

**ECONOMIC STUDY OF SPECIAL EMPLOYMENT
OF DISABLED PEOPLE
IN THE EUROPEAN UNION**

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1. Executive Summary

In this section the main results, conclusions and recommendations of the study are summarised. (1 page)

2. Introduction

2.1 Objectives of the present study

Within the European Union around 10% of the total population – approximately 37 million people – are directly affected by some form of disability. People with disability not only constitute a very heterogeneous group, they also are recognised by the European Commission (2000) in its communication *Towards a Barrier Free Europe for People with Disabilities* as one of the most disadvantaged sections of our society. People with disability are significantly under-represented in the workplace. Disability figures are among the factors that cause social exclusion and poverty. This is primarily due to lack of employment opportunities for people with disabilities whose productive role in society continues to be underestimated (EUG-IPWH, 1999). Within the national social security systems of the Member States of the European Union (EU) there is a shift from the benefit principle towards the employment principle in social security (Van Vugt et al., 2000). In the European Union between 35% and 45% of the disabled people are 65 years old or over; less than 3% are under 20; 45-65% of the disabled in the EU are of working age (15-64 years), i.e. they make up 6-8% of the working age population. In the Treaty of Amsterdam an article on the general non-discrimination covering inter alia disability is of importance for the promotion of equal rights for people with disabilities. Based on Article 13 of the EC Treaty, the European Commission adopted on 26 November 1999 a comprehensive anti-discrimination package (COM (1999) 564 final), including the prohibition of discrimination in the field of employment and occupation. The Resolution of the Council of 17 June 1999 (OJ C 186, 2.7.1999) on equal employment opportunities for people with disabilities stated that the National Action Plans (NAPs) for Employment provide for a comprehensive platform within which disability employment policies should be strengthened. Related to the NAPs the European Commission is particularly interested in: a commitment to meeting quantified objectives for disabled people. Also the 1998 Code of good practice on the employment of people with disabilities of the European Commission may be of help here.

The present Economic study of special employment of disabled people in the European Union is commissioned by the European Union Group of the International Organisation for the Provision of Work for People with Disabilities and who are Occupationally Handicapped (EUG-IPWH) and financially supported by the European Commission. The EUG-IPWH is a non-governmental organisation representing the majority of specially organised employment

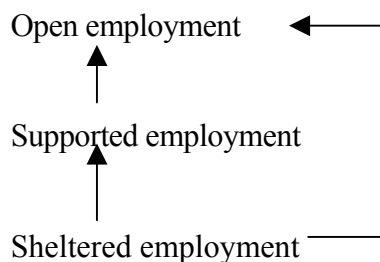
in the European Union.¹ The major aim of this economic study is to contribute to the improvement and the modernisation of this important economic sector by looking at developments in personnel, supported employment, transition rates and other non-financial ratios as well as financial ratios in sheltered employment establishments. The economic image of sheltered workshops often stated in the literature (See e.g. KPMG, 1999) is that they are in labour intensive industries, less productive and less profitable and largely different from commercial enterprises. The duality of focus of sheltered employment workshops – supporting disabled people and operating a commercial viable business – is difficult to balance. Sheltered employment workshops are also supposed to lack commercial skills and to have difficulties in meeting customers targets. The present study aims to collect appropriate EU and national data that will allow to focus on the differences in economic performance of systems of sheltered employment and explain these differences from structural differences as well as business economic differences of sheltered workshops with similar structures. The study tries to reveal tendencies. It is not intended to achieve the degree of accuracy of national studies! The study will establish the different business sectors in which special companies are active. Taking into account that there are a large number of special companies and that many of these are active in different sectors, this will obviously need to be general. Analysis of latest changes in the distribution of business sectors and information about latest initiatives will be specially relevant. This will allow to analysis the changing role of special companies in the integration of disabled people in the labour market. These changes in the sheltered employment sector will be related to trends within the wider economy. Common conclusions will be drawn as well as actionable recommendations made - in line with the EC employment policy guidelines - in order to improve the performance of these organisations.

Related to the reintegration of people with disabilities into the labour market EUG-IPWH (1999) proposed a three-step model:

1. Work in the regular labour market on equal terms with others;
2. Economic incentives and support for employers of people with disabilities;
3. Companies that provide specially organised workplaces for people with disabilities.

¹ Currently the EUG-IPWH has 22 members from 16 European countries. IPWH is a world wide organisation representing the majority of organisations providing special employment for disabled people. EUG-IPWH was created in 1995 as a regional subgroup of IPWH, thus including all IPWH members that are based in Europe. UG-IPWH currently has 18 members from fifteen European countries (eleven EU countries, Iceland, Norway, Poland and Switzerland).

Step 1 is related to the pillars 1 (improving employability) and 4 (equal opportunities) of the employment guidelines of the European Commission. Development of abilities to work, i.e. training and education are of importance here. Step 2 refers to forms of wage subsidies and tax reductions in order to compensate for the additional costs incurred. Step 3 refers to the creation of paid (bridge) jobs in its own workplaces (sheltered employment) or with another employer (supported employment) for people with disabilities who would otherwise not be employed. Employees should be prepared to make a transition to open employment. Such companies should operate on the same commercial terms as other companies in the business community and the work should be based on the production of goods and services in demand. Most countries regard qualifications as a key factor in the sustainable occupational integration of people with disabilities (Council of Europe, 2000, p. 23). In a systematic way the approach applied in this study related to the employment opportunities for the disabled can be shown in the following way:



An important element in economic integration is the encouragement of physical proximity and synergy between workers with and without disabilities. Co-operations are successful in which disabled and non-disabled co-operate. Compensation of certain impairments is possible and social integration is established. Like sheltered employment, also self-employment does not aid integration of disabled people with other non-disabled workers, and yet may be seen as a highly suitable form of employment. Within the sheltered employment this can be obtained by means of the new approaches like enclaves, outside placements, supported employment. Supported employment offers an alternative to sheltered employment. The two approaches should be made complementary and ensured that they are tailored to the individual needs and wishes of all people with disabilities (Council of Europe, 2000, p. 27). Supported employment is competitive employer-paid work combined with the provision of continuous on-the-job support to individual employees with (often severe) disabilities and employer as needed, in order to perform a normal job in open employment. Individual work preferences are emphasised. The training-work model is replaced by a work-training model. The emphasis is on a guarantee that the job will be done, with the help of job coaches employed by the placement

agency, who train, assist and support the worker in the work situation. The support may be quite intensive and is maintained at the level necessary for the person involved to stay in a job. This project aims to examine the contribution of the different forms of supported employment to the transition to open employment.

The 1999 employment policy guidelines of the European Commission (EC, 1999) are built on four pillars:

1. Improving employability;
2. Encouraging entrepreneurship;
3. Increasing adaptability;
4. Promoting equal opportunities for women and men.

The fundamental objective of this strategy is to raise the employment rate of the EU to a level closer to that of the main trade competitors. The promotion of employability refers to providing people with the necessary skill, i.e. tackling the skill gap. This employability pillar is the most important one referring explicitly to the employment situation of disabled people (guideline 9). According to Guideline 9 the Member States will give special attention to the needs of people with disabilities and develop appropriate forms of preventive and active policies to promote their integration into the labour market, to get more people with disabilities into jobs. The European Commission considers the development of a culture of entrepreneurship the key to future job creation, i.e. to close the job gap, depending on the healthy growth of self-employment, and new small business. The EC considers the promotion of adaptability in business and their employees, i.e. the modernisation of the organisation of work essential in order to improve the productivity of European firms, the quality of working life and the employability of the work force. Training is a key element. A stated aim of the project is to identify the opportunities for and constraints on sheltered employment workshops in diversifying provision, adapting business sectors and making transition possible. The equal opportunities between men and women refers to reducing the gender gap in unemployment.

The data gathered in this project will contribute to the assessment to what extent EU employment strategies achieve their stated goals at the national and EU level. The information gathered may also locate deficiencies and problems in business management which hinder conditions which would be conducive to reaching the goals of the employment strategies. The data would be especially relevant to pillars 3 “adaptability”: developing new flexible ways of working in a fast-changing world” and 4 “equal opportunities: equal access to work stations

for women and men, equal treatment at work". The survey gathers needed data on the establishment level to improve and complement the socio-economic knowledge base being used in the ongoing assessment efforts of EU policy, in particular in regard to pillar 3. The concept of adaptability builds on the idea of promoting the capability of reorganisation or modernisation enterprises (and especially their capability of restructuring their operating hours and working time management) by taking both employer and employee interests into consideration when developing plans. There is an important lack of representative and comparable establishment level data among EU countries on this topic. Adaptability is seen as a strategy to enhance competitiveness of businesses. Management capability to act in response to the common fluctuating conditions and thus remain competitive is precisely the focus of the adaptability concept and the logic behind changing work organisation. Finally, the research project contributes to matters of gender-mainstreaming and equal opportunities for men and women on the labour market (pillar 4). Forms of working time (derived operating hours management) may discriminate between a core and peripheral work force, in which case the peripheral work force - as empirical studies on this topic point out - is made up of predominantly of employees in precarious and atypical forms of employment, and the core work force mainly possesses secure full-time positions. According to empirical research women are represented among the first above proportion, while men are predominantly represented among the second. If this is the case, it reveals a serious disadvantage to women in terms of career and social security. Firstly, precarious and atypical forms of employment tend to be related to less qualified positions, poor earnings and short-comings in long-term social security. Secondly, workers who are part of the peripheral staff are often subject to a "hire-and-fire" policy. All in all, this form of integration of women in the labour market may include a concentration and accumulation over the life course of disadvantages in relation to the male labour force.

2.2 Methodology

A straight forward comparison between EU countries is difficult, if not impossible because of national differences in terms of terminology, statistical methods and socio-economic environment. Unfortunately there are no uniform definitions in the degree and type of disabilities within the European Union. For example the term "severe disabilities" used in Germany for a group of people that are qualified as "moderate disabilities" in the southern European countries, whereas "moderate disabilities" used in the United Kingdom and the Northern European countries

corresponds to a degree of “light disabilities” in Germany (See Schmitt, 1992; Delsen, 1996). Thus comparison of levels across countries require some caution or should probably not be made. For our purpose the international classification and definitions issued by the World Health Organisation (WHO) has been used in this project. In the European Union there are various concepts of sheltered employment systems. Comparative studies on sheltered employment in the EU countries carried out in the past focussed on structural differences, i.e. differences in legislation, quantitative scale and specific patterns. However, the national studies were carried out in isolation. No classification of the organisations on the basis of similar features was presented (See Samoy and Waterplas, 1992; Lheureux, 1992; Schmitt, 1992; Lunt and Thornton, 1993). Arnold and Larisch (1997) provide a classification system according to their similarities to facilitate comparison and evaluation of good practices from abroad and to position the national system with an international context. This allows to compare the systems of sheltered employment and to compare the economic performance of institutions with similar structural elements. The starting point of their study was that the objective, the target group, and the supporting institution are the critical players in determining the structure itself. Therefore it is important to know the purpose, the users and the ownership/provider of the sheltered workplaces and to understand the intention pursued by the legislative bodies, or even more importantly of the management of the establishment. The present study also starts from this. Relevant questions are: what is the purpose of the sheltered workshop? What is the aim of the management of the establishment? Who are the users of the sheltered workshop? What kind of disabled persons are employed? Which institution is officially responsible for sheltered employment: private versus public

The unity of enquiry of the research project is the establishment, i.e. the local unit. In case of multi-unit organisations therefore information is collected for the local unit and not for the whole organisation. For the collection of desired economic data on sheltered employment workshops at establishment level, an 18 pages written questionnaire was developed for this study by the Department of Economics of the University of Nijmegen in the Netherlands in close co-operation with EUG-IPWH. For this purpose a working group of national experts as well as a steering committee were established (See Annex 1). Member states were requested to nominate a national representative who would assist in the development, identification, collection and analysis of relevant data in conjunction with the University of Nijmegen. Each national representative was involved in questionnaire design, distributing and collecting responses from EUG-IPWH members and other organisations who are involved in the employment of disabled

people and providing expert support to the university team. The EUG-IPWH Secretariat based in Brussels provided a co-ordinating and project management function.

The questionnaire covers the following topics (See Annex 2): location and aim; potential of disabled people employed; ownership and financial support from governments; economic performance and financial performance. The identical English questionnaires were planned to be distributed among the EUG-IPWH Members in 12 EU countries between June and December 2000:

Austria	Italy
Belgium	Ireland
Finland	Portugal
France	Spain
Germany	Sweden
Netherlands	United Kingdom

Whilst the EU-IPWH does not have members at this time in either Denmark or Italy, both have special employment sectors that are worthwhile including in this Study. EUG-IPWH members have good contacts with both Danish and Italian organisations; their involvement and obtaining relevant information was not expected to be a problem. The EUG-IPWH secretariat also involved Greece and Luxembourg by contacts seeking the employment of disabled people. The questionnaire was also translated into French with the help of the national representatives. The original target was to obtain data through the collection of 120 to 180 completed questionnaires. Though this number does not allow a representative sampling, the absolute number of completed questionnaires – 10 to 15 per country – gives a good impression of the tendencies within the national systems. This would certainly be the case because the national representatives were asked to distribute the questionnaires in such a way that the response is typical, not only from the point of view of sector of activity, but also related to establishment size and location. Therefore, the findings can be considered as relevant.

In relation to the distribution of the questionnaires within each country the research team of the University of Nijmegen co-operated with the national organisations. Not only to contribute to improve the (cost) effectiveness of the project, but also to increase the response rate. The national organisations were asked to distribute 10-15 forms over their national member organisations, i.e. the separate sheltered employment establishments. Moreover, because of the small sample, in order to arrive at "representative results" the distribution of the questionnaires over potential respondents, i.e. the sheltered employment establishment in each country is

important. The coverage, distribution and stratification of the questionnaires were based on relative macro data within each country. For the stratification of the sample the following three criteria were used (See Annex 3 for the letter to the national representatives):

1. the distribution of sheltered employment establishments by size classes;
2. the distribution of sheltered employment establishments by sector of activity;
3. the distribution of sheltered employment establishments by location/region.

There is a lot of variance in the policies in different countries, with different objectives, target groups, types of measures and conceptions of the labour market and disabled people's roles within it. A general picture of the institutional framework of the countries that participate in the project is in Annex 4. This overview of the national institutional frameworks is of help in explaining differences between countries.

Table 2.1: Returned forms by country

Country	Number of forms
Austria	1
Belgium	4
Denmark	1
Finland	6
France	15
Greece	3
Ireland	12
Italy	2
Netherlands	5
Portugal	1
Spain	15
Sweden	10
United Kingdom	12
TOTAL	87

Germany did not participate in the project, while Denmark and Greece actually did participate. That is why there were 13 participating EU-countries instead of 12 as was originally planned. In total 87 forms were received back. As can be seen from Table 2.1 the planned 10-15 forms per country were not received. Only five countries returned 10-15 filled up forms. For half of the participating countries 5 or less completed forms were returned. This of course complicates to make calculations, to make inter-country comparisons and does not allow to draw firm conclusions from this comparison nor to make well motivated recommendations for the representativeness of the sample is not secured. Cross tabulation will often result in meaningless

empty cells, certainly related to questions asking for quantitative establishment data. Also regression analysis deserves a minimum number of cases that is not available. That is why in this report the presented results are either in the form of simple counts of responses or cross tabulation related to a selection of qualitative and quantitative data. However, as we will see below this exercise - despite its limitations - still is very informative and allows to draw some interesting conclusions and to make actionable recommendations.

1.3 Acknowledgements

The author wants to thank all the national representatives participating in the workshops and the members of the steering committee, Alain Riolland and Leo Kooyman in particular, for their effort, their support and contributions to this economic study. Thanks are also due to the colleagues Hans Moerel, Jan Kuijpers and Mark Vollaard of the ITS, the interdisciplinary policy research and consultancy institute based at the University of Nijmegen, for their scientific and computer support at all stages of the project and Haixia Hu at the Department of Economics of the University of Nijmegen for her research assistance. Finally I want to express thanks to the Directorate of Employment and Social Affairs of the European Commission for their financial support and their advice.

3. Characteristics of the establishments

In this chapter the main results concerning the characteristics of the sheltered workshop establishment will be presented. These are location, ownership, main purpose of the management, main target group, size of the establishment, the gender distribution of employees on the pay-roll, sector of activity. An important topic addressed is the transition rates to open employment. Next the quality of the applied techniques, the commercial skills among staff, and the management initiatives are reviewed.

Table 3.1: Location of sheltered employment establishments

Location	Frequency	Percent
In or close to large town	37	44
In or close to small or medium size town	35	41
In a rural area	13	15
TOTAL	85	100

Table 3.1 shows that the majority of the establishments are located in an urban area, i.e. in or close to a large town or city (more than 100,000 inhabitants) or in or close to a small or medium size town or city (10,000 to 100,000 inhabitants). Only 15% of the sheltered employment workshop establishments is located in a rural area. This geographical distribution is expected, both for demand and supply side reasons. The absolute number of disabled people is higher in these areas, i.e. the supply of disabled persons and hence the demand for sheltered jobs is higher in urban areas. Transport means are readily available in urban areas. Also demand plays a role: the business sector in which sheltered workshops are active are most manufacturing and services. The latter are mainly located in urban areas (See Table 3.13 below).

Table 3.2: Kind of organisation

	Frequency	Percent
Public organisation	29	34
Private organisation	45	52
Voluntary organisation	7	8
Others	5	6
TOTAL	86	100

Sheltered employment establishments can be initiated, set up, and run by private or by public institutions. Sheltered work often was established by voluntary initiatives and only later made subject to state regulation (Lunt and Thornton, 1993). Over half of the sheltered workshop are private organisations (See Table 3.2). There are differences between countries. For instance, in Belgium and Spain workshops are private organisations; in the Netherlands, Sweden they are public organisations, while other countries like Portugal, Ireland and the United Kingdom show a mixed picture (See also Annex 4).

Table 3.3: Status of the establishments

	Frequency	Percent
Totally independent	34	40
Totally or partially owned by domestic company/institution	26	30
Others	26	30
TOTAL	86	100

Table 3.3 shows that the establishments are rather equally distributed over the three categories of status. 40% of the respondents consider their establishment to be totally independent. This of course is very much related to the experienced autonomy of the management. The category “others” refers to e.g. fully owned by an association or confederation in the case of Spain or by an enterprise in the case of Ireland. So the majority of the establishments are totally or partially owned by a domestic company/institution.

Table 3.4: Most important purposes of the management

	Frequency	
	Most important	Most and second most important
Employment for disabled	47	52
Vocational training	8	17
Transition to open employment	12	25
Personal and social assistance	17	32
Medical care	-	-
Others	8	12

The purpose of the management is an important determinant for the employment and financial results of a workshop. Table 3.4 shows that providing employment for disabled people on labour

markets contracts equalling those in the open market clearly is the most important purpose of the management. This is in line with the legal aim of sheltered workshops. The central formal aim of sheltered workshops in most countries is to provide work to those who are not able to sustain work in open employment. The second most important purpose is of a social nature: personal and social assistance to improve the work capacity. Transition to open employment although mentioned in most legislation as being the second most important goal is here the third most important. Followed by vocational training. The latter of course may be an important condition to employ disabled people and for transition to open employment in particular. Medical care is in none of the establishments the most important, nor the second most important purpose of the management. Also earlier research shows that in no country transition is a prime aim of sheltered workshops in Europe (See Samoy, 1992; Lunt and Thornton, 1993; ECOTEC, 2000).

Table 3.5: Most important target groups of establishments

	Frequency	
	Most important	Most and second most important
People with medical limitations	62	70
People with limitations in relation to work	15	40
Long-term unemployed	2	3
Other	2	3
TOTAL	81	

Table 3.5 shows that the most important target group clearly - for more than three quarters of the establishment - are people with medical limitations of physical, mental or psychological origin, followed by people with limitation in relation to work to be performed, including socio-medical handicap (19%). Long-term unemployed are to a far lesser extent the most important target group of sheltered employment workshops. "Other" e.g. includes people with learning difficulties. Table 3.5 does not indicate that there has not been a major change in the target group in recent years, although there may be differences between the legal target group and establishment practice. However, because of (some) overlap between categories final conclusions cannot be drawn.

Table 3.6: Means of the average number of persons on pay-roll of establishments

	1995	1997	1999

Employees with disabilities			
men	467	376	317
women	371	299	220
total	745	630	514
Employees without disabilities			
men	77	62	48
women	62	48	250
total	173	102	80
Employees with and without disabilities			
men	585	478	373
women	460	363	272
total	1,007	827	650

Table 3.6 shows the gender division of the persons with and without disabilities on the pay-roll of the sheltered employment establishments in the second half of the 1990s. The number of respondents is different between the three years and varies between categories. So conclusions about a trend in personnel cannot be drawn from this. The most accurate data are for 1999. About 39% of the employees with disabilities are female. Among the non disabled the female share is a little bit higher. Of all persons on the pay-roll 42% was female in 1999; 44% in 1997 and 46% in 1995. Also Samoy and Waterplás (1992) shows for the EU, excluding Spain, Italy and Portugal, that 64% of the employees with disabilities in the sheltered workshops are male and 36% are female. When we compare these data with those for the economy as a whole the following picture emerges. In 1997 females occupied 42% and males occupied 58% of the jobs in the European Union (EU15); for 1995 these figures were 41% and 59% respectively (Source: EC, 1999). Also Paoli (1997, p. 347) found for the EU16 male 58% and female 42% (data refer to 1995/1996). So from these data it may be concluded that the gender differences in the sheltered workshops are similar to those of the economy as a whole. Table 3.6 also shows that about 15-20% of the persons on the payroll of sheltered workshops are not disabled. In part this concerns managerial personnel. The latter is related to the characteristics of the population of employed disabled and may also be related to the purpose of the management in the establishment. The data in Table 3.6 also give a crude impression of the average size of the sheltered employment workshop. The average size in 1999 is 650 employees. Note however, that the establishment size varies between 1 and 14,000 employees. These means are very much biased by the very large establishments.

Table 3.7: Establishments size by size classes (total number of employees)

Number of employees	1995	1997	1999
0 – 9	2	2	5
10 – 49	11	15	21
50 – 249	22	26	37
250+	8	10	13
TOTAL	43	53	76

From Table 3.7 follows that most establishments belong to the small and medium size class. Small firms refer to establishments with less than 50 employees (34% in 1999). Medium-sized establishments with 50 or more employees but less than 250 (49% in 1999). Large establishments have 250 and over employees (17% in 1999). In empirical research small and medium size firms are almost always underrepresented and larger organisation overrepresented. The response rate of the larger organisations is often higher. This also holds for this project. That is why it is difficult to compare these data with representative data for the economy as a whole. Small and medium sized enterprises (SMEs) are a vital source of jobs in the EU and make a major contribution to employment growth. In 1994 small firms accounted for just over 40% of all those in work in the EU. About 65% of this, 26% of total employment, worked in firms with less than 10 people employed. Medium sized firms accounted for 10%. So just over half of all those in employment in the EU work in SMEs. In absolute terms there are 1 million firms with between 10 and 49 people employed and over 20 million small firms with less than 10 persons employed. SMEs are more important in the Southern parts of the EU than in the Northern part. The exception being Belgium. Differences in the share of SMEs between Member States can be explained from differences in one-persons business or self-employed without employees and is also very much related to fiscal and legal differences, and differences in the structure of the economic activity. For instance, small business are important in catering (77% of employment) and other services, including mainly personal services and recreational and cultural activities (78%) and construction (74%) (European Commission, 1999, p. 99).

Table 3.8: Main economic activity of establishments

	Frequency	Percent
Agriculture, hunting (NACE 0)	9	13
Energy and water (NACE 1)	-	-
Extraction and processing (NACE 2)	1	1

Metal manufacturing (NACE 3)	9	13
Other manufacturing (NACE 4)	24	33
Building and civil engine (NACE 5)	-	-
Distributive trades (NACE 6)	2	3
Transport and communication (NACE 7)	1	1
Banking and finance (NACE 8)	3	4
Other services (NACE 9)	10	14
Others	13	18
TOTAL	72	100

The sheltered employment workshops are active in a broad palette of activities and branches (See Table 3.8). The workshops are represented in almost all branches of industry, based on the NACE code (See Annex 5 for an overview.) Sheltered employment workshops are not active in Energy and water (NACE 1) and Building (NACE 5). Overrepresentation is expected in the labour intensive areas, including Manufacturing (furniture, printing) (NACE 4), Services (domestic services; laundry) (NACE 9), metal manufacturing (NACE 3) and agriculture (NACE 1). The category “Others” includes various fields of activity, mainly services like training and placement services and logistics, but also farming and packaging and assembly. In part these are areas that could be covered by the 0-9 NACE-code.

Table 3.9: Distribution of sector of activity of establishment by location of establishments (percentages)

Location	NACE 0	NACE 2-4	NACE 6-9
In or close to large town	22	30	80
In or close to small or medium size town	55	55	13
In a rural area	22	15	7
TOTAL	100	100	100
N	9	33	15

The establishments that are active in the service sector are mainly located in or close to a large town. Sheltered employment workshop active in agriculture and manufacturing are often located in or close to a small or medium size town (See Table 3.9). The fact that service sector activities are hardly located in the rural areas may cause supply and demand mismatches regionally. Additional research is needed on the geographical distribution of people with disabilities to improve the matching process in the labour market.

Table 3.10: Distribution of kind of establishment by main economic activity (percentages)

	NACE 0	NACE 2-4	NACE 6-9
Public organisation	33	39	7
Private organisation	66	52	67
Voluntary organisation	2	3	13
Others		6	13
TOTAL	100	100	100
N	9	33	15

Private sheltered employment workshops are the largest category in agriculture (NACE 0), manufacturing (NACE 2-4) and services (NACE 6-9). (See Table 3.10). These private organisations are evenly distributed over all three sectors of activity. The majority of the public sheltered employment workshops are in agriculture and manufacturing. The public sheltered employment organisations are underrepresented in the service sector. The majority of the voluntary sheltered employment workshops are active in the service sector. Over the past years in the EU the main growth sectors in terms of the net additional jobs, were business services, health and social services, hotels and restaurants, education and recreational activities. These 5 service sectors were responsible for just over 70% of the employment increase in the period 1994-1997. The main job losses were recorded in agriculture, textiles, the wood industry, iron and steel and retailing (EC, 1999). The latter are sectors where the majority of the public sheltered employment workshops have their main activity. A prudent conclusion is that the future of private sheltered employment workshops is brighter than of public sheltered employment workshops. The results may also indicate that private sheltered workshops are more adaptable than public ones. However, further research is needed here.

Table 3.11: Transition rate to open employment of employees with disabilities, 1995, 1997, 1999

	1995	1997	1999
	2.6%	3.0%	2.7%
	(N=23)	(N=30)	(N=35)

Transition to open employment is one of the stated aims of sheltered employment. The number of transfers from sheltered workshops into open employment remain low. Table 3.11 shows rates between 2.6% and 3.0%, well above what is generally found in other comparative studies. However, the number of cases is rather low, and the results are biased. For instance,

in 1999 19 of the 35 respondents, more than half of the cases, reported transition rates of 1.7% or lower; in 1997 18 of the 30 (60% of the cases) respondents reported transition rates of 0.8 or lower; in 1995 13 of the 23 (more than half of the cases) respondents reported a transition rate of 1.7% or lower. In part the low transition rates can be explained from the applied training policy by sheltered employment workshops. In most EU member states the extra training and social support functions of sheltered workshops serve to increase competence and personal security in the sheltered work setting rather than to equip workers for outside employment. It helps them to remain self-sufficient (ECOTEC, 2000). Higher exit rates may not be in the interest of the sheltered workplace. Organisations may not be willing to let go of the most productive workers (Delsen, 1996). The tightening of budgets may imply that in view of the requirement to balance the budget sheltered employment institutions hold on their most productive and efficient, by ensuring internal promotion or integrating them into supervision jobs instead of stimulating them to find ordinary employment. Data on transition to the open market are not readily available on the level of the establishment available: there is a high number of missings. This is to some extent surprising, for transition to open employment is one of the aims of the management of sheltered workshops.

Sheltered employment can be considered a job-creation measure: sheltered workshops have been established in order to create work for certain disabled people who otherwise would not be catered for in the open employment market. The relatively high transition rates presented in Table 3.11 are expected. Privatisation and a change in target group may go hand in hand. In theory privatisation may have a positive impact on the competitiveness as well as the effectiveness of the sheltered employment establishment. However, it may also imply a creaming off of the market as is often the case with privatisation, e.g. the private employment services. There may be a trade-off between the short-term and the long-term. However, hard conclusions cannot be drawn from this. For high transition rate may also mean that those disabled leaving the sheltered employment through the front door enter again after some time through the back door. The only thing that is happening is a constant flow of disabled people being pumped round. Disabled employees may be trapped in temporary jobs in the open sector and the sheltered sector. Additional research is needed in order to be able to draw final conclusions on this matter.

One of the central aims of the research project is to establish the role semi-sheltered workshops could have in contributing to a higher transition rate. Unfortunately, due to the high number of missings a meaningful division of transition to open employment from the different forms of supported employment can not be made. Further research on this important topic is needed.

Table 3.12: Applied technique in relation to first main product/service

	Frequency	Percent
Newest technique	6	7
Rather new technique	34	41
Neither new nor outdated	36	44
Rather outdated	5	6
Fully outdated	1	1
TOTAL	82	100

Table 3.12 shows that the judgement by the respondents related to the applied production techniques in relation to the first main product or service of the establishments is satisfactory. Almost half of the respondents indicated that sheltered employment establishments applied the newest technique or rather new techniques. Another 44% indicated that the applied technique is neither new nor outdated. Some 7% indicated that the applied techniques are rather outdated or fully outdated.

Table 3.13: Distribution of sector of activity of establishment by location of establishments

	NACE 0	NACE 2-4	NACE 6-9
Newest technique		2	4
Rather new technique	5	11	9
Neither new nor outdated	3	18	2
Rather outdated		3	
Fully outdated		1	
TOTAL	8	35	16

Table 3.13 shows the sectoral distribution of the appraisal of the applied techniques in relation to the main products or services. The majority (80%) of the establishments with their main activity in the services sector apply rather new or the newest techniques. The manufacturing sector

(NACE 2-4) and the agricultural sector (NACE 0) apply less updated techniques. The manufacturing sector shows a mixed picture. Just over one third of the establishments in this sector apply rather new or the newest techniques. Manufacturing also is the only sector of activity reporting the application of rather and fully outdated techniques. Related to this it is important to mention that the application of old techniques in fact may be a strength and a target and not a drawback. For instance in book binding.

Table 3.14: Commercial skills among staff in 1999

	Frequency	Percent
Fully qualified	12	17
Sufficiently qualified	47	65
Insufficiently qualified	13	18
Fully unqualified	-	-
TOTAL	72	100

The often heard remark that the staff of sheltered employment workshops lacks commercial skills (marketing, sales, production and financial management) is not confirmed by the respondents. Two thirds of the respondents indicated that related to commercial skills in 1999 the staff of their establishments was sufficiently qualified (See Table 3.14). Another 17% even indicated a fully qualified staff. On the other hand, the fact that almost one of every five respondents indicated insufficient commercial qualification may cause problems in the changing environment towards a more market oriented approach. Important in this respect is that there is hardly any difference in the appraised commercial skill base among staff between public, private or voluntary organisations.

Table 3.15: Management initiatives within establishment

	1995	1997	1999
Working time flexibility	13	14	23
Flattening of management structure	13	14	24
Automation	12	19	30
New information technology	18	28	40
Down sizing	5	6	10
Product innovation	19	25	26
Job rotation	21	25	37
Outsourcing	7	10	11
Subcontracting	17	23	31
Flexible remuneration system	3	5	12

Other	4	5	7
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Increased consumer demands for high quality products and services and growing domestic, intra-European and international competition require more flexible organisation structures to survive in the competitive race and secure and increase market share. This pushed workplace to adapt. One policy seems cost rationalisation by workforce reduction (downsizing). Stiff product market competition raises the rate of innovation. Table 3.15 shows that within sheltered employment workshops over the past five years a large number of management initiatives have been taken. The management initiatives are related to developments in competition. Notable in the field of new information technology, job rotation and automation initiatives have been taken. The EC considers the promotion of adaptability in business and their employees, i.e. the modernisation of the organisation of work essential in order to improve the productivity of European firms, the quality of working life and the employability of the work force. Training is a key element. Related to the latter job rotation is of importance. Within sheltered employment workshops the new initiatives are not very much different from those in open employment establishments (See European Foundation, 1997; OECD, 1999). Initiatives in the field of working time flexibility allow to take into account both employee and employer interests (pillar 3, adaptability). The flattening of management structure as a management initiative based on EPOC data taken over the past three years before 1996 show that 27% of the workplaces reported those measures. The highest figures of management initiatives in the area of flattening management structures is found in the Netherlands, Sweden and the United Kingdom. Above average initiatives are found in the transport sector (OECD, 1999, p. 188). Related to job rotation the EPOC data report an average of 11% of the workplaces. Sweden and Denmark clearly have the highest figures. Also the initiatives in the field of subcontracting is an initiative that also can be found in the private sector in general. This may improve to transition rates in the future as well as to the viability of sheltered workshops. Also the developments in product innovation seem promising.

In the questionnaire an open question was asked (question 44) on initiatives in the field of new products and services and/or employment opportunities for people with disabilities. Most of the answers relate to product innovation (Denmark, Netherlands) and new product initiatives (France, Ireland, Spain United Kingdom). In some cases a complete change in trade and towards sub-contracting, notably in the UK. Also supported employment is being tested in UK; in Spain enclaves. In Finland also new initiatives including those focussing on long-

term unemployed. In Greece supported employment for trainees. A new law opens the possibility to establish sheltered workshops. For Italy and Sweden no new initiatives were reported. These results do not indicate the direction in which sheltered employment workshop look for new and expanding niche markets. It seems that they manage to stay updated within their “traditional” market in which they have a comparative competitive advantage. The business cycle has its impact here. It seems that the initiatives are similar to those in the open employment sector.

4. Characteristics of the personnel

In this chapter the characteristics of the personnel employed by the sheltered employment workshops is reviewed. The following topics are addressed: distribution by degree of work disability, by handicap and by function level, and by age. The distribution by sex has already been addressed in chapter 3. Finally the ratio between production personnel and supervisory personnel and the labour contract structure are pictured.

Table 4.1: Means of the average of the distribution of all employees on the pay-roll by their degree of work disability

Degree of work disability	1995	1997	1999
<20%	34	39	33
20 – 39%	29	66	72
40 – 59%	28	28	34
60 – 79%	36	33	29
≥80%	55	50	45

Table 4.1 shows that the disabled persons with a work disability degree of 20 – 39% is the largest group among the employees; also the 80% and over work disability degree are a relative large category. Earlier research showed that sheltered employment workshops fail to employ the severe disabled people (See Samoy and Waterplas, 1992; Delsen, 1996). Table 3.8 seems to suggest that this is no longer the case. Our research confirms the ECOTEC (2000) conclusion that sheltered employment continues to be a major employer of disabled individuals, and that there is a trend increasingly in the direction of provision for individuals with the most severe disabilities. However, further research is needed here because of the limited number of available data. The high number of missings related to the question of the degree of work disability also illustrates that there is a lack of national and certainly comparative statistics and research finding. The fact that these data are not readily available at establishment level is surprising. For in theory this information on the seriousness of the disability, and hence on the degree of work disability is available, because the former is the most important selection criterion for the sheltered workshops. From the reintegration point of view the emphasis should be on the possibilities and not on the limitations of the individual. The establishment of such a standardised information system in the EU is recommendable.

Table 4.2: Means of the average number of employees with disabilities of establishments by handicap

	1995	1997	1999
Physical handicaps	649	560	338
Sensory handicaps	59	64	56
Mental handicaps	220	186	171
Psychological	223	188	126
Multiple handicap	10	14	31
Other	427	301	168
TOTAL	1,146	1,608	681

Table 4.2 shows the distribution by handicap of the employed employees with disabilities for three years. Because of differences in the number of responses no conclusions can be drawn on the trend. The distribution by handicap of course has an impact on productivity and may be related to the purpose of the management of the establishments. It may also be relate to the sector of activity. Earlier research by Samoy and Waterplas (1992) showed that the largest proportion – two thirds - of employees of sheltered employment workshops in the EU are those with a mental handicap. However, there are large inter-country differences. Notably in France and Portugal the focus is on mental disabled. Our research also shows the overrepresentation of mental and psychological disabled relative to their population. However, in 1999 the physical handicapped including the sensory handicapped were an equally large group. This shift in type of handicap may be related to developments in and the application of new technologies (ICT). However, more research is needed on this topic to draw a final conclusion. The large category “other” refers e.g. to limitation in the labour market and social handicap.

Table 4.3: Means of the average number of employees with disabilities on the pay-roll by function level

	1995	1997	1999
class 1	91	86	83
class 2	23	23	26
class 3	23	24	50
class 4	8	8	10
class 5-7	4	3	7
Total	137	138	142

Table 4.3 shows that class 1 - unskilled occupations, with very simple instructions that need no or little insight and consultation – is the most dominant function level in the sheltered workshops. The reported data for 1999 also indicated that class 3 - skilled professions with rather intricate

work that needs insight, consultation and theoretical knowledge - is also (becoming) an important function level in sheltered workshops. This may point towards a development of a duality in the population of workshops. It fits in the developments from manufacturing to services and the application of information and communication technology. However, also here to draw final conclusions additional research is needed. Class 2 - half skilled and trained occupations with simple work and little intricate work that need insight and consultation- is the third most important function level. The number of functions in classes 5, 6, and 7 - specialised and very specialised professions – are limited.

Table 4.4: Means of the average number of employees with disabilities distributed by age

Age	1995	1997	1999
15 - 24 years	28	28	37
25 - 39 years	74	74	90
40 - 54 years	53	70	73
55 - 64 years	22	27	29

Unlike the distribution by sex (See Table 3.6), there is a difference in the age structure of the employees in sheltered shops and the total working age population. Comparison with the age structure of employment in the EU in general (See Paoli, 1997, p. 348) the young 15-24 years of age (13%) as well as the 55 and over (10%) are underrepresented in employment are underrepresented in both populations. 25-34 years: 29%; 35-44 years 27%; 45-54 years 21%. This is also confirmed by Samoy (1992). The population of employed people in the sheltered workshop is relatively young (See Table 4.4). The underrepresentation of those 55 years and over may be related to early retirement and pensioning policy. It is also related to the age of establishment of sheltered employment workshop. Here again there are strong inter country differences: in Sweden the 45 and over is the largest group. The disability risks increases with age. Training explains the underrepresentation of youth.

Table 4.5: Means of the average number of employees with supervisory + management responsibilities and production personnel of establishments

	1995	1997	1999
Supervisory + management			
disabled	5	5	6
non-disabled	54	42	42
total	58	46	44
Production personnel			

disabled	902	665	530
non-disabled	12	14	23
total	820	688	515

Table 4.5 shows that most – nine out of ten - of the employees with supervisory and management responsibilities are non-disabled. The latter are a minority in production personnel. Nine out of ten persons involved in production personnel are employees with disabilities. These results are as expected. In order to increase productivity and as a result of the introduction of ICT there may be a trend towards the employment of more non-disabled production personnel. Also offering jobs to long-term unemployed may cause a shift here toward more non-disabled production personnel. The developments in the second half of the 1990s point in this direction. However, because of differences in the response rates between years conclusions on the trend reported in Table 4.5 can not be drawn. Additional research is necessary to establish the existence or non-existence of this shift.

Table 4.6: Means of the average number of employees with disabilities working on a full-time or part-time persons contract

	1995	1997	1999
Full-time contract of 35 and more hours	627	523	378
Part-time contract of 20 to 35 hours	398	279	186
Part-time contract of less than 20 hours	7	6	15

The majority of the employees with disability in the sheltered workshops are employed on full-time contracts of 35 and more hours per week (See Table 4.6). However, a considerable proportion works on a part-time contract of 20 to 35 hours per week. The part-time employment rate in the sheltered employment workshops is higher than in general employment (17-18% in the EU). This higher proportion of part-time jobs is expected. For a major part of the disabled, part-time work is the only way to take part in the labour process. Moreover, part-time work allows those who have not had work experience or who have been out of work for a considerable time to become acquainted with the world of work, and possibly move on to a full-time job (See Delsen, 1996).

5. Economic and financial characteristics

Related to the characteristics of the market the following topics are reported. Market shares, employment outlook, exemption from social security premiums and taxation, subsidies received, and competitive environment. Related to economic performance of sheltered employment workshops in this chapter the results concern training costs per employee; supervision/employees ratio; capital intensity; total sales per employee; value added per employee will be reported. Related to financial information the following ratios will be presented: current ratio; quick ratio; debt ratio and return on investment .

Table 5.1: Market shares of the first main product or service (percentages)

	1995	1997	1999
≤5	19	15	12
6 – 10	3	3	5
11 – 20	13	21	12
21 – 30	19	12	14
31 - 40	16	18	21
41 – 60	3	6	14
61 – 80	16	9	5
81 – 100	10	15	18
TOTAL	100	100	100
N	31	33	43

Table 5.1 shows the development in the market share of the main product or service of the sheltered employment workshops. The majority of the establishment reported a market share of 40% or less. This applies to about 70% of the establishments. Although this proportion is relatively constant, the reported market shares clearly show a positive development. The number of establishments with a relatively small market share of 5% or less decreases in time, while those reporting a relatively high market share (81 – 100%) increase in time. Related to this it is important to note that most are monopolist, i.e. reported a 100% market share. These developments indicating an improving market position related to the main first product or service. Related to the second most important product or service the response was lower. Of course the market share of the second main product is lower than of the first main product. In 1995 91% (N = 23) of the establishments reported a market share of 30% or lower; in 1997 87% (N = 23) and in 1999 79% (N = 29). Only one establishment reported a 100% market share. So also the market share of the second main product or service improves. The improving position of the

establishments can also be shown by the value of net investments. The mean value of the net investments increased from 18.3 million Euro in 1995, and 108.7 million Euro in 1997 to 161.5 million Euro in 1999. When we suppose that these investments are efficient, the competitive position of the sheltered workshops has become stronger.

Table 5.2: Development in employment of disabled in coming two years

	Frequency	Percent
Strong increase	9	12
Increase	26	36
About constant	30	41
Decrease	4	6
Strong decrease	4	6
TOTAL	73	100

Not only based on the management initiates it may be concluded that sheltered employment workshops in Europe are forward looking. The economic position of the sheltered employment workshops can also be derived from the employment outlook. The expected development in 2000 and 2001 points are favourable (See Table 5.2). Only some 12% of the respondents expect a (strong) decrease in employment, while almost half expects a (strong) increase in employment. In 40% of the establishment employment will remain about constant in 2000 and 2001. These opinions may be strongly influenced by the business cycle situation at the time of filling up the forms.

Table 5.3: Development in employment of disabled in coming two years distributed by sector of activity

	NACE 0	NACE 2-4	NACE 6-9
Strong increase		2	5
Increase	6	8	7
About constant	1	19	4
Decrease	1	3	
TOTAL	8	32	16

Table 5.3 shows that the most favourable expected developments in employment in 2000 and 2001 are in the service sector. This is in line with the growth of the service sector employment in general in the EU as well as the reported applied updated techniques in this sector. Agriculture

(NACE 0) and certainly Manufacturing (NACE 2-4) show a mixed picture. Several establishments in the agricultural and manufacturing sectors expect a decrease in employment. The employment outlook is most favourable in the private sheltered employment workshops. Half of the private workshops reported an increase in employment and over 10% a strong increase. For the public sheltered workshops these percentages are only 20% and 5%. Some 15% of the public establishments expected a decrease in employment. No private establishment reported a decrease. These differences relate to the sectoral distribution of public and private workshops.

Table 5.4: Exemption from paying social security premiums, by country

Country	Yes, completely	Yes, partially	No	(N)
Austria	1			1
Belgium	1	2	1	4
Denmark	1			1
Finland			5	5
France			14	14
Greece	1		1	2
Ireland	1	2	8	11
Italy		1	1	2
Netherlands			5	5
Portugal		1		1
Spain	9	6		15
Sweden			10	10
United Kingdom			2	2
TOTAL	14 (19%)	12 (16%)	47 (64%)	73 (100)

Table 5.4 shows that almost two thirds of the sheltered workshops are not exempt from paying social security premium. The division by country shows that there is a North-South divide in the EU. In the Northern European countries sheltered employment workshops are treated more similar to “normal” enterprises related to paying social security. Belgium and Ireland show a mixed picture. The reported response also shows that private sheltered workshops are treated more favourable than public sheltered workshops. Of the first half is exempted from paying social security premiums, while almost all public sheltered workshops have to pay premiums.

Table 5.5: Have to pay value added tax, by country

Country	Yes	No	(N)
Austria	1		1
Belgium	3	1	4
Denmark		1	1
Finland	6		6

France	11	4	15
Greece	2	1	3
Ireland	9	3	12
Italy	2		2
Netherlands	5		5
Portugal	1		1
Spain	12	2	14
Sweden	9		9
United Kingdom	3		3
TOTAL	64 (83%)	12 (17%)	76 (100%)

Also related to paying value added tax (VAT) over 80% of the respondent indicated that his/her sheltered employment workshop has to pay VAT. Less than 20% is exempt from paying VAT. Hence, also related to VAT sheltered employment workshops are treated as “normal” enterprises (See Table 5.5). On the other hand, much more than related to social security premiums, countries show a mixed picture. The latter may be related to the product or service produced. It may also be related to the kind of sheltered workshop, i.e. its ownership. However, cross tabulation shows that there is no difference between public, private or voluntary establishments. 80-90% of the establishments have to pay VAT, irrespective of ownership.

Table 5.6: National, regional or local subsidies, by country

Country	National	Regional	Local	(N)
Austria	1	1		1
Belgium	2	4	3	4
Denmark	1	1	1	1
Finland	1	2	4	6
France	11	2	1	15
Greece	3	3		3
Ireland	9		1	10
Italy	1	1	1	2
Netherlands	5		2	5
Portugal	1			1
Spain	1	15	2	15
Sweden	10			10
United Kingdom	2	1	2	3
TOTAL	48	30	17	76

Almost two thirds (48) of the sheltered employment workshop are subsidies by national governments; 30 respondents reported to receive subsidies from regional governments and 17

reported subsidies from local government (See Table 5.6). The question that arises is whether there is an accumulation of subsidies from both national, regional and local governments. To answer this question in Table 5.6 also the country specific distribution of subsidies is presented. The volume of the subsidies will be dealt with in the analysis of the financial data below. In most countries there is accumulation of subsidies from different government levels. This may cause coordination problems as well as transaction costs. In Spain regional government is the most important subsidiser, in Sweden the national government is the sole subsidiser. Ownership is of importance here. Almost all of the public and voluntary organisations are subsidised by national governments, while only two-thirds of the private establishments. The reverse holds for subsidies by regional and local government. Public sheltered workshops are less frequently subsidised by regional and local government than private or voluntary sheltered employment workshops.

Table 5.7: Establishment has to compete for orders with other sheltered establishments?

	Frequency	Percent
Always	14	17
Sometimes	39	46
Never	32	38
TOTAL	85	100

The good news from Table 5.7 is that almost 40% of sheltered workshops never have to compete with each other for orders. For almost half of the workshop establishments this is sometime the case. Only 17% indicated they always had to compete with other sheltered establishments in their country. To say it differently there is relatively little competition for orders between sheltered workshops. From this it may be concluded that the good and services produced by the sheltered workshops are to a large extent complementary and of a heterogeneous nature. This is in line with the earlier reported finding that sheltered workshops are active in almost all sectors of activity. It is important to mention here that there are hardly any differences in the frequency of competition, i.e. the competitive environment between private and public establishments.

Table 5.8: Establishment has to compete for orders with other private enterprises?

	Frequency	Percent
Always	56	65
Sometimes	23	27
Never	7	8
TOTAL	86	100

Almost four of every ten sheltered employment establishment reported never to compete with another sheltered employment workshop for orders. On the other hand two thirds of the respondents indicated that they always have to compete for orders with private enterprises in the product market in their country. One quarter sometimes has to compete with private enterprises (See Table 5.8). This indicates that sheltered employment workshops are not sheltered from competition and that they produce tradable and competitive goods. So it not a special niche they are producing in. This also may be an indirect indicator for the quality of the goods and services produced by sheltered workshops in Europe. Here ownership status plays a role. Public organisation have to compete more often with other private enterprises in the product market. This again is related to the agricultural and manufacturing sectors they are relatively active in.

Table 5.9: Description of competition in sales in 1999

	Frequency	Percent
No competition	4	5
Only regional competition	32	38
Only domestic competition	10	12
Domestic. comp with little foreign competition	15	18
Both domestic and foreign competition	24	28
TOTAL	85	100

In 1999 competition in sales of the sheltered employment workshops was found on various levels. The importance of these levels varies (See Table 5.9). Most important are the regional competition and both domestic and foreign competition. Hence, sheltered workshop not only produce for the regional market, but also for the domestic as well as the international market. The latter may be related to outsourcing of part of the production towards enterprises in other countries, e.g. Eastern European countries. Of course the competitive patterns are related to the sector of activity the workshop are in. E.g. textile and high tech. The conditions of competition for sheltered workshops are similar to the one of the private enterprises in general. The representative EPOC survey for 10 EU Member countries (European Foundation, 1997) also shows that 43% of the workplaces are operating under conditions of both domestic and foreign competition. Given the Single European Market this result is not a surprise. Only domestic was reported by 28% and some 17% reported domestic competition with little foreign competition. No competition: 13%. Note that regional competition was not included in the EPOC study questionnaire. Also ownership plays a role here. The competition on sales of private sheltered employment workshops is best described by regional competition; for the public sheltered employment workshops by domestic and foreign competition. The latter is related to the sector of activity.

Table 5.10: Development sales competition over past 5 years, 1995-1999

	Frequency	Percent
Declined	2	2
Stayed the same	24	29
Increased slightly	22	26
Increased significantly	35	42
None of the above	1	1
TOTAL	84	100

Table 5.10 shows that sales competition increased (significantly) over the past five years between 1994 and 2000. This increase in sales competition applies to all sectors of activity. This is related to the establishment of EMU. EMU intensifies competition between companies. This may be a threat for sheltered workshops, taking into account their dual focus. However, as came forward from previous sections it has also been a trigger for changes in the management and in the organisation of sheltered workshops and hence it represent a challenge. However, employment in some workshops active in agriculture (NACE 0) and manufacturing (NACE 2-4) seems threatened as a result of increased competitive pressure. From these results it may be concluded that most sheltered workshop seem prepared for an independent future. Similar finding related to the development in the competitive environment of the enterprises in general are recorded in the EU by the EPOC survey (European Foundation, 1997). Also here just over half of the workplaces reported a significant increase while around a quarter reported a slight increase over the past three years. These finding fit properly the three-step model proposed by EUG-IPWH (1999) mentioned in Chapter 1 of this report. Almost two thirds of the public sheltered employment organisations reported a significant increase in sales competition between 1994 and 2000. For the private organisation this was only just over one quarter. This of course is very much related to the EMU and the fact that the public organisation produce much more for the international market. Two thirds of the private workshops reported that competition stayed the same, while this was recorded by one quarter of the public workshops.

Table 5.11: Economic performance ratios in Euro

	1995	1997	1999
Training costs per employee	72.256	88.426	49.032
Supervision/employees ratio	7.1	6.7	8.5
Capital intensity	0.73	0.82	0.98

Total sales per employee	176.082	195.706	235.949
Value added per employee	157.221	120.886	143.094
Subsidies per employee	224.217	237.399	250.595
Added value/subsidies received	0.7	0.51	0.57

The training costs per employee of the sheltered workshops are considerable (See Table 5.11).² This is expected. Vocational training is among the aims of most sheltered employment workshops (See Chapter 4). Sheltered employment organisations invest considerably more time in ‘on the job’ training and supervision to ensure employees have the necessary skills to manage work tasks. The time taken to learn skills is generally significant. Training also tends to be ongoing and repeat rather than one off and is generally greater than for able-bodied workers (See KPMG, 1999).

From Table 4.5 in the previous chapter it can be calculated that the percentage of supervisory plus management personnel relative to production personnel in the three years under review is 7-9% for sheltered employment establishments (See Table 5.11). The percentages are about twice as high as in open employment. For the northern European Rhinelandic countries the percentage is 4-6%; For the Anglo-Saxon countries it is higher: 15% (See Gordon, 1994). The higher ratio than the economy as a whole is expected, taking into account the stated (social) purpose of the sheltered employment workshops. The ratio also depends on the sector of activity as well as the prevalent type of handicap.

The figure for the capital intensity in Table 5.11 is measured by the ratio of fixed assets and total assets. Between 1994 and 2000 this ratio increases from 0.7 to unity. Another way to measure the capital intensity is the ratio of fixed assets to total sales. This measure also shows an increase in time from 1.7 in 1995, 1.6 in 1997 and 2.0 in 1999. The increase in the capital intensity is in line with the earlier reported increase in the value of net investments in the second half of the 1990s. This growing capital intensity is potentially a source for increase of the efficiency of the production process and hence the cost effectiveness of the sheltered employment workshops. This of course depends on the efficiency of the net investment.

A measure for efficiency is the sales per employees. Total sales per employee increase in time, indicating an improvement of the efficiency (See Table 5.11) On average the subsidies

² In the questionnaire the questions where an amount of money should be filled are in millions of national currency. These amounts for the years 1995, 1997 and 1999 have been converted in ECU or Euro (See Annex 6 for the applied exchange rates).

per employee are higher than the value added. Turnover depends on the size of the establishment and the sector of activity as well as the target group as well as the major purpose of the management. A better performance is the labour productivity measures as the output per hour worked. This is the ultimate measure for efficiency. Unfortunately, these data – although relevant questions were included in the questionnaire – is not available for a sufficient number of establishments due to high number of missings to draw conclusions on. Another measure is productivity per person employed. We apply value added – turnover minus costs of materials etc. - per person employed. Productivity depends on the aim of the establishment, for offering social assistance or medical care will reduce the available number of working hours and hence total productivity.

Although a reduction in government subsidies may be expected, the means of the value of subsidies per employee show some increase (See Table 5.11) This may be related to the increasing proportion of disabled people with a high degree of work disability that are employed. These subsidies compensate for the additional costs incurred by the workshops.

Table 5.12: Financial ratios

	1995	1997	1999
Current ratio	13.0	11.7	7.3
Quick ratio	2.7	9.2	7.1
Debt ratio	0.56	0.53	0.51
Return on investment (net profit)	0.02	0.10	0.03
Return on investment (net loss)	0.08	0.10	0.07

Finally some financial ratios are presented. Liquidity is the extent of a firm's ability to meet current liabilities as they become due. The current ratio is a measure for the liquidity of an establishment and is calculated by current assets divided by current liabilities (See Blommaert et al., 1991). Current assets are cash plus assets that are expected to be converted to cash or sold or consumed during one reporting cycle (usually one year). The latter mainly concern stocks. Current liabilities are liabilities that fall due within the span of the business reporting cycle. The quick ratio is also a measure for liquidity in the short term and are the liquid assets (including marketable securities and debtors) divided by current liabilities. The difference between the current ratio and the quick ratio is in the stocks, the inventory. The current ratio as well as the quick ratio for the sheltered employment workshops are very high compared with the wider economy. From the liquidity point of view this is favourable. However, from

the efficiency point of view this may be unfavourable. Inventories are costly. Also cash money does not give returns or may even have negative returns. Although these tendencies are clear, further research is needed here to draw final conclusions.

The debt ratio is a measure for solvency and is calculated by debts divided by assets. Solvency is the extent to which a firm would be able to pay its debts in the event of liquidation. Assets refer to economic resources expected to produce future cash inflows or reduce future cash outflows. The debt ratio (0.5) is relatively high, compared to private enterprises in general (0.3). From the solvency point of view this is a favourable position. However, from the efficiency point of view it may be interest to attract less expensive money from outside the workshops.

Return on assets, return in investment (ROI) is calculated by profit before taxes plus interest, divided by average assets. Over half of the establishments reported profits, and a little less than half reported losses. The returns on assets of the sheltered workshops are relatively low. However, one may question whether for sheltered employment workshops this ratio should be equal to the one of the private sector in general, taking into account the dual focus.

6. Conclusions and recommendations

The major aim of the present small scale comparative economic study is to contribute to the improvement of the performance of the sheltered employment workshops in the European Union. The study tries to reveal tendencies. It is not intended to achieve the degree of accuracy of national studies. Comparative research in the European Union has to deal with the practical problem of differences in definitions between member states and the language, i.e. the translation problem. These practical problems hamper the gathering of comparative data. In this project, before drawing conclusions and making recommendations, the research team of the University of Nijmegen asked the national experts participating in the working group to comment on the crude research results. This of course cannot be a substitute for or assure representative results of the present small scale project or compensate for the low response rate, but it offers a better basis to draw conclusions. Also the comparison with earlier comparative research and with the wider economy contribute to this purpose.

The low response rate as well as the high number of missings in the returned forms related to (historical) employment, economic and financial data of the establishments may at least partly be explained from the fact that the management of the sheltered employment workshops does not need this information to achieve its aim and the information is not necessary for the sheltered employment establishment to survive. However, economic as well as employment performance and the quality of management decisions could improve by the availability of such information. Central bodies or national governments could create incentives for the establishments to gather and keep record of such data. Coordination between country is recommendable.

The starting point for a successful integration of disabled people into the market sector ought to be the individual worker. From the reintegration point of view the emphasis should be on the possibilities and not on the limitations of the individual. The establishment of a standardised information system in the EU is recommendable. For the availability of comparable data is a condition *sine qua non* for learning across participating sheltered employment workshops and across countries. The European Commission favours a pathway approach which encompasses a tailor-made package of training and other support measures for each individual and of which combines the efforts of a wide range of partners (including local

authorities, social partners, NGO's etc) to help the most vulnerable into employment. Reliable and comparable data on the number, specific problems, needs and geographical distribution of people with disabilities is necessary to develop preventive and active and to improve the matching process in the labour market.

Sheltered institutions are a major factor for integrating those people who because of their disability cannot (yet) work in ordinary employment into society and for economic independence. Despite increased competition the results of this project seem to indicate that there has not been a major change in the main target group in recent years. As far as the target group changes from medical limitations of physical, mental or psychological origin to limitations in relation to the work to be performed there is the danger of substitution. Persons with a mental handicap are not (any more) the largest proportion of employees of sheltered employment workshops in the EU; the group of physical handicapped including the sensory handicapped is equally large. This shift in type of handicap may be related to developments in and the application of new technologies (ICT). Individuals with the most severe disabilities, i.e. with a high degree of work disability are well represented in the personnel of sheltered workshops. The fact that data related to the degree of work disability are not readily available at establishment level is surprising, for the degree of work disability is the most important selection criterion for the sheltered workshops. The unskilled occupations is the most dominant function level in the sheltered workshops. The skilled professions is also (becoming) an important function level in sheltered workshops. This may point towards a development of a duality in the population of workshops. It fits in the developments from manufacturing to services and the application of ICT.

Data on transition to the open market are not readily available despite the importance of this target set by the management. From the reported low transition rates it may be concluded that sheltered employment often is a dead end. Sheltered employment still is mainly a social provision than a labour market oriented provision as part of active labour market policy. However, high transition rates is a necessary condition but not a sufficient condition for integration into the labour market. New initiatives like enclaves could contribute to the improvement of the transition rates, by bridging the gap between sheltered and open employment. The present research does not allow to draw conclusions on this.

Sheltered workshops are not so much different from commercial enterprises. They are not active in active in energy and water (NACE 1) and building (NACE 5). Most sheltered workshops are small and medium size establishments. The gender differences in the sheltered workshops are similar to those of the economy as a whole. The population of employed people in the sheltered workshops is relatively young. Most employees with supervisory responsibilities are non-disabled. Most production personnel are disabled people. The supervision personnel/production personnel ratio is twice as high as in open employment. Sheltered employment workshops are more labour intensive but innovation and new technology plays a role. It seems that they manage to stay updated within their “traditional” markets in which they have a comparative competitive advantage. The contents and the intensity of the management initiatives in the field of ICT, automation, job rotation, the flattening of the management structure in the sheltered employment sector are similar to those in the open employment sector. Sheltered workshops spent relatively much money training per employee. Related to employability and integration into open it seems important that training by the sheltered employment workshops aim is to equip workers for outside employment. The reported data also show that the competitive environment is similar to the open sector. Sheltered workshop not only produce for the regional market, but also for the domestic as well as the international market. Like in the open employment sector sales competition increased (significantly) in all sectors of activity over the past five years. Sheltered workshops seem relatively well prepared and adapted to the increasing competitive pressure. The data do not allow to draw conclusions related to their capability of restructuring their operating hours and working time management. Also related to the structure of the employment contracts and the employment conditions additional research is needed.

Market shares and sales increased in the second half of the 1990s. The employment outlook for 2000 and 2001 is favourable, notably for the sheltered employment workshops in the service sector. Also the reported increasing amount of net investments indicates that the competitive position of the sheltered workshops has become stronger. The staff of private and public sheltered workshops does not lack commercial skills. The future of private sheltered employment workshops is brighter than of the public ones. The results also suggest that private sheltered workshops are more adaptable than public ones. To a large extent this is related to the differences in the sector of activity.

The research results also point out that from the efficiency point of view a closer look at the financial structure of the sheltered employment workshops may contribute to achieving their main goals.

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ANNEX

Annex 1

Members of steering committee and national experts participating in the EUG-IPWH Economic Study 2000

National experts

Walter Brunner, BBRZ, Austria
Roger Cacao and Sandra Marques, FENACERCI, Portugal
Alan Chapman, Remploy Ltd., United Kingdom
Constantine Georgopoulos, National Confederation of Disabled People (ESAEA), Greece
Ulla Jespersen, S.I.E., Denmark
Henk Kronenberg, NOSW, The Netherlands
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Holger Moeller, BAG WfB, Germany
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Marjatta Varanka, FPED, Finland
Alfons Weltens and Mark Muyshondt, VLAB, Belgium

Steering group

Leo Kooyman The European Group - IPWH Chairman of Steering Committee
Philippe Boidin The European Group - IPWH Board Member
Alain Rialland The European Group - IPWH Secretary

Annex 6

Average number of national currency (exchange rate) per ECU or Euro, 1995-1999

	1995 (ECU)	1997 (ECU)	1999 (Euro)
Austria (Schilling)	13.18	13.82	13.76
Belgium (Franc)	38.55	40.53	40.34
Denmark (Crown)	7.33	7.48	7.44
Finland (Mark)	5.71	5.88	5.95
France (Franc)	6.52	6.61	6.56
Greece (Drachma)	303.01	309.33	325.77
Ireland (Pound)	0.82	0.75	0.79
Italy (Lira)	2,131.50	1,929.63	1,936.27
Netherlands (Guilder)	2.10	2.21	2.20
Portugal (Escudo)	196.12	198.56	200.48
Spain (Peseta)	163.00	165.88	166.39
Sweden (Crown)	9.33	8.66	8.81
United Kingdom (Pound)	0.83	0.69	0.66

Source: Data kindly provided by the Dutch central bank (De Nederlandsche Bank).

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