pursue these three main principles indicated above.

The European Council of Barcelona (March 2002) invited the member States to accelerate the reforms, stressing the accent on the integrated report of Commission and Council about Pensions. At the same time the Council proposed to reduce incentive to retirement and promote flexible solution to exit from the labour market.

The European Council of Bruxelles (March 2003) underlined the urgency of the need to face matters relating to social protection and employment in an integrated way. The principle of solidarity was endorsed as a reference value to assure suitable pensions for the elderly.

The European Council of Thessalonica (June 2003) gave guidelines for policies for economic growth and employment with the aims defined as:

to pursue balance between flexibility of employment and suitable levels of social protection;

to facilitate mobility and life-long learning to preserve the quality of life;

to perform the pension reforms quickly.

The European Council of Bruxelles (October 2003) stressed the necessity to strengthen the process of coordination of the policies adopted by member States on matters of social protection, in order to produce a harmonisation of the systems.

The recent EU enlargement is going to have a major economic impact and clear consequences on the social protection systems. The aim of the European Union is to extend the method of open coordination to the new member States. In this way there will be a 'soft' harmonization between different regimes, without any imposition of law. The preferred solution is the construction of common indicators on the suitability of the future social benefits and on their sustainability. These indicators will become instruments to monitor the situation of the present systems.

In terms of financial sustainability of the social security systems, even within a common strategy, national solutions should be adapted to the different specific situations, because every regime proceeds from its own unique traditions and assets chosen in response to the needs and demands of its own citizens.

To this end, a classification of the social protection systems in Europe can be useful, Boeri (Boeri, 2002) presents a typology, not dissimilar to that of Esping-Anderson (Esping Anderson,)four homogeneous groups of countries, having similar protection systems have been identified:

Northern countries (Denmark, Finland, Netherlands, Sweden). This group is recognizable for social protection systems in which social protection is considered a universal right. Social benefits are paid out by public authority and the financial support comes from taxation. In facts, the State acts with a distributive function, answering the demand of social protection coming from citizens. Workers receive even further integrative benefits tied to professional, compulsory funds. These countries have a tradition of full employment, helped by the public sector and by universal assistance programmes, with an expense of the order of one third of the PIL. The fundamental problems of these systems are the financing and the necessity to sustain high employment in the private sector.

Anglo-Saxon countries (Ireland and the UK). This group features relatively large social assistance exerted by the third pillar (based on personal voluntary contribution schemes). Money transfers are primarily oriented to people of working age. Activation measures are important as well as schemes conditioning access to benefits to regular employment. On the labour market side, this model is characterised by a mixture of weak unions, comparatively wide and increasing wage dispersion and relatively high incidence of low paid employment, halfway between Europe and the US.

Continental countries (Austria, Belgium, France, Germany, Luxemburg). This group shows a strong relationship between employment and benefits paid out. The Unions pay contributions to obtain services, with the intervention of the State to settle any eventual deficit. Irregular employment is diffused, but the nexus between underqualification and poverty is weaker than in the Anglo-Saxon regimes, because there are strong correctives to the proportionality between contributions and social benefits to help weaker categories.

Mediterranean countries (Greece, Italy, Portugal, Spain). The last group presents more recent social security systems, displaying different levels of maturation. They depend on the employment status of the subjects and are characterised by a high fragmentation in the required contribution and in the payment of benefits. The problems of this model are the financial support and the disparity between employed and unemployed subjects. Furthermore, there is a large share of irregular employment without any form of contribution.

FRANCE

Groups most at risk

In previous chapters, we have analysed the main features of the welfare state in France and the possible loopholes concerning some specific populations. This section is a broad overview of the main debates and questions concerning access to social protection.

Discussion in France about groups which would be most at risk of exclusion from coverage in the national welfare system has not occurred as such. However, some have stressed the fact that unemployment was a major source of exclusion from social protection since most social rights are derived from the employment status (Belorgey, 2000). Moreover, as it has been noted above, just around 50% of unemployed people do get an unemployment benefit. That does not mean that other unemployed people are "excluded" from social protection, since they are theoretically entitled to some guaranteed minimum income (RMI) if they are over the age of 25.

Attention has also been given to the expansion of low wage employment. Since most social benefits are directly linked to the level of past wages, low wage employment also means low social protection. In that sense, low wage employment might exclude workers from social protection coverage if coverage is to be understood as the access to an "adequate" protection against social risks.

The situation of immigrants has always been worrying. Immigrants, if they are legal residents in France, should theoretically have access to social protection. However, it is known that illegal immigration does still exist and allows some employers to "hire" immigrant workers under minimal conditions (very low wages, no social protection). This situation is an extreme example of the situation that atypical and precarious workers face today even if they are legal residents in France.

As a conclusion, one could say that the labour market has developed in such a way that a growing number of workers earn a low wage so that their social protection benefits are also very low. Unemployment and low wage employment are the most serious concerns for access to social protection.

In 1998, a framework bill on combating all forms of social exclusion was passed in France. With this bill, France became the only European country to have on its statute book a broad-based piece of legislation encompassing jobs, housing, debt and health. In June 2004, the French government presented a social cohesion plan. The aim is to take an integrated approach to social exclusion, seeking simultaneously to combat problems in

employment, housing and society more widely. The question remains whether these bills and plans will help in fighting social exclusion in France.

Current policy debates

Generally speaking, in France discussions on the subject of restructuring turn on the question of which players and systems should be given the responsibility of handling employee regrading (local government, the companies, or what?) and on the forms that this responsibility should take (corporate financial responsibility, negotiations, the consultation of organisations representing the personnel, etc).

Today, discussions focus more particularly on the legal framework regarding redundancy following the *Larcher* bill on the reform of redundancy procedures, which aims chiefly at relaxation of the conditions governing redundancy (shortening of the period of recourse against redundancy for companies, the possibility of dispensatory agreements on collective redundancy procedures – agreements on methods)), combined with the implementation of new social legislation for employees (projected right to personalised regrading and possibly an intermediate contract).

Additionally, a number of public reports have recently been published; these also structure current discussions around the question of social responsibility in the event of restructuring.

In October 2003, the Economic Analysis Council (Blanchard and Tirole, 2003), an advisory body to the prime minister, published a report recommending the introduction of a tax on companies making personnel redundant in return for simplification of their recovery plans: The company's financial contribution would be compensated by the possibility of greater flexibility. Moreover, only those companies laying off personnel would contribute to the National Employment Agency for jobs in industry and commerce (UNEDIC), an unemployment insurance organisation. The report also recommended eliminating the distinction between fixed-term and open-ended contracts and replacing them by the creation of a single employment contract (to include a trial period in which a company could dismiss a person without having to pay a tax).

The recent Camdessus (2003) report recommends doing away with the special provision governing redundancy; it also contains certain proposals such as taxing companies that lay employees off, in return for simplification of the relevant legal machinery.

Finally, the very recent Cahuc-Kramarz (2004) report (*From Insecurity to Mobility: towards a Professional Social Security*) puts forward proposals for a more effective French employment market (including a section on redundancy). It raises numerous questions concerning the unions. The CGT (French trade union) feels that whilst this report opens

the way to discussions on the implementation of "a professional social security", its main thrust still consists of "relieving the company of the heavy costs incurred by regrading". In the opinion of the CGT, there needs to be a stronger commitment on the part of companies to enable employees to enjoy a "real right to regrading".

The general idea of the social aspect of the current reform of redundancy procedures is to give employees that have been made redundant a personal right to redeployment for the purpose of facilitating their regrading – a right linked with the financial security that would be ensured by an intermediate contract — (Tuchszirer, 2005). Some people see in this a return to the system of retraining agreements; these came into being in 1986 and at the time represented a form of "outsourcing of the regrading process, (… which seems to take account of) the difficulty of requiring the company to assume responsibility – a responsibility which is already incumbent on it – to regrade employees that it intends to lay off" (Tuchszirer, 2005).

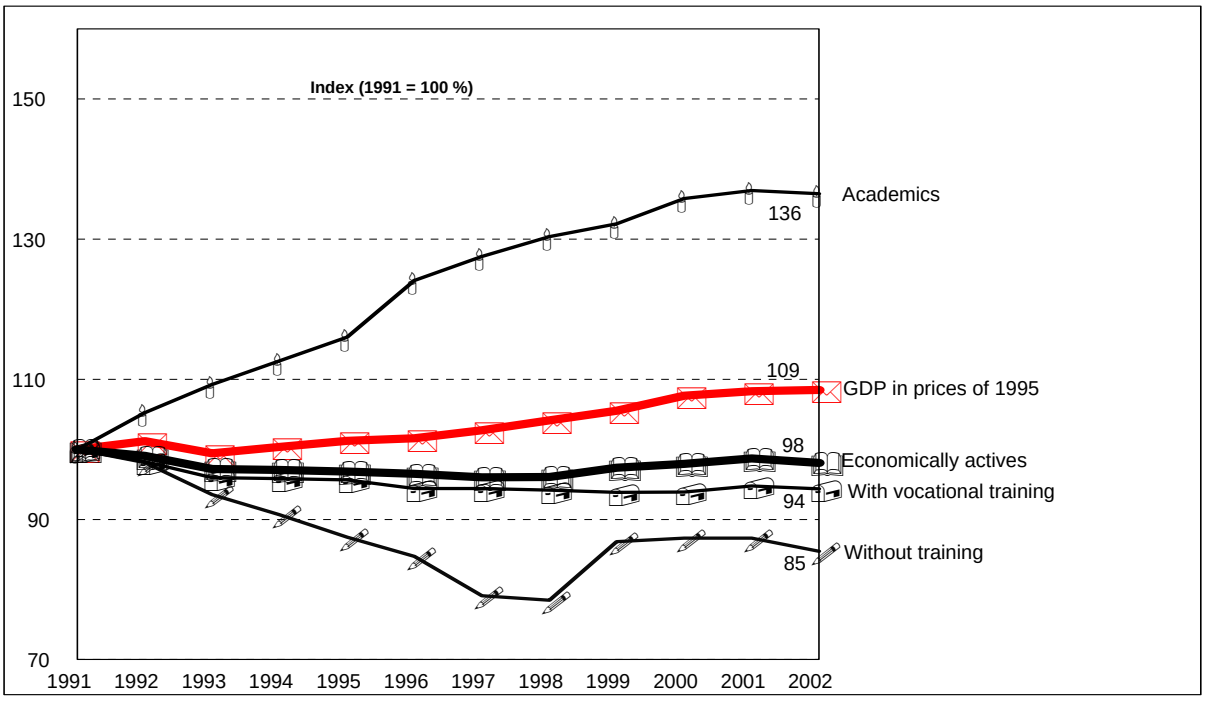
Discussions on restructuring are also linked with the way in which handling employee regrading has changed (under the law and/or interprofessional agreements). Staff and management intervene directly in restructuring activities via UNEDIC, which is managed equally by the unions' and the employers' organisations and which itself manages unemployment insurance. More especially, UNEDIC manages the above-mentioned system of retraining agreements. This system was introduced in 1986 under an interprofessional agreement negotiated by staff and management. It was a sort of social counterpart with a greater room for manoeuvre that the law gave the company as regards employment management (Tuchszirer, 2005): the law made redundancy easier and a negotiated system guaranteed the employee(s) the right to be regraded. The retraining agreements, which also covered redundancies not subject to the recovery plan requirement, relieved companies from the management of and the obligation to assist with regrading. The retraining period, like the entire system, was funded and managed primarily by UNEDIC together with staff and management. (implementation of the system and the regrading of the personnel made redundant was the responsibility of ANPE, the National Employment Agency). C. Tuchszirer points out that following this transfer of the responsibility for corporate regrading to the public authorities, the 90's saw the employees retraining process revert to the company (the retraining agreements were abolished in 2000). In the discussions on the Larcher bill on restructuring, it was once again the question of responsibility for regrading (company/government/ staff and management) that came to the fore.

GERMANY

Groups most at risk

Young People, old people, women and foreigners belong to the labour market's "problematic groups" in Germany. The danger of unemployment and the difficulties for unemployed citizens to find a new job increase, if the person is also low qualified. For example, in September 2002 about 43% of the unemployed West Germans had not completed vocational training. The number of unemployed academic graduates ran up to only ca. 6%. (Federal Statistical Office 2004d: 119)

Figure 23: Development of employment and of the gross domestic product (GDP) with regards to the level of qualification 1991 to 2002 in Germany



Source: IAB 2003, own calculations

Developed societies become more and more societies of information, where high qualification standards are required from their members. In these times, an efficient battle against unemployment has to consider exactly this: a reduction of people with low education and the creation of sources of income for low qualified citizens.

In the public eye, the labour market's current problems are often attributed to the weak growth of German and international markets. This makes it necessary, to point to the specific meaning that the level of qualification has for employment. Long-term-analyses of the West-German labour market carried out by the Institute for Employment Research (IAB) show that even periods of economic expansion with a growth of about 4 to 5 % per year, did not create new opportunities for low qualified people. At the same time, the positive development of employment among graduates did not stop in periods of low growth or recession. If anything at all it was slowed down. (Reinberg/Hummel 2003).

Figure 23 considers all of Germany and shows an excerpt for the relatively short period of time between 1991 and 2002. It demonstrates that workers without vocational training are - regardless of economic growth - constantly pushed off the labour market, even though the total level of employment stays the same. One exception has to be explained: an apparently rapid rise in the employment of low qualified workers can be observed in 1999. This was caused by a changed registration process for marginal employed persons, who from that time on had to be registered by name. This was the first time that these people were officially counted within a new statistic of the Federal Employment Office. Hence, the large apparent rise in untrained employees was a statistic artefact.[1] Despite this artefact the index value for the employment of workers without vocational training has sunk in 2005 to 85 % of the same employment in 1991.

While the employment for untrained persons has been falling off during the last ten years and while also the employment of manpower with a vocational training showed below average growth (index value 2002: 94 %) the development of employment for graduates ('academics' in the figure) was consistently positive. The employment of graduates from universities and colleges / polytechnics increased during this period of time by 36 %.

With regards to the general situation and to the changes in employment based on technological changes, this means that unemployment, which is based on low qualified manpower, is not a cyclical problem, but goes back to structural causes. The market value of simple work jobs is constantly reduced by a growth in productivity (through technological developments) and by the demand for new and higher competences within an information society. This means that more and more structural changes reduce the economic conditions of utilization, which are necessary for a greater security of employment and social conditions.

For this reason, Germany is – more than ever - confronted with the question of how far it can absorb a growing amount of low qualified manpower and of an expanded sector of low income. Currently the country is doing both: a) The support of *mini-* and *midi-jobs* strengthens employment within the sector of low income; b) The latest reforms of the labour market ("Hartz IV"), which became effective on January, 1st 2005, introduce "employment opportunities" for the long-term unemployed. These "employment

[1] Employees in mini jobs (Marginally employed) typically are less qualified and elder women.

opportunities" include the obligation to accept so called "*One-Euro-Jobs*", which provide an assigned work placement that pays extra money of about 1 Euro per hour. In case of refusal the payment of the "unemployment benefit II" will be shortened significantly.

Current policy debates

In the political debate on the effects of current technological changes (especially within the ICT-technology) on the development of employment, representatives of economy, politics and trade unions agree especially in the following ideas and estimations:

If Germany wants to support a positive development of employment and if it wants to reduce the risks of unemployment for disadvantaged and low qualified persons, it has to take over a leading position with regard to the application and production of information technology on the global market. This means a) a fundamental promotion of an innovation active economy and science and b) intensive and joint efforts for the development of technological-digital competences at all levels of society. In order to achieve this goal, the government has set up several support programmes and projects at a national and a state level, which are partly supported and partly initiated by industry. Important programmes and initiatives are e.g. "*Initiative 21*" (initiated by economy), "Internet for everybody" (set up by the government in 2000) and "*Germany – society of information 2006*".

In order to reduce the risk of unemployment and social exclusion, great efforts are made, to introduce those citizens, who do not have much experience with the "digital world", to the PC and the Internet. The above-mentioned programme "*Internet for everybody*" is one of these attempts. It was launched in September 2000 by the government and led to the creation of the foundation "*Digital chances*", which was set up in 2002. The foundation tries to introduce elderly people, (single mother) women, low qualified persons and disadvantaged young people to the Internet in a sustainable way. It combines more than 6,000 institutions, which provide access to the Internet and offer the imparting of digital competences. Moreover, the foundation provides extensive and targeted documents, information and support for (kindergarten) teachers, employees of homes for the elderly, youth workers, etc.[1]

There are more than a hundred government-funded programmes and projects that support and push forwards the distribution of IT. Among them are 14 projects, which are dedicated explicitly to "education & qualification", "gender mainstreaming" and "equal opportunities". The support of Internet certificates for long term unemployed persons is

[1] The foundation „Digital Chances" was founded in January 2002. Founders are the university of Bremen and AOL. Further partners are the consulting enterprise Accenture and the Burda Academy. The foundation springs from the project „Network digital chances", which started at the university of Bremen in March 2001. It was the programme's goal to set up an information system, which deals with the problems of the so called „digital divide". At the same time, the governmentally funded programme should develop instruments to overcome the mentioned divide.

one of these governmentally run projects. The intention is that the unemployed will become affiliated with the modern labour market through a training in the Internet. About 18,000 persons – among them 10,000 women – participated in the programme in 2002. In general great political efforts (more and more through private-public partnership) try to overcome the "digital divide" that has even grown during the last years. To reduce this "digital divide", an important aspect will be a reduction in costs for Internet access.

Similarly to the national level, a social integration of IT is also supported at a state level. Northrhine-Westfalia, for example, has set up the project "*mekonet*" (media competence network). *Mekonet* creates and provides a network of some 190 institutions from different working-fields, which disseminate specific media competences in all fields of society.

An increased use of IT leads to a sustainable reduction of the "digital divide". In order to achieve this goal, German experts agree that the most important condition for the society's capacity to use these existing chances is based on an expanded, systematic integration of IT into school and vocational training. Part of this is the overall provision with access to the Internet for all schools, the support of special teaching units for schools and vocational training, the equipment of all public libraries with Internet access and a increasing integration of IT in vocational further education.

The social partners are particularly active in IT training. Together with the government, they have developed a new IT training- system that offers a qualification, which is adapted to the labour market. It fulfils the requirements, which trade unions and enterprises claim for the IT sector and offers a new opportunity to many employees to develop their careers. It especially offers well-accepted further education qualifications to enable lateral entry to the IT sector.

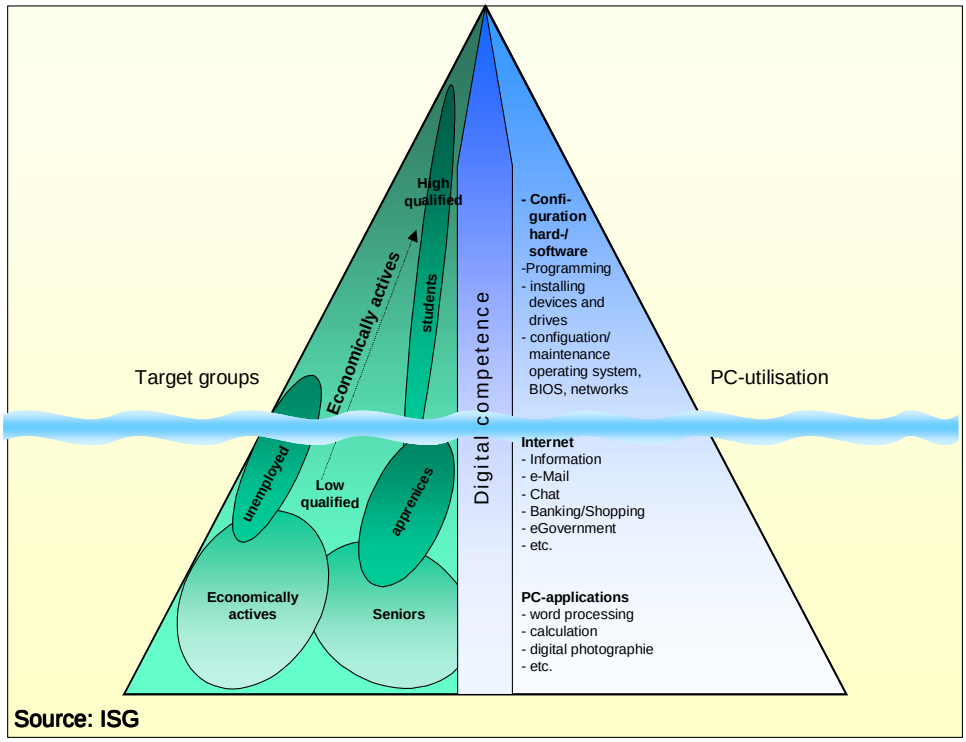
While some researchers claim the significance of IT for society's development, other researchers lead a controversial debate. They discuss, in how far an obvious and increasing digitalisation of life- and labour environments create their own dynamic effects or whether the new "digital divide" is not actually the "old" traditional social borderline. The question, if an overcoming of this traditional social division in losers and winners could be achieved or at least reduced through a sensible use of the IT-revolution and the new technologies, is not ultimately answered yet. Up to now it cannot be denied that digital communication technologies reflect more or less the "analogue" societies. The German knowledge society, which is increasingly based on these new technologies, is still marked by traditional social problems such as exclusion of minorities, an unequal access to resources or the unevenly distributed risks and opportunities in relation both to the labour market and to social security.

The Institute for Social Research (ISG) has suggested a concept for the assessment of the effects of the abovementioned "Internet for everybody" initiative to the German

government. The heuristic chart demonstrates that digital competences are still very different throughout the different groups of employed and unemployed citizens in Germany (see illustration 11). It also demonstrates that these differences follow mostly the traditional "logic" of the labour market (Institute for Social Research, 2004). It uses the image of an iceberg to illustrate the main part, which lies under water, represents the large number of people, who have no or hardly any digital competences. This group can be said to represent the those groups on the labour market who are most at risk in the emerging digital economy.

In conclusion it has to be stated that up to now Germany has not managed to use the great emancipatory potentials of modern technological developments in order to reduce current and established risks on the labour market and in the welfare system. In this context it would already be a success if modern technology could assist in a process in which differences and social borderlines at least do no get any worse.

Figure 24: Aspects and target groups of digital competence



Source: IAB 2003

ITALY

Groups most at risk

In Italy, workers who lack a permanent worker status, given the discontinuity of their jobs, lose or simply lack the eligibility to use the entitlements that depend on employment. This kind of risk is particularly high for the long term unemployed, which are, roughly, 50 per cent of the overall unemployed. The young in search of their first employment are not entitled to any benefit. The *reddito minimo d'inserimento*, to help working age people in search of an employment, especially the youth, which was experimented in the last legislature has been practically abolished and delegated to the regions (Geroldi, 2003).

A very large group of the active population, whom are vulnerable with regards to the stability of employment and the continuity of income, are the so-called "*Parasubordinati*", or "Pseudo-independent". This is a very particular phenomenon of the Italian labour market. It is not very easy to quantitatively determine the size of this phenomenon. In any case two figures are available: one represents the registered workers at INPS, over many years, as *Parasubordinati* and this figure is over two million workers.

The second figure, also from INPS, indicates individuals who, effectively, are working and pay social security contribution in a specific time period. These number about one million and two hundred thousand (year 2000). It is generally also assumed that almost 90 per cent of these workers are, in practice, dependent workers. It is clear that this is a very high portion of workers in precarious employment. Their employment has indeed no job protection, no unemployment benefit and no maternity leave. The contributions paid in for social security are also lower (Fontana, 2004).

It is worth noting that the vast majority of Call Centre workers are hired using this type of contracts. A new law was introduced concerning the labour market (2004), which is aimed to reduce this phenomenon, thus limiting this kind of employment relationship, towards a project related employment. In other words, the "*parasubordinati*" type of employment will have to be transformed into a dependent type of employment relationship. But the possible outcome of the law is at this moment uncertain and controversial.

Current policy debates

The main issue of the current debate in Italy is centred on the balance between labour flexibility and social protection. Flexibility and deregulation of the labour market are generally deemed to be the necessary conditions needed to implement new methods of work organization and to be able to increase the level of general employment, particularly concerning female and youth employment. Starting from this assumption, the Italian government has enacted a law, between 2003 and 2004, driving the labour market in the direction of an increased flexibility (Zoppoli, 2004). This direction has led, among many other aspects, into temporary and fixed term contracts, part time, contracts which are project-based, *work on call,* and so on. A significant part of these measures particularly

affect new types of jobs within the area of the new services being provided, such as the telecommunications industry, principally the sectors related to outsourcing.

The law has been an issue of tough controversy among the political parties, trade unions and labour law experts. The objections and reservations were concentrated on the fact that further extension of flexibility of the labour market is bound to expand the precariousness, either through generating employment instability or through removing the certainty of a stable income (Romagnoli, 2004). Critics of the new law consider that the labour market is already widely flexible, as is proven by the high improvement of the employment rate in the last years, even though the average GDP growth was relatively low (Accornero, 2003). According to this thesis the main problem of the Italian labour market is specifically related to the "*Mezzogiorno*" (or the southern regions) where unemployment is double the national average, particularly affecting women and the young.

Within the central and northern regions, which make up two thirds of the country, unemployment is below the European average, and in many areas, the labour market is not far from full employment. Therefore the problem of unemployment in the south can be demonstrated not to be a question of lack of labour flexibility, given that the rules in the involved territories are the same, but a symptom of a huge lack of employment demand, stemming from different reasons, including insufficiency in infrastructures and investments along with the crisis of the old industrial sectors (SVIMEZ, 2004).

In other words, there is a fear that an excess of deregulation of the labour market will in the end result negatively on the investments and technological innovations needed to the increase of productivity and a competitive environment, because for the goal of acquiring competitiveness, the main objective is squarely focused on labour cost reduction, and lower wages, instead of technological innovation and a better performing work organization.
Unions have strongly opposed the deteriorating of employment conditions, aiming to reconcile a regulated and a negotiated flexibility of the labour market, which guarantees of a certain level of working condition and employment protection (Carrieri, 2004). In this regard, it is worth drawing attention to a recent agreement agreed with Atesia, the most important Italian Call Centre firm, designed to stabilise the work force by means of a transition from a "*parasubordinati*" employment status to various types of dependent workers' contracts (Rassegna online, 2004).

Another important issue within the current debate involves pension reform and its impact on the future of the labour market (Lettieri, 2003). The reform involves shifting to a calculation of pensions based on contributions paid during the whole working life (and not only, as it was before, on a limited years related to the last period of the working life). This will significantly lower the pension for many groups and brings the risk that precarious forms of employment will deeply condition the amount of the pension, thus fuelling the risk of poverty for future retirees.

There are also current debates concerning the structure of collective negotiation (Lettieri, 2004). According to one argument, which is consistent with stronger liberalization of the labour market, trade unions should negotiate only at the firm level, giving up the national one. But this is considered in contrast with a position aiming to establish a set of guarantees for all workers, independent of their contingent strength and in defence of the more vulnerable groups.

POLAND

Groups most of risk

The risk of exclusion from the social security system for specific groups differs depending on the type of social security system.

Considering the formal access to the Polish social security system we can talk basically about the exclusion from social insurance schemes (in the current legal meaning of this concept).

The social insurance scheme covers only legally working persons and therefore the benefits provided within this scheme are not available for other categories of persons. Persons who do not work or work illegally have no access to insurance in case of old age, invalidity, sickness and employment injury. This is a serious social problem in the light of the high unemployment rate in Poland and the low economic activity rate (Czepulis-Rutkowska, 2003).

Persons outside of the social security system do not collect entitlements to long-term benefits. If they have never worked they will have no entitlement to old-age benefits or invalidity pension. If their employment periods were short, the amount of benefit may be very low (especially in case of old age benefit with a defined contribution). Access to minimum old-age benefit is limited.

A large group of informally employed persons is one of the characteristics of the present situation in Poland. This group is not covered by the social insurance system at all. It includes among others workers working in dangerous conditions (i.e. in the construction industry). They are exposed to employment injuries and they are not provided with an adequate protection.

This informal sphere offers employment mainly to Polish citizens but also for immigrants from the neighbouring countries (seasonal workers). It is hard to evaluate the scope of employment of foreign citizens in this "grey" zone of the economy but it can be presumed that in majority of cases these employees have no social insurance coverage

It should be stressed that the health care insurance scheme has a much broader personal scope than the social insurance scheme. However the low allocation of resources to the health system and inefficient organisation of the health care system leads to difficulties in accessing the health care system. (CASE, 2002; GUS, 2004). Persons from lower income group are excluded from private health care system due to high prices of medical services.

The two main systems addressed to persons (families) with a low income are available for all persons meeting the income criteria. However although the family benefits are obligatory, the social assistance benefits are discretionary. Therefore some persons meeting income criteria may not receive benefits from social assistance or the amount of the received benefits will be low.

The long-term unemployed are not eligible for the cash benefits (for the unemployed). They can apply for the social assistance benefit, but, as already mentioned, it is not obligatory, therefore this group can be excluded from social security cash benefits.

Current policy debates

The trends in the recent reforms of social security can be interpreted as a move towards individualization on one hand and introducing the means testing on the other. The individualization can be seen in the old age pension reform as the redistributive element was withdrawn within the pension formulae. This change will affect low earners as the replacement rate for them will decline (Czepulis-Rutkowska, 2000).

As for the means test introduced within the benefits for families with children it is believed to better target those in material need, however there is no proof for this impact yet.

Many researchers in the field of social policy are trying to identify the groups most likely to become poor. In their studies families with many children, single parents families and those with an unemployed member are often indicated as being within the risk of poverty (Milanovic, 1997), (Bednarski, 2000) (Czapiński, Panek, 2001). This is the indication that perhaps the effective coverage and/or the benefits amounts for these groups is not sufficient (Rymsza, 2004).

UNITED KINGDOM

Groups most at risk

The UK's departure from its post-war welfare model took place earlier than was the case for other European countries. The 1980s saw major reforms in the benefit system as well as changes in labour market legislation and these have now been in place long enough for some of the longer-term effects to become apparent. The UK can, therefore, in some respects, be regarded by some other Member States as a laboratory for the examination of the implications of some of the innovations that are only now being introduced in their own national environments.

It must be said, however, that a number of the negative effects of the reforms of the 1980s and 1990s have been identified and addressed by the New Labour Government which came to power in 1997.

During the 1990s a series of 'poverty traps' were identified in the British welfare system, largely created by mismatches between the benefit system and the labour market (Parker, 1995). it was argued that these traps were created by the first wave of reforms, in combination with the results of the major demographic changes took place from the 1960s on and which created the first major challenges for the Beveridge model of the welfare state (including the growing divorce rate, the rise in single-parent families and the growth in immigration). These 'traps' included an 'unemployment/income support trap', an 'invalidity trap', a 'poverty trap', a 'lone parent trap', a 'part-time trap', a 'lack of skills trap' and a 'savings trap'.

Most of the 'traps' refer to a situation where a claimant's household would be worse off if he or she entered employment than while claiming benefit. Huge disincentives to entering the labour market are thereby created and, because the household is the unit on which means are assessed, whole families thereby become trapped in poverty, leading to a polarisation in society between cash-rich and time-poor two-earner households and cash-poor (though time-rich) no-earner households.

Many of these 'traps' still exists for people in certain circumstances (e.g. households with large numbers of children) but in general the majority of the anomalies identified by Parker have been successfully addressed by a combination of tax credits to the working poor and the introduction of a minimum wage, both initiatives of the post-1997 New Labour government. Other specific measures designed to support 16-18-year-olds wishing to stay in education, help with childcare costs, and provide targeted support to lone parents, carers and other groups have also been developed to partially address some of these problems.

It is however argued by some critics that the tax credit, in combination with a very low minimum wage, effectively provides a subsidy to low-paying employers from the taxpayer and that a higher minimum wage would be a more socially equitable solution. To this, the counter-argument from the employers is that a high minimum wage creates a disincentive to create new jobs.

It should be pointed out, however, that although these new measures have removed some of the barriers to entering full-time, permanent employment, the relative security of the guaranteed income from benefits, however low, may be preferable for many people than entering impermanent or uncertain employment. In the case of transient employment, such problems are further accentuated by the delays experienced in re-entering the benefit system when the work has come to an end - a period during which the household may have no means of support whatsoever.

Although there is some NI coverage for flexible workers, many part-time, temporary, and on-call workers are likely to be excluded. Anecdotal evidence suggests that some employers deliberately control the amount of work given to part-time workers in order not reach the threshold that makes payment of benefit compulsory . On-call workers may be treated as employees but have no guarantee of a fixed number of hours and therefore may not always earn above the stated minimum and may not be deemed to be 'actively seeking work' and may therefore be unable to register with the unemployment office during periods without work . In addition, many flexible workers (like homeworkers, for instance) are isolated and have little knowledge of their rights . Women who have had a second child with a short gap after the first or anyone who has taken a break to look after an elderly or disabled relative may well not have made sufficient contributions to qualify for benefits in any case.

The difficulties involved in fulfilling conditions for contributory benefits for flexible workers mean that when they become unemployed they are obliged to rely more heavily on means tested benefits than permanent full-time employees.

There are also problems for some flexible workers in claiming the statutory minimum wage. Many home-based workers, for instance, are paid piece rates which makes it difficult to prove how many hours they are really working. For instance, teleworkers doing data entry are often paid by the keystroke, with the rate being recalculated for each job, resulting in a pay rate that fluctuates from job to job as well as according to the skill of the worker and the difficulty of the task. Similarly, over 80% of homeworkers involved in manufacturing or packing processes are paid 'by the piece'. For such groups, the idea of a 'normal' rate of productivity has little meaning. They might, for instance, work more slowly than the worker on whose speed the rate is based; or workers may be expected to correct mistakes in their own time; or they may be new to the job and not as fast as more experienced workers; there may be frequent interruptions which make it difficult to

distinguish working from non-working time, or they may work more slowly as they become more tired towards the end of the day.

Groups identified as being particularly at short-term risk under the present system include asylum-seekers and refugees (from whom the right to income support whilst their application is being processed has been withdrawn), members of minority ethnic groups, the low-skilled, and lone parents. The longer-term risk associated with a drop in pension entitlement extends to broader groups across the labour market, especially those who are self-employed, those whose labour market participation is intermittent and part-time or temporary employees.

Because of the strong geographical polarisation within the UK, with the vast majority of new high-tech and service-sector employment being created in the South East region. There remain pockets of very high unemployment in some regions where, in some cases, three generations of the same family can be found in long-term unemployment. In some deindustrialised parts of the North West of England and West Midlands, the combination of high unemployment and high presence of second-generation immigrants has already generated considerable racial tension.

The evidence points to a range of different barriers which, taken together, either discriminate against flexible workers or create obstacles to entry into the labour market on a flexible basis. Although this has been alleviated to a great extent, some also create barriers to entering any form of employment that pays less than a household can receive in direct or indirect benefit once work-related expenses have been taken into account.

Current policy debates

In recent years, some concern has been expressed that the British benefit system has moved further and further away from a rights-based approach to one based on individual need. This necessarily entails a series of tests of entitlement and the establishment of cut-off points below which benefits are not payable. This is sometimes regarded as off-putting and humiliating for claimants, creating barriers to claiming even those benefits to which people are entitled. The complex bureaucratic procedures involved are also seen as posing deterrents to claiming, especially for people with learning or communications difficulties and newly arrived immigrants.

As far as flexible workers are concerned, thresholds form perhaps the most detrimental feature of the National Insurance regulations. Workers can only make contributions if they earn above the lower earnings limit. Women who do not qualify for Statutory Maternity Pay, for example, may be entitled to Maternity Allowance but only if they have paid at least 26 weeks National Insurance contributions in the 66 weeks before the baby is due . Workers not entitled to Statutory Sick Pay may claim Incapacity Benefit, but only if they

have paid National Insurance Contributions which are equal to at least 25 times that year's lower earnings factor paid in any tax year. Claimants must also have paid or have been credited with contributions producing an earnings factor equal to 52 times the lower earnings level in the last two contribution years before the relevant benefit years . Credits may be obtained if, for example, claimants are receiving Unemployment or Incapacity Benefit or Statutory Sick Pay or, if they are on low income and are not earning enough to pay contributions but are registered with an Unemployment Benefit Office . In theory, self-employed workers may be entitled to Incapacity Benefit, but only if they have made the correct number of Class 2 National Insurance contributions.

As in most European countries there is an ongoing debate in the UK about the future of the benefit system, in many cases triggered by the need to contain its rising cost. Often this debate is closely intertwined with discussions about the best means to reduce unemployment levels. Sometimes it is also associated with ideas about the need to transform the 'culture of dependency', to stimulate new enterprise or to increase competitiveness by reducing non-wage labour costs.

As in other countries, the main focus of the British debate on the future of the benefit system is on how to contain the costs of a system which is facing ever-increasing demands on it at a time when the base of economically active contributors to it is shrinking as a proportion of the total population. The response of the last government was to reduce costs wherever possible, to tighten up on benefit fraud (with highly-publicised campaigns against fraudsters, increased penalties for fraud and increased resources devoted to the detection and prosecution of offenders) and to target resources more precisely at those in need. This had the effect of increasing the proportion of benefit which is means-tested and decreasing the coverage of rights-based contributory benefits. It should be noted, however, that these attempts failed to shrink the overall social security budget which continues to grow inexorably.

These developments have been accompanied by a growth in commercial forms of social insurance provided privately in the market. These include private pension schemes, sickness insurance, insurance against unemployment, insurance against industrial injury and mortgage protection insurance. Because of the commercial risk criteria which such schemes are obliged to apply, however, those who need them most are least likely to be covered by them.

There has also been an explosive growth in private forms of previously public services such as childcare, hospital care, care of the elderly and care of the chronically sick or disabled. Once again, the need to charge commercial rates places them beyond the reach of the neediest members of society except where public subsidies are paid.

The current government retained many of the features of this system, such as selectivity, the encouragement of self-help, market freedom and competitiveness although these are modified by concepts reminiscent of the Scandinavian social-democratic welfare model,

such as social citizenship, solidarity and a commitment in principle to full employment'. It has also taken major steps towards the integration of the tax and benefit systems, with a view to eliminating many of the 'traps' identified during the 1990s.

Some of these developments have been criticised by trade unions who would prefer to see a strengthening of the insurance model of social welfare, combined with a high minimum wage and initiatives designed to encourage full employment, if necessary through increased public investment. They also argue strongly for a stronger National Health Service and a resistance to privatisation.

There are, however, other voices to be heard in the debate. One idea which is gaining support from a surprisingly diverse range of political positions is that of a basic income payable as a right to all citizens. The principle underlying this idea is the guarantee to each citizen of a subsistence income, paid for by some form of social transfer (Dwyer, 2004, Otsuka, 2003) It is, however, difficult to imagine how such an initiative could be taken by one Member State of the EU in a situation where free movement of citizens between states is allowed.

It can be concluded that while there is broad agreement that the British welfare system needs adaptation, there is no consensus as to what that adaptation should consist of. Indeed, many of the remedies currently proposed by both the main political parties in the UK seem, because of their focus on 'targeting' (with the underlying implication of means-testing) seem likely to exacerbate, rather than cure the existing 'traps', which make it difficult for those in precarious employment, those on low incomes, or those who live with an unemployed partner to claim even a subsistence income.

Such arguments about the welfare state co-exist with, but are not always closely related to, a parallel public debate about the development of an information economy. This topic has been linked to the concept of a 'digital divide' and a large number of initiatives have been implemented to address this danger, including the introduction of ICTs into schools and public libraries and various training initiatives. A number of eGovernment initiatives have also been adopted, with the multiple aims of reducing costs, improving citizens' access to information and services, and boosting the development of an information economy.

Whilst most political parties, employers groups and trade unions are broadly in favour of the modernisation of the economy and the extension of ICT training to all social groups, recently there has been some public alarm at the development of 'offshore outsourcing' which is widely believed to pose a threat to white-collar jobs in the UK, even though it is also widely regarded as an inevitable and unstoppable trend, connected with the development of a global information economy. The British government (DTI. 2004) is strongly in favour of encouraging free trade in information services, as in other goods and services, and argues that Britain, like the rest of Europe, will be a long-term beneficiary of these developments because of the general growth in markets.

5. CONCLUSIONS

In the introduction to this report we examined some hypotheses about the character of 'information' or 'knowledge-based' economies and their impact on labour markets and societies more generally. On the basis of the information presented in the foregoing chapters from four large EU Member States, what conclusions can be drawn?

We must begin by asserting that some, if not all of the hypotheses are supported by the evidence:

Tertiarisation – the development of service economies?

All the labour markets under study have witnessed a dramatic drop in the proportions of employment in production and a growth in service employment. This confirms one of the central hypotheses of the 'information society' concept. However this has taken forms in different countries and in some economies, notably Italy and Germany, the decline in manufacturing has levelled off and may even be demonstrating signs of growth in some sectors.

Tertiarisation may therefore represent not so much a continuing trend as a specific characteristic of a particular phase of restructuring. Whilst some manufacturing industries have declined, others may expand. Moreover much of the expansion in service employment (especially in business-related services) is directly linked to the production sector and cannot survive without a thriving market in these industries. Furthermore, some of the apparent growth in production-related services is a statistical artefact – a by-product of the outsourcing of service functions by firms in the production sector. The development of ICTs is a critically important enabler of much of this outsourcing.

Service work = information work?

A great deal of the new employment created in services in each of the countries studied is undoubtedly directly connected with the handling of information and the use of ICTs and the workers concerned could be accurately designated – to use Reich's epithet – as "symbolic analysts" (Reich, 1992). The high proportional growth in occupations such as computer programmers in most of the economies under study is testament to this development. However it should be pointed out that some of this growth is from a rather small base and is dwarfed, numerically speaking, by smaller percentage growth rates in more numerous occupations.

It must also be pointed out that a very large number of service workers do *not* fall into this "symbolic analyst" category. One important source of growth in service employment has been in health and social services. Here, the rise has been generated mainly by demographic changes, especially by the ageing of the population, and cannot be attributed to the introduction of ICTs. Another area of growth has been in relatively low-skilled occupations in retail, tourism, cleaning and catering, again activities with little connection to the development of an information society.

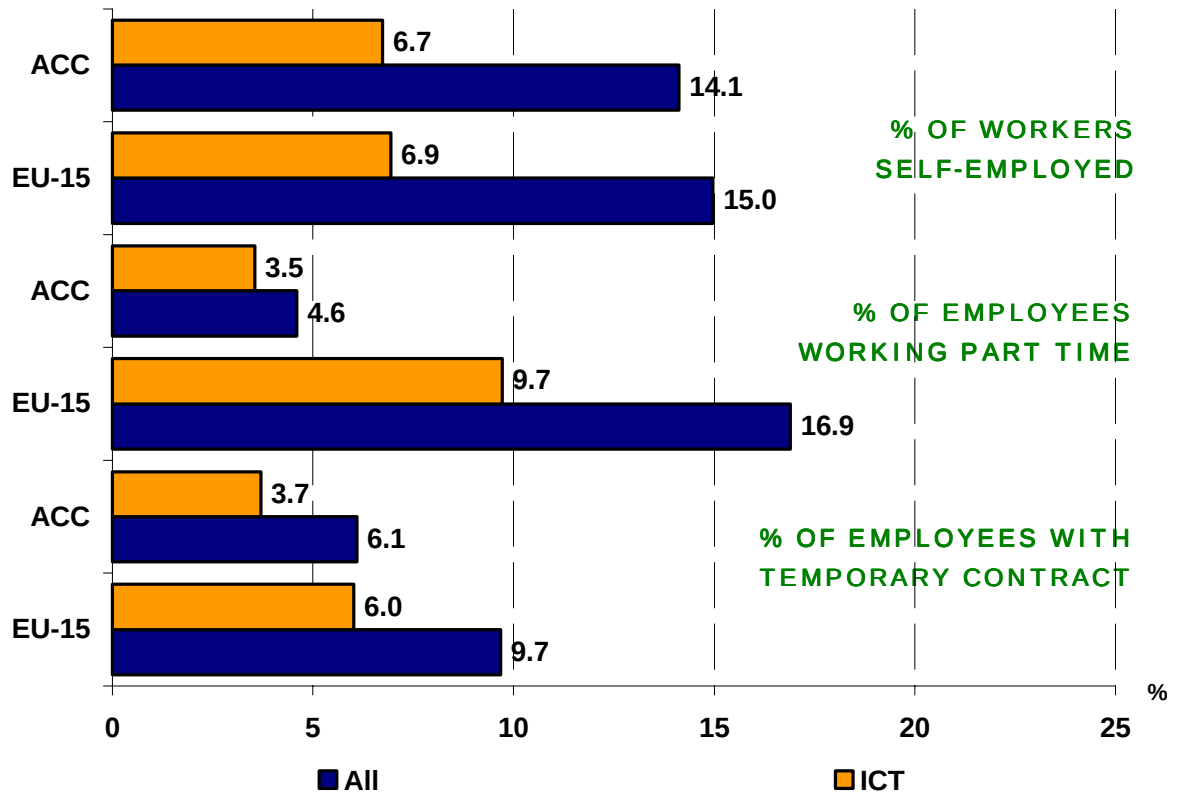
Flexibilisation of labour markets?

Each of the countries, in its own way, demonstrated conclusively that the flexibilisation of labour markets which plays such a strong part in models of the information society has indeed been taking place, if this can be judged by an increase in part-time and temporary employment and other contingent forms of work.

In some cases, for instance in the growth of home-based teleworking, and in the use of "*parasubordinate*" contracts for call centre workers in Italy, there is a clear link between the introduction of ICTs and the development of these "atypical" forms of flexible working.

However it is much harder to make out a general case that flexible forms of work are associated with the use of ICTs. Indeed, some results from the STILE project (Stimpson and Tielens, 2004) suggest the opposite.

Figure 25: ICT workers compared with all workers, EU and Accession States, by employment status



Source: Eurostat Community Labour Force Data, 2000, analysis by the STILE project

Figure 25 shows the results of an exercise in which all workers in ICT sectors in the EU 15 and New Member States were compared by employment status. As can be seen, in both the new and old member states, the ICT workers less likely to be self-employed, working part-time or working on temporary contracts than the generality of workers. This

conclusion does not just hold good at the aggregate level but was also the case within each Member State for each type of employment, with the single exception of self-employment in Portugal where a high rate of self-employment was found amongst the ICT workers (a relatively small group).

This negative correlation between ICT work and flexible working forms suggests that the 'problem' of flexible work in the information society is not so much that ICTs are a direct *cause* of flexibilisation but rather that flexibilisation is an indirect *effect* of an increasingly service-based economy affecting not the information workers themselves but precisely those groups who are in the non-information-intensive jobs.

This hypothesis is supported by the evidence from many of the country studies that those most likely to be in atypical forms of employment are socially vulnerable groups including immigrants, lone parents and workers from deindustrialised areas with high unemployment who cannot find regular work. The occupations in which part-time or "mini-jobs" are most likely to be found (including retail, cleaning and catering) and those where temporary or self-employment is common (including construction work and low-skilled clerical work) also bear out this assumption.

A single European model of an information economy?

It is often supposed that the path to a knowledge-based economy (like the path to 'economic development') follows a single inevitable course, and will bring increasing convergence between national economies and labour markets. One of the most striking conclusions to be drawn from the foregoing descriptions is that, on the contrary, European nations exhibit profound differences from each other and that each has its own distinctive model of economic development, shaped by its own culture, customs and history.

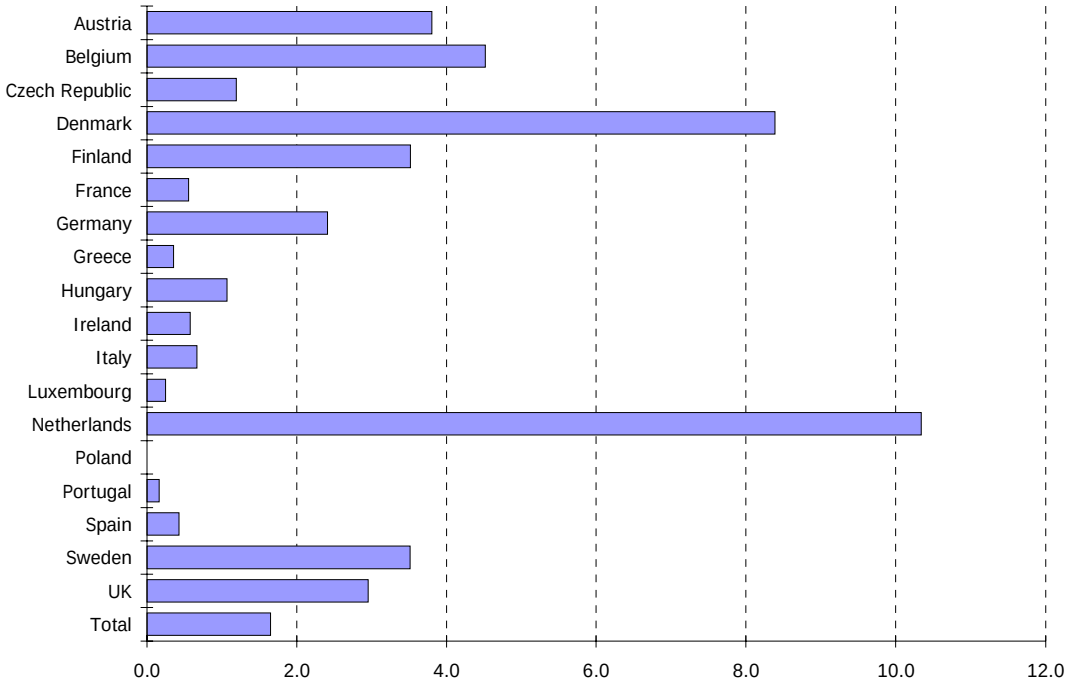
The different ways in which national economic actors have chosen to adopt ICTs can be well illustrated by the results of the EMERGENCE survey which collected information on the implementation of various forms of teleworking across the EU 15 plus Poland, Hungary and the Czech Republic. Figures 26-29 show the percentages of employers using ICTs to relocate work in each of four ways. These are:

- Home-based teleworking by employees working exclusively at home using ICTs including a telecommunications link to the employer's premises
- Multi-locational teleworking by employees working from a number of different locations using ICTs
- 'eLancing' – teleworking by self-employed individuals working from their homes using ICTs to communicate with their clients
- 'eOutsourcing' – using a telecommunications link to outsource work to an external company which provides ICT-based services.

As can be seen from these figures, each of these types of teleworking shows a completely different pattern of national distribution. No one country can be said to be more 'advanced' than any other. Rather, each has adopted the form of teleworking best suited to its own particular circumstances.

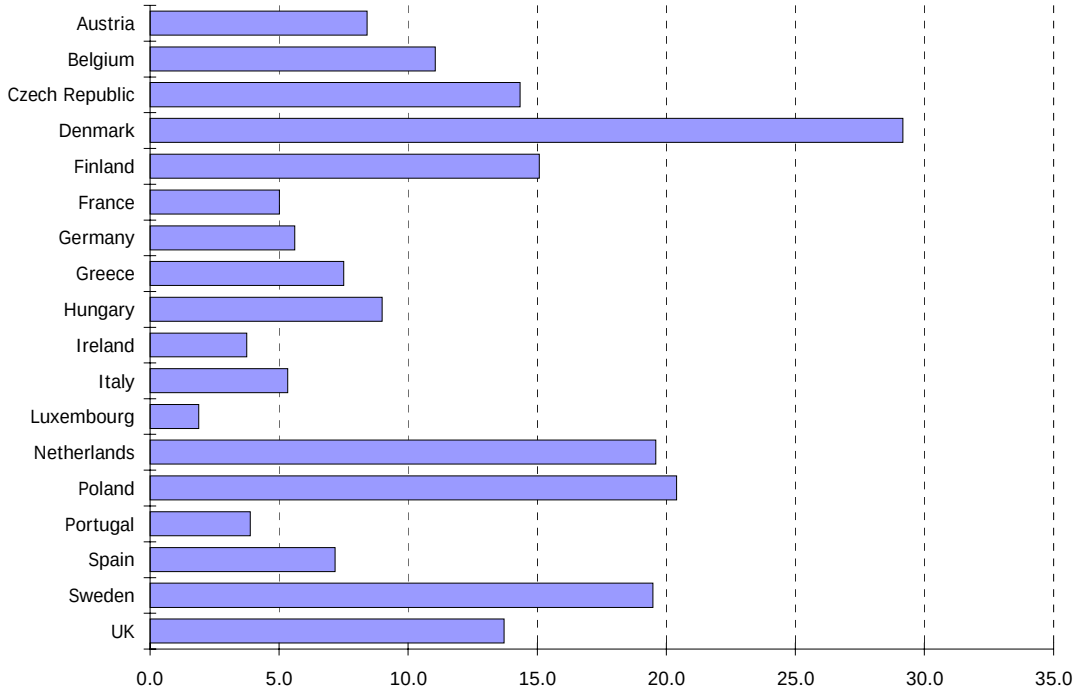
Italy, for instance, shows a very high rate of 'eLancing' in reflection of a strong culture of informal networking between small firms. The Netherlands, with a low rate of female participation in the labour market, has a very high rate of telehomeworking.

Figure 26: Home-based teleworking in Europe, by country, 2000



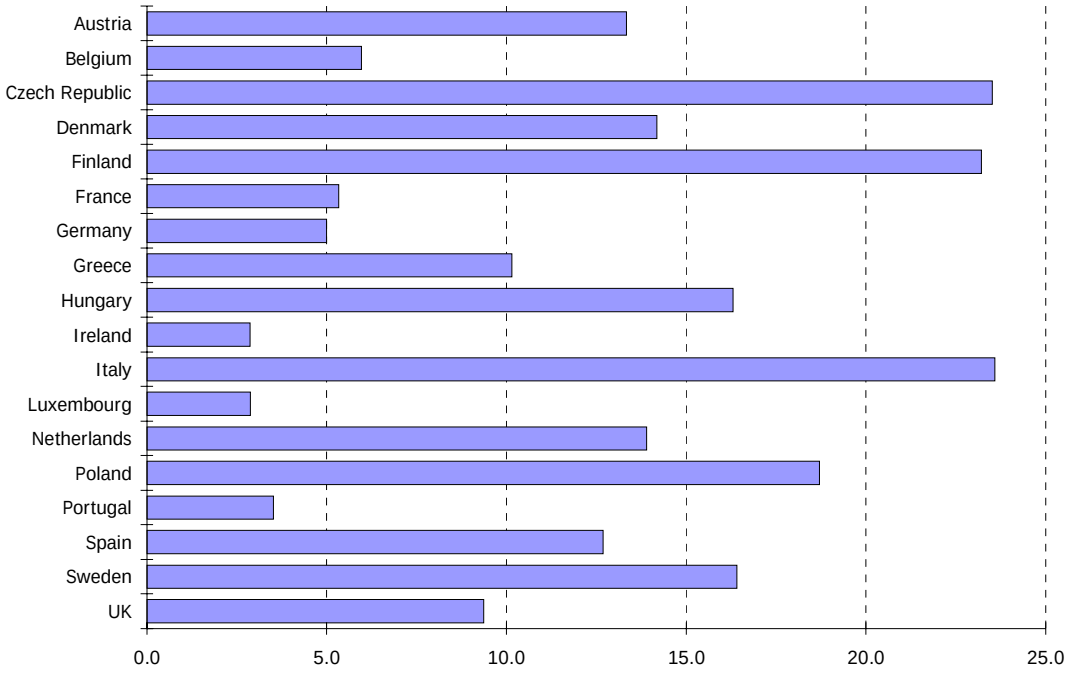
Source: EMERGENCE 18-country survey, IES and NOP, 2000

Figure 27: Multilocational teleworking in Europe, by country, 2000



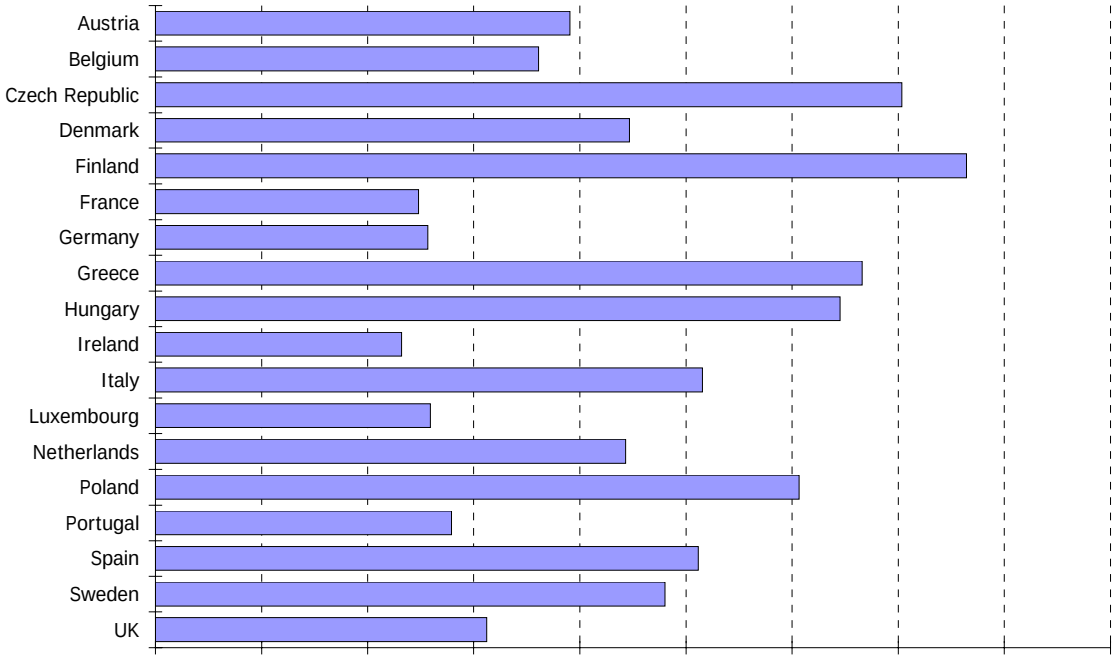
Source: EMERGENCE 18-country survey, IES and NOP, 2000

Figure 28: 'elancing' in Europe, by country, 2000



Source: EMERGENCE 18-country survey, IES and NOP, 2000

Figure 29: 'eOutsourcing' in Europe, by country, 2000



Source: EMERGENCE 18-country survey, IES and NOP, 2000

Attention could be drawn to many other specific national differences in teleworking patterns (Huws, 2003). The differences are presented here to demonstrate the general point that each country has its own distinctive path to a knowledge-based economy.

These diverse national economic patterns are of course reflected in diverse welfare systems. Indeed, they could be said to be both shaped by them and to contribute in turn to the particular form that each national welfare system takes.

Next steps

In the next stages of the LAW project we will examine some of these issues in greater detail, including developing a case study approach to study some best practice examples of ways in which ICTs have been used successfully to enhance both labour market participation and social inclusion.

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