



**TOGETHER**  
*for a sustainable future*

## OCCASION

This publication has been made available to the public on the occasion of the 50<sup>th</sup> anniversary of the United Nations Industrial Development Organisation.



**TOGETHER**  
*for a sustainable future*

## DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

## FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

## CONTACT

Please contact [publications@unido.org](mailto:publications@unido.org) for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at [www.unido.org](http://www.unido.org)

21068

Distr.  
LIMITED

CPD.16(SPEC.)  
2 May 1995

UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION

ORIGINAL: ENGLISH

**PARTICIPATION OF WOMEN IN MANUFACTURING:  
PATTERNS, DETERMINANTS AND FUTURE TRENDS  
REGIONAL ANALYSIS, ECE REGION**

XP/RER/94/110

**FINAL REPORT\***

prepared by

Integration of Women in Industrial  
Development Unit

\* The views expressed in this document are those of the author and do not necessarily reflect those of the UNIDO Secretariat. This document has not been edited.

V.95-53558

## PREFACE

This study<sup>1</sup> is part of UNIDO's efforts to establish a more systematic approach to data gathering and analysis of women's participation in the manufacturing sector and of the factors that determine their participation in this sector. It is expected that this approach will provide a basis for identifying and designing strategies and action plans to improve women's participation in industrial development. In a wider context, the study forms a part of UNIDO's contribution to regional preparations for the Fourth World Conference on Women to be held in Beijing in 1995. This study was generously supported by the Government of the Netherlands.

The present study covers in detail the industrialized economies of the ECE region, seven Emerging Eastern European economies and Turkey. The study used the methodology provided by the global analysis of patterns of women's industrial/economic participation in a 1992/1993 UNIDO study on "Women in Manufacturing : Participation Patterns, Determinants and Trends" (UNIDO, October 1993). A conceptual model designed for regional analysis, was used as an important guideline for selecting variables and indicators. The methodology together with some proposed strategies and plans of actions as well as the data base prepared for the analysis are the main outputs of this study.

The study has been implemented by the Integration of Women in Industrial Development Unit with the assistance and cooperation of the United Nations Commission for Europe (ECE). The work involved in the study was shared between international consultants Cecilia Andersen, Anna Gelei, Teresa Salazar de Buckle and the Unit's Typology Team, Giorgia Dario-Paolucci, Claudia Barberis and Stefan Bosnjakovic.

---

<sup>1</sup> We are aware of the fact that the period covered by the study is critical because it is a period of recession for the industrialized European countries and a period of un-precedented general socio-economic and institutional transformation for the Eastern and Central European countries covered by the analysis. This is particularly true for the economies in transition where further changes will take place in the near future, whose effect is not predictable. Therefore these findings could prove to be weak retrospectively in an already stabilized environment.

## TABLE OF CONTENTS

<b>INTRODUCTION</b> .....	1
<b>CHAPTER I : FRAMEWORK OF THE ANALYSIS</b> .....	3
I.1. Conceptual Framework: Objectives of the Analysis .....	3
I.2. Theoretical Framework .....	3
<b>CHAPTER II : DEVELOPMENT PERSPECTIVES IN THE ECE</b> .....	11
II.1 Development Trends .....	11
II.1.1 Recent Development Trends in the OECD .....	13
II.1.2 Recent Development Trends in Selected Emerging Eastern European Economies .....	15
II.2 Structural Changes and Challenges .....	23
II.2.1 "Tertiarization" of the Economy .....	23
II.2.2 Structural Shifts within Manufacturing .....	24
II.2.3 Shifts in Labour Demand: Towards Higher-Skilled Labour .....	24
II.2.4 Shifts in Labour Supply .....	25
II.2.5 Shifts in Working Conditions: Increased Employment Flexibility .....	25
II.2.6 Greater Privatization of Public Services .....	25
II.3 International Competition .....	26
II.3.1 Increasing International Interaction .....	26
II.3.2 Increasing Need for Investment in Human Resources Development .....	26
<b>CHAPTER III : PARTICIPATION OF WOMEN IN ECONOMIC ACTIVITY</b> ..	27
III.1. Women's Role in the Overall Economy .....	27
III.1.1 Women's Position in the Economically Active Population .....	27
III.2 Women's Participation in Manufacturing .....	29
III.3 Economic and Industrial Development .....	30
III.4 Social and Demographic Conditions .....	31
III.5 Political and Institutional Decision-Making .....	31
III.6 Determinants of Women's Economic and Industrial Participation .....	32
III.6.1 Factors Influencing Women's Position in Society .....	32
III.6.2	
<b>CHAPTER IV : PATTERNS OF WOMEN'S PARTICIPATION - GROUPS OF COUNTRIES AND THEIR CHARACTERISTICS</b> .....	36
IV.1 Cluster Characteristics .....	36
IV.1.1 Overview of the Main Cluster Characteristics .....	36
IV.1.2 Description of the Country Groups .....	37
IV.1.3 Additional Characteristics of the Economies in Transition .....	43
IV.1.4 Cluster Characteristics: Graphical Representation .....	44

<b>CHAPTER V : CONCLUSIONS AND RECOMMENDATIONS</b> .....	53
V.1. Regional Conclusions and Recommendations .....	53
V.2. Cluster-specific Recommendations .....	56
V.3. Project Proposals .....	60
<b>BIBLIOGRAPHY</b> .....	63
<b>GLOSSARY</b> .....	66
<b>ANNEXES</b> .....	70
Annex 1: List of ECE countries	
Annex 2: List of OECD countries	
Annex 3: System Characteristics of Countries	
Annex 4: Sources of Variables and Indicators	
Annex 5: Enlargement of the Data Base	
Annex 6: List of Participants to the Workshop	
Annex 7: Statistical Annex	

**TABLES AND FIGURES****CHAPTER I**

**BOX 1** Methodology

**BOX 2** Conceptual Model

**TABLE 1** List of Variables and Indicators

**Table 2** Selected Indicators for all countries

**CHAPTER II**

**Table 3** Growth Rates in GDP, MVA and Employment in some Central and Eastern European countries %

**Table 4** Unemployment Rates by Sex: Selected Countries

**Table 5** Change in Total Female Employment by Economic Activity during the Transition Period 1990-92 %

**Table 6** Changes in Women's Employment in the Services Sector in Selected Economies in Transition 1989-92 %

**CHAPTER III**

**Table 7** Women's Economic and Industrial Participation, Multiple Correlation Analysis: Strong Relationships

**Table 8** Women's Economic and Industrial Participation Results of Factor Analysis

**CHAPTER IV**

**Table 9** ECE Region. Cluster and Regional Means

**Table 10** Economies in Transition - Multiple Correlation Analysis - Strong Relationships

**Figure 1** Cluster Characteristics. Cluster 1: Norway, Finland, Denmark and Luxembourg

**Figure 2** Cluster Characteristics. Cluster 2: Canada, France, UK, USA, Belgium, Netherlands, Austria, Germany and Sweden

**Figure 3** Cluster Characteristics. Cluster 3: Ireland, Spain and Italy

**Figure 4** Cluster Characteristics. Cluster 4: Czech Republic, Slovakia, Bulgaria, Poland, Hungary and Romania

Figure 5 Cluster Characteristics. Cluster 5: Greece, Portugal and Cyprus

Figure 6 Cluster Characteristics. Cluster 6: Luxembourg

Figure 7 Cluster Characteristics. Cluster 7: Turkey

Figure 8 Index Male/Female Disparity in EAP (15+)

## INTRODUCTION

The 1985 Nairobi Forward Looking Strategies for the Advancement of Women to the Year 2000 recognize the essential contribution of female labour to economic growth and output. The persistence of female-male gaps in human resources development poses the important challenge of accelerating women's integration by making economic structures and policies more responsive to women's needs.

The scarcity of adequate information is a serious obstacle for the understanding and analysis of women's social and economic position. (To the region under consideration this is especially the case with respect to the emerging economies of Eastern Europe). Internationally, some progress has been made in the overall design of indicators to measure women's economic activity. The use of these indicators has contributed to the enhancement of women's visibility and to knowledge about the conditions under which they function in the economy. Analysis of such indicators may result in the determination of useful implications for the development and welfare of nations.

In this study, women's participation in the economy and in the manufacturing sector is analyzed. A systematic approach has been used for data collection and analysis, in line with the work performed by UNIDO at the global level in 1992-93. It uses a conceptual model which reflects the interplay of a set of systems, economic, industrial, political, demographic and legal that provide the environment surrounding the work of women (Box 1). The methodological framework is described in chapter 1 and the list of variables and indicators is summarized in table 1 of chapter 1.

The study represents UNIDO's contribution to the regional preparation for the Fourth World Conference on Women to be held in Beijing this year. Integrated strategies and actions proposed in this study should provide an input to the formulation of a Regional Plan of Action.

The complexity of the system model used for the analysis required the creation of individual data bases for each country. These data bases, if maintained updated, can permit a close follow up of the role of women in the economy and will contribute to enhance the visibility of women in the different regions. The databases can also be useful tools when national or regional action programs for improving women's position in the manufacturing sector and in the overall economy are prepared.

### Objectives of the study

There are two main objectives of the study:

- 1- To improve the availability of statistical data on women's economic and industrial participation and,
- 2- To derive strategies and actions to lessen disparities and improving women's position in the manufacturing sector and in overall economic activities of the region. A comprehensive assessment of the characteristics of female participation in the labour market was undertaken using a systematic approach to the analysis.

This approach provides a comparative framework of data on women's participation in the economy. This framework is used as a basis for deriving conclusions and recommendations. These outputs will be useful for decision making in areas which need to be addressed if the participation of women in economic and industrial development is to be enhanced in quantitative and qualitative terms and put on an equal footing with that of men.

The economic data used in the study indicate that the recession may have bottomed out in many European and other OECD countries - or will do so during 1995. This economic recovery will bring little relief for the unemployed: that figure will remain at record levels in the next years. Because of foreseeable structural changes that will affect all industrial sectors and the public administration, the very same can be expected for the economies in transition.



Economic recovery in the countries under consideration does represent an all too essential opportunity for making the structural changes in the labour market, that are necessary for maintaining and improving the region's competitiveness on a global level.

Data also indicate that, in this overall economic context, the role of women in the economy is becoming increasingly important. Women's contribution to employment and unemployment increased markedly over the past few years. However, female participation in employment is still low in a number of countries and in most places women are concentrated in a narrow range of jobs and sectors. Inequalities of opportunities for women remain an important matter of concern. Women's place in a new economic and industrial environment and their equitable integration in the labour market will therefore be important points of discussion during the next years.

These years will be characterized by crucial changes in the economy: there is the challenge of technological innovation and adaptation ; there is the integration and expansion of the European Union; there is the economic emergence of Eastern European countries and the increasing competitive capacity of a series of Asian and South American countries. These developments lead to international relocation and international restructuring of industry and services. If such changes represent a more rational and more competitive use of the factors of production of the European region, they should also lead to economic growth. The beneficial impact of these developments for female labour in the region, will heavily depend on women's capacity to obtain increased integration and participation in the economy. Inversely, the competitive capacity of the region within the world economy will be very much influenced by the degree in which women, and especially skilled women, are integrated in the economic activities of the region.

### **Structure of the study**

Chapter I gives a brief overview of the methodological framework adopted for the analysis and presents the variables and indicators selected for this study.

Chapter II analyzes development perspectives in the different countries of the region. Features of actual labour market developments in the OECD area and in the economies in transition are presented. Complementary to this, there is some specific attention given to recent trends in the selected emerging Eastern economies. The second part of chapter II analyses how current issues in economic development and their future trends can be expected to influence women's economic and industrial involvement.

Chapter III focuses more specifically on the major characteristics of women's actual participation in the economies of the region, with particular emphasis on the manufacturing sector. This chapter also assesses possible influential factors such as economic/industrial, demographic and political environmental factors.

Chapter IV describes the seven clusters of countries which have been identified as sharing similar characteristics of women's economic and industrial participation, constraints and challenges that could in turn facilitate the design of specific strategies and actions for a more efficient use of human resources in economic and industrial development in the region.

Chapter V outlines priority areas of concern related to actual issues and future trends of relevance to women's economic status in the region, according to the different patterns of participation and group- specific challenges identified in the course of this study.

## CHAPTER I - FRAMEWORK OF THE ANALYSIS

This chapter outlines the main objectives of the study and the methodological approach. This is followed by a description of the main findings of the analysis.

### I.1. OBJECTIVES OF THE ANALYSIS

The purpose of this study is to identify patterns in the level and quality of women's economic and industrial participation and to detect key economic, social and institutional determinants which influence this participation. The identification of patterns permits a methodological classification of the countries covered in the study, into groups that share similar characteristics with regard to women's economic and industrial participation.

The results of the study constitute a basis for analysis and discussion of major current and emerging issues that will be of concern to women's industrial status in different countries and country groups, and for the identification of differentiated strategies of action for patterns of participation.

The aim is to arrive at a comprehensive and structured understanding of main trends and influences that favour or hamper women's integration in manufacturing, and of the role of female industrial labour in relation to social, economic and industrial progress. The availability of statistical data on women's economic and industrial participation is improved through the establishment of specialized country and regional data bases required for the present analysis. The data bases should be kept updated and used in the future as a tool for monitoring women's economic and industrial participation.

### I.2. THEORETICAL FRAMEWORK

The theoretical framework consists of three parts : a conceptual model, the identification of variables and indicators, and a statistical analysis. The framework is an adapted approach developed by UNIDO for the analysis of industrial systems and sectoral typologies (Box 1).

#### I.2.1. Conceptual model of women's economic and industrial participation

Acknowledging the fact that the pattern of women's participation in the countries' manufacturing sector and their economies as a whole is the result of different interacting factors and a complex set of relationships, a conceptual model was devised for the analysis that is pictured in Box 2. This model illustrates that the underlying assumptions for the analysis are :

- 1 Women's economic participation is determined by interdependent relationships between a number of systems : economic, social, demographic, traditional culture/religion, political and legal/institutional.
- 2 Each system may be represented by certain variables. The variables selected for this study are presented in table 1. The interaction of these variables has a different impact on economic participation of men and women in different age groups, income groups, social groups and household units.
- 3 Variables within one system may strengthen, weaken or neutralize the impact of variables in other systems.

#### I.2.2. Identification of variables and indicators

Empirical research, surveys and studies have identified issues directly or indirectly relevant for the examination of women's role in economic and industrial development. These issues were expressed as variables and classified under the relevant systems. Statistical indicators were chosen to quantify and systematize information pertaining to the variables. Selection of these indicators relied heavily on conceptual work undertaken by the UN system with regard to gender sensitive statistics characterizing women's economic role. Table 1 shows the list of selected variables and indicators grouped under the relevant systems. The variables finally selected for the analysis are highlighted in this table. Country coverage was determined by the availability of comparative data. The final composition of the list of variables retained for the study was a result of factor and multivariate

### METHODOLOGICAL FRAMEWORK

The methodological framework consists of three parts: a conceptual model, identification of variables and indicators, and statistical analysis. The framework is an adapted approach developed by UNIDO for the analysis of industrial systems and sectoral typologies.

#### A. Conceptual model of women's economic/industrial participation

The underlying premises for the analysis are as follows:

1. Women's economic participation is determined by inter-dependent relationships between a number of systems: economic, social, demographic, traditional culture/religion, political, and legal/institutional.
2. Each system may be represented by a number of variables. The interactions of these variables have a different impact on economic participation of men and women in different age groups, income groups, social groups and household units.
3. Variables within one system may strengthen/weaken/ neutralize the impact of variables in other systems.

#### B. Identification of variables and indicators

Empirical research, surveys and studies have identified issues relevant to the examination of women's role in economic/industrial development. These issues were expressed as variables and classified under the relevant systems. Statistical indicators were chosen to quantify and systematize information pertaining to the variables. Selection of these indicators relied heavily on conceptual work undertaken by the UN system with regard to gender sensitive statistics characterizing women's economic role. Table 1 shows the list of variables and indicators grouped under the relevant systems. An assessment of the indicators at a country and regional level helped to delineate different patterns of male and female labour force participation in a given time.

#### C. Statistical tools and analysis

Statistical tools facilitated cross-country comparative analysis of large sets of data which gave a more complete picture of factors affecting the economic role of women. Means, correlations and regressions were calculated to determine the strength/weakness of indicators as well as their relationships. Multivariate statistical techniques were used to approximate groupings of countries sharing similar characteristics of women's economic participation. Results of statistical analysis were verified by qualitative information.

Box 2

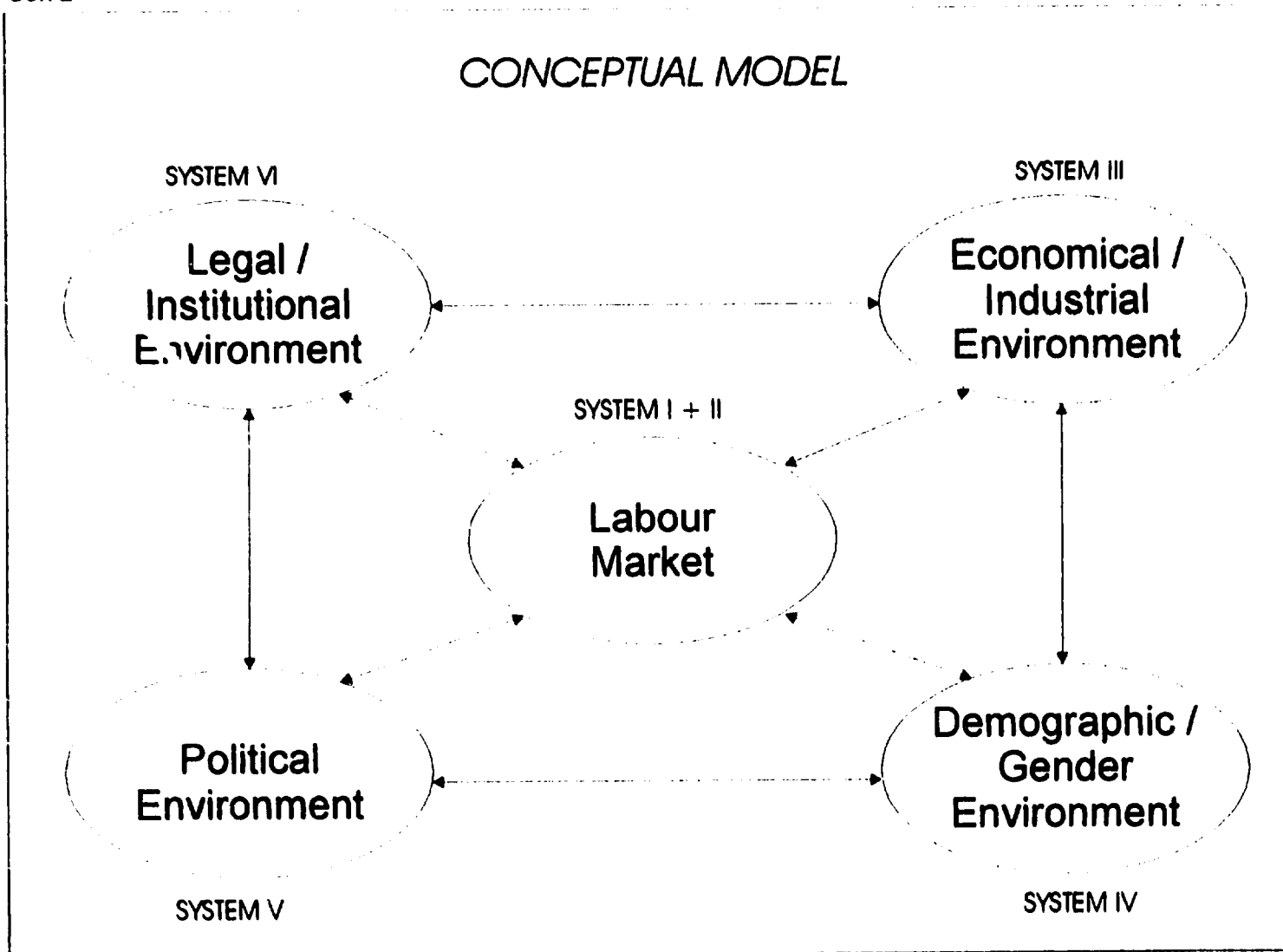


Table 1

## LIST OF VARIABLES AND INDICATORS

<b>I. LABOUR FORCE CHARACTERISTICS</b>	
<b>Variable 1.1. Size and distribution of Economically Active Population (EAP)</b>	
1.1.1.	Women's economic activity rate (15 years +) [Economically active female population 15+ / total female population 15+]
1.1.2.	Gender gap in economic activity rate ~ [(Male - female EAP) - total EAP]
1.1.3.	Women's economic activity rate (15-64) [Economically active female population 15-64 / total female population 15-64]
1.1.4.	Index in EAP (15-64 years) [(Male - Female EAP 15-64) / total female EAP]
1.1.5.	Women's participation rate in the agricultural sector ~ [Females EAP in agriculture / total female EAP]
1.1.7.	Women's participation rate in the tertiary sector (commerce and services) [Females EAP in tertiary sector / total female EAP]
1.1.8.	Gender gap in tertiary activities [(Male - female EAP in tertiary sector) / total EAP in tertiary sector]
1.1.9.	Rate of growth of female EAP (1970-90)
1.1.10.	Women's share in total EAP [Female EAP / total EAP]
<b>Variable 1.2. Size and distribution of employment</b>	
1.2.1.	Women's employment rate ~ [Female employment / female EAP]
1.2.2.	Index of male/female disparity [(Male employment - female employment) / male employment]
1.2.3.	Women's employment rate in non-agricultural activity [Female employment in non agricultural activities / female employment]
1.2.4.	Index of male/female disparity [(Male - female employment in non-agricultural activities) / male employment in non-agricultural activities]
1.2.5.	Women's employment rate in tertiary sector ~ [Female employment in tertiary sector / female employment]
1.2.6.	Index in employment rate in tertiary sector [(Male - female employment in tertiary sector) / male employment in tertiary sector]
1.2.7.	Women's employment rate in services [Female employment in services / female employment in tertiary sector]
1.2.8.	Index in employ. rate in services [(Male - female employment in services) / male employment in services]
1.2.9.	Women's Total Employment Rate [Female employment/total employment]
1.2.10.	Rate of growth of women's employ. rate in non-agric. activity [Rate = $(Vf/Vp) 1/n - 1$ ] Vf = latest year; Vp = first year

~ Indicators used in cluster analysis

Table 1

## LIST OF VARIABLES AND INDICATORS

<b>Variable 1.3. Employment status</b>	
1.3.1.	Women's self employment rate ~ [Female self employed / female employment]
1.3.2.	Index of male/female disparity [(Male - female self employed) / male self employed]
1.3.3.	Women's unpaid family employment rate [Female unpaid family workers / female employment]
1.3.4.	Index of male/female disparity [(Male - female unpaid family workers) / male unpaid family workers]
1.3.5	Women's part-time employment ratio [Female part-time employment / female employment]
<b>Variable 1.4. Employment by Employer</b>	
1.4.1	Women's employment ratio in public sector [Female employment in public sector / female employment]
1.4.2	Index in women's employment in the public sector [(Male - female employment in public sector) / male employment in public sector]
<b>Variable 1.5. Occupational status</b>	
1.5.1.	Women's participation rate in professional and technical positions [Women in category 0/1 / total female employment]
1.5.2.	Index of male/female disparity [(Male in category 0/1 - female in category 0/1) / male in category 0/1]
1.5.3.	Women's participation rate in administrative and managerial positions [Women in category 2 / female employment]
1.5.4.	Index of male/female disparity [(Male in category 2 - female in category 2) / male in category 2]
1.5.7.	Women's participation rate in non-agricultural activities [Women in category 7+8+9 / female employment]
1.5.8.	Index of male/female disparity [(Male in category 7+8+9 - female in category 7+8+9) / male in category 7+8+9]
<b>II. INDUSTRIAL LABOUR FORCE CHARACTERISTICS</b>	
<b>Variable 2.1. Size and distribution</b>	
2.1.1.	Participation rate of women in manufacturing [Female EAP in manufacturing / total female EAP]
2.1.2.	Gender gap in industrial (manufacturing) activities [( Male - female EAP in manufacturing) / total EAP in manufacturing ]
2.1.3.	Participation rate of women in manufacturing employment ~ [Female employment in manuf. / total female employment]
2.1.4.	Index of male/female disparity [(Male - female employment in manufacturing) / male employment in manufacturing]
2.1.5.	Rate of women's involvement in the food, beverages and tobacco sub-sector (31) ~ [Female employment in 31 / female manufacturing employment (3)]

~ Indicators used in cluster analysis

Table 1

## LIST OF VARIABLES AND INDICATORS

2.1.6.	Index of male/female disparity [(Male employment in 31 - female employment in 31) / male employment in 31]
2.1.7.	Rate of women's involvement in the textile, garments and leather sub-sector (32) ~ [Female employment in 32 / female manufacturing employment (3)]
2.1.3.	Index of male/female disparity [(Male employment in 32 - female employment in 32) / male employment in 32]
2.1.9.	Rate of women's involvement in metal, machinery and equipment production of sub-sector (38) ~ [Female employment in 38 / total female manufacturing employment (3)]
2.1.10.	Index of male/female disparity [(Male employment in 38 - female employment in 38) / male employment in 38]
2.1.11	Women in manufacturing employment [Female employment in manufacturing / total manufacturing employment]
<b>III. ECONOMIC AND INDUSTRIAL ENVIRONMENT</b>	
<b>Variable 3.1. Level of economic development</b>	
3.1.1.	Logarithm of GDP/capita [(minX - X (=GDP/capita;log)) / (minX - maxX)]
3.1.2.	Share of the agricultural sector in GDP
3.1.3.	Share of the tertiary sector in GDP
3.1.4.	Share of MVA in GDP
3.1.5.	Share of exports in GDP
3.1.7.	Inflation rate [mean of price index for last three years]
3.1.8.	Share of government expenditure in GDP
3.1.9.	GDP per capita ~ [absolute values in US \$]
3.1.10	Food security index
3.1.11	Integrated poverty index
<b>Variable 3.2. Level of industrial development</b>	
3.2.1.	Logarithm of MVA/capita [(minX - X) / (minX - maxX)]
3.2.2.	Share of manufactured goods in total exports [Exports of manufactured goods (3) / total exports]
3.2.3.	Share of sub-sectors 31 and 32 in total MVA ~ [MVA (31 + 32) / total MVA (3)]
3.2.4.	Share of subsector 38 in total MVA ~ [MVA (38) / total MVA (3)]
3.2.5	MVA per capita

~ Indicators used in cluster analysis

Table 1

## LIST OF VARIABLES AND INDICATORS

3.2.6.	Annual growth rate for industry (1980-90)
3.2.9	Share of the food and beverages sub-sector (31) in total MVA
3.2.10	Share of the textile and leather sub-sector (32) in total MVA
<b>Variable 3.3. Infrastructure</b>	
3.3.1	Length of railways per 1000 square kilometres
3.3.2.	Length of road per 1000 square kilometres
3.3.3.	Number of radio receivers per 1000 inhabitants
3.3.4.	Government expenditure on basic human needs [Government expenditure on social security+housing, water+food / total government exp.]
3.3.5.	Government expenditure on education [Government expenditure on education / total government expenditure]
<b>IV. SOCIAL AND DEMOGRAPHIC CONDITIONS</b>	
<b>Variable 4.1. Size and distribution of population</b>	
4.1.1.	Urbanization [Urban population / total population]
4.1.2	Index in Urbanization [(Male - female urban population) / male urban population]
4.1.3.	Gender gap in life expectancy [(Male - female life expectancy at birth) / total life expectancy at birth]
4.1.4.	Total fertility (births per woman)
4.1.5.	Mean age at first marriage for women [(minX - X) / (minX - maxX)]
4.1.6	Index in legal age of marriage [(Legal age of a bridegroom - legal age of a gride) / legal age of bridegroom]
4.1.7	Household size ~ [Number of persons per household]
4.1.8.	Female headed households [Female headed households / total number of households]
<b>Variable 4.2. Access to education</b>	
4.2.1.	Gender gap in literacy rate [(Female - male literacy rate) / total literacy rate]
4.2.2.	Female primary enrolment rate [Female enrolment in primary school / female population of relevant age group]
4.2.3.	Index of male/female disparity [(Male enrolment rate in primary school - female enrolment rate in primary school) / male enrolment in primary school]
4.2.4.	Female secondary enrolment ratio ~ [Female enrolment in secondary school / female population of relevant age group]

~ Indicators used in cluster analysis



Table 1

## LIST OF VARIABLES AND INDICATORS

4.2.5.	Gender gap in secondary school enrolment [(Female - male enrolment rate in secondary school) / total enrolment rate in secondary school]
4.2.6.	Female tertiary enrolment ratio [Female enrolment in tertiary school / female population of relevant age group]
4.2.7.	Index of male/female disparity [(Male - female enrolment rate in tertiary school) / male enrolment in tertiary school]
4.2.10	Ratio of female enrolment in technical subjects ~ [Female enrolmen in technical subject / total female enrolment]
4.2.11.	Index of male/female disparity [(Male - female enrolment rate in technical subjects) / male enrolment rate in technical subjects]
<b>V. POLITICAL ENVIRONMENT</b>	
<b>Variable 5.1 Distribution of power</b>	
5.1.1.	Parliamentary representation ~ [Women members of parliament / members of parliament]
5.1.2	Cabinet representation [Female cabinet members / total cabinet members]
5.1.3	Executive representation [Women in the top three ministerial posts / total top three ministerial posts]
5.1.4	Representation in economical and legal affairs [Women in areas of economic and legal affairs / women top three ministerial posts]
<b>VI. LEGAL AND INSTITUTIONAL FRAMEWORK</b>	
<b>Variable 6.1. Legal protection</b>	
6.1.1.	Ratification of the International Convention on elimination of all discrimination against women (CEDAW)
6.1.2.	Ratification of ILO Convention 100 - Equal remuneration, 1951
6.1.3.	Ratification of ILO Convention 111 - Discrimination (Employment and Occupation), 1958

analysis used to identify the statistically independent set of variables the clustering exercise was to be based upon.

The assessment of the indicators at a country and regional level serves to delineate different patterns of male and female labour force participation at a given time.

### 1.2.3. Statistical tools and analysis

Various statistical analytical procedures and tools were applied to the selected variables. Statistical tools facilitated cross-country comparative analysis of systems composed of a relatively large set of variables simultaneously determining the system to be analysed. The set of indicators selected provides a more complete picture of the factors affecting the economic role of women in the region. Means, correlations and regressions were calculated to determine the strengths and the weaknesses of the indicators as well as their relationships. Multi-variate statistical techniques were used to arrive at the grouping of countries sharing similar characteristics of women's economic and industrial participation. Results of statistical analysis were verified by qualitative information.

Cluster analysis was used to identify major groups of countries with similar characteristics. Cluster analysis groups objects or countries on the basis of indicators that describe the system under analysis; in this case, the economic and industrial participation of women in the different countries of the region. The method has advantages over other classification methods because it simultaneously considers a large number of indicators and thus permits a more comprehensive evaluation of women's participation and identifies prevailing differences.

Examination of country-group-specific characteristics of women's participation permits the identification of patterns of female economic and industrial participation, as well as the identification of constraints and opportunities for the improvement of women's status in the labour market. This analysis facilitates the formulation of specific strategies for action adapted to the specific needs of each group of countries.

The lack of gender specific data has resulted in limitations to the analysis, particularly with respect to country coverage. Countries for which the most essential variables were not available had to be eliminated from the sample. This problem was most common in countries from Eastern and Central European countries. Finally a sample of 25 countries was obtained, for which the set of 16 selected indicators was fully covered. This sample was used for the cluster analysis that led to the description of patterns of women's economic and industrial participation, the identification of challenges and constraints and the derivation of strategies and action plans.<sup>2</sup>

## CHAPTER II DEVELOPMENT PERSPECTIVES IN THE ECE

This chapter analyzes in section II.1, current development perspectives in the region. The analysis deals with development trends in the OECD and then with what is taking place in selected emerging countries of Eastern and Central Europe. Section II.2 examines major structural changes and challenges that characterise particularly the OECD region but that are expected over time to influence developments in the emerging economies. The chapter also pays attention to the need for human resource development in view of international competitive conditions.

Table 2 includes selected indicators for a large number of countries in the region.

### II.1 Development Trends

This section focuses more specifically on industrial labour market developments both in the OECD and in some selected emerging Eastern European countries.

---

<sup>2</sup> The latter was produced during the UNIDO-ECE Regional Workshop that took place in Geneva, February 21-23, 1995.

System Characteristics of Selected Indicators for all Countries

Country	System I	System II	System III	System IV	System V
<b>Regional Means</b>	50% 27% 15% 8% 2%	60% 28% 16% 9% 3%	65% 30% 18% 10% 4%	70% 33% 20% 12% 5%	75% 36% 23% 15% 7%
<b>Western European Countries</b>					
Andorra					
Austria					
Channel Island					4.70
Cyprus	34% 0.95	100% 65% 41%	1% 2% 13% 4%		
Denmark					
Finland					
France					
Germany					
Germany, Federal Republic of					
Greece					
Iceland					
Ireland					
Israel					
Italy					
Liechtenstein					
Luxembourg					
Malta					
Netherlands					
Norway					
Portugal					
San Marino					
Spain					
Sweden					
Switzerland					
Turkey					
United Kingdom					
United States					
<b>Central and Eastern European Countries</b>					
Albania	41%	52%	16%	76%	34%
Bosnia and Herzegovina					
Bulgaria					
Burkina Faso					
Croatia					
Czechoslovakia (former)					
Czech Republic					
Estonia					
Georgia					
Hungary					
Latvia					
Lithuania					
Republic of Moldova					
Poland					
Romania					
Slovakia					
Slovenia					
Ukraine					
Yugoslavia (former)					
Yugoslavia (former)					
Yugoslavia (former)					

Table 2

## II.1.1. Recent Development Trends in the OECD

### II.1.1.1. Economic growth and labour market developments

Economic growth remained relatively weak in the OECD area in 1993. Real GDP (Gross Domestic Product) advanced 1.2%, falling from the 1.7% growth recorded in 1992 (Statistical Annex, Table 2). In particular, real GDP declined 0.2% in Europe as many countries entered into recession. Among the major European countries, the United Kingdom was an exception with regard to poor economic performance; its economic recovery began in the latter half of 1992. Economic recovery has covered other countries including Canada, the United States, Australia and New Zealand.

Output growth picked up in 1994, but is still uneven across OECD Member countries given their different cyclical position. The recovery countries are expected to continue to post relatively strong growth as domestic demand increases. Most other OECD countries are expected to move into a recovery which is to a large extent driven by increases in net export given the relative strength of export markets and improvements in competitiveness. As many European countries moved out of recession in 1994, growth for the OECD area is expected to have more than doubled relative to 1993, with real GDP increasing 2.6%. Growth in Europe is however expected to have only reached 1.9%.

Employment gains have been relatively weak, even in countries whose economy has showed an early recovery. For the OECD area as a whole, employment continued to fall in 1993, declining by 0.3%. In 1992, a 0.2% decline was recorded (statistical annex, table 2). The fall was sharpest in Europe, where employment dropped 1.9% with most countries recording declines. Two countries in recovery, Australia and the United Kingdom, also posted declines. The largest declines occurred in Finland and Sweden, countries where economic restructuring has taken place.

The largest employment declines were generally found in industry. In the countries where there is recovery, industrial employment is a weaker element in the actual recovery process than in previous recovery periods. Meanwhile, even employment in services has slowed down, and the service sector is not providing as strong an offset to weak industrial employment as has been observed in the past. Most employment growth, so far, has been in part-time jobs (except in the United States) and in white-collar occupations.

As a result of projected increases in economic activity, the 1994 employment figures for the OECD area as a whole are expected to have improved for the first time in three years with a projected increase of 0.8% for the OECD area as a whole. By contrast, employment is forecasted to have continued to decline by about 0.8% in the European countries.

Labour force growth was substantially weaker in all countries compared with previous recovery periods. Labour force growth slowed in 1993, advancing 0.1% in the OECD as a whole but declining 0.7% in Europe - reflecting, to some extent, poor employment conditions in this part of the region. As labour force growth outpaced employment growth, the unemployment rate continued to edge up in 1993, moving over the 8% mark to 8.2% (Statistical Annex, Table 3 and 4). Unemployment rates are very different among the major OECD economic areas: around 11% of the civilian labour force in the European Community against rates of about 7% and 2.5% in the US and Japan respectively.

In the coming years, labour force growth is expected to pick up. In 1994, the projected labour force increase was about 1.2% for the OECD area, exceeding employment growth. Unemployment rates for the OECD area as a whole, continue to increase, reaching 8.5% in 1994 before declining slightly to 8.3% in 1995. In Europe, the unemployment rate has reached 11.7% in 1994 and is forecasted to increase to 11.8% in 1995.

The fact that GDP growth rates exceed that of employment indicate a general rise in productivity. The growth of GDP follows some structural changes that the economy is undergoing which in turn affect labour market conditions.

The unemployment rate is the most common measure of labour market slack, but in its publications the OECD also proposes the use of additional unemployment measurements such as adding the number of discouraged and involuntary part-time workers to the number of unemployed. When discouraged workers or involuntary part-time

workers are added to the number of unemployed, the data indicate considerably greater slack in some countries compared to the slack measured solely on the basis of open unemployment figures (statistical annex, table 5).

The above discussion indicates that among deeply ongoing changes the regional economic-social system is suffering, some affect directly our field of analysis such as the following:

- welfare state in its classical form is going to disappear and/or be transformed
- directions of the structural changes in the economy in all countries of the region tend to emphasise a tendency towards post-industrial economy which favours less labour intensive productive activities, services and the emerging of new activities on the basis of technological progress.
- the former will further affect the labour market by offering new fields of activity and requiring new abilities and skills.

It can be foreseen that basic transformations will be needed in the organization, system, forms of enterprises which also involve the appearance of new managerial methods. These have to correspond with the transformation of the character of labour supply and demand. (Less working hours, more and continued training processes, new lifestyles, flexible work non existence of state financed social services etc.).

Long-term unemployment continues to be a major problem in the OECD area, particularly in European countries. The indices of long term unemployment continued to rise in 1993. In the European Union, over half the unemployed have been unemployed for more than one year. It is a particular problem for young people in the South of Europe, where they account for 50% of the long-term unemployed. In the North, the long term unemployment is more concentrated among un-skilled middle-aged workers, who have lost their jobs through the closure of plants. Part of the present high unemployment in the European Union is a legacy of the existing rigid conditions in the labour market.

Over the past few years, labour costs in Europe have risen at a much greater rate than the labour costs of Europe's major trading partners. In particular, high non-wage costs (statutory levies and charges, employers' social security contributions...) were a contributing factor to the significant increases in European labour costs. If statutory charges on labour are expressed as a proportion of total labour costs, they account on average for more than 40% of the overall labour costs in the European Union as compared to 20% in Japan and 30% in the USA. Inefficiency of the European labour markets, with a lack of flexibility in terms of organization of working time, pay and mobility, and an inadequate match of labour supply to the needs of the market-especially as regards workforce skills and qualifications - are considered BY employers to be the root causes of the relatively high labour costs.

The constant rise in the labour costs in the European Union, affecting both wage and non-wage components has hindered job creation. Existing collective bargaining, taxation and labour costs arrangements have the effect that gains from economic growth are absorbed mainly by those already in employment, rather than leading to the creation of more jobs. The level of long-term investment has fallen and there is a significant lack of confidence among those involved in economic progress. These facts call attention to the need of reinforcing the social network and the design of solutions that including social welfare considerations may still secure efficiency .

High and rising unemployment rates have also meant that wage increases, as measured by average compensation per employee in the business sector, have remained moderate in the OECD area (statistical annex, table 6). Compensation increased by 3.4% in 1993, compared to the 5.2% recorded in 1992.

### II.1.1.2 Recent industrial labour market developments in the OECD area

Over the last two decades the share of Gross Domestic Product originating from manufacturing declined in almost every OECD country. For the OECD area as a whole, overall industrial production and production in the manufacturing sector in particular, declined in 1992 by almost 1% for the second consecutive year. In terms of the performance of the different manufacturing industries for the OECD as a whole, chemicals, the wood industry and to a lesser extent the food sector registered increases. Production declined slightly in the paper group, and more so in textiles and clothing, nonmetallic mineral products, basic metals and in the fabricated metal products and machinery group.

Manufacturing employment declined by over 2% for the OECD area as a whole, a decline slightly lower than in 1991 but still steeper than in the 1980s. There is a downward trend in manufacturing employment in almost all OECD countries.

In services a more diverse picture emerges. Service jobs continue to grow in the US, Canada, Japan, Germany and Portugal. They are stable in Spain, stable or falling in most EFTA countries, and falling in the UK. It seems that traditional service employment is no longer acting as a buffer for manufacturing job losses. OECD employment growth was near zero in 1991 and 1992 as a result of the much slower growth in service employment combined with the sharp drop in manufacturing.

It is apparent that the time for the redefinition of both industry and services sectors has come. The changes which require this redefinition are dependent on the level and stage of economic development. Given the inherent differences in development patterns and levels observed within the region. It is to be expected that rather important differences will prevail in the redefined industrial and services activities according to each pattern. It will be important to identify the specific activities that will integrate the labour market and within them, their effect on the female labour force.

In addition, within the manufacturing sector, the distribution of value added between industries has continued to move towards from low-technology, labour-intensive and natural resource intensive industries to high and medium technology and towards more science based industries.

### II.1.2. Recent development trends in selected emerging Eastern European economies.

#### II.1.2.1. Reforms towards a market economy

The economies in transition have introduced, with different degrees of intensity, far-reaching reforms aimed at creating the basis for a market economy. These reforms include the privatization in all sectors of the economy, the dismantling and restructuring of many previous systems, the setting up of new institutions and the establishment of a modified legal infrastructure necessary for the operation of the restructured economy.

The break up of the former political system produced in the Central and East European countries and overall social-economic change. Structural changes embracing the entire social-economic spheres have gone along with radical decline in performance and thus in standards of living. The individual countries were additionally hit by the collapse of COMECON (which resulted from the changes themselves) and by the global recession witnessed in the industrialized countries. Nevertheless the transition process these countries all face, produces differentiated effects on socio-economic development and institutional structures. This is due to existing differences in the levels of development they represented and to the strength of the previous political system they had at the start of the change.

Thus there are three basic phenomena relevant to the present analysis: The first is the overall decline of economic performance of each of the countries in question (absolute shrinking of the GDP and outputs of the different sectors) and the consequent under utilization of resources, in absolute terms. The second refers to the structural changes which were combined with the above. The third decisive factor relates to the coincidence in time of the above critical changes and the overall economic recession. The combined effect of this set of economic processes, have strongly affected the labour market and necessarily the position of women in society.

### II.1.2.2. Decline in economic performance during the period 1989-93 and recent events

As it will be shown in Chapter IV, the clustering exercise resulted in the formation of one special cluster for the economies in transition. The formation of this separate cluster happened to express the differences with the rest of the European countries and the existence of similarities within the countries undergoing transition. Nevertheless, marked differences exist between the individual countries; however, with respect to general level of economic development and shift in structures, certain analogies are relevant. The latter stem mainly and are consequences of the characteristics of the past system and therefore can be considered system specific (child care, wage rate, employment policies, etc.).

The existing data prove that besides the similarities, previously existing differences inherent to the individual countries became more pronounced with the ongoing transformation and influenced differently the evolution of the transformation. This differentiation is expected to prevail. Previous stages in "marketization" existing in the individual economies, differences in the economic-institutional background, lead to dissimilar capacities to adapt and compete under the new environment.

Output, as measured by GDP, has declined drastically throughout Central and Eastern Europe since the start of the implementation of the changes. Table 3. shows the figures for the period 1991-93. Nevertheless, some signals of a beginning of stabilization and or recovery can be witnessed in certain countries as Poland, the Czech Republic and Hungary. In the case of Albania, the recovery can be explained through improvements in agriculture, which in this country accounts for more than half the GDP. The table shows for the period 1992-93 a continuous fall in employment in the region, however the net rate of job loss was smaller than in previous years. The major employment losses were occurring in agriculture and within it, in countries with more advanced agro sectors. Women job losses in agriculture have been greater than male's in all countries, disparities being more accentuated in Hungary and Slovakia (Table 4). Losses in industrial employment were smaller than total employment at the beginning of the transition period.

A recent analysis prepared by the European Commission under the series Employment Observatory, entitled "Central and Eastern Europe-Employment Trends and Developments", provides useful comments for the present study two of which we have considered useful quoting: " All countries, even those experiencing growth in 1993, have some considerable way to go before recouping losses in output suffered since 1989. In Poland, after two years of growth, GDP in 1993 was some 12% below its level four years earlier. In the other countries the reduction has been much greater". In Hungary and the Czech Republic the decline in GDP amounted to around 20%, Albania 30 %, and Bulgaria 32%.

The loss in industrial output was even larger throughout the region as production shifted from industry to services. This continued to be the case in 1993, industrial output falling by more than GDP in all countries, while the latter declined, except in Hungary , where industrial output increased by an estimated 4% despite the fall in GDP which was caused largely by a decline in output in agriculture".

TABLE 3.

**GROWTH RATES IN GDP, MVA AND EMPLOYMENT REGISTERED BETWEEN  
1991-1992-93 IN SELECTED CENTRAL AND EASTERN EUROPEAN COUNTRIES  
IN PERCENTAGES**

PERIOD:	GDP	MVA	TOTAL EMPLOYMENT
	92-93	91-92 (a)	1990-1992*
COUNTRY:			
ALBANIA	16.0 (a)	-12.0	-27.1 -13.0
BELARUS	-10.6 - 11.0	-24.0	-6.0 n.a.
BULGARIA	-7.7 -6.0	-7.0	-28.7 -1.5
CZECH REPUBLIC	-7.1 0.5	n.a.	-8.8 -4.0
HUNGARY	-5.0 -2.0	-9.7	-12.1 -6.0
LITHUANIA	-39.3 n.a.	n.a.	-2.9
REPUBLIC OF MOLDOVA	-21.3 -4.0	n.a.	-2.0
POLAND	+1.5 +4.0	+2.9	-12.6 -0.5
ROMANIA	-15.4 +1.0	-22.5	-4.5 -4.0
RUSSIAN FEDERATION	-18.5 -2.0	-3.7	-4.2 n.a.
SLOVANIA	-6.0 +1.0		-18.1
SLOVAKIA	-7.0 -4.7	n.a.	-13.5 -4.0
UKRAINE	-14.0 -15.0	-18	-5.6

Sources: 1. ECE Economic Survey of Europe in 1993-94 a. UNiDO's Global Data Base  
b. European Commission, Employment Observatory, Central and Eastern Europe Employment Trends and Developments", October, 1994.



#### II.1.2.2.1. Industrial production

Industrial production fell in 1993, in all the seven countries considered by the EU analysis<sup>3</sup> to levels below those of 1989, at the start of the transition period. The magnitude of the fall in industrial production ranged from 30% in Hungary, Poland, 36% in the Czech Republic, 43% in Slovakia to 50% in the rest of the countries considered by the EU study. However there were some signs of recovery as the EU analysis indicates: at the start of 1994, industrial output was around 10% higher than the one registered one year earlier in Poland, Hungary and Bulgaria.

The large overall contractions in industrial outputs have been different across the industrial branches, indicating a pattern of industrial structural change that also affects women's position. The biggest losers were metalurgy and mechanical engineering. However, some industrial branches with traditional high female participation, such as textiles, leather and footwear were also hit. Their contraction exceeded that of the whole industrial sector.

#### II.1.2.2.2. Agricultural Production

Agricultural production has declined in the Central and Eastern European countries since the start of the transition period. Major reasons for the decline are as follows:

- 1- Land privatization, which has broken-up large production units existing in the former system following the elimination of collective farms
- 2- Substantial reduction in agricultural support from the governments
- 3- Lack of capital and poor equipment
- 4- Reduced market possibilities
- 5- Additionally, poor climatic conditions, particularly in Hungary

The extent of the decline in 1993 was highest in Bulgaria and Hungary: 6% and 17% respectively and 1% in the Czech Republic. In Romania, agricultural output increased by 12% as a result of government support for the purchase of inputs, legal reforms and favourable weather<sup>4</sup>.

For slightly different reasons the fall in agriculture output was also large in the Baltic states (20% in 1992 and 10% in 1993) and in the CIS countries. In Russia alone, the contraction in agricultural output between 1990 and 1993 reached 21% and 25.9% in Ukraine.

#### II.1.2.3. Labour Market Specificities

As a consequence of the economic developments, conditions and relationships, discussed above, the labour market also suffered rather important changes. Although the direction of the changes has been similar in most countries, nevertheless there are differences to be highlighted with regard to rates and emphasis and to the effect on women's participation.

---

<sup>3</sup> Countries included: Albania, Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovak Republic. EU "Employment Development in Central and Eastern Europe", October, 1994.

<sup>4</sup> See footnote 3.

### II.1.2.3.1. Labour force, employment and unemployment

Some general trends can be observed in these areas, among which is the decline of the labour force and within it an even more pronounced decrease of the female labour force results even more important. The phenomenon is not due to demographic reasons but mainly to the withdrawal from work of the top working age manpower population and to the difficulties that young population face in entering the labour force.

The main reasons for the withdrawal of aged population from the workforce can be found in the industrial restructuring and the reduced number of jobs and demand for older workers, that have been mainly employed in manual jobs and/or in the use of less advanced technologies has sharply decreased.

Different sources of information indicate however, that women's labour force participation has not been affected significantly, up to the present, more than the male participation.

### II.1.2.3.2. Unemployment

The overall economic contraction in the economies of the region resulted in the appearance of open unemployment on a large scale. The size of unemployment however diverges along countries and sectors.

All countries except the Czech republic recorded double digit unemployment, a situation for which they were not prepared. At the beginning of 1994 unemployment was over 20% in Albania, around 16% in Bulgaria and Poland, just under 14% in Slovakia and around 12% in Hungary. In Romania the registered rate was 11%. The Czech Republic being the exception with a rate of 4%<sup>5</sup>.

Unemployment rates in the CIS countries generally lagged behind the rates in the Central and Eastern European countries, due to a certain reluctance in implementing reforms in an attempt to maintain employment levels in spite of structural changes.

However, even under these circumstances, the absolute number of unemployed is very large; in Russia for instance it has been estimated that the number of unemployed reached 3.8 million.

Table 4. includes gender disaggregated information on unemployment for selected countries among the transitional economies.

Table 4

#### UNEMPLOYMENT RATES BY SEX: SELECTED COUNTRIES

Country	September 1992			September 1992			September 1993		
	Total	M	F	Total	M	F	Total	M	F
Czech	....	...	...	2.6	1.9	3.5	3.2	2.5	4.0
Hungary	6.1	6.6	5.5	11.4	12.9	9.8	12.9	15.1	10.5
Poland	10.7	9.4	12.2	13.6	11.7	15.9	15.4	13.5	17.8
Romania	2.4	1.8	3.2	7.2	5.3	9.5	9.2	6.3	13.0
Slovakia	...	...	...	10.6	12.3	9.3	13.7	11.7	16.8
Slovenia	8.1	8.4	7.8	12.2	12.8	11.4	15.3 a	16.1 a	14.3 a

Source: EU., "Economic Survey of Europe", 1993-94

a - October

<sup>5</sup> Employment Observatory, "Central and Eastern Europe", European Commission, October, 1994.

### II.1.2.3.3. Structural shifts in employment

Additionally to the decrease in labour force, employment has also suffered significant declines in all of the countries in question. Table 5 shows employment losses in four countries. Employment losses score strongly between countries, but in Bulgaria the negative change in employment almost doubled the margin - 10-18% as it reached -32% during the period 1990-92. With the exception of Hungary and Bulgaria, the decline in total female employment was stronger than that of males (Paukert, 1994). Moreover, the negative rates of growth in employment registered between 1990-1992 for Bulgaria, Czech and Slovak Republics and Hungary, seemed to have affected more female than male workers in the industrial sector of the four countries and in agriculture in Slovakia and Hungary. (Paukert, 1994)

The general decline of the levels of outputs in all countries of Eastern and Central Europe, gave way to and has been combined with a structural modification of the individual countries. The restructuring however, has not followed uniform rates and patterns as it is illustrated by Table 5, in terms of changes in employment in different economic activities during the transition period. Thus not only the general decline in total employment in the different countries followed different rates but, the changes in total and female employment varied markedly between sectors and countries.

TABLE 5

**CHANGE IN TOTAL AND FEMALE EMPLOYMENT BY  
ECONOMIC ACTIVITY DURING THE TRANSITION  
PERIOD 1990-1992 - %**

Activity	Bulgaria 1990-92	Czech 1989-91	Hungary 1989-92	Slovakia 1989-91
Total Female	-35.2 -32.4	-10.0 -13.0	-12.9 -11.0	-14.1 -18.2
Out of which:				
<b>Agro</b>				
Total	-56.6	-22.6	-34.3	-22.3
Female	-57.4	-24.3	-38.8	-27.3
<b>Industry</b>				
Total	-33.5	-14.1	-17.1	-17.1
Female	-34.5	-18.5	-21.0	-26.7
<b>Construct.</b>				
Total	-47.9	-1.51	-20.5	-16.4
Female	-46.9	-21.0	-10.7	-30.1
<b>Trade</b>				
Total	-49.9	-5.2	-4.3	-22.0
Female	-48.0	-14.8 (a)	-4.5	-26.4 (a)
<b>Trade</b>				
		-30.1 -28.3 (b)		-8.5 -9.3 (b)
<b>Transport</b>				
Total	-24.8	-6.2	-8.5	-2.0
Female	-18.3	+0.5	-1.7	-5.3

(a) domestic trade

(b) other trade activities

Source: L. Paukert, "Women's Employment in East-Central European Countries during the Period of Transition to a Market Economy System", ILO, Geneva, 1994.

#### II.1 2.4. Women's employment and tendencies in their participation

The general high level of employment and within it the relatively high participation of women were common features of all Central and Eastern European countries before the political and economic transformation started.

The characteristics of employment distribution by gender have not changed substantively as indicated by data available for four countries of the region and included in previous tables. The already high proportion of female employment in total employment increased in Bulgaria and Hungary (countries where easily half of the total employment is female employment) but decreased in the Czech republic and Slovakia (where the proportion of female employment has general been lower).

As observed in Table 5, the major job losses occurred in agriculture and within this sector in those countries with more advanced agriculture. Losses in women's agricultural employment have been greater than men in all countries and the disparities have been accentuated in Hungary and in Slovakia. The trade sector provided employment, particularly in Hungary.

Employment in the services sector was generally less negatively affected than the rest of the economy. In fact, most of any new jobs created in the period 1989-92, were in services. Within services, a major growth area seems to be distribution, and the tourist sector with hotels and restaurants. The other area which was significantly underdeveloped under the former regime is banking, finance and related services. Moreover, rather significant gains in female employment in some of these branches can be observed, in these areas (business services, banking, finance, tourism and production services, Table 6). Slovakia shows less dynamic changes and the Czech Republic the most spectacular modifications, particularly in business and technical services. Decreasing employment is registered in housing and communal services, especially in Bulgaria.

Table 6

**CHANGES IN WOMEN'S EMPLOYMENT IN THE SERVICES SECTOR IN SELECTED ECONOMIES IN TRANSITION (%)**

1989-92

SERVICE *	BULGARIA 1990-92	CZECH R. 1989-91	HUNGARY 1989-92	SLOVAKIA 1989-91
BUSINESS/ TECHNICAL		+113.9		-1.1
COMMUNAL				-6.7
FINANCE-BANK INSURANCE	+27.2	+1.2		-2.1
HOUSING COMMUNAL	-41.9	-12.2		-2.3
TOURIST		+23.3		+7.6
PRODUCTION			+12.4	
NON- PRODUCTION			+0.4	

Source: Paukert, ILO, 1984

\* Due to incompatibility in the classification of services activities in the countries, direct comparison of data is not possible. Therefore data under different classifications are included in this table.

### II.1.2.5. Prospects for recovery

Prospects for recovery principally rest on the hope that the massive declines in the output of the public sector have come to an end and that the rapid growth in private sector output will tip the balance from recession to growth. It is expected that, in the future, employment in large state-owned firms will fall more and more, while employment in services and small and medium-sized enterprises (SMEs) will increase. This was already the case in the Czech Republic, where, during 1992, employment in large state-owned firms fell by 14% and in Hungary, where, in the same year, output of larger companies fell by 17% , while the recorded output of firms employing less than 50 persons - which are predominantly in the private sector almost doubled. In Poland also, the economy has already undergone some drastic changes in particular the rapid development of the sector of small private services.

In all emerging economies the principal source of growth is the rapidly expanding private sector and the restructuring of the whole economy towards a competitive system. Continuous and strong export growth following restructuring as well as sustained inflow of foreign capital will also be necessary for sustained recovery. Yet, recession in the region and the virtual collapse of the former Soviet Union economy has depressed traditional markets for exports. In face of this, export patterns are as much as possible shifting towards the European Union and to other market economies. Nevertheless in countries where restructuring and modernization, are going for different reasons at a low pace, the necessary and desirable structural changes in the productive sectors and consequently on exports lag behind.

## II.2. STRUCTURAL CHANGES AND CHALLENGES

In this section the discussion centers on structural changes, challenges and current development issues in manufacturing and in the economy in general in order to determine their possible influences on women's role and position in the economy.

### II.2.1. "Tertiarization" of the Economy

The continuous shift from manufacturing to services in the region means that the importance of the service sector has been steadily growing over time. Today, service activities account for more than half of all employment in the OECD area. Within the service sector, growth in financial and business services, as well as in community services and wholesale trade, has been a common feature of OECD economies over the past decades.

The increasing dominance of the service sector must be seen in the context of changes in the structure of the OECD economies. The growth of the service sector should be related to considerable decreases in the importance of the primary and the manufacturing sector (statistical annex, table 1) and also to the expansion and changing nature of more specialized, industrial or business services.

However, manufacturing and services are becoming more and more interlinked. Today the distinction between manufacturing and services has become increasingly blurred. Historically, service activities focused on community services (banking, transportation, ...) and private household services (barber shops, household employees ...). The category of business or producer services has only more recently been identified. In the past, these business services, ranging from factory cleaning to management counselling and auditing, were mostly provided within the context of goods producing (manufacturing) firms. Today, the nature of business services is drastically changing. Technological innovations and the globalization of markets are modifying and diversifying the needs and potentials of the firms within the region. Much of the recent increases in services, as measured in value added or by employment figures in national statistics, are due to the phenomenon that manufacturing firms either externalize their own services and/or make use of external services for their needs. At the same time, fundamental changes have taken place in the nature of many of the goods produced in the manufacturing sector. Today, product and service are more and more integrated, making manufacturing and services more complex and interconnected. Manufacturing now requires more inputs from services and, conversely, services use increasingly inputs from manufacturing. The same holds for the building and construction sectors where the use of Cad-Cam techniques is expanding at high rates.

Future emerging growth activities in the business service sector are likely to be those which are related to manufacturing, especially to the manufacturing of high technology products. The new business services will include customization and specialization services, design services and maintenance services. Persistent technological change is continuously altering the nature of business services and is creating a trend towards higher levels of skills and an increasing demand for more qualified, highly trained service workers.

Simultaneously, the increasing demand for higher and more transferable skills is also a result of the rationalization and elimination of existing traditional lower-level jobs -particularly routine clerical jobs- and of the reorganization of some existing service activities. Banking, for instance, is reorganizing away from the provision of routine services towards more specialized services and sales.

Although the combined effects of automation, specialization, and customization add up to increasing complexity of services and to increasing demand for high skills, other service activities which employ lower skilled workers can also expand. Increasing female labour market participation and the consequent requirement to continue to meet household and family needs through external paid services, together with the changes in life-styles and increasing needs of a growing population sector of elderly people also create new opportunities. There is a growth in demand for the more traditional personal and social service jobs such as child care, home help for elderly, housework and meal preparation and sectors such as tourism, sports, arts and recreational activities are also rapidly expanding. These new demands should create new opportunities for moderately and low skilled workers. Additionally, new needs related to issues such as maintaining the environmental quality of life and the protection and security of persons and goods, are also sources for new service jobs.

### **II.2.2. Structural shifts within manufacturing**

Within the manufacturing sector, there has been a shift from low-technology, labour-intensive industries to high and medium technology industries. Declines in manufacturing employment in both relative (to services) and absolute terms have been accompanied by important shifts in the composition of manufacturing employment. The sharpest declines since 1980 were in textiles, footwear and leather and in the basic metal industry. The declines in non-metallic mineral products, in wood, cork & furniture industry and in fabricated metal products, equipment & machinery, were more moderate. Employment in food, drink & tobacco stayed level between 1980 and 1992, while it increased only in chemicals and paper and printing. To the extent that these different industries employ workers of different skills, these shifts can also be seen as evidence of a longer-term shift of labour demand towards higher-skilled labour. These trends could favour the incorporation of women to the workforce since it is well known that women perform better than men in activities related to the application of higher skilled technologies and new organizational models particularly in occupations that require fine mobility, precision, responsibility and team work.

Foreseeable structural shifts in manufacturing create the need for new skills and training and retraining of the labour force. These will affect women in the labour market in two ways: by offering new job opportunities and by requiring retraining.

### **II.2.3. Shifts in labour demand : towards higher-skilled labour**

To maintain a competitive edge in the future, OECD countries will have to rely on their capacity for innovation and on high quality production of goods and services. A highly qualified, functionally flexible and mobile work force is therefore essential. It can be expected that, there will be very favourable job opportunities for those with third level education or high-level skills.

The structural shifts in the economy and the technological and organizational changes in manufacturing, have significantly increased or modified the skills required for many occupations. Especially developments in information technology are significantly influencing technological changes and employment opportunities.

#### **II.2.4. Shifts in labour supply**

Changes in social thinking and in demographic patterns are affecting labour supply and the work force. In the life cycle expectations of many men as well as women today, family time and quality of life are increasingly valued. This diminishes their job aspirations and their interests in jobs that make unlimited demands on their time. Family types are changing. Smaller, nuclear families are increasingly the norm for most of the countries of the region. Dual career families are more and more an economic necessity and a social requirement. These changes mean that women as well as men now more and more expect, want and need to participate in the economy on the basis of full or part-time employment.

#### **II.2.5. Shifts in working conditions : Increased employment flexibility**

"Non-standard" forms of employment, or employment flexibility are a growing reality in most industrialized economies. Flexibility can take many forms. It applies mainly to working hours, work organization and employment contracts.

In the OECD, the increasing flexibility was predominantly visible through the development of a-typical or non-standard forms of employment such as part-time work, temporary work and self-employment. Most OECD employment growth in the recent recovery period, has been in part-time jobs. This growth in part-time jobs reflects increasing flexibility needs of both workers and firms but part of it can also be attributed to a certain uncertainty over the stability of the actual economic recovery.

In a number of countries, the development of flexible working conditions has been encouraged or facilitated by public policy : relaxation of regulations applying to non-standard contracts, incentives for employers to create non-standard forms of employment, and incentives for the unemployed to accept such contracts. On the other hand, employers also increasingly use non-standard forms of employment as an element of a flexibility strategy aimed at the improvement in the firm's performance and thus competitiveness. Employers see flexible forms of employment, such as part-time work, as a way to respond to changing market conditions they can add and subtract from the peripheral part-time workforce as needed, while maintaining a high commitment to a core of full-time "standard" employees.

The use of part-time workers has a number of cost and productivity advantages : part-time employment allows adjustment to fluctuating work loads and related staff requirements, part-time workers have lower costs of hiring, screening and introduction compared to full-time workers and mostly wages paid to part-timers are lower than those paid to full-timers. Additionally, to the extent that the employment of part-time workers can reduce overtime and allow a better match between hours worked and hours paid, it can also contribute to a better allocation and utilization of capital investment in equipment, thereby further raising productivity. Nevertheless, part-time workers also often involve additional costs such as higher administrative costs, since administrative overhead costs have to be written off against fewer hours of work. The generalization of such a system would also involve a large increase in training costs.

Employment flexibility also creates advantages for employers by making employment compatible with other areas of activity such as training, child care or family life. However, experience reveals that in practice, not all types of employment flexibility are equally favourable. Part-time jobs, for instance, are, in many economies, only available in a very limited range of occupations, often un-skilled occupations offering low-status jobs. Moreover, flexible forms of employment often do not fit into the boundaries of existing labour regulations and lead to lower job security, career possibilities and wages.

#### **II.2.6. Greater privatization of public services and less support for non-competitive industries**

Over the last few decades, public sector activities have significantly contributed to employment creation in the OECD. In most countries, growth of the public sector and consequent employment opportunities and conditions led to increasing feminization of the public sector labour force.

More recently, however, this trend has changed. The public sector now no longer creates jobs, thereby contributing to structural adaptation and recovery, but is rather engaged in a process of restructuring and



privatization in order to achieve greater economic efficiency. Most OECD countries today have opted for the privatization of public services and utilities and for the rationalization of public services so that users can benefit from competitive services at competitive prices.

In addition, public support for non-competitive industrial activities is substantially reduced. The increased emphasis on economic efficiency is leading to privatization and or substantial decreases in public sector financing for non-competitive state monopolies and mixed enterprises. Governments must also more and more refrain from supporting non-competitive private enterprises, such as shipbuilding or airlines, even if they have traditionally been seen as part of the national image and pride.

### **II.3. International Competition**

#### **II.3.1. Increasing international interaction**

The globalization of economies and markets, which is characterized by the liberalization of trade and the intensification of international competition through technological breakthroughs and greater mobility of both labour, technology and capital has created an increased dependency between economies and labour markets. These increased interactions affect migration flows and the conditions for competition and employment on national labour markets.

Within the global economy, regions such as the European Union are benefiting from regional integration processes. The geographic expansion and the deepening of the European Union as well as the recent trade agreements between the US, Canada and Mexico are important determinants for the future competitiveness of the region.

The economies in transition are gradually benefiting from the regional integration process through investment mechanisms such as joint ventures partnerships with western economies.

#### **II.3.2. Increasing need for investment in human resources development**

At present, the OECD countries have the advantage of holding the most developed human resources potential in the world. Nevertheless, there is growing evidence that other areas of the world may emerge as viable competitors with the competitive advantage of low-wages and costs. The new mobility of capital and technology and the fact that more and more workers in the more advanced developing economies have education and skills and are thus also capable of operating complex technology and machinery implies that the industrialized countries are increasingly confronted with new competitive pressure.

Investment in human resources plays a key role in meeting this challenge by stimulating growth and competitiveness in the post-industrialized countries. The potential of the labour force, the infrastructures and opportunities which enable the efficient utilization of the human resources of the region are actually considered as the most critical elements of the future competitive advantage of the countries under consideration.

For this reason, most (post-)industrialized economies now more and more stress the upgrading of the skills and competence of their population. Nevertheless, the reforms which are required for this continuous upgrading, are often costly and difficult to implement because of the large number of actors and institutions involved in this process. Yet, "life-long learning" is becoming a central element in a high-skills, high-wages labour strategy.

## CHAPTER III - PARTICIPATION OF WOMEN IN ECONOMIC ACTIVITY

### III.1. Women's role in the overall economy

#### III.1.1. Women's position in the economically active population

This section will examine the actual position of women in the total economically active population of the different countries of the region.

The latest economic OECD data indicate that the total 1992 OECD labour force accounted for about 375 million economically active people of which about 215 million, or 57% were men. The 1992 female labour force in the total OECD area accounted for about 160 million economically active women, or 43% of the total labour force (statistical annex, table 7 and 8) This is about 33 million more women than in the 1980 total labour force.

Since the late 1960s, the female labour force participation rate has increased in every OECD country. The yearly average female labour force growth for the period 1973-1990 was about 2%, while, for the same period, there was only an average annual growth of approximately 0.6% for the male labour force. Total male labour force even declined with 1% in 1991, while it remained unchanged in 1992.

When in most OECD regions, male participation rates are actually stable or decreasing, the mobilization of the female population on the labour market has increased considerably over the last decades. Female participation rates are still increasing in a number of OECD countries. Gender differences are therefore diminishing overall, while remaining very pronounced in certain countries. In 1991, for instance, the gap between male and female rates had been reduced to 4 points in Sweden, while in Ireland it was still 42 points (statistical annex, table 9).

The data gathered for this study (UNIDO, 1994) indicate that the number of economically active women is lower than the number of economically active men for all 25 countries. Nevertheless, there is a clear difference between the different countries: The lowest male/female disparity in EAP is exhibited by the Scandinavian countries and the countries with economies in transition. With the exception of Portugal, the degree of gender disparity is highest in Southern Europe, Ireland, Luxembourg and Turkey. In these countries the disparity index is above 0.4, indicating that the number of active men is almost twice as high as the number of active women. These countries are also the countries where women account for a much lower proportion of the active population than in the rest of the analyzed region. In Southern Europe (except Portugal), Ireland and Luxembourg the proportion of women in the active population varies between 34% and 37%, while this share is between 40 and 47% in the other countries of the European Union.

The fact that Portugal has a lower gap between male and female rates than the other Southern European countries is explained as follows by Lopes, Ferreira and Perista: "It was particularly after the sixties with the colonial war and the massive wave of emigration involving the departure of several thousand active men that the need to integrate women on the labour market was finally acknowledged. With the advent of 25 April 1974, the political, economic, social and even cultural changes had repercussions on the position of women in that they created the conditions for an increase in their rate of activity." (Chagas Lopes, Ferreira and Perista, 1991, p.7)

Part of the disparity between male and female participation is due to the fact that women have to combine work and family. As a result of this, a lot of women take up part-time work as an alternative to not working at all. In many Southern European countries, the development of part-time working has been restricted by legislation or by collective agreements which can partially explain why these countries have a lower female participation rate.

The disparity between male and female rates is almost not existing in Sweden (0.08 as disparity index) and Czech Republic (0.1 as disparity index). In both these countries, almost as much men as women are economically active. Disparity values below 0.2 are registered in the rest of the countries with economies in transition with the exception of Romania (0.26).

The lower gender disparity in Sweden and also in the other Nordic countries can probably be explained by a long-standing tradition of women's independence and equality that led to women acquiring political and economic rights at an early date. The Nordic countries also score much better concerning women in political and public decision-making. In addition, forms of family leave and part-time or temporary employment are much better developed in these regions which enable women (and men) to absent themselves from work and return without loss of job, seniority or interrupting their contracts.

Sectoral data provided further classification of women's current position in the labour force of the region. Sectoral figures confirm that, over the last decades, the relative importance of the agricultural sector in terms of demand for (male and female) labour has declined almost everywhere with the exception of Turkey. In this country the female participation is 3 and five times that of Greece, Portugal and Cyprus, 47 and 75%.

In the overall average for the region, 16% of all economically active women are involved in agriculture. In the United States and the United Kingdom, only one out of hundred economically active women are working in the agricultural sector. The participation rate of women is below 10% in 18 of the 25 analyzed countries. In Hungary it is close to 10% and in Poland it is even above 20%. In the southern countries with an important agricultural sector such as Portugal, Greece and Cyprus the number of women in agriculture is on average 18%. Greece is at the higher end with more than 20%, while Portugal is at the lower end with 13%.

In the southern countries, agriculture remains an important sector through which women enter the labour market. The actual decline in employment opportunities in the agricultural sector, can therefore possibly be one of the reasons for the lower female participation rates in the labour market of those countries. Technological improvements in agricultural techniques can also adversely affect female employment if women in rural areas do not obtain the required technical skills and qualifications.

Employment in agriculture is closely tied to the seasons and therefore characterized by extremely flexible work patterns and a high degree of uncertainty and irregularity. For this reason, temporary employment is very important in the agricultural sector. In those countries where female employment in agriculture is high, temporary employment in agriculture is generally also high. In 1989, for instance, 73.5% of those employed in Greek agriculture held temporary jobs; in Portugal this percentage was 49.4%.

The expansion of the service sector has been favourable for the employment of women. In several OECD countries, four out of five women in employment are in the service sector and elsewhere the trend is in that direction. Especially in Europe, a large number of women is concentrated in the service sector. In 1991, over 75% of women in work in the European Union were employed in services as against under 20% in industry, whereas just over half of men in employment worked in services and over 40% in industry. As a consequence, future female employment will increasingly depend on evolutions in the service sector.

Female employment in the tertiary sector is especially high in Norway, Sweden and Canada. It is lower in Greece, Cyprus and in most of the selected emerging Eastern economies and very low in Slovenia and Turkey.

The tertiary share tends to vary inversely with the share of female employment in agriculture. Also, countries with the highest share of (female) employment in the tertiary sector tend, for the most part, to be the more developed economies with the highest level of income per head (e.g. Canada and Sweden).

Germany is an exception to this pattern. Germany, with a share of employment in agriculture that is much lower than the European Union average and one of the highest levels of income per head, has fewer people (men and women) employed in the tertiary sector than Ireland, Italy or Spain.

The self-employed are a very heterogeneous category and details of the definition of a self-employed can vary across national statistics. First because there are people whose status lies between that of wage/salary employment and self employment (e.g. free-lance workers, consultants and people working very short hours). Second, there are the owner-managers of companies. Under tax legislation owner-managers are

registered as employees of their own company because they receive a salary and enjoy limited liability. However, they share many characteristics of the self-employed and usually consider themselves as self-employed. Some countries exclude them from their self-employment statistics, other countries count them as self-employed. Differences in national definitions must be kept in mind when making international comparisons.

OECD statistics indicate that most self-employed are men, the proportion varying from 60% in Canada to over 90% in Turkey. In general, they are older than the average for those in employment. Indeed, in the majority of countries, the number of older self-employed (60 and over) exceed those in the youth age ranges (15 to 24 years), quite the opposite to the situation for employment as a whole. The tendency for the self-employed to be older applies both for women and men, though less strongly for women.

The indicators of women's status on the labour market gathered for this study indicate that, for the region as a whole, the average share of self-employment in female employment is about 8%. High proportions of female self-employment are found in the southern European countries (almost 20%), Poland (13%), Hungary (and Romania (19%) Belgium (10.5%) and Ireland (8.6%). The United Kingdom, Netherlands, France and Luxembourg score around 7%. At the other extreme, Czechoslovakia has a female self-employment rate of almost zero, while the Nordic regions, North America, Germany and Austria have rates between 2 to 4%.

Self-employed women can broadly be divided into two very different groups. One group of self-employed women consists of highly educated women who see entrepreneurial activity and self-employment as an alternative to a career as an employee with advancement chances affected by gender-biased training and promotion systems. The other group of self-employed women is at the opposite side of the skills spectrum and contains women with few qualifications who see self-employment as a way to combine domestic work and gainful employment. (An example could be garments through sub-contracting and agricultural-related activities of the female working force.)

### III.2. Women's participation in manufacturing

Generally, more women are employed in services than in manufacturing. For the region as a whole, the percentage of women employed in manufacturing is on average half that of women in the service sector. The highest representation of women in the manufacturing sector can be observed in Cyprus and in the Eastern European countries. In these countries more than one out of four women in the labour market are employed in manufacturing. On the other hand, female employment in the manufacturing sector is low in Luxembourg (7%), Norway (8.5%) and the Netherlands (2%).

In general it can be concluded that, with the exception of Germany, female employment in manufacturing is lower in more developed countries where the shift to capital and technology intensive manufacturing has led to the elimination of more labour-intensive production with high female labour and where the development of the service sector has led to an increasing number of women in services. This explains why countries that are still in the process of economic restructuring and industrialization and still have a high labour-intensive manufacturing sector and a less developed service sector, such as Cyprus and the eastern European countries have more women active in the manufacturing sector. It is thus likely that female industrial workers will decrease as these countries progress in their industrial development.

Gender specific data on the distribution of the female labour force in the different manufacturing sub-sectors indicate that on average 14% of the women employed in manufacturing are active in the food industry, while on average 29% of them are employed in the textile industry. Nevertheless there are some differences across countries. In Luxembourg and Denmark, for instance, more than one out of four women employed in manufacturing is employed in the food sector, while less than 5% of them is employed in the textile industry. The participation rate of women in the textile and garments sub-sector is highest in Turkey (75%).

### III.3. Economic and industrial development

Patterns of economic and industrial development are analyzed because a major assumption of this study is that economic and industrial development have an important influence on women's participation in the (industrial) labour force and on women's socio-cultural status. While this assumption is generally accepted and is used for this analysis, there are various theories on whether development tends to improve or harm women's role in the economy. Theories can be differentiated in : the integration hypothesis ("optimistic view"), the marginalization hypothesis ("pessimistic view") and the explanation hypothesis.

The integration hypothesis is based on modernization theory as reflected in neo-classical labour market theories. It assumes that economic development automatically opens up employment possibilities for women and paves the way for their integration in public life. Women's integration on the labour market increases their financial independence, productive skills and modern values and attitudes, leading to women's emancipation from their traditional sub-ordinate role and to increased equity between genders.

The marginalization hypothesis is related to dependency theory as reflected in gender/feminist approaches (Anker/Hein, 1986a). According to this thinking, economic modernization generally has resulted in women being marginalized and displaced from production and political control. With capitalist development, women's traditional productive function loses importance and they are reduced to an economically unproductive role of home makers and child rearers, while men are increasingly integrated in the formal sector. This approach has been very much emphasized in the 1970s the early phases of research on women's participation in the economy.

The integration hypothesis gained importance during the 1980s, its basic assumption is as follows : while capitalist modes of production lead to increased economic integration of women, this mainly is in the form of cheap and easily expendable labour, this has a more harmful than beneficial impact on women. Thus marginalization of women is perceived as a result of their inclusion in the labour force and the related segregation in the labour market (Berik/Catagay, 1990). This approach has also been reflected in the theory of the "new international division of labour" (Frobel/Heinrichs/Kreye, 1980). According to this theory, the relocation of production during the 1970s and 1980s has relied on the exploitation of the gender division of labour. Women in peripheral economies constitute because of their subordinate position in society, the cheapest and most flexible and exploitable labour force for international capital. "Their vulnerability has made them a preferred labour force in an evolving pattern of business organizations that tends to rely on flexible and disposable workers." (Mitter, 1986, p.6).

Within the region, there are clear differences in the level of development as reflected in the per capita GDP of the different countries. In the more developed and industrialized countries the GDP per capita varies between US \$ 28,000 (Sweden) and almost US \$ 21,000 (Canada). Except for Italy, the Southern European countries, Ireland and the United Kingdom have a per capita GDP between US \$ 15,000 (Spain and Ireland) and US \$ 8,000 (Greece). At the low end, the selected countries in transition, Poland, Hungary and Czechoslovakia, which are still in the initial stage of the reconstruction of their industry, have a per capita GDP below US \$ 5,000, Slovenia being an exception (6,000).

The importance of different industries in the structure of the manufacturing sector also reveals patterns of industrialization in the various countries. This aspect is especially relevant for this study. A high share of light labour-intensive industries, such as food and textile industries in manufacturing value added (MVA), is often associated with an early stage of industrial modernization and an import-substitution strategy. In Cyprus, Greece, Portugal, Ireland and Eastern European countries, the food and textile sectors account for more than 30% of the total MVA, while in most countries such as Germany, Sweden, the US and Italy, the share of the metal, machinery and equipment sub-sector (branch 38) is dominant.

The high number of women in the service sector shows the evolution to a "tertiary economy" and the integration of the manufacturing sector and the service sector. However there are differences between clusters. A possible explanation for the observed differences in female service employment is the fact that service provision is defined differently across countries. In countries such as Denmark or Norway, services as food preparation, laundry services, child care and care for elderly, form more and more part of the

service sector and are often not any more provided by women in the home. In the Nordic countries, more than elsewhere in the OECD, care for the young and the elderly has been redefined as a collective responsibility and is more and more carried out by women employed in the public sector. In other countries, such as Germany or Italy, such services are primarily provided by women in the home. In still another set of countries, most notably in the United States and, to a lesser extent, in the United Kingdom, care services are mostly privatized and are mainly provided by women who are self-employed or employed by private firms.

In the economies in transition industrial structural change is in the making in most countries. For example, traditional heavy industries are in decline but within them new branches are being established. This is the case of the declining steel industry in Hungary and the simultaneous appearance of car manufacturing in that country; the textile sub-sector has been badly hit in most countries but specialized branches using new technologies survive. This being the case of the declining production of wool intermediate products while the manufacture of carpets is growing.

#### **III.4. Social and demographic conditions**

The pattern of women's participation in the labour market is also assumed to be closely related to social and demographic factors that have an influence on women's status in the economy and in the society as a whole. Socio-cultural factors can be a main barrier to women's integration in the labour force. Both men and women have a reproductive, productive and societal roles. Women's reproductive task is generally much more extensive than that of men because women bear and generally rear the children. Such a time-consuming task impacts on their own capacity to participate in the labour market and often on their capacity to accept opportunities for employment. Even today in the region under consideration, the socio-cultural image of the role of women in the home and in society still affects women's capacity to enter the labour market and to maintain and develop a career.

Household size is considered to be an important indicator of women's capacity to enter the labour market. Although there are some differences between countries, the trends concerning household sizes are similar all over the region. Almost all countries have seen a decline in household size from an average of four to five members per household in 1900 to the current average of only 3.3, with the exception of Turkey, where it remains close to 5.

Not only the average number of children per household has decreased over the last decades. There also is an increasing trend towards new family structures such as the "nuclear family". Elderly people generally no longer move in with their children. They more and more stay at home and are assisted through external services, such as help care, meal preparation and other housework or they are living in environments where basic services are provided.

Women's access to education is also an important determinant for women's capacity to enter and advance in the labour market. Of particular interest to this study is female enrolment in technical subjects because this can have a significant impact on women's access to the manufacturing sector and on their career advancement.

Data analyzed for this study, indicate that, for the region as a whole, almost 30% of the women in enrolment are enrolled in technical subjects. In Hungary, Poland and Romania Luxembourg, between 40 and 70% of the total enrolment in technical subjects corresponds to females. Luxembourg excepted, countries with a high percentage of female technical enrolment have a high female industrial labour force.

#### **III.5. Political and institutional decision-making**

The representation of women in positions of influence on political and public life, provides an indication of the level and extent of women's involvement in societal decision-making. Access to positions of power creates the possibility to enhance the chances of women's demands being considered in policy formulation and in the allocation of public resources.

The figures of women's parliamentary representation in the different countries show at the top, the Nordic countries (Denmark, Norway, Finland and Sweden) where women constitute between 30 and 40% of the members of parliament. At the other extreme there is Cyprus (3.7%), Greece (5%), and France (5.7%). In an intermediate level are found Slovakia, Bulgaria and the Czech republic with levels between 10 and 15%. The rest of the economies in transition show levels of parliamentary participation below 10%. Romania and Turkey showing the lowest values.

### **III.6. Determinants of Women's Economic and Industrial Participation**

#### **III.6.1. Factors influencing women's position in society**

Two techniques were used to identify these factors: multiple correlation analysis and factor analysis. The results obtained are discussed below.

##### **III.6.1.1. Multiple correlation analysis**

The multiple correlation analysis applied to the entire ECE region provides reasonable indications on the economic-social factors which determine the position of women in the economy and industry. Results of multiple correlation analysis also reflect underlying links existing within the ECE region considered as a whole. The signs and the relatively high numeric values of certain coefficients also give a hint of the inherent lack of homogeneity of the region. This will be supported by the results of the clustering analysis.

As it is well known, high positive correlations between any two variables express that the two phenomena represented by the two variables move closely together and in the same direction. In contrast, high negative correlations between the variables express a close but opposite relationship between the two phenomena they represent. While the relationships do not imply causality, the substance of the relationships can be instructive for policy makers.

All the meaningful quantitative results found at this stage of the analysis, express qualitative issues related to the main topic of this study: Women's present position in the economy and industry and the challenges that have to be faced to modify that position-if needed or found necessary- in the present national economies of the region.

Table 7

**WOMEN'S ECONOMIC AND INDUSTRIAL PARTICIPATION  
MULTIPLE CORRELATION ANALYSIS<sup>6</sup>  
STRONG RELATIONSHIPS**

Positive Relationships	Negative Relationships
Women's participation in the tertiary sector and GDP/cap.	Women's participation in the textile industry and the tertiary sector
Women's participation in the tertiary sector and the level of female secondary school enrolment	GDP/capita and women's participation in manufacturing
Share of the Sector 38 in MVA and the participation of women in this sector	Share of food and textile industries in MVA and women in Sector 38.
Women's participation in agriculture and their participation in the textile industry	Women's participation in agriculture and in the tertiary sector
	Women's participation in agriculture and their secondary enrolment level
	Women in the textile industry and their secondary enrolment level

The results in Table 7 reflect some evident and well known relationships that characterize the modern growth process. These results support the information we have on the existing relationships and their impact on women's problematic. These results show that in the region, the occupational sectoral distribution of female employment, the trend towards tertiarization and some structural-dependent relationships ( women share in agriculture) that influence the levels of women's economic development. These relationships illustrate how strongly women's position is dependent on the pattern of development of a given country, which in turn is determined by the economic structure, educational level of women.

Evidently enough, the question emerges, whether the economies characterized by indicators and or relationships referring to a lower level of economic development and a special position for women in the economy, should or will follow the path of the post-industrialized countries? This question could be one of the important challenges for the future EU as a whole and particularly for women's problems in the region.

These relationships together with the results of the clustering exercise, shade light to the existing differences between countries in the region. On the other hand, these results are in harmony with the findings of factor analysis which are presented in the section that follows.

### III.6.1.2. Factor analysis

Factor analysis of the available data was used to identify (latent) variables or effects that explain correlations or covariations within a set of variables. The factors are underlying and represented in the original, observed variables. The identification of the most important factors underlying the presently used set of variables is a supplementary tool for the determination of women's economic and industrial participation. The statistical factor analysis led to the retention of one factor for more detailed analysis : the so-called factors 1. Factor 2, although with much lower explanatory power was found useful to support the interpretation given to Factor 1.



The pattern of the two factors which resulted from the application of the factor analysis over the selected indicators for 25 countries, is summarized in Table 8. It represents the lists of indicators with the highest "explanatory power".

Both the numerical values and the signs of the factor loadings of factor 1 are related to degrees of industrialization and levels of economic development as they determine women's social-economic participation in the region. The indicators with the highest explanatory power are the ones which characterize advanced degrees of industrialization and economic development; meanwhile indicators figuring with high negative explanatory powers represent social-economic constructs which are normally negatively correlated with an advanced degree of development and industrialization. Therefore, factor 1 can be interpreted as the factor expressing the components which determine women's modern position in function of the stage of industrialization ("industrial modernity") and of the level of economic development of a particular country.

The above results reflect the following set of relationships:

1. The more women are involved in the tertiary sector and in branch 38 (modern machinery, electronics etc.), and the higher is the GDP/capita, the more advanced is the position of women in the economy.
2. The lower is the number of women in agriculture, in the textile industry and the share of textile and food industry is in MVA, the more advanced is the position of women in the economy.

From the statistical results of factor 1, it can be logically deduced that a post-industrial stage of economic development -characterized by a high GDP, a strong developed tertiary sector, a comparatively marginal agricultural sector and significantly developed progressive industrial sub-sectors such as branch 38 - can be associated with a high economic and industrial participation of women.

The majority of the factor loadings found in factor 2 is statistically low. The positive relationships found in factor 2 suggest that this factor reflects the relationship between engineering aspects of manufacturing and women's position in it. This is supported by the negative sign found in indicator 2.1.5, which corresponds to women's participation in the food industries. Factor 2 thus is partly supporting the interpretation given to factor 1. This factor also represents the relationships prevailing in the more developed economies, where women's participation in sub-sector 38 has been relatively higher than in other regions of the world.

---

<sup>7</sup> These are the so called Factor Loadings i.e. the "correlations between the original variables and the factors. These provide the key to understanding the nature of the factors" ( "Multivariate Data Analysis with Readings, J.F.Hair, R.E. Anderdon, R.T. Latham, Macmillan, N.Y., 1987., p.234).

Table 8

**WOMEN'S ECONOMIC AND INDUSTRIAL PARTICIPATION**  
**RESULTS OF FACTOR ANALYSIS**

Indicators	Explanatory Power	
	Factor 1	Factor 2
1.2.5 Women's participation rate in the Tertiary Sector	+0.90	
1.1.5. Women's employment rate in the Agriculture Sector	-0.81	
2.1.7 Women's participation rate in sub-sector 32	-0.80	
3.1.9 GDP/capita	+0.80	
4.2.4 Female Secondary Enrolment ratio	+0.76	
4.1.7 Household size	-0.77	
2.1.9 Women's Participation rate in sub-sector 38	+0.73	
3.2.3 Share of sub-sectors 31 and 32 in MVA	-0.75	
	-0.77	
1.1.2 Male/female disparity index in EAP (15+)		-0.60
3.2.4. Share of sub-sector 38 in MVA		+0.57
2.1.3. Women's participation rate in manufacturing employment		+0.66
2.1.5. Women's participation rate in sub-sector 31		-0.56

## CHAPTER IV - PATTERNS OF WOMEN'S PARTICIPATION - GROUPS OF COUNTRIES AND THEIR CHARACTERISTICS -

The patterns of women's participation in the manufacturing sector and in the economy, prevailing in the EEC region were identified using the cluster analysis technique. Countries with similar patterns of participation were grouped together.

This chapter describes groups of countries which have similar characteristics with respect to female participation in the economy and in the manufacturing sector, as well as with respect to possible economic, socio-cultural determinants considered in the conceptual model (Box 1).

A summary of the key findings concerning patterns of women's participation in the labour market and possible factors which influence this participation is presented. The mean values for the main indicators are presented for the region and for each group in Table 9 and the results for specific countries in each group are included in Annex 2. The findings are based on the analysis of official statistical data published by the 25 selected countries and gathered by UNIDO (1994) for this study. To give a broader picture of the actual situation in the different countries, the analysis of the data gathered by UNIDO is supplemented with quantitative and qualitative information from relevant publications

Multiple clustering exercises, led to the identification of seven country clusters( internally similar but externally dissimilar country groups) from a total of 25 countries for which a complete set of the 16 finally selected variables was available. Although there are country to country variations in the indicators within the clusters, the method allows for a "compromise" between a maximum number of similarities and a meaningful number and composition of country groups. Turkey and Luxembourg were identified in independent clusters in each case.

Section IV.1. describes major characteristics of the identified groups, with main emphasis on the presentation of underlying patterns and trends in the individual groups. To define the position of the different clusters within the analyzed region, cluster mean values have been related to the regional mean values of the selected indicators. Tables as well as graphs and charts, that provide underlying quantitative information, are included in the presentation to substantiate the findings made and to describe the groups in a clear form. Table 9 summarizes the cluster and regional mean values of the 16 indicators applied in the analysis. A comparison of the clusters with each other was performed to find similarities and differences between them.

### IV.1. Cluster Characteristics

A first glance at the clustering pattern, reveals that the pattern roughly coincides with major commonly accepted country groupings. On the one hand, this is a result of similar industrialization paths and levels. On the other hand, it reflects the significant similarities that exist in terms of the socio-economic setting and the socio-cultural norms within one region. This confirms that the pattern of women's economic participation as reflected in the clusters, is closely related with major economic changes as well as with socio-cultural influences.

Section IV.1.1. presents an overview of major general cluster characteristics. Section IV.1.2. explains in detail the country groups which have been identified. brief overview of the identified correlations of the individual variables. Section IV.1.3. gives graphical representations of cluster characteristics.

#### IV.1.1. Overview of the main cluster characteristics

In summary, the following groups with a similar pattern of women's involvement in the economy and in manufacturing have been identified :

##### Cluster 1 : Denmark, Finland and Norway

Nordic countries with a high income level typified by a high female participation in the economy, a low level of gender disparity on the labour market and in political positions and by a pronounced role of women in the tertiary sector.

**Cluster 2 : Austria, Belgium, Canada, France, Germany, Sweden, Netherlands, United Kingdom and the United States**

Highly industrialized Western European and North American countries with a high per capita GDP and a medium female concentration in the tertiary sector and in manufacturing.

**Cluster 3 : Ireland, Italy and Spain**

High income countries with a higher gender disparity and with a lower female participation on the labour market.

**Cluster 4 : Bulgaria, Czech Republic, Hungary, Poland, Romania and Slovakia**

Selected, ex-centrally planned lower income Central-Eastern European countries in transition to a market economy with a very high participation of women in the economy, particularly in the textile and food industry, high female participation rate in agriculture and a rather important self-employment ratio. The structure of this group can be defined as being previous to the post-industrial stage.

**Cluster 5 : Cyprus, Greece and Portugal**

More recently developed, lower income South European countries with a low female participation in manufacturing and in the tertiary sector but with a relatively high female involvement in agriculture and a high female self-employment rate.

**Cluster 6 : Luxembourg**

A small country with some of the socio-economic characteristics of the post-industrialized economies but with a pattern of women's participation characterized by a lower than average female employment ratio, high disparity index in economic activity rate and female employment in manufacturing concentrated in the food industries.

**Cluster 7: Turkey**

Turkey was also identified as a cluster on its own, characterized by the highest regional male/female disparity index in economic activity rate, the highest female participation rate in agriculture and the lowest in manufacturing activities.

**IV.1.2. Description of the country groups**

This section gives a more detailed description of the identified clusters. Table 9 summarizes the cluster and regional mean values of the indicators applied to the analysis. Annex 3 contains the system characteristics of individual countries. Additional qualitative information from various studies and publications served to support statistical findings and to illustrate key patterns of women's participation in the economy. At the end of each cluster description, the most relevant results of the correlation analysis of the different individual variables is briefly reviewed.

Correlation analysis is used to identify relationships and mutual influences between indicators of women's economic and manufacturing participation. Since correlations do not explain causal relationships, interpretation of the results is only an indication of the strength not the cause-effect of these relationships.

A great number of high correlations was found in the clusters 1, 3, 4 and 5. However, from a technical point of view, the degree of significance of a large number of these correlations is generally not sufficient, making the interpretation of the correlations questionable. This is probably due to the very low number of countries included in each of the four clusters. In the present section, only those correlations with an acceptable level of significance are discussed.

Table 9

**ECE Region  
Cluster and Regional Means**

Indicator	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Cluster 6	Cluster 7	Means
1.1.5 Women's participation rate in the agricultural sector	3.89%	2.90%	5.91%	11.88%	17.75%	3.00%	74.50%	17.09%
1.2.1 Women's employment ratio	89.15%	91.14%	83.84%	87.15%	92.35%	80.70%	74.50%	82.69%
1.2.5 Women's employment ratio in tertiary sector	82.09%	80.07%	73.97%	55.87%	59.40%	84.20%	15.30%	64.41%
1.3.1 Women's self employment ratio	3.57%	5.22%	14.60%	11.62%	15.08%	7.40%	10.20%	9.67%
2.1.3 Participation ratio of women in manufacturing employment	12.43%	14.05%	17.73%	29.61%	22.85%	7.24%	10.20%	16.30%
2.1.5 Ratio of women's involvement in the food, beverages and tobacco sub-sector	23.02%	15.26%	14.38%	14.25%	14.69%	29.55%	8.90%	17.15%
2.1.7 Ratio of women's involvement in the textile, garments and leather sub-sector	8.01%	11.69%	10.91%	32.33%	31.29%	2.44%	75.20%	24.55%
2.1.9 Ratio of women's involvement in metal, machinery and equipment production	23.31%	31.73%	25.14%	22.85%	6.13%	27.27%	5.10%	20.22%
3.1.9 GDP / Capita	\$ 25,141	\$ 22,027	\$ 16,798	\$ 1,748	\$ 8,467	\$ 26,923	\$ 2,722	\$ 14,832
3.2.3 Share of the food and textile sub-sectors (31 and 32) in total MVA	23.53%	18.43%	25.52%	30.24%	44.46%	10.12%	31.20%	26.21%
3.2.4 Share of metal, machinery and equipment products 38 in total MVA	31.66%	38.70%	36.05%	31.16%	15.62%	20.43%	19.68%	27.62%
4.1.7 Household size	2.51	2.58	3.52	2.90	3.63	3.10	4.97	3.32
4.2.4 Female secondary enrolment ratio	106.00%	94.67%	98.00%	78.30%	77.63%	75.00%	31.10%	79.81%
4.2.10 Ratio of female enrolment in technical subjects	28.96%	28.48%	22.42%	47.03%	4.76%	62.15%	21.48%	30.76%
5.1.1 Share of women in total MP's	35.74%	15.97%	10.17%	10.80%	5.93%	13.33%	1.30%	13.32%
<b>Gender Gap</b>								
1.1.2 Index male / female disparity ( years 15+)	0.15	0.25	0.47	0.16	0.39	0.43	0.58	0.34

### **Cluster 1 : Denmark, Finland and Norway**

The first cluster includes the Nordic countries (with the exception of Sweden) and Luxembourg. Average per capita GDP for this cluster is the highest in the total group of six countries. Women's share in employment, and especially in service employment, is high and participation of women in the economy is almost equal to the participation of men.

In the political and institutional field, the cluster scores very high with respect to women's representation in parliament. For this indicator, the cluster average is twice as high as the regional average. This is not surprising, since these Nordic countries have a very long-standing tradition of women's independence and equality. Women in these countries acquired political and economic rights at an early stage of the average emancipation process in the countries of the region.

Female participation in manufacturing is 11% which is below the regional average of 21%. On the other hand, 82% of the female labour force of cluster 1 is active in the tertiary sector, while this is only 55% at the regional level. The structure of the female participation in the manufacturing sector shows the highest regional concentration of women in the food sector, while it is low in the textile sector. This is not surprising, knowing that this cluster also has a low share of the textile sector in total manufacturing value added.

Manufacturing employment declined at a rate of about half a percentage point a year between 1970 and 1990 in Finland, and by about 1.5% each year in Norway. In both countries, employment during the 1980s increased in high wage or high technology industries so that there was a relative shift towards these sectors away from low wage, low technology jobs.

For cluster 1, the statistical analysis shows a close negative correlation between women's participation in the tertiary sector and women's secondary enrolment. With an increasing female participation in the tertiary sector, secondary enrolment for women decreases in importance. This relationship probably reflects that the progressive orientation of women towards the tertiary sector modifies their educational pattern.

GDP per capita is significantly negatively correlated to women's participation in the agricultural sector, expressing a clear opposite relationship between the economic level of development and women's role in agriculture.

### **Cluster 2 : Austria, Belgium, Canada, France, Germany, Netherlands, Sweden, the United Kingdom and the United States**

Cluster 2 groups the highly industrialized Western European and North American countries (high per capita GDP) with a high female employment ratio and with the second highest concentration of women in the tertiary sector.

In manufacturing, women are especially well represented in branch 38 of the industry (metal, machinery...), together with a high share of sector 38 in the MVA. Yet, because of low shares of the food and textile sectors in MVA, this cluster scores badly concerning women's activity in these two sub-sectors. Self-employment and participation in agriculture are very low.

In cluster 2, there were was a virtual absence of very high correlations. Nevertheless, some reasonable and acceptable relations were found. A significant negative correlation has been observed between the participation of women in the manufacturing sector and the participation of women in the tertiary sector. Thus, in the countries included in cluster 2, there exists an inverse relationship between female activity in manufacturing and female activity in services. The more women are engaged in the tertiary sector - i.e. the more the economy advances towards its post-industrial stage of development - the less women are involved in the manufacturing sector as the tertiary sector, which continuously gains in importance, is absorbing female labour. Part of this shift can be attributed to the growth of the tertiary sector in post-industrialized economies resulting from the expansion of industrial services related to the transfer of production-related functions from manufacturing to service firms. Correlation analysis also shows that, in the countries of cluster 2, Male/female disparities decrease when there is an increase of women's activity in the tertiary sector (or vice versa).

There also is an acceptable negative correlation between women's engagement in industrial sub-sector 38 and the share of the food and textile industries in total MVA. This suggests that a diminishing importance of the more traditional agro-industrial sub-sectors such as food and textiles can be associated with an increasing contribution of women in the more progressive industrial sub-sector 38 and vice versa. A positive correlation between women's engagement in sector 38 and the share of sector 38 in total MVA supports this conclusion.

The share of the most advanced industrial sub-sector, sector 38, in total MVA is negatively related to the household size. This expresses that household sizes decrease in societies with a highly developed sector 38, i.e. in more advanced economies.

### **Cluster 3 : Ireland, Italy and Spain**

Cluster 3 has the highest gender disparity of the clusters in Western Europe. The Tertiary employment, per capita GDP and female manufacturing employment score above the regional mean. The share of the industrial sub-sector 38 in total MVA is above the regional mean. Such a highly developed sector 38 typically characterizes modern industrial economies.

As compared to the other clusters, and especially to cluster 2, the textile industry has much less importance in offering employment for women. Women's secondary enrolment rate and women's enrolment in technical subjects score high.

Another special feature of cluster 3 is the high female self-employment rate. analysis reveal that, for cluster 3, female self-employment and female participation in agriculture are positively correlated. This positive relation indicates that the high level of female self-employment should be related to the above average rate of female activity in agriculture. Probably, a large number of self-employed women in some countries of cluster 3 are women helping their spouses or family in agriculture.

### **Cluster 4 : Czech, Bulgaria, Hungary, Poland, Slovakia, and Romania**

This cluster includes 6 ex-centrally planned economy countries for which data is available. Typical to this cluster is a relatively large scattering of the country values of many indicators around the regional means. Some deviations are very large. This is true of GDP/capita, share of the textiles and food industries in MVA, self-employment, women in the metal, machinery and equipment production, female secondary enrolment ratio.

The six countries forming cluster 4 have a very low average per capita GDP, less than 10% of the average GDP in cluster 2, with a rather significant scoring of US\$ 623 for Bulgaria and 3,441 for Hungary.

The share of industrial sub-sector 38 in these countries is, after cluster 3, the third highest of the entire ECE region under analysis. However, behind this apparent similarity there is a large qualitative difference, that of the sectoral composition of manufacturing. While the manufacturing sector in cluster 2 is dominated by the modern machinery and electronics industry, in cluster 4, in spite of recent sharp decreases in outputs, the food and textile industries still represent a large share in MVA, 30% as opposed to 18%.

This structural difference may explain the fact that the participation of women in manufacturing employment is in this cluster more than twice that of cluster 2. This is probably due to the extremely high female participation in the textile industry in countries of cluster 4. (Almost half of the total female employment in these countries was absorbed by the textile and food industries, while in cluster 2 it is only 26%). The other striking difference between cluster 4 and cluster 2, is the ratio of female employment in the tertiary sector and women's participation in agriculture. While in the post-industrial countries 80% of employed women find a job in the tertiary sector, in the economies in transition only 55% on the average. In agriculture, female employment is still 11% in this cluster while in cluster 2 is 6.7%. (Behind this cluster average stand Poland and Romania with 26 and 21% respectively while it is only 4% for the Czech Republic).

The above findings express that at an early level of industrial modernization, women's participation in manufacturing increases with the growing importance of the manufacturing sector leading to a higher rate of female activity in the manufacturing sector. However, as these countries experience structural changes,

manufacturing becomes more and more capital intensive releasing lower skilled female manpower. At a later stage of modernization, the tertiary sector gains in importance. At that stage, women's industrial role tends to level off and the rate of female activity in the manufacturing sector begins to drop, while more and more women become active in the tertiary sector.

In cluster 4, a very large percentage of the workforce is female and, as a consequence, the gender disparity in economic activity is very low. Although, the number of people employed in agriculture and in manufacturing has declined markedly since the economic reforms, female participation is still high in agriculture as well as in more labour intensive branches of manufacturing.

Women's high (industrial) participation rate in the ex-centrally planned economies can partly be explained as a result of these countries' historical constitutional provisions stipulating that every citizen had both a right and an obligation to work. Also, before these countries started their industrial restructuring process, women's labour was a necessity because of low productivity and labour-intensive production. Present low wage levels, have turned women's work into an essential contribution to generally low family income.

The important concentration of women in the manufacturing sector corresponds with an major role of women in the textile sector. As much as 32% of the women in manufacturing are involved in the textile sector, which is above the average regional value of women's activity in the textile industry.

Female secondary enrolment is low. Nevertheless, women are very well represented in technical enrolment. More than 50% of the women enrolment corresponds to technical subjects. However, the literature indicates that women's qualifications have often not been matched by corresponding career chances. One of the reasons for this miss-match is that, in the countries of cluster 4, specific skills are often more highly valued than years of schooling which is partly due to deficiencies in the schooling system itself and particularly in the vocational training system. In these countries, women also have very limited chances for further training, upgrading and occupational mobility.

The negative correlation between the female secondary enrolment ratio and the ratio of female enrolment in technical subjects probably reflects the specificity of the schooling system in the Eastern European countries. This system offers technical secondary level training schemes which end with a certificate of final examination as is usual in secondary schools. These training schemes are considered as substitutes for secondary enrolment and - at least in Hungary - a large number of people give preference to this type of education because it additionally provides a certified medium level vocational training.

#### **Cluster 5 : Cyprus, Greece and Portugal**

Cluster 5 comprises the more recently developed, lower income southern European countries. The averages of the indicators for this cluster are very different from those of the first three groups. This deviations indicate a general less advanced stage of development and a weaker level in women's position in the economy or society as a whole. Nevertheless, analysis of the data of the individual countries included in cluster 5, reveals that Portugal shows several signs of change in comparison to the other countries in the group.

When compared to the region as a whole, cluster 5 has a quite "traditional" pattern of female employment. There is a low female participation in the tertiary sector but a relatively high female involvement in manufacturing and in agriculture. Gender disparity in the labour market is higher than the regional average male-female disparity.

All three of the countries in this cluster have been recently going through an economic restructuring process. The growth and expansion of the manufacturing sector plays an important role in this process and partially explains why women's integration in the modern manufacturing sector is increasing while female participation still remains quite traditionally oriented.

Moreover, foreign manufacturing investment flows as well as financial support through support programs of the European Union targeting less developed areas in the Union have been important contributors to industrial development. Over the past few years, for instance, Greece and Portugal have benefitted from an inflow of



foreign manufacturing investments because of lower wage advantages. Both countries have also benefitted considerably from European Union financial support. This has some consequences for women. Examples are Portugal and Cyprus where women have a significantly higher share in manufacturing employment than in most other Western European countries.

Inverse correlations were found between female agricultural participation and the total female employment ratio and between female employment in the tertiary sector and women's involvement in agriculture. These findings seem to indicate that, at the present stage of development, the agricultural and tertiary sector do not offer more labour opportunities for the type of female labour force found in cluster 5.

The high gender disparity suggests that more women have to be involved in the labour market. The labour market for women has to be enlarged through the expansion and re-structuring of sector 38 and through the growth of a modern tertiary sector. Yet, the low values of the indicators of female enrolment in technical subjects show that female labour supply as yet is not sufficiently prepared for such a development. It is only a more skilled female labour force which can be expected to find new employment opportunities in the growth sectors.

#### **Cluster 6 : Luxembourg**

The separation of this country from the group of post-industrialized economies is due to large differences relative to the mean values of cluster 2 in many indicators. This is particularly evident in the low values showed in female secondary enrolment ratio, women's employment ratio and participation of women in manufacture and in several of the industrial branches. (The values for Luxembourg are 1/3 to 1/2 than the means for cluster 2). It is interesting to note that although the contribution to MVA of food and textile industries in this country is much lower than in cluster 2, there is a concentration of women workers in the food industries. This together with the rather low female employment ratio and very high concentration in the tertiary sector reflect a special disproportionality and justify the placing of this country in a special group.

#### **Cluster 7: Turkey**

The pattern of women's participation in the economy found in Turkey is unique within the region and confirms the strong influence that the socio-economic setting and the stage of industrial development have on women's position in the economy.

Striking characteristics are the very high level of participation of women in agriculture. (4 times the regional mean) the lowest participation rate in the manufacturing and the tertiary sectors and the highest male/female disparity in the workforce. All these features belong to a strong traditional pattern of female employment.

Within manufacturing, women's participates in a traditional fashion; very high concentration in textiles and garments and very low in sub-sector 38. The manufacturing sector of Turkey is similar to that of cluster 5, with a higher level of diversification from textiles to the manufacture of metal, equipment and electronics (38).

Women social conditions are the lowest in the region, characterized by the highest household size and the lowest female secondary school enrolment ratio (half the value of the regional average and one third the value of clusters 1, 2 and 3). The country shows however a relatively high female enrolment in technical subjects, close the level found in cluster 3 and five times that of cluster 5.

The high gender disparity in the work force and low participation rate in sub-sector 38 seem to indicate that women are not yet prepared to participate in the modernization of industry that appears to be taking place. The relative high level of women enroled in technical subjects may however accelerate the participation of professional and technical women in the modernization process.

## IV.1.3. Additional Characteristics of the Economies in Transition

**Table 10**  
**ECONOMIES IN TRANSITION**  
**MULTIPLE CORRELATION ANALYSIS**  
**STRONG RELATIONSHIPS**

High positive correlation coefficients	High negative correlations coefficients
Male/female disparity: - self employment ratio - share of food and textile in MVA	Women in the tertiary sector: - women in agriculture - women in manufacturing - female enrolment in technical subjects
Women in agro: - women in textile industry - technical enrolment ratio	Women in manufacturing: - GPD/capita - women's secondary enrolment ratio
Women's employment ratio: - women in agro - household size	Women's in textile industry: - women's in tertiary sector - women's participation in MP
Self employment ratio: - share of food and textile industries in MVA	
Women in food industry: GPD/capita	
Women in textile industry: - share of food and textile industries in MVA	
Women in sub-sector 38: - share of 38 in MVA	
GPD/capita: - female secondary enrolment ratio	

The above quantitative results reflect certain - occasionally surprising - special relationships characteristic for the Eastern and Central European economies in transition.

1. The inter-relations found underline the strong linkage between the attained levels on the development path and the situation of women in the subregion. Moreover they also indicate how strongly the economic structural characteristics of the given countries influence women's participation.

2. Most probably as a result of the massive unemployment persisting in the subregion, some employment "buffers" have developed within the individual economies. Self-employment seems to be one of them. (Probably the same holds partly for the social system in some countries where child care allowances assure a moderate but still guaranteed income for women.) As women have been hit by job losses severely - and mainly by the losses in the agriculture, food and textile industries, one of their major escape routes is found through self-employment. The high negative correlations found between women's participation in different industrial sectors and their involvement in the tertiary sector belong to the same problematic, but also reflect the importance of the structural changes these economies are undergoing.

3. A clear connection has been expressed between the level of education of women (represented in the present model by the variable: women's secondary enrolment ratio) and the per capita GPD or the level of development.

4. As opposed to the other European countries, in this subregion the employment rate of women increases under the pressure of the size of the families and the low wage rate.

#### **IV.1.4. Cluster characteristics : graphical representation**

The bar charts, profiles, included in this chapter provide the profiles of each cluster or each country group by illustrating the most distinguishing features of each cluster. These figures allow a two dimensional comparison of clusters. One dimension shows to what extent the mean values of indicators change for the 25 countries with a mean of zero and a variance of 1. The other dimension shows how the deviations differ across clusters. A high (positive or negative) value for a given indicator shows a pronounced difference of the group from the global average, a value close to zero indicates that the group average corresponds to the regional average. The same criteria should be applied to the interpretation of the disparity index.

Figure 1

**CLUSTER CHARACTERISTICS**

Cluster 1: Finland, Norway, and Denmark.

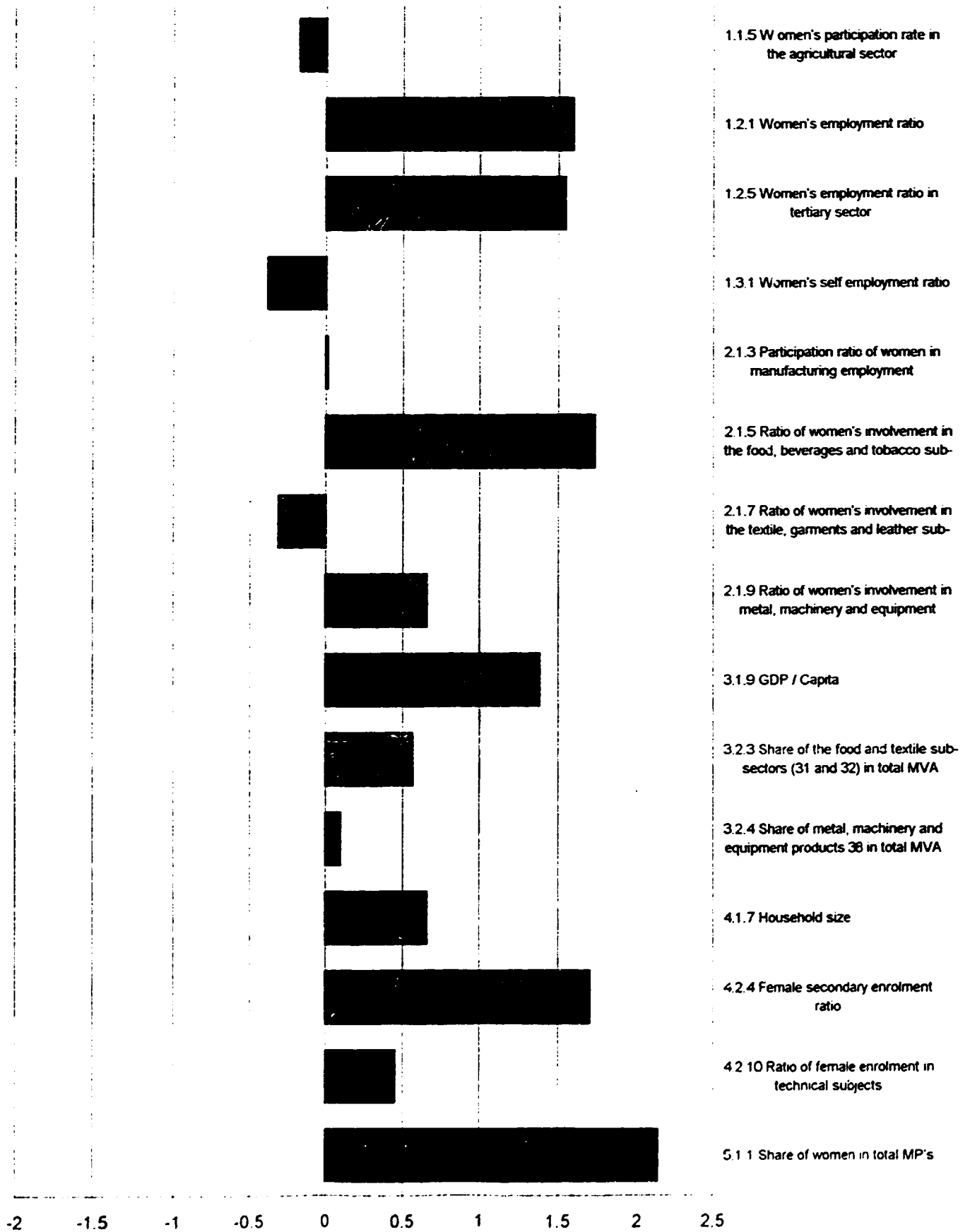


Figure 2

## CLUSTER CHARACTERISTICS

Cluster 2: Canada, France, UK, USA, Belgium, Netherlands, Austria, Germany, and Sweden.

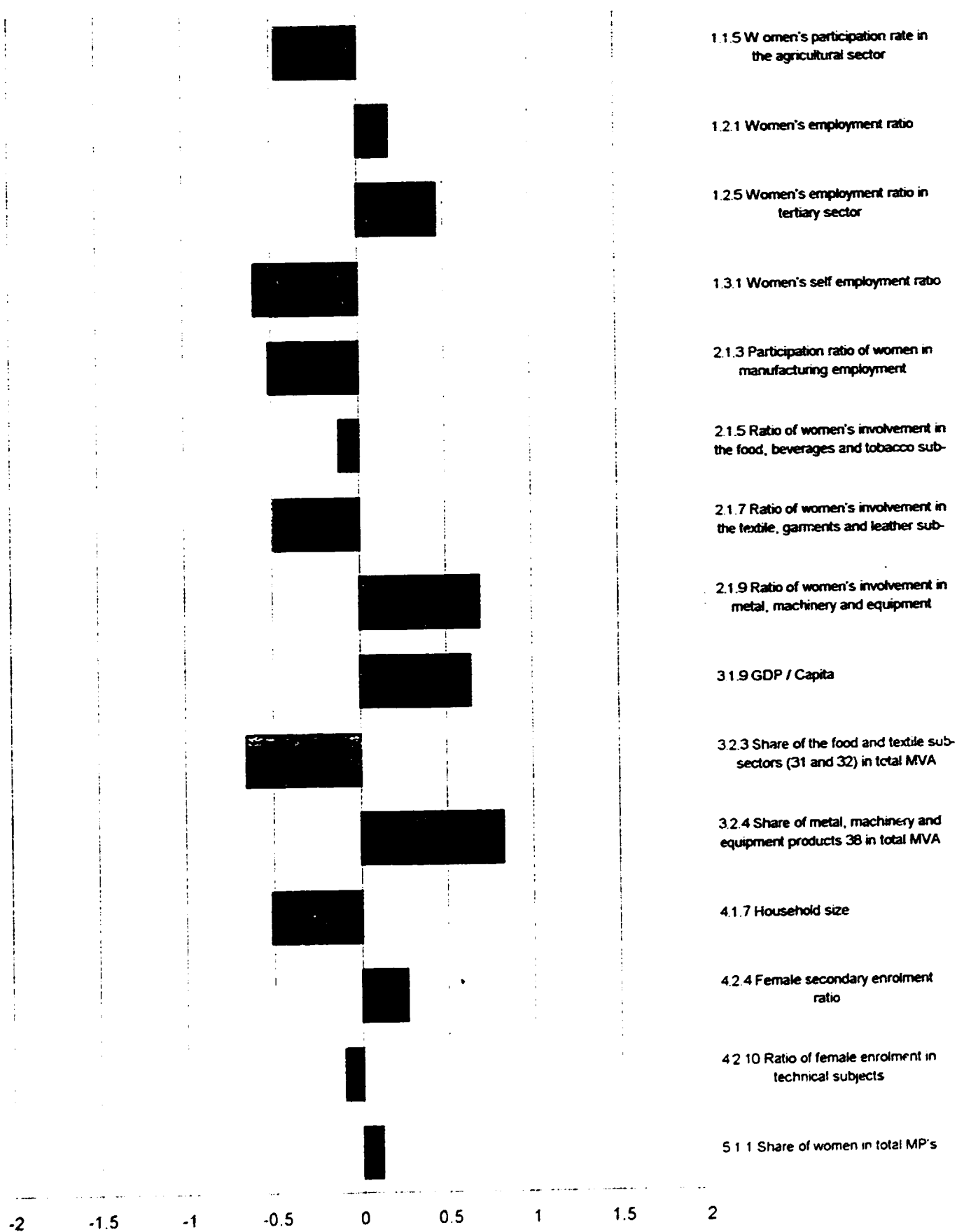


Figure 3

## CLUSTER CHARACTERISTICS

Cluster 3: Ireland, Spain, and Italy.

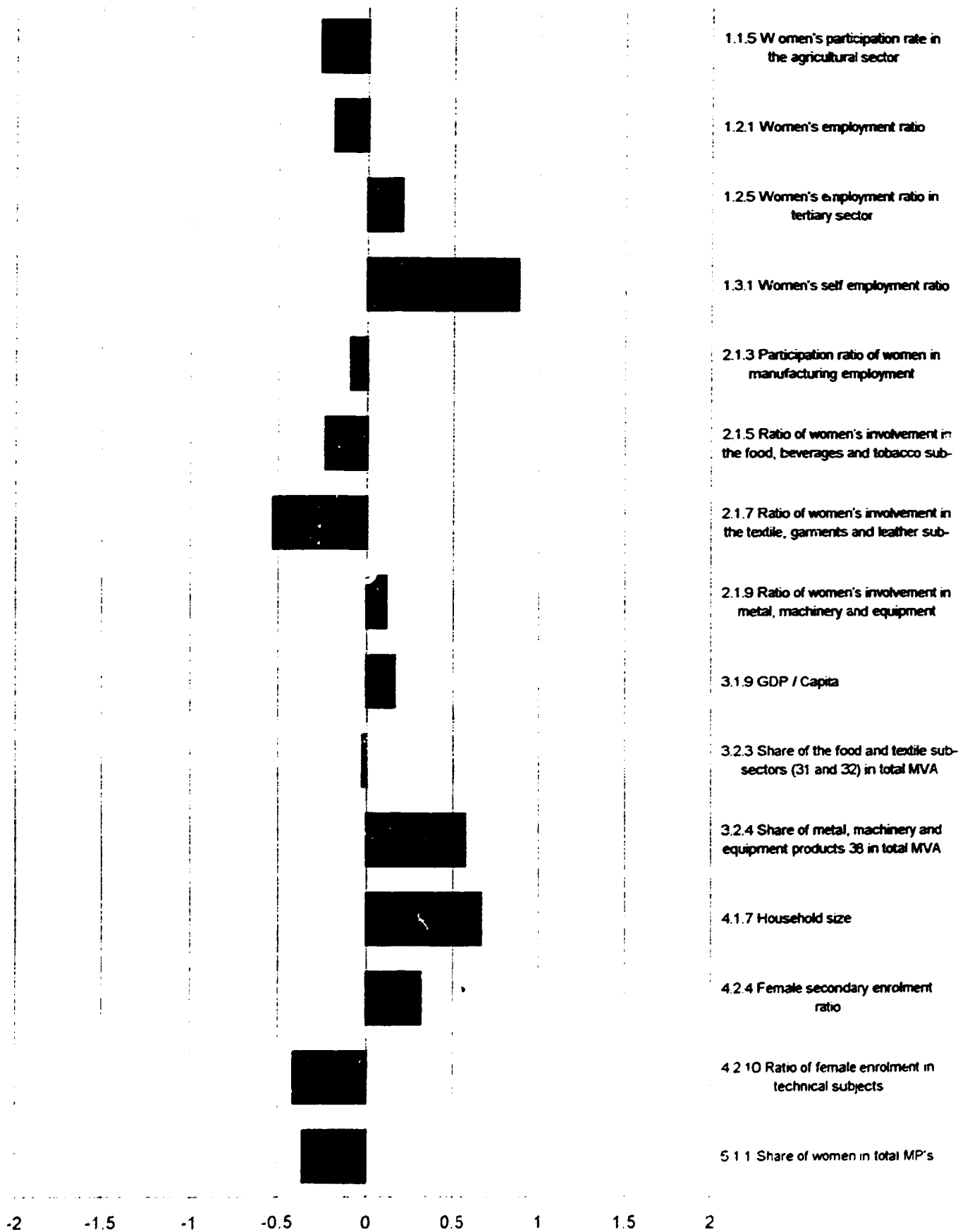


Figure 4

## CLUSTER CHARACTERISTICS

Cluster 4: Czech Republic, Slovakia, Bulgaria, Poland, Hungary, and Romania.

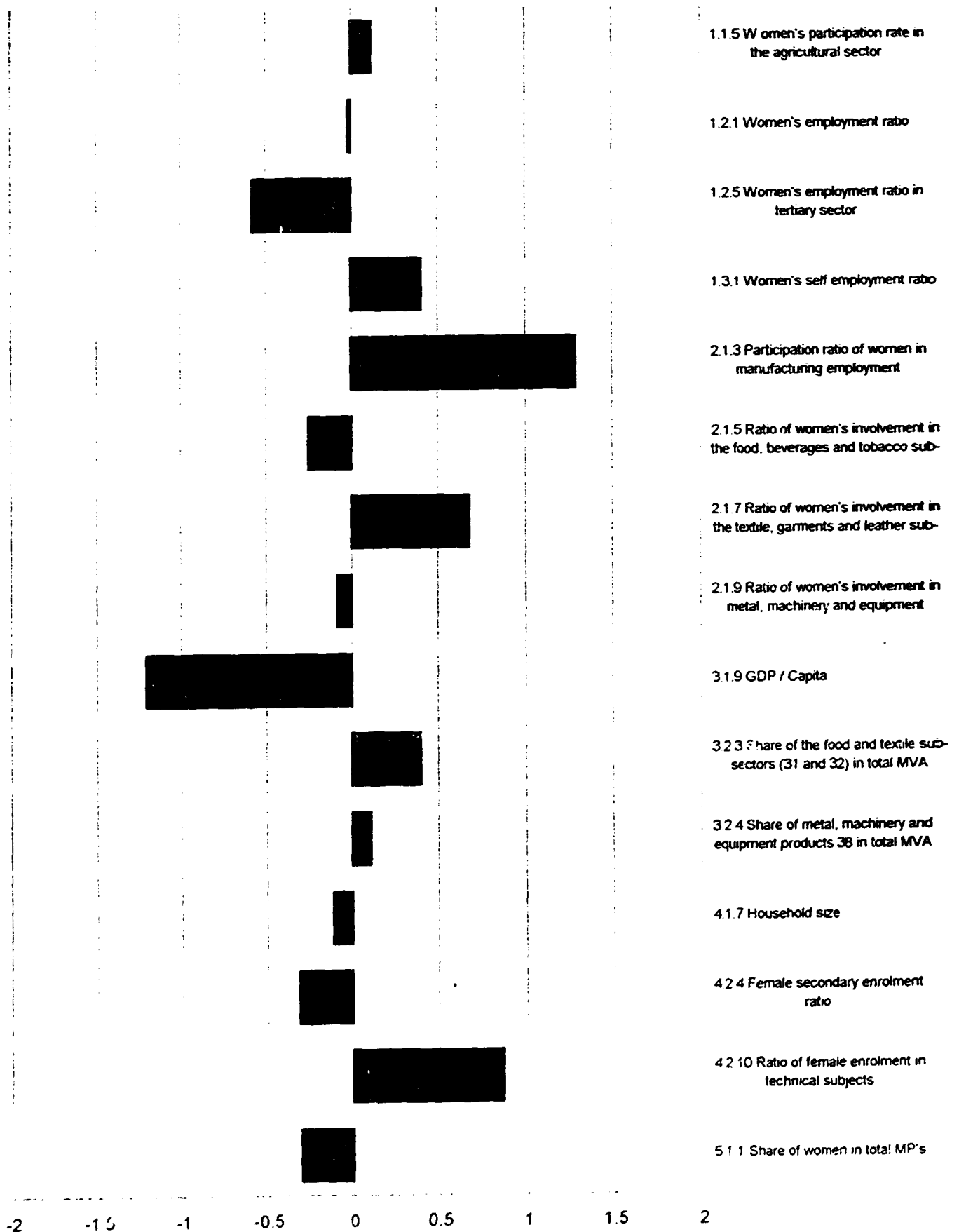
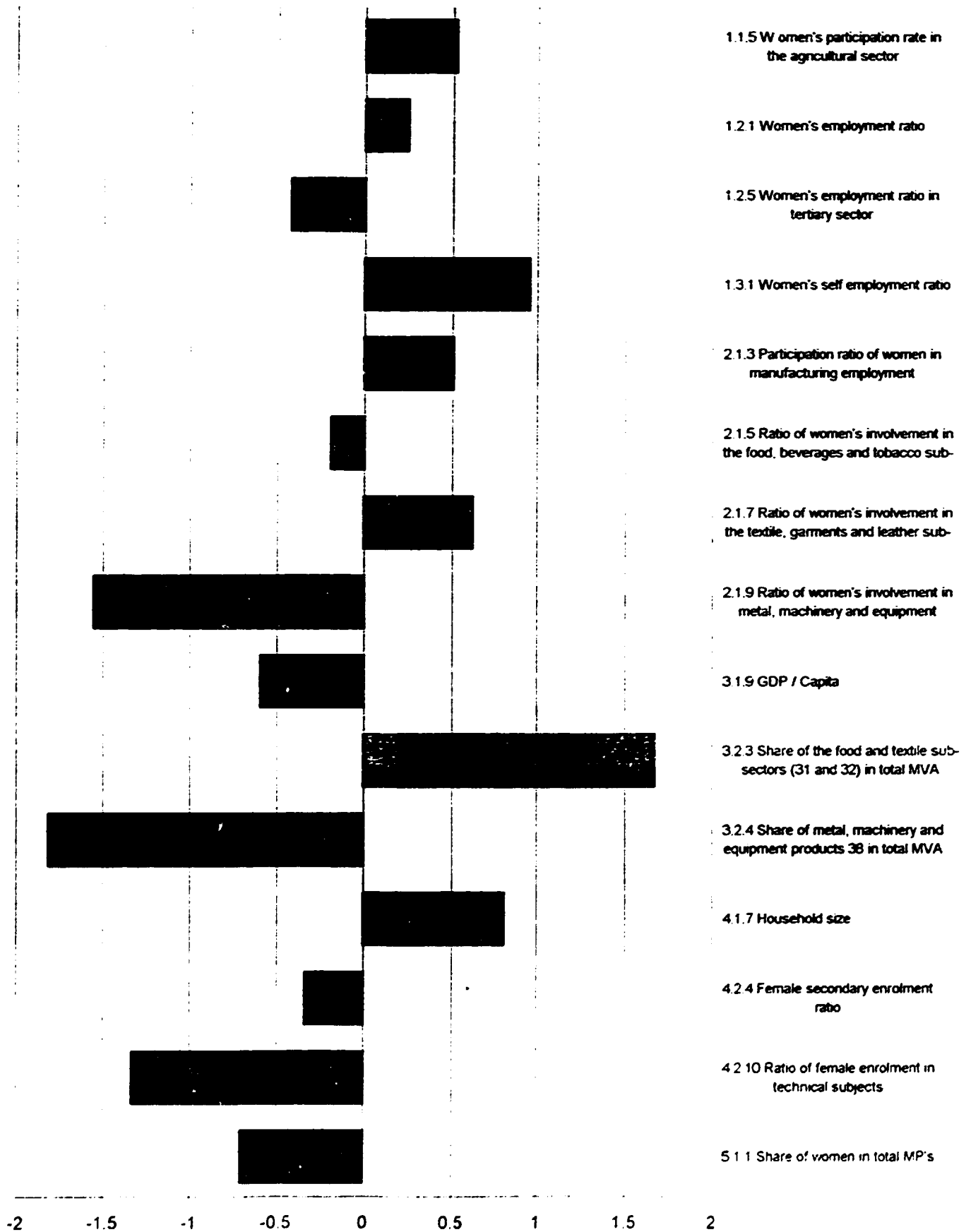


Figure 5

**CLUSTER CHARACTERISTICS**

Cluster 5: Greece, Portugal, and Cyprus.

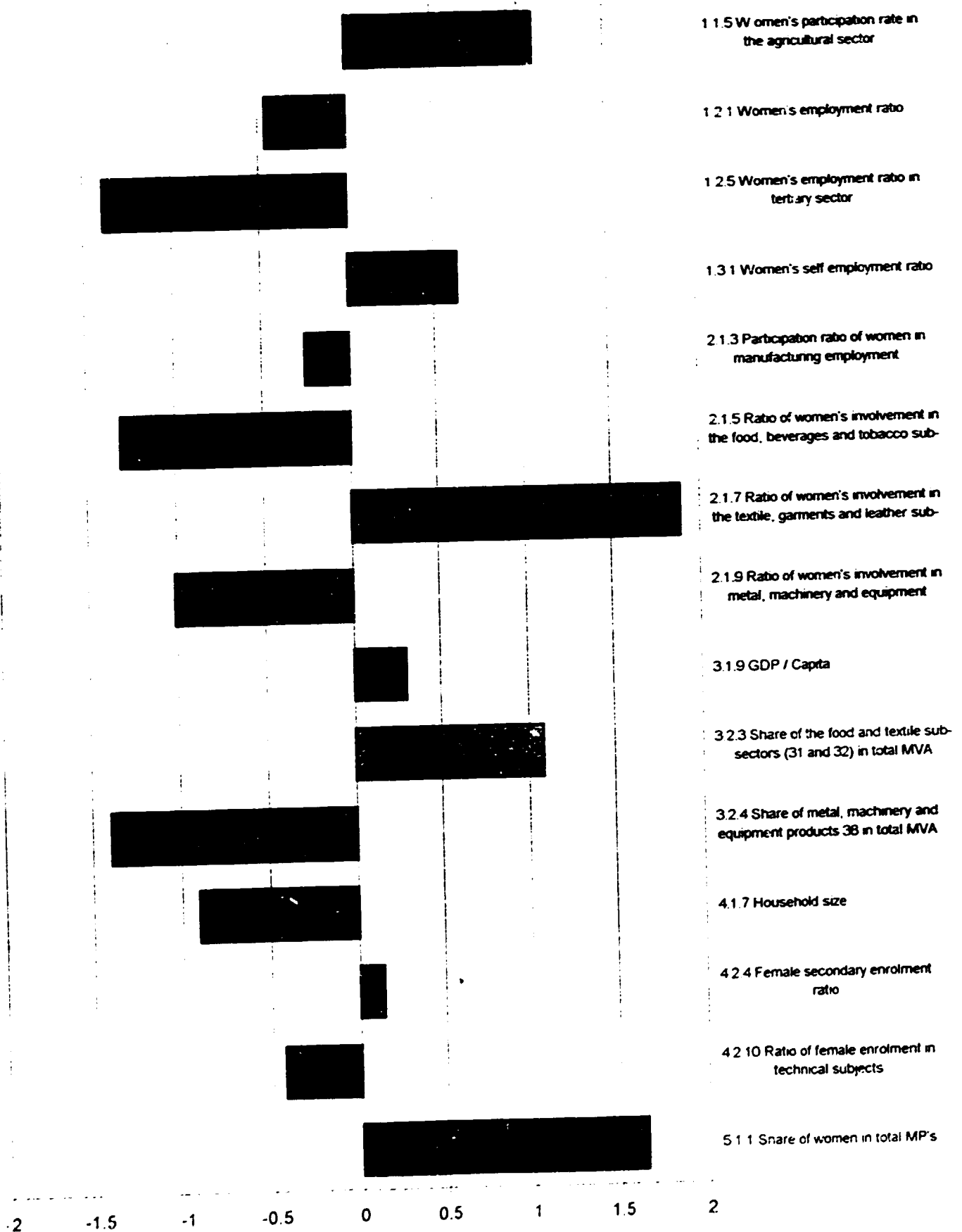




## CLUSTER CHARACTERISTICS

Figure 6

Cluster 6: Luxembourg



CLUSTER CHARACTERISTICS

Cluster 7: Turkey.

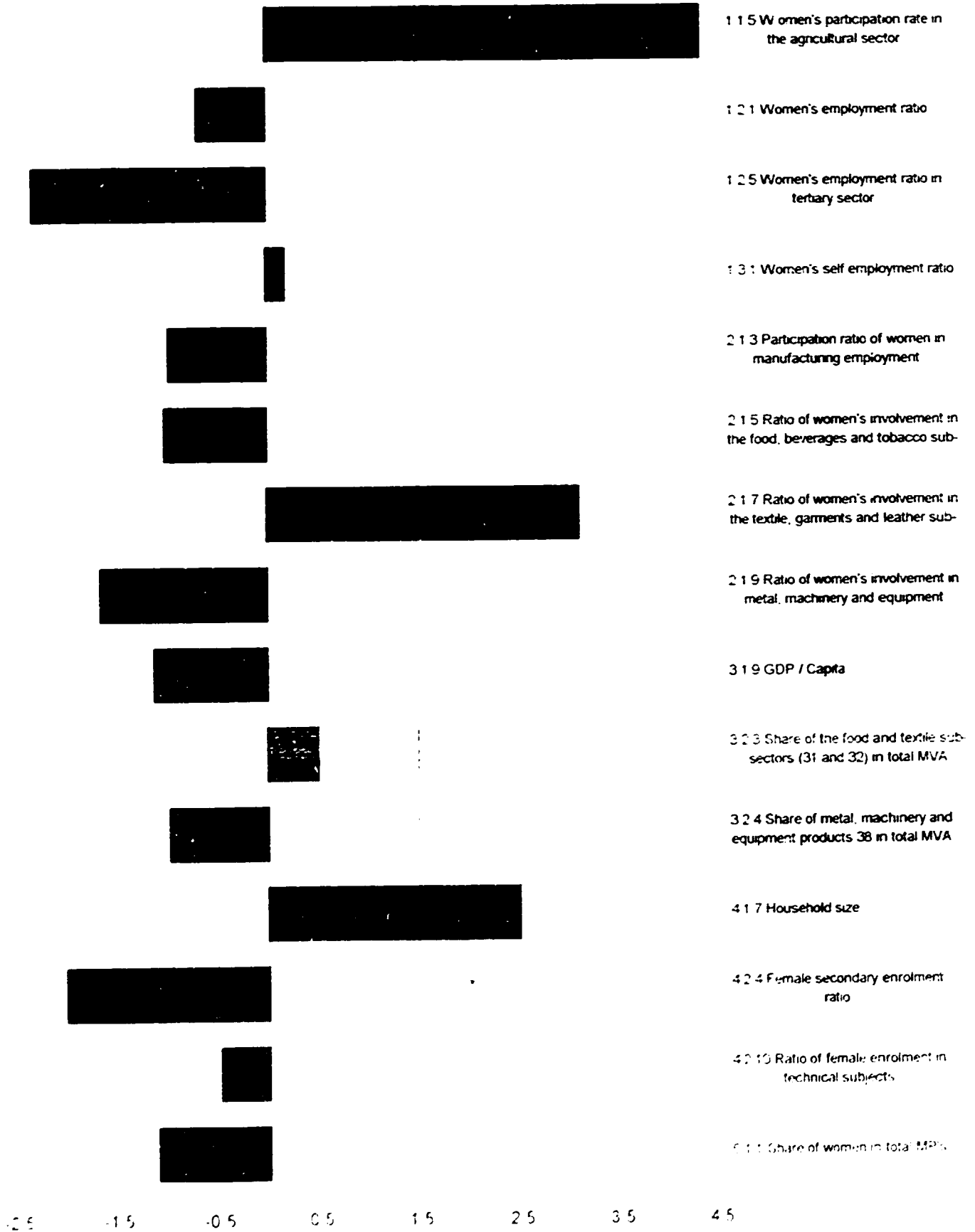
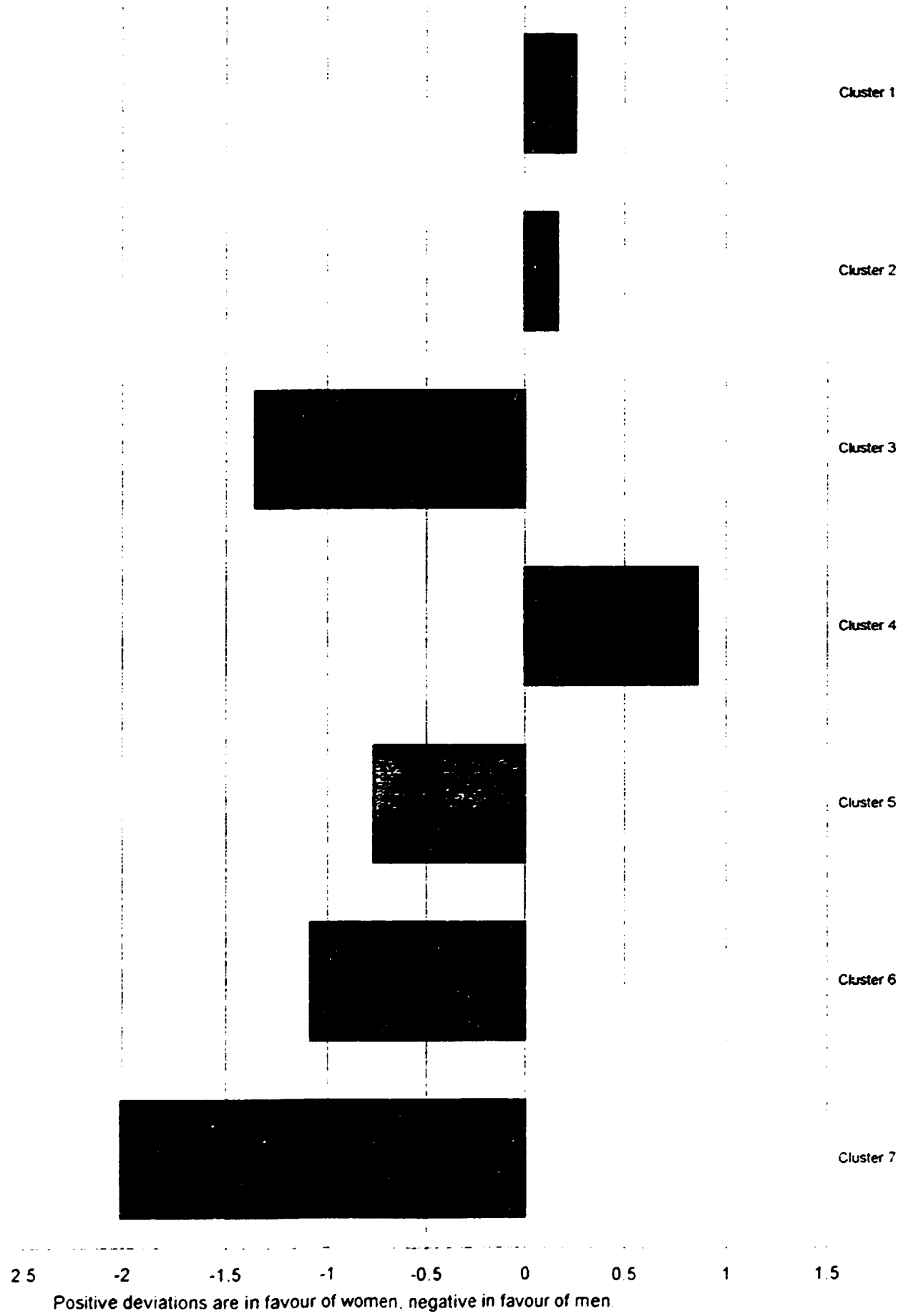


Figure 8

Index Male / Female disparity in EAP (15+)



Positive deviations are in favour of women, negative in favour of men.

## CHAPTER V - CONCLUSIONS AND RECOMMENDATIONS

This chapter uses the findings presented in the previous chapters to identify priority areas of concern and to formulate recommendations, action proposals as well as bases for strategies for the region and for different country groups.

The conclusions presented in this chapter can serve as a framework for designing programs to enhance women's participation in the economy and in particular in the manufacturing sector of the region and countries included in the seven groups.

The first section of this chapter presents regional conclusions and recommendations. Section V.2 includes cluster-specific recommendations and section. Section V.2 contains specific recommendations and actions for individual clusters. Section V.3 introduces project ideas applicable to countries in several of the clusters in the region.

### V.1. Regional Conclusions and Recommendations

#### Structural Changes in the Economy

There is an increase in GDP larger than growth in Employment, implying that structural changes in the economy are taking place, affecting labour market conditions.

These structural changes are leading to shifts in manufacturing demanding training and retraining of the labour force. In addition there are transformations in organizations, systems, forms of enterprises and new managerial methods in agreement with the modified labour market.

These changes make it imperative that more is known about the transformation process itself and about its impact in the various clusters of the region. There is an urgent need of improving and completing information on the transformation processes, on labour market needs and conditions (short-long term) and the identification of skills requirements (training) in agreement with the structural transformation. This pro-active assessment should include evaluation of what now exists in the area of learning and the identification of what will be required in view of the future needs of the economy.

The transformation processes will also require adaptations in labour conditions so that there will be more labour market flexibility. Working time within enterprises will be reassessed. The competitive position of the region at a global level will require redirection in indirect labour costs and improved labour market policies as well as maximal support for the development of employment possibilities in connection with the new requirements of the emerging post-industrial society. This will require legal and fiscal adaptations in the countries of the region so that the transformation process in enterprises is stimulated and sustained within a context which is equitable for the labour force of the region: both men and women.

#### Visibility of Women

The statistical data base created for the region in the course of the study required information for 66 indicators. At present the data base shows a great number of information gaps distributed over a large number of countries. The gaps concern quantitative information on important aspects of the conceptual model on which the analysis of women's participation in the economy is based. This situation undermines unido's efforts to assess the contribution of women not only to manufacturing activities but to the total economic activity in the region. This difficulty is illustrated by the fact that the final, clustering exercise for the region, based on 16 statistically selected indicators, could include only 25 countries for which the required information was complete.

It is therefore imperative to improve gender differentiated statistical data gathering in the region so that progress of the impact of transformation processes on the women in the region can be better assessed and addressed.

The report therefore contains in Annex 4 a list of indicators which have been identified as specific macro-economic aspects of structural change having an impact on women's position in the economy. These indicators refer to key elements that will improve knowledge on:

- Women's participation in the economical industrial environment.
- The legal, institutional, political elements which can sustain efforts to improve women's position in the economy of the region.
- Demographic realities which affect women's participation: changing conditions in the labour market that are of importance to women.
- The capacity of skilled women to develop as entrepreneurs and thereby improve their chances of benefitting from increased flexibility in labour market conditions and market transformations.
- Ways to guarantee minimal legal protection and assistance to the most vulnerable groups of unskilled women directly affected by the transformation processes. This is applicable to the more industrialized clusters of the region and specially applicable to clusters of emerging transitional economies.

It is recognized that the gathering of this additional statistical information will require substantial, additional statistical efforts as well as technical support from the governments and international organizations (ECE, OECD, Eurostat) involved in statistical data gathering on the region. UNIDO recognizes that the sustained continuation of regional analyses of women's economic position in the region will depend on the maintenance as well as expansion of the databases on which this report is based. It plans therefore to establish mechanisms for completing and updating the data bases for this region and other regions of the world. This work is to be undertaken in coordination with the UN Regional Commissions, other UN specialized agencies and regional agencies.

Since it can only be expected that there will be gradual progress in expanding the comparable statistical database it is suggested that:

1. The European Group of High-level statisticians be invited to examine the possibility of expanding the gathering of gender desegregated data on a comparative basis in line with what the discussions held during the UNIDO/ ECE Validation Workshop.
2. In the meantime, as a practical first step, there could be agreement between the member states to participate in a sample exercise the details of which are being prepared.

### **The Legal Institutional Environment**

The classical responsibility of the state-in-welfare matters is being transformed. The principle of state responsibility for access of all citizens to basic health care and for a minimal standard of living needs to be retained. But, there is a constant search for adapted structures and measures both with respect to unemployment benefits and social security measures.

These adaptation should take account of various realities important for women

- the capacity of women to function equitably in the labour market will depend to a large extent on the existence of public/private facilities /infrastructure to share work and family responsibilities.
- the establishment/provision of basic services to enable women to combine career and family life should more and more take place within economic parameters set by the business environment. This means that home and family care services should become viable business opportunities.
- the demographic changes in the region should lead to the identification and development of new sectors of services especially in relation to care for the aged, increased leisure-time and expanded tourism. In addition,

environmental and security considerations are also leading to the emergence of new service activities resulting in employment opportunities from which women should benefit.

### **The Political Environment**

Ensuring that structural changes in the economy of the region benefit women requires adequate representation of their interests at political decision-making levels. Notwithstanding the limited amount of information available on this topic, it is clear that more women need to accede to positions of power influence in the political fora of their countries so that their empowerment in decision-making improves.

This, however, is not enough. Employees and trade union organizations as well as NGO's and cooperatives also need to be more supportive of the gender-specific labour requirements in the changing environment of the region.

Women should therefore be more involved in the decision-making levels of the structures of these organizations and gender issues should become a regular natural element in the design and negotiation of strategies and policies related to economic and social conditions in the region.

### **Technological Innovation**

Structural changes in the economy of all countries in the region tend to favor less labour intensive productive activities. The continuous nature of technological progress will affect the labour market by offering new fields of activity which in turn will require new abilities and skills. It is also more and more apparent that the traditional distinction between the industrial sector and the services sector is no longer relevant and needs to be redefined.

The clustering exercise presented in this report leads to the assumption that various clusters will, over time, evolve towards the characteristics of cluster 2: the most representative cluster for the region.

### **Special Regional Issues**

A number of special issues require specific attention. This section provides a brief overview of a selected number of these issues.

1. The growth of dual career families increases female labour supply. The clusters have shown existing structural and participating differences among groups of countries. Loss of employment of, especially, unskilled women in dual career families in many cases creates special hardships. Loss of employment of less skilled or unskilled females, heading a household, increases the amount of females living below the poverty line.

There is a need for more specific data on the number of females living below the poverty line, and their profile. Such knowledge is a prerequisite for action in favor of this vulnerable group of women.

2. The gradual emergence of a unified Europe within the scope of the European Union and the aspiration of the emerging countries to join the EU makes it imperative that data is collected now on the potential impact on the EU of the social legislation in the emerging countries.

3. The emergence of the so-called information society based on the expansion of information and communication technologies, highlights specialized activities in the audiovisual and telecommunications sector as future growth areas and potential sources of new jobs.

If women are to be fully associated with these changes, they will need continuous access to high level capacity building. They need to be exposed to the required education and training in order to be able to participate in the new non-traditional occupations of the emerging information society.

4. The joint effects of issues such as the need to combine work and family life, unemployment and technical specialization suggest part-time and home-based work as solutions. The design of acceptable forms of flexible

employment meeting the requirement of both the employer and the employee needs to take gender considerations into account.

Research should be undertaken to identify required skills, to design measures for the empowerment of workers, to determine what legislative reforms are required to promote the most acceptable form of flexible work and the equitable participation of both men and women.

The implementation of the required legislation should be continuously monitored not only by the governments involved but by concerned international organizations and pressure groups (NGOs).

The need to combine work and family represents a special burden for women. In most of the clusters special efforts are required to modify social conceptions of the role of men and women with respect to family responsibilities. The ILO Convention (15b) sharing of family responsibilities deals with this topic. It should be ratified by all states of the region and serve as an inspiration for appropriate measures and actions to foster the required changes in mentalities and attitudes.

5. The employment potential of new or disadvantaged entrants to the labour market needs to be promoted. This requires special attention to the needs of young women, aged women, migrant women, refugee women, and disabled women. Their needs should be dealt with when policies and practical measures with respect to training/retraining are designed, adopted and implemented.

6. Private small and medium sized enterprises should be major sources of future employment in the region. The challenge is to create the most appropriate environment for promoting the start-up, expansion and survival of such enterprises.

This challenge is all the more important because self-employment or employment in SME activities represents the currently most viable identified channel for re-integrating to the labour market women being displaced from agriculture and the public sectors.

The appropriate response is the development and implementation of policies to promote small enterprises. These programs should address practical issues such as market surveying to identify business opportunities, the development of realistic business plans, the provision of credit facilities, R & D, training, human resources management, marketing, and information management.

These policies need to be supplemented with the promotion of and support to associations of small enterprises so that they are together more competitive vis à vis larger enterprises. In addition, there should be attention, at least temporarily given, for alleviating the administrative as well as taxation burden on emerging ventures so that they may have the opportunity to emerge and continue operating under competitive conditions.

## V.2. Cluster-specific recommendations

The findings with respect to the different clusters lead to a series of conclusions and recommendations. Recommendations made permit a first identification of strategies and actions for each cluster or for groups of clusters. Recommendations, strategies and actions are presented in the following paragraphs.

### Clusters 1 and 2:

- In clusters 1 and 2 there should be an emphasis on having women participating fully in the emerging sector of business services as well as in high-tech diversified jobs. This requires equitable access to adequate lifelong training. It also requires that family and home care activities develop into entrepreneurial activities for less qualified women and that appropriate training needs in business and care-related skills be addressed. These recommendations could also be applicable to Luxembourg.

**Summary of Recommendations  
Clusters 1 and 2**

Strategy	Proposals for Action
Promote women participation in the emerging business services	Provide equitable access to life-long training
Promote women participation in high-tech diversified employment	
Promote the development into business enterprises of home-care and child-care activities	Provide adequate training in care-related and business management skills  Establish credit schemes for the start-up of such enterprises

**Cluster 3:**

Cluster 3 is typified by the important role of women in agriculture. Two issues need attention as the economies of countries of this group progress. Agriculture cannot only be expected to be transformed but also will diminish in economic importance. Women's position in the rural areas needs to be underpinned by legal measures recognizing their role in family agricultural enterprises, by facilitating women's access to the training required for specialized mechanized agricultural activities and training for agro-based non-agricultural rural small scale entrepreneurial activities.

**Cluster 4:**

Cluster 4 countries require a four-pronged approach. The pool of high level female manpower needs to be provided with access to training in high-tech entrepreneurial skills, human resources management and business skills. The dismantling of non-competitive estate or publicly owned enterprises as well as the privatization process and overall, restructuring of non-competitive enterprises makes it imperative that alternative employment opportunities be developed with emphasis on devising support measures for viable small and medium sized enterprises.

At the same time, the dismantling of the state welfare system should not lead to having women assume, in addition to work, an unacceptable load of home and family care responsibilities. Nor should it force women to retire from the official labour market for reasons of family responsibilities.



## Summary of Recommendations

## Cluster 3

Strategy	Proposals for Action
Make visible women's role in family agricultural enterprises	Introduce legal measures to underpin women's contribution
Upgrade capability of women farmers to enable them to participate in modernized agriculture	Provide and facilitate training for specialized, mechanized agricultural activities
Promote female participation in agro-based non-agricultural, small scale entrepreneurial activities	Undertake market studies to identify promising agroindustrial activities  Provide necessary technical training in small scale agroindustrial processing  Provide entrepreneurial and business training  Design and implement supporting credit schemes

There is therefore a need to develop and support entrepreneurial activities related to home care needs possibly through the provision of start-up capital and mechanisms to enable such enterprises to grow into viable ventures while keeping the prices charged to customers within equitable social ranges.

## Summary of Recommendations

## Cluster 4

Strategy	Proposals for action
Upgrade existing highly trained female workforce to participate in high-tech and modern business activities	Provide training in high technology areas and business management skills
Channel female workforce being laid off through privatization, industrial restructuring and plant closures towards new productive activities	Identify alternative employment opportunities  Promote the development of viable SME  Provide support measures required by SME entrepreneurs
Promote private home and day-care enterprises to replace welfare services being dismantled	Devise differential payment systems for these services linked to customers' income  Support entrepreneurial activities through credit and training
Promote diversification of training among young girls	Provide incentives for girls to enter new, non-traditional areas of training

Strategy	Proposals for action
Promote economically adequate levels of population growth	Design schemes to protect employment of working pregnant women. The schemes should find a balance between budgetary welfare cuts and the protection of demographic reproduction.

These countries should also pay special attention to directing young girls to widen their choices with respect to their professional training so that they are willing to move more into "non-traditional" areas of training.

Demographic conditions in the cluster also make it imperative that basic policies for the protection of the employment of pregnant women be maintained. This is not only a social but especially an economic imperative.

#### Cluster 5:

In Cluster 5 there is a need to expand light industries through diversification. Restructuring of sector 38 towards serving specific market niches seems to be required. These industrial changes will in-turn require adequate attention to the training of women to insure that they benefit from the developments.

The contribution of sub-sectors 31 and 32 to MVA of the countries in this cluster is high indicating that these sectors are well developed. Further growth in these areas would require product diversification with technological change.

An expansion of female participation in manufacturing could be found in sub-sector 38. Analysis of promising areas for future development of this sub-sector are required. Human resource development planning for this sector should be based on the results of those analysis.

The cluster also is typified by a traditional attitude to female involvement in the economy. Therefore, there is a need for changes in social cultural attitude towards women's role in the economy.

Countries of this cluster present the highest M/F disparity in Europe. Disparities may be eliminated by increasing female participation in economic activities and by improving women's working image. There is room to increase women's participation in manufacturing and in the tertiary sector. However, modernization trends and requirements in both sectors highlight the need to increase women's enrolment in technical subjects. (The present level of female enrolment in technical subjects is 1/4 of the regional mean). Sensitization campaigns of the entrepreneurial sector and of society would be a mechanism to improve women's working image in this cluster.

#### Cluster 7:

Cluster 7 represents a country (Turkey) where the modernization process as compared to cluster 2 of the region still requires a substantial transformation of various aspects of the economy. If women are to be more fully involved in this process, a sustained attention to female education and training should be given. A decrease in average household size should enable future generations of women to attain a more equitable position in the economic activities of the country. Most of the recommendations and actions identified for cluster 3 and 5 are considered applicable to Turkey. An exception would be the promotion of a growth in the increased participation of women in technical subjects, which is already high in Turkey.

## Summary of Recommendations

## Cluster 5

Strategy	Proposals for Action
Restructure and expand sector 38	Identification of possibilities to serve market niches with high technology products
Expand light industries	Studies concerning product diversification with technical change.  Human resource needs assessments
Increase female participation in high technology manufacturing and tertiary sectors	Incorporate in formal education courses, training which will enable women to participate in industrial and tertiary sector activities requiring the use of most advanced technology  Increase female enrolment in technical subjects
Improve women's working image	Undertake sensitization campaigns addressed to the entrepreneurial sector and to society with respect to women's role in the economy
Reduce M/F disparities	Train private entrepreneurial sector to eliminate gender bias when hiring personnel.

## V.3. Project Proposals

Discussions held during the UNIDO, ECE Validation Workshop that took place in Geneva February 21-22, 1995, lead to the identification of several concrete project ideas which are included in this section.

## Project No.1 Establishment of a reliable statistical database

This first project deals with the enlargement of the regional data base constructed during the typology study. This would be a large project requiring the participation of several international organizations and national statistical offices.

Objective of the Project: To make available to the ECE Region an enlarged data base on the subject of women's participation in the economy and in manufacturing, within the conceptual framework introduced by UNIDO for the typology studies. This, in order to strengthen the explanatory power of both the qualitative and quantitative analysis of the participation of women in manufacturing and the economy in the countries of the region.

Characteristics of the work to be performed:

New variables and country coverage

The enlargement of the data base refers both to the list of indicators and to country coverage. The latter refers mostly to the countries in transition for which the availability of statistical information is rather limited<sup>3</sup>.

The enlargement suggested covers two types of statistical indicators: those which directly will be incorporated in the quantitative analysis and those which serve "only" the qualitative analysis. The latter are variables which foreseeably are statistically interdependent with others and therefore technically cannot be applied in the multivariate exercises but supply very important substantive information on the matter investigated. Variables which do not have full country coverage (but technically could have been incorporated in the exercises) will also fall into this category.

Some of the additional data does not fall into the scope, range of the existing systematic data collection that is undertaken by the different national or international institutions. Therefore collection of these data will require the design of special cooperative activities among a number of institutions. These data refer mostly to gender specific statistics related to the present field of the analysis.

A large number of the missing indicators, for which the country coverage has been incomplete, belong to areas of Macroeconomics, the National Account System and/or Demography - Labour Force. Collecting this information should be of general interest of both national and international institutions and not only of interest of this type of analysis.

These data cannot be generated within the framework of the project but need to be gradually obtained under a special project framework and with the cooperation of several interested parties.

Project No. 2. The design of special re-training projects for high-level professional women, scientists and engineers that are or were employed in the military industry. The project will provide the necessary training to start activities as entrepreneurs, possibly in the high-tech business sector. This project will be applicable mainly to Russia but it could cover all transition economies with strong military industry which was or is to be transformed into civilian production.

Objective: To provide new entrepreneurial skills to high level professional women being displaced from industrial branches linked to the military industry in Russia and other economies in transition, in order to maximize the use of available human resources within a sustainable industrial development.

Project No. 3. Design and implementation of special training courses for women engaged in the agro-sectors.

Objective: To provide entrepreneurial training for women engaged in agriculture in countries with a still over-proportionate female participation in agriculture. This type of project would be applicable to countries both in "southern" and east-central european clusters.

Project No. 4. Pilot projects for the definition, design and testing of institutional frame-works required to transform former State welfare services into services rendered within the concept of business enterprises.

Objective: To provide alternative support services to working women through the formulation and testing of different business types of enterprises within country groups with similar legal, institutional system.

---

<sup>3</sup> This situation is due to the difficulties encountered in restructuring of the system of national statistics in these countries. The restructuring involves the system of data collection and the methodological aspects of statistical information

Project No. 5 Undertake studies to identify re-training needs for highly qualified scientists and engineers formerly engaged with the military industry and identify mechanisms to reincorporate them to the economy. These studies and experiences should be extended to other industrial sectors being restructured and privatized in Russia and other economies in transition.

Objective: To establish priority areas for reincorporating highly trained female personnel to the industrial economy. To identify mechanisms to promote their re-incorporation. To promote the funding of re-training programmes.

Project No. 6. Pilot projects for the setting-up of specific female enterprise promotional centres at regional level and with international assistance.

Objective: To retain female labour force in industrially depressed areas through re-training female personnel and the promotion of SME's. The project will include feasibility studies and business plans for the establishment of local and/or national centres.

Project No. 7. Training female project managers for the implementation of specific large-scale project initiatives in agroindustries and other areas of industrial activity.

Objective: Creating future project managers through the training of female personnel in project planning, formulation and implementation.

## BIBLIOGRAPHY

Anker, R., Hein, C., (editors), 1986a: Sex inequalities in urban employment in the third world, a study prepared for the International Labor Office within the framework of the World Employment Program with the financial support of the United Nations Fund for Population Activities.

Berik, G., Catagay, N., 1990: Industrialization Strategies and Gender Composition of Manufacturing Employment in Turkey. Paper presented at the International Economics Association World Congress, Athens, Greece, 1989. Forthcoming in B. Agarwal, B. Bergmann, M. Floreo and N. Folbre (eds): Women and Work in the World Economy, Macmillan.

Berlage, L., Terduwe, D., 1988: The classification of countries by cluster and factor analysis; in : World Development, Vol.16, no.12, pp.1527-1545.

Del Alba Acevedo, L., 1990: Industrialization and Employment : Changes in the patterns of Women's work in Puerto Rico, in: World Development, Vol.18, No.2, pp. 231 - 255.

EC, Commission of the European Communities, Directorate-General III, industry, directorate for Industrial Policy, 1994: An Industrial Competitiveness Policy for the European Community, Communication from the Commission to the Council and Parliament and to the Economic and Social Committee and the Committee of Regions, 14 September 1994, Brussels.

EC, Commission of the European Communities, Directorate-General Employment, Industrial Relations and Social Affairs, 1993: Employment in Europe, 1993, Brussels.

EC, Commission of the European Communities, Directorate-General Employment, Industrial Relations and Social Affairs, 1993: Social Protection in Europe, 1993, Brussels.

EC, Commission of the European Communities, Directorate-General Employment, Industrial Relations and Social Affairs, 1993: Women in the rural economy, a study of the economic role and situation of women in rural areas of the European Community, September 1993, Brussels.

EC, Commission of the European Communities, 1993, White Paper, Growth, competitiveness, employment, the challenges and ways forward into the 21st century, Bulletin of the European Communities, Supplement 6/1993, Luxembourg.

EC, "Central and Eastern Europe, Employment Trends and Developments", Employment Observatory. No. 6, October. 1994.

Euromonitor, 1994, European Marketing Data and Statistics 1994 EMDAS 1994, London.

Euromonitor, International Marketing Data and Statistics 1994, IMDAS 1994 , London.

Frobel, F., Heinrichs, J., Kreye, O., 1980: *The New International Division of Labor*, Cambridge, 1980.

Hübner, S., Maier, F., Rudolph, H., 1991: *Women's employment in Central and East-Europe - Status and Prospects*. Report for the joint OECD-ILO Conference on Labor Market and Social Policy Implications of Structural Change in Central and Eastern Europe, 1991.

ILO (International Labor Organization), 1993: *Yearbook of labor statistics*, 52nd edition, Geneva, 1993.

Institute for Labor Research, Hungarian Ministry of Labor, 1993, 1994: *Reports of National Statistical Offices, 1993 & 1994*.

International Labor Office (ILO), 1993 *Year Book of Labor Statistics*, 52nd issue, 1993, Geneva.

Johnston, W.B., 1991: *Global Workforce 2000 : the new world labor market*, in: *Harvard Business Review*, March-April 1991.

Meulders, D., Plasman, R., Vander Stricht, V., 1993: *Position of women on the labor market in the European Community*, Dartmouth Publishing Company, 1993, Aldershot.

McKinsey Global Institute, 1994: *Employment Performance*, Washington D.C., November 18, 1994.

Mitter, S., 1986: *Common fate. Common bond, Women in the Global Economy*, London, 1986.

Noer, D., 1993: *Healing The Wounds, overcoming the trauma of layoffs and revitalizing downsized organizations*, Jossey-Bass Publishers, 1993, San Francisco.

OECD, (Organization for Economic Co-operation and Development), 1993: *Employment Outlook*, July 1993, OECD, Paris.

OECD (Organization for Economic Co-operation and Development), 1994: *Employment Outlook*, July 1994, OECD, Paris.

OECD (Organization for Economic Co-operation and Development), 1994: *The OECD Jobs study : facts, analysis, strategies ; unemployment in the OECD area, 1950-1995*, 1994, OECD, Paris.

OECD (Organization for Economic Co-operation and Development), 1994: *Women and Structural Change. New Perspectives*, 1994, OECD, Paris.

OECD (Organization for Economic Co-operation and Development), 1993: *Industrial Policies in OECD countries, Annual Review 1993*, 1993, OECD, Paris.

Paukert L. "Women's Employment in East-Central European Countries during the Period of Transition to a Market Economy". ILO. Geneva, 1994.

7

Oliver, N., Jones, D.T., Delbridge, R., Lowe, J., Roberts, P., Theyer, B., 1994: Worldwide Manufacturing Competitiveness Study, the second lean enterprise report, 1994. Andersen Consulting, London.

Pott-Buter, Hettie, A., 1993: Facts and Fairy Tales about Female Labor, Family and Fertility, a seven country comparison, 1850-1990, Amsterdam University Press, 1993. Amsterdam.

The Economist, 1994: A survey of the global economy, War of the worlds, October 1st-7th, 1994, pp. 46, London.

UNESCO, 1993. Statistical Yearbook, Geneva.

UNITED NATIONS, Economic and Social Council, Economic Commission for Europe (ECE), 1994: Regional platform for action - women in a changing world - call for action from an ECE perspective, draft for the high-level preparatory meeting for the fourth world conference on women, Vienna, 17-21 October 1994, Item 8 of the provisional agenda, 4 October 1994.

UNIDO, 1994: Participation of women in Manufacturing : Patterns, Determinants and Future Trends, Regional Analysis, ESCAP region. Integration of Women in Industrial Development Unit, 1994. (ESCAP)

UNIDO, OEKOTOP Ltd., 1992: Participation of women in manufacturing: patterns, determinants and future trends, an analysis (Draft). Report prepared for the Unit for the Integration of Women into Industrial Development, October 1992.

WIDER (World Institute for Development Economics Research of the United Nations University), 1992: Privatization and Democratization in Central and Eastern Europe and in the Soviet Union : the gender dimension. Edited by Valentine M. Mogham, Helsinki.



## **GLOSSARY**

### **Administrative and managerial workers (major group 2)**

According to the International Standard Classification of Occupations (ISCO-1968), major group 2 includes administrative and managerial workers, such as legislative officials and government administrators, as well as managers.

### **Economically active population**

As defined by the International Labour Organization (ILO), the economically active population comprises all persons of either sex who furnish labour for the production of economic goods and services as defined by the United Nations systems of national accounts and balances, during a specified time period. This includes all production, whether for the market, for barter or for own consumption, and whether consisting of goods or services. Two useful measures for the economically active population are the usually active population measured in relation to a long reference period such as a year, and the currently active population, or its equivalent, the labour force, measured in relation to a short reference period such as a day or a week.

### **Employee**

Employee, according to the classification by status, in the present document defines a person who receives a remuneration (in money or in kind) for working for a public or private employer. In general, it refers to someone working in the formal or modern sector.

### **Employment**

Employment is used in the present document to describe that part of the economically active population which has employee status.

### **Formal sector**

The division between the formal and informal sector is not clear-cut, although it has been a subject of much debate, in which the ILO has played a prominent part. For the purpose of the present analysis, the formal - or modern - sector has been defined as activities outside agriculture and taking place in registered enterprises. The labour force in formal sector enterprises would normally consist of employees.

### **Formal manufacturing sector**

The formal or modern manufacturing sector has been defined as comprising registered firms; usually, the labour force in these firms would have employee status.

**Industrial sector**

This sector is often defined as comprising - apart from the manufacturing sector - energy production, mining and construction. In most countries, manufacturing is by far the most important activity in this sector, and in the present document "industrial" is used as a synonym for manufacturing.

**Informal sector**

The question of how to define and enumerate employment in the informal sector has attracted considerable attention in recent years. Although it is widely understood that the informal sector in many developing countries absorbs vast numbers of workers, especially during periods of economic crisis, there is as yet no generally agreed upon definition of where the informal sector ends and the formal sector begins. The lack of clear demarcation is not surprising because the formal/informal classification is continuous, not dichotomous. Informal sector employment comprises activities which are not included in the official data collection systems and are outside the reach of legal and institutional sphere of influence. It generally refers to workers in small-scale, family based enterprises that operate outside the formal system of labour laws, taxation, and other business regulations. The production of goods and services does not constitute a separate legal entity of the household or household members that own them and there is no clear distinction of the production activities from other activities of the owners. (ILO - Bulletin of Labor statistics, 1993-2, Annex II, resolution concerning statistics of employment in the informal sector). In the study, the informal sector also includes the casualized labour force.

**Indicator**

In the present document, the term indicator is applied to statistically measurable variables of women's role. An example of an indicator would be gross domestic product per capita which is one measure of overall economic development.

**Labour force**

The currently active population, see under economically active population. In the present context, the terms economically active population and labour force are used synonymously.

**Manufacturing sector**

Manufacturing is defined as the mechanical or chemical transformation of inorganic or organic substances into new products, by machines or by hand, in a factory or in the worker's home. The definition usually includes assembly of component parts of manufactured products.

**Modern sector**

Like the other sectors, the modern sector is not clearly defined. For the present purpose, it was measured through indicators reflecting women's participation in non-agricultural activities as well as measures of women's share among salaried and wage earners. The term is thus used synonymously to formal sector.

**Modern manufacturing sector**

For the present purpose, this is synonymous to the formal manufacturing sector.

**Part-time work**

According to the ILO this is work on a regular or voluntary basis for a daily or weekly period of substantially shorter duration than current or normal statutory hours of work.

**Professional and technical workers (major group 0/1)**

According to ISCO-1968, major group 0/1 includes professional, technical and related workers, e.g., physical scientists, architects, medical and dental workers, statisticians, economists, jurists, teachers, authors, artists and sportsmen.

**Segregation**

Women's participation in the economy, it is assumed, takes place on unequal terms, and is characterized by patterns of "vertical" and "horizontal" segregation. For example, "Vertical" or industrial segregation refers to the tendency for female participation to concentrate in a limited number of manufacturing branches, mainly light industries characterized by assembly-type production which requires a large amount of cheap unskilled labour. "Horizontal" or occupational segregation describes the tendency for women to be over-proportionately represented in low-skilled production jobs at the lower end of the occupational hierarchy.

**Status (employment)**

"The status of an economically active individual with respect to his or her employment, that is, whether the person is (or was, if unemployed) an employer, own-account worker, employee, unpaid family worker, or a member of a producers' co-operative" (ILO Year Book).

**Tertiary sector**

According to the International Standard Industrial Classification of all Economic Activities (ISIC-1968) this sector comprises wholesale and retail trade and restaurants and hotels; transport, storage and communications; financing, insurance, real estate and business services; and community, social and personal services.

**Variable**

In the context of the present study, the term variable is applied to describe a factor influencing the social position and economic role of women (in the terminology of sectoral typologies, the term is 'component'). Variables are statistically measured through indicators, and thus describe a larger entity than these.

## **Annexes**

1. **List of ECE countries**
2. **List of OECD countries**
3. **System Characteristics of Countries grouped under the different clusters. Cluster 1 to cluster 7**
4. **Annex 4 - Sources of Variables and Indicators**
5. **Annex 5 - Enlargement of the Data Base**
6. **Annex 6 - List of Participants to the Workshop**
7. **Annex 7 - Statistical Annex**

## ANNEX 1

List of the Member States of the UN/ECE  
United Nations / Economic Commission for Europe

Albania	Lithuania
Andorra	Luxembourg
Armenia	Malta
Austria	Monaco
Azerbaijan	Netherlands
Belarus	Norway
Belgium	Poland
Bosnia-Herzegovina	Portugal
Bulgaria	Republic of Moldova
Canada	Romania
Croatia	Russian Federation
Cyprus	San Marino
Czech Republic	Slovakia
Denmark	Slovenia
Estonia	Spain
Finland	Sweden
France	Switzerland
Germany	The former Yugoslavia
Georgia	Republic of Macedonia
Greece	Turkey
Hungary	Turkmenistan
Iceland	Ukraine
Ireland	United Kingdom
Israel	United States of America
Italy	Uzbekistan
Kyrgyzstan	Yugoslavia
Latvia	
Liechtenstein	

## ANNEX 2

## List of the OECD Members :

Australia	Japan
Austria	Luxembourg
Belgium	Mexico
Canada	the Netherlands
Denmark	New Zealand
Finland	Norway
France	Portugal
Germany	Spain
Greece	Sweden
Iceland	Switzerland
Ireland	Turkey
Italy	the United Kingdom
the United States	

### System Characteristics of Cluster 1

Indicator	Denmark	Finland	Norway	Mean
1.1.5 Women's participation rate in the agricultural sector	2.92%	5.65%	3.10%	3.89%
1.2.1 Women's employment ratio	87.40%	89.54%	90.51%	89.15%
1.2.5 Women's employment ratio in tertiary sector	81.50%	78.32%	86.43%	82.09%
1.3.1 Women's self employment ratio	3.53%	4.82%	2.34%	3.57%
2.1.3 Participation ratio of women in manufacturing employment	13.79%	14.95%	8.55%	12.43%
2.1.5 Ratio of women's involvement in the food, beverages and tobacco sub-sector	25.28%	20.47%	23.30%	23.02%
2.1.7 Ratio of women's involvement in the textile, garments and leather sub-sector	2.91%	10.16%	10.98%	8.01%
2.1.9 Ratio of women's involvement in metal, machinery and equipment production	25.04%	24.35%	20.55%	23.31%
3.1.9 GDP / Capita	\$ 27,386	\$ 21,738	\$ 26,318	\$ 25,141
3.2.3 Share of the food and textile sub-sectors (31 and 32) in total MVA	26.05%	16.20%	28.35%	23.53%
3.2.4 Share of metal, machinery and equipment products 38 in total MVA	34.62%	32.23%	28.14%	31.66%
4.1.7 Household size	2.31	2.53	2.70	2.51
4.2.4 Female secondary enrolment ratio	107.00%	114.00%	97.00%	106.00%
4.2.10 Ratio of female enrolment in technical subjects	29.11%	27.99%	29.78%	28.96%
5.1.1 Share of women in total MP's	32.96%	30.50%	35.76%	35.74%
<b>Gender Gap</b>				
1.1.2 Index male / female disparity ( years 15+)	0.16	0.12	0.17	0.15



### System Characteristics of Cluster 2

Indicator	Canada	France	United Kingdom	United States	Austria	Germany	Belgium	Netherlands	Sweden	Mean
1 1 5 Women's participation rate in the agricultural sector	2.41%	3.78%	1.14%	1.30%	8.22%	3.03%	1.51%	2.95%	1.77%	2.90%
1 2 1 Women's employment ratio	89.59%	87.40%	94.19%	92.81%	96.32%	93.56%	79.70%	90.51%	98.22%	91.14%
1 2 5 Women's employment ratio in tertiary sector	85.61%	78.00%	82.30%	84.47%	70.36%	71.02%	81.90%	81.20%	85.78%	80.07%
1 3 1 Women's self employment ratio	3.57%	7.29%	6.90%	2.79%	3.74%	2.47%	10.48%	7.34%	2.42%	5.22%
2 1 3 Participation ratio of women in manufacturing employment	10.42%	14.85%	13.54%	13.11%	20.07%	20.86%	14.09%	8.66%	10.88%	14.05%
2 1 5 Ratio of women's involvement in the food, beverages and tobacco sub-sector	18.18%	17.21%	12.67%	9.30%	16.60%	12.10%	16.45%	21.44%	15.40%	15.26%
2 1 7 Ratio of women's involvement in the textile, garments and leather sub-sector	10.16%	8.86%	6.29%	20.98%	22.06%	14.51%	10.57%	2.66%	9.14%	11.68%
2 1 9 Ratio of women's involvement in metal machinery and equipment production	24.35%	30.14%	34.76%	35.65%	31.26%	40.40%	28.73%	21.49%	40.78%	31.73%
3 1 9 GDP / Capita	\$ 20,724	\$ 23,045	\$ 13,877	\$ 23,679	\$ 23,508	\$ 21,953	\$ 21,872	\$ 21,098	\$ 28,483	\$ 22,027
3 2 3 Share of the food and textile sub-sectors (31 and 32) in total MVA	20.43%	18.90%	18.71%	17.28%	21.37%	13.59%	23.92%	19.69%	11.95%	18.43%
3 2 4 Share of metal, machinery and equipment products 38 in total MVA	32.57%	40.09%	39.25%	42.23%	37.12%	50.25%	29.59%	33.78%	43.40%	38.70%
4 1 7 Household size	2.90	2.90	2.80	2.64	2.90	1.63	2.70	2.43	2.30	2.58
4 2 4 Female secondary enrolment ratio	104.00%	96.00%	85.00%	99.00%	81.00%	92.00%	100.00%	103.00%	92.00%	94.67%
4 2 10 Ratio of female enrolment in technical subjects	22.40%	20.31%	11.44%	19.08%	27.76%	36.83%	46.29%	39.09%	33.10%	26.48%
5 1 1 Share of women in total MP's	13.22%	5.72%	6.77%	6.70%	21.86%	21.03%	8.98%	21.33%	38.11%	15.97%
<b>Gender Gap</b>										
1 1 2 Index male / female disparity (years 15+)	0.18	0.27	0.29	0.16	0.30	0.31	0.36	0.34	0.08	0.25

### System Characteristics of Cluster 3

Indicator	Ireland	Spain	Italy	Mean
1.1.5 Women's participation rate in the agricultural sector	2.87%	7.55%	7.31%	5.91%
1.2.1 Women's employment ratio	88.71%	79.80%	83.02%	83.84%
1.2.5 Women's employment ratio in tertiary sector	77.80%	75.10%	69.00%	73.97%
1.3.1 Women's self employment ratio	8.62%	16.07%	19.10%	14.60%
2.1.3 Participation ratio of women in manufacturing employment	17.10%	15.14%	20.95%	17.73%
2.1.5 Ratio of women's involvement in the food, beverages and tobacco sub-sector	17.29%	18.52%	7.33%	14.38%
2.1.7 Ratio of women's involvement in the textile, garments and leather sub-sector	6.63%	11.67%	14.42%	10.91%
2.1.9 Ratio of women's involvement in metal, machinery and equipment production	33.43%	16.01%	25.99%	25.14%
3.1.9 GDP / Capita	\$ 14,148	\$ 14,709	\$ 21,539	\$ 16,798
3.2.3 Share of the food and textile sub-sectors (31 and 32) in total MVA	31.09%	25.39%	20.07%	25.52%
3.2.4 Share of metal, machinery and equipment products 38 in total MVA	35.74%	31.98%	40.44%	36.05%
4.1.7 Household size	4.05	3.50	3.00	3.52
4.2.4 Female secondary enrolment ratio	103.00%	107.00%	78.00%	96.00%
4.2.10 Ratio of female enrolment in technical subjects	8.67%	25.63%	32.96%	22.42%
5.1.1 Share of women in total MP's	7.83%	14.57%	8.10%	10.17%
<b>Gender Gap</b>				
1.1.2 Index male / female disparity ( years 15+)	0.46	0.48	0.46	0.47

### System Characteristics of Cluster 4

Indicator	Czech Rep.	Slovakia	Bulgaria	Poland	Hungary	Romania	Mean
1.1.5 Women's participation rate in the agricultural sector	4.30%	7.40%	5.10%	20.96%	6.00%	26.30%	11.68%
1.2.1 Women's employment ratio	79.20%	88.30%	80.10%	105.50%	77.60%	92.20%	87.15%
1.2.5 Women's employment ratio in tertiary sector	61.60%	61.70%	56.50%	53.39%	68.30%	33.70%	55.87%
1.3.1 Women's self employment ratio	5.50%	3.20%	9.40%	13.30%	18.80%	19.50%	11.62%
2.1.3 Participation ratio of women in manufacturing employment	28.20%	27.18%	35.40%	28.41%	21.80%	36.70%	29.61%
2.1.5 Ratio of women's involvement in the food, beverages and tobacco sub-sector	10.00%	13.79%	13.70%	19.41%	19.30%	9.30%	14.25%
2.1.7 Ratio of women's involvement in the textile, garments and leather sub-sector	30.11%	32.90%	26.80%	31.69%	32.30%	40.20%	32.33%
2.1.9 Ratio of women's involvement in metal, machinery and equipment production	31.84%	23.10%	15.40%	21.45%	17.20%	28.10%	22.85%
3.1.9 GDP / Capita	\$ 1,586	\$ 1,880	\$ 623	\$ 2,179	\$ 3,441	\$ 778	\$ 1,748
3.2.3 Share of the food and textile sub-sectors (31 and 32) in total MVA	20.40%	30.70%	27.30%	29.76%	33.70%	39.60%	30.24%
3.2.4 Share of metal, machinery and equipment products 38 in total MVA	40.55%	30.60%	19.30%	30.99%	30.20%	35.30%	31.16%
4.1.7 Household size	2.60	2.98	2.80	3.30	2.60	3.10	2.90
4.2.4 Female secondary enrolment ratio	90.00%	90.80%	56.80%	68.88%	97.00%	66.30%	78.30%
4.2.10 Ratio of female enrolment in technical subjects	36.64%	21.10%	42.60%	63.34%	40.00%	78.50%	47.03%
5.1.1 Share of women in total MP's	9.50%	14.60%	12.90%	13.48%	10.90%	3.40%	10.80%
<b>Gender Gap</b>							
1.1.2 Index male / female disparity ( years 15+)	0.10	0.14	0.15	0.15	0.20	0.21	0.16

### System Characteristics of Cluster 5

Indicator	Greece	Portugal	Cyprus	Mean
1.1.5 Women's participation rate in the agricultural sector	23.35%	12.87%	17.03%	17.75%
1.2.1 Women's employment ratio	87.67%	94.28%	95.10%	92.35%
1.2.5 Women's employment ratio in tertiary sector	56.40%	62.80%	59.01%	59.40%
1.3.1 Women's self employment ratio	19.92%	21.79%	3.54%	15.08%
2.1.3 Participation ratio of women in manufacturing employment	16.38%	23.03%	29.14%	22.85%
2.1.5 Ratio of women's involvement in the food, beverages and tobacco sub-sector	17.55%	11.08%	15.45%	14.69%
2.1.7 Ratio of women's involvement in the textile, garments and leather sub-sector	10.92%	18.70%	64.25%	31.29%
2.1.9 Ratio of women's involvement in metal, machinery and equipment production	5.44%	8.83%	4.13%	6.13%
3.1.9 GDP / Capita	\$ 7,562	\$ 8,546	\$ 9,292	\$ 8,467
3.2.3 Share of the food and textile sub-sectors (31 and 32) in total MVA	42.31%	39.81%	51.26%	44.46%
3.2.4 Share of metal, machinery and equipment products 38 in total MVA	16.93%	17.35%	12.57%	15.62%
4.1.7 Household size	3.00	4.00	3.90	3.63
4.2.4 Female secondary enrolment ratio	89.00%	56.00%	87.88%	77.62%
4.2.10 Ratio of female enrolment in technical subjects	10.05%	1.90%	2.38%	4.78%
5.1.1 Share of women in total MP's	5.33%	8.70%	3.75%	5.93%
<b>Gender Gap -</b>				
1.1.2 Index male / female disparity ( years 15+)	0.47	0.30	0.39	0.39

### System Characteristics of Cluster 6

Indicator	Luxembourg	Mean
1.1.5 Women's participation rate in the agricultural sector	3.00%	3.00%
1.2.1 Women's employment ratio	60.70%	60.70%
1.2.5 Women's employment ratio in tertiary sector	84.20%	84.20%
1.3.1 Women's self employment ratio	7.40%	7.40%
2.1.3 Participation ratio of women in manufacturing employment	7.24%	7.24%
2.1.5 Ratio of women's involvement in the food, beverages and tobacco sub-sector	29.55%	29.55%
2.1.7 Ratio of women's involvement in the textile, garments and leather sub-sector	2.44%	2.44%
2.1.9 Ratio of women's involvement in metal, machinery and equipment production	27.27%	27.27%
3.1.9 GDP / Capita	\$ 26,923	\$ 26,923
3.2.3 Share of the food and textile sub-sectors (31 and 32) in total MVA	10.12%	10.12%
3.2.4 Share of metal, machinery and equipment products 38 in total MVA	20.43%	20.43%
4.1.7 Household size	3.10	3.10
4.2.4 Female secondary enrolment ratio	75.00%	75.00%
4.2.10 Ratio of female enrolment in technical subjects	62.15%	62.15%
5.1.1 Share of women in total MP's	13.33%	13.33%
<b>Gender Gap</b>		
1.1.2 Index male / female disparity ( years 15+)	0.43	0.43

### System Characteristics of Cluster 7

Indicator	Turkey	Means
1.1.5 Women's participation rate in the agricultural sector	74.50%	74.50%
1.2.1 Women's employment ratio	74.50%	74.50%
1.2.5 Women's employment ratio in tertiary sector	15.30%	15.30%
1.3.1 Women's self employment ratio	10.20%	10.20%
2.1.3 Participation ratio of women in manufacturing employment	10.20%	10.20%
2.1.5 Ratio of women's involvement in the food, beverages and tobacco sub-sector	8.90%	8.90%
2.1.7 Ratio of women's involvement in the textile, garments and leather sub-sector	75.20%	75.20%
2.1.9 Ratio of women's involvement in metal, machinery and equipment production	5.10%	5.10%
3.1.9 GDP / Capita	\$ 2,722	\$ 2,722
3.2.3 Share of the food and textile sub-sectors (31 and 32) in total MVA	31.20%	31.20%
3.2.4 Share of metal, machinery and equipment products 38 in total MVA	19.69%	19.69%
4.1.7 Household size	4.97	4.97
4.2.4 Female secondary enrolment ratio	31.10%	31.10%
4.2.10 Ratio of female enrolment in technical subjects	21.49%	21.49%
5.1.1 Share of women in total MP's	1.30%	1.30%
<b>Gender Gap</b>		
1.1.2 Index male / female disparity ( years 15+)	0.56	0.56

## Sources for Variables and Indicators

I. LABOUR FORCE CHARACTERISTICS		Sources
<b>Variable 1.1. Size and distribution of Economically Active Population (EAP)</b>		
1.1.1	Women's economic activity rate (15+)	EUROSTAT (1), ILO (2), National Sources (3)
1.1.2	Index in EAP (15+)	EUROSTAT, ILO, National Sources
1.1.3	Women's economic activity rate (15-64)	EUROSTAT, ILO, National Sources
1.1.4	Index in EAP (15-64 years)	EUROSTAT, ILO, National Sources
1.1.5	Women's participation rate in the agricultural sector	ILO
1.1.7	Women's participation rate in the tertiary sector	WISTAT, ILO, EUROSTAT, National Sources
1.1.8	Index EAP part. rate in the tertiary sector	WISTAT, ILO, EUROSTAT
1.1.9	Rate of growth of female EAP (1970-90)	WISTAT, ILO
1.1.10	Share of Women in total EAP	WISTAT, ILO
<b>Variable 1.2 Size and distribution of employment</b>		
1.2.1	Women's employment rate	ILO, EUROSTAT, National Sources
1.2.2	Index in women's employment rate	ILO, EUROSTAT, National Sources
1.2.3	Women's employment rate in non-agricultural activity	ILO, EUROSTAT, National Sources
1.2.4	Index employ. rate in non-agricultural activity	ILO, EUROSTAT, National Sources
1.2.5	Women's employment rate in tertiary sector	ILO, EUROSTAT, National Sources
1.2.6	Index in employ. rate in tertiary sector	ILO, EUROSTAT, National Sources
1.2.7	Women's employment rate in services	ILO, EUROSTAT, National Sources
1.2.8	Index in employ. rate in services	ILO, EUROSTAT, National Sources
1.2.9	Women's Total Employment Rate	ILO, EUROSTAT
1.2.10	Rate of growth of women's employ. rate in non-agric. activity	EUROSTAT
<b>Variable 1.3. Employment status</b>		
1.3.1	Women's self employment rate	ILO, EUROSTAT, National Sources
1.3.2	Index in self employment rate	ILO, EUROSTAT, National Sources
1.3.3	Women's unpaid family employment rate	EUROSTAT, National Sources
1.3.4	Index in unpaid family employment rate	ILO, EUROSTAT
1.3.5	Women's part-time employment rate	ILO, EUROSTAT
<b>Variable 1.4. Employment by Employer</b>		
1.4.1	Women's employment ratio in public sector	National Sources
1.4.2	Index in women's employment in the public sector	National Sources
<b>Variable 1.5. Occupational status</b>		
1.5.1	Women's participation rate in professional & technical positions	EUROSTAT, National Sources
1.5.2	Index in part. rate in professional & technical positions	ILO, EUROSTAT, National Sources
1.5.3	Women's participation rate in administrative & managerial positions	ILO, EUROSTAT, National Sources
1.5.4	Index in part. rate in administrative & managerial positions	ILO, EUROSTAT, National Sources
1.5.7	Women's participation rate in non-agricultural activities	ILO, EUROSTAT, National Sources
1.5.8	Index in part. rate in non-agricultural activities	ILO, EUROSTAT, National Sources
<b>II. INDUSTRIAL LABOUR FORCE CHARACTERISTICS</b>		
<b>Variable 2.1. Size and distribution</b>		
2.1.1	Participation rate of women in manufacturing	ILO, National Sources
2.1.2	Index in part. rate in manufacturing	ILO, National Sources
2.1.3	Participation rate of women in manufacturing employment	ILO, EUROSTAT, National Sources
2.1.4	Index in part. rate in manuf. employment	ILO, EUROSTAT, National Sources
2.1.5	Rate of women's involvement in sub-sector 31	ILO, EUROSTAT, National Sources
2.1.6	Index in part. rate in sub-sector 31	ILO, EUROSTAT, National Sources
2.1.7	Rate of women's involvement in sub-sector 32	ILO, EUROSTAT, National Sources
2.1.8	Index in part. rate in sub-sector 32	ILO, EUROSTAT
2.1.9	Rate of women's involvement in sub-sector 38	ILO, EUROSTAT, National Sources
2.1.10	Index in part. rate in sub-sector 38	ILO, EUROSTAT, National Sources
2.1.11	Women in manufacturing employment	ILO, EUROSTAT, National Sources
<b>III. ECONOMIC AND INDUSTRIAL ENVIRONMENT</b>		
<b>Variable 3.1. Level of economic development</b>		
3.1.1	Logarithm of GDP/capita	UNIDO (4)
3.1.2	Share of the agricultural sector in GDP	UNIDO, EUROSTAT
3.1.3	Share of the tertiary sector in GDP	UNIDO
3.1.4	Share of MVA in GDP	UNIDO
3.1.5	Share of exports in GDP	UNIDO
3.1.7	Inflation rate	UNIDO, EUROSTAT
3.1.8	Share of government expenditure in GDP	UNIDO
3.1.9	GDP per capita	UNIDO
3.1.10	Food security index	Not available
3.1.11	Integrated poverty index	Not available
<b>Variable 3.2 Level of industrial development</b>		
3.2.1	Logarithm of MVA/capita	UNIDO, EUROSTAT
3.2.2	Share of man. included goods in total exports	UNIDO, National Sources
3.2.3	Share of sub-sectors 31 and 32 in total MVA	UNIDO
3.2.4	Share of sub-sector 38 in total MVA	UNIDO, EUROSTAT
3.2.5	MVA per capita	UNIDO
3.2.6	Annual growth rate for industry	UNIDO
3.2.9	Share of sub-sector 31 in MVA	UNIDO
3.2.10	Share of sub-sector 32 in MVA	UNIDO
<b>Variable 3.3 Infrastructure</b>		
3.3.1	Ratio of MVA per MVA in the industrial sector	Statesman YB '93 (5)

## Sources for Variables and Indicators

3.3.2	Length of road per 1000 square kilometres	Statesman YB '93
3.3.3	Number of radio receivers per 1000 inhabitants	Statesman YB '93
3.3.4	Government expenditure on basic human needs	WB (6)
3.3.5	Government expenditure on education	WB
<b>IV. SOCIAL AND DEMOGRAPHIC CONDITIONS</b>		
<b>Variable 4.1. Size and distribution of population</b>		
4.1.1	Urbanization	WISTAT, UNIDO, National Sources
4.1.2	Index in Urbanization	WISTAT, UNIDO, National Sources
4.1.3	Index in urbanization	WISTAT, UNIDO, National Sources
4.1.4	Total fertility (births per woman)	WISTAT, UNIDO, National Sources
4.1.5	Mean age at first marriage for women	WISTAT, UNIDO, National Sources
4.1.6	Index in legal age of marriage	WISTAT, UNIDO, National Sources
4.1.7	Household size	WB, National Sources
4.1.8	Female headed households	WISTAT, IFAD (7)
<b>Variable 4.2. Access to education</b>		
4.2.1	Index in literacy rate	WISTAT
4.2.2	Female primary enrolment rate	WISTAT, WB
4.2.3	Index in primary enrolment rate	WISTAT
4.2.4	Female secondary enrolment ratio	WISTAT, WB
4.2.5	Index in secondary enrolment rate	WISTAT, WB
4.2.6	Female tertiary enrolment ratio	WISTAT
4.2.7	Index in tertiary enrolment rate	WISTAT
4.2.10	Ratio of female enrolment in technical subjects	WISTAT, ILO
4.2.11	Index in technical subjects rate	WISTAT
<b>V. POLITICAL ENVIRONMENT</b>		
<b>Variable 5.1 Distribution of power</b>		
5.1.1	Parliamentary representation	IPU (8)
5.1.2	Cabinet representation	IPU
5.1.3	Executive representation	IPU
5.1.4	Representation in economical and legal affairs	IPU
<b>VI. LEGAL AND INSTITUTIONAL FRAMEWORK (qualitative= dummy variables)</b>		
<b>Variable 6.1. Legal protection</b>		
6.1.1	Ratification of CEDAW	ILO
6.1.2	Ratification of ILO Convention 100	ILO
6.1.3	Ratification of ILO Convention 111	ILO
6.1.4	Ratification of ILO Convention 156	ILO
<p>1 EUROSTAT Office, Geneva  2 Database of the International Labour Organisation, Geneva  3 Republic of Albania, Ministry of Labour, Emigration, and Social Protection  Republic of Belarus ??????  Republic of Bosnia and Herzegovina, Ministry of Energetics and Industry  Republic of Bulgaria ????  Czech Republic, Czech Statistical Office, Spring 1993; Statistical Yearbook of the Czech Republic, 1993  Hungary, Ministry of Labour, Research Institute of Labour, 1993  Romania, ?????  Macedonia, ????  Republic of Moldova, ?????  Slovak Republic, Ministry of Labour, Social Affairs and Family, 1993  Republic of Slovenia, Office of Women's Politics, 1993  Republic of Turkey, General Directorate on the Status and Problems of Women, 1993  4 Database of the United Nations Industrial Development Organisation (Industrial Statistics Branch IRD/STAT and Industrial Development Review Informations Base )  5 Paxton, John Ed (1993) The Statesman Yearbook 1993-94.  6 The World Bank 1993. World Development Report. New York: Oxford University Press  7 IFAD ??????  8 International Parliamentary Union (1993). Les femmes au Parlement au Juin 1993. Geneva (Wall chart)</p>		



## ANNEX 5

**Enlargement of the Data Base on Women's Participation in the Economy and in the Manufacturing Sector.**

For the enlargement of the data base, the following list of variables should be considered, as recommended by the participants to the Geneva Workshop with special reference to the countries in transition

## 1.1. Labour force characteristics

Additional variable requested:

Age of retirement (breakdown by gender) and number of retired women

## 1.2 Labour market

For a complete presentation of the female participation in employment and its sectorial distribution the list of variables related to employment should be completed by variables expressing the position of women in the total labour market and in different sectors of the economy.

Special interest was devoted to the possibilities to define new business type activities for female employees. (Pe. in the different services, to replace or transform unpaid work (or that in the informal sectors) Therefore information is needed on the size and types of the so-called women's unpaid family employment, different forms of family - child care allowances, women on maternity leave or children's care, etc. These statistical data would not necessarily be incorporated in the quantitative exercises themselves but could serve as starting points for strategy, policy making and project development. All the above indicators have to be defined to follow internationally standards.

## 1.2.5. Part time employment ratio of women

## 1.5 Occupational Status

Information should be broken down into public and private sectors.

## Unemployment

One of the major weaknesses of the data set is the lack of data on unemployment and its sectorial and gender

## III. Economic and Industrial Environment

Contribution to GDP by different sectors of the economy, particularly applicable to the economies in transition.

Share of agriculture in

Share of the tertiary sectors in

Share of MVA in

Share of exports in GDP

Ratio of indebtedness to GDP and exports.

Poverty issues

"Food security index" and the "integrated poverty indices".

## IV. Social and Demographic Conditions

Complete information on enrolment issues in general and on the tertiary female enrolment in specific.

## ANNEX 6

## List of Participants at the Validation Workshop 19-24 February 1995 in Geneva

**Experts**

1. Ms. M. Ruzickova, Deputy Director  
Ministry of Economy, Slovakia
2. Ms. Elena Borislavova Poptodorova, Parliament Member  
Bulgarian National Assembly, Bulgaria
3. Ms. Tatiana Yugay, Advisor  
The Analytical Center under the President of Russia, Russia
4. Ms. M. Karhliene, Head  
Population Statistics Service, Lithuania
5. Ms. Aleksandra Kanjua Mrcela, Sociologist-Researcher  
Institute for Social Sciences, Slovenia

**UN Agencies**

1. Ms. Renu Chahil-Graf, Chief  
Policy, Strategy, and Evaluation Office, UNV
2. Ms. Jean Anglin, UN Volunteers  
Programme Operations & Management Division, Geneva
3. Ms. Kirsti Floor, UN Non-Governmental  
Liaison Service, Geneva

**NGOs**

1. Ms. Conchita Poncini, International Federation  
of University Women, Geneva
2. Ms. Greuter  
International Council of Social Welfare, Geneva

**ECE**

1. Ms. Dunja Pastizzi-Ferencic, Deputy Executive Secretary  
of the ECE, Geneva
2. Dr. Antal Szabo, Regional Adviser

for Industry and Technology, Geneva

3. Mr. Petr Caslavsky  
Industry and Technology Division, Geneva
4. Gianluca Sambucini  
UNECE, Geneva
5. Ms. P. Kalampasut, Statistical Division  
ECE, Geneva

#### **UNIDO**

1. A. Fujino, Industrial Development Officer  
CSPD/OMD/WOMEN, Vienna
2. Mr. A. Akpa  
UNIDO Liaison Office, Geneva
3. Dr. Anna Gelei  
Budapest, Hungary
4. Ms. Cecilia Andersen  
Brussels, Belgium

**7. STATISTICAL ANNEX**

Source : OECD, Industrial policy in OECD countries, annual review, 1993, p. 83 (table 7)

Table 1 Shares of manufacturing in GDP

	Current prices					Constant 1985 prices				
	Shares			Percentage change <sup>1</sup>		Shares			Percentage change <sup>1</sup>	
	1970	1980	1990	1970-80	1980-90	1970	1980	1990	70-80	80-90
United States	25.2	21.8	18.9*	-1.4	-1.6	19.4	19.6	20.4*	0.1	0.5
Canada	19.8	17.9	17.5*	-1.0	-0.3	19.3	17.3	16.7*	-1.1	-0.5
Japan	36.0	29.2	28.9*	-2.1	-0.1	25.1	26.8	30.6*	0.7	1.5
Denmark	18.5	17.2	16.5	-0.7	-0.4	..	17.2	15.6	..	-1.0
France	29.9	24.2	21.0	-2.1	-1.4	..	24.1	20.1	..	-1.8
Germany	38.4	32.8	31.2*	-1.6	-0.5	35.2	32.5	30.4*	-0.8	-0.7
Italy	27.1	27.8	22.4	0.3	-2.2	..	24.6	25.1	..	0.2
Netherlands	25.8	17.9	20.1*	-3.6	1.3	..	..	..	..	..
United Kingdom	28.7	23.2	18.9**	-2.1	-2.6	27.5	22.2	20.1	-2.1	-0.7
Finland	23.8	25.2	19.1	0.6	-2.7	..	22.1	18.2*	..	-2.2
Norway	21.6	16.0	14.5*	-3.0	-1.1	..	..	12.5	..	..
Sweden	25.0	21.1	19.7	-1.7	-0.7	..	20.6*	20.7*	..	0.1
Australia	24.3	19.3	16.1*	-2.3	-2.0	..	..	..	..	..

a) National source.

\* 1989.

\*\* 1988.

1. Annual growth rates between indicated years.

Source: OECD STAN database; EAS Division.

8

Source : OECD, Employment Outlook, July 1994, p. 4

Table 2 Growth of real GDP in the OECD area<sup>a</sup>

	1991 Share in total OECD GDP	Percentage changes from previous year				
		Average 1983-91	1992	1993	1994	1995
<b>North America<sup>a</sup></b>	<b>41.1</b>	<b>2.8</b>	<b>2.4</b>	<b>3.0</b>	<b>3.9</b>	<b>3.1</b>
Canada	3.5	3.0	0.7	2.4	3.7	4.3
United States	37.7	2.8	2.6	3.0	4.0	3.0
<b>Japan</b>	<b>15.5</b>	<b>4.5</b>	<b>1.1</b>	<b>0.1</b>	<b>0.8</b>	<b>2.7</b>
<b>Central and Western Europe</b>	<b>26.6</b>	<b>2.8</b>	<b>1.1</b>	<b>-0.3</b>	<b>2.0</b>	<b>2.8</b>
Austria	0.9	2.7	1.6	-0.3	1.8	2.7
Belgium	1.1	2.5	1.4	-1.3	1.5	2.6
France	6.8	2.5	1.2	-0.9	1.8	2.9
Germany <sup>b</sup>	8.3	3.3	2.1	-1.3	1.8	2.6
Ireland	0.3	4.2	4.9	2.3	4.1	4.5
Luxembourg	0.1	4.4	1.8	0.3	1.5	2.6
Netherlands	1.6	2.9	1.4	0.2	1.4	2.8
Switzerland	1.0	2.4	-0.1	-0.6	1.5	2.5
United Kingdom	5.9	2.5	-0.6	1.9	2.8	3.2
<b>Southern Europe</b>	<b>12.1</b>	<b>3.2</b>	<b>1.3</b>	<b>0.1</b>	<b>1.3</b>	<b>2.8</b>
Greece	0.5	2.1	0.9	-0.1	1.0	1.6
Italy	6.4	2.7	0.7	-0.7	1.5	2.6
Portugal	0.6	3.2	1.1	-0.5	1.2	2.3
Spain	3.3	3.6	0.8	-1.0	1.2	2.7
Turkey <sup>c</sup>	1.3	5.2	5.8	6.8	0.6	4.3
<b>Nordic countries</b>	<b>2.6</b>	<b>2.1</b>	<b>-0.6</b>	<b>-0.6</b>	<b>3.1</b>	<b>3.4</b>
Denmark	0.6	2.1	1.2	1.2	4.0	3.5
Finland	0.5	2.0	-3.8	-2.6	1.9	4.7
Iceland <sup>d</sup>	0	3.0	-3.4	0.8	-0.6	1.4
Norway	0.5	2.6	3.4	2.2	4.3	2.9
Sweden	1.0	2.0	-1.9	-2.1	2.7	2.9
<b>Oceania</b>	<b>2.2</b>	<b>3.1</b>	<b>1.8</b>	<b>4.2</b>	<b>4.0</b>	<b>4.2</b>
Australia	1.8	3.5	2.1	4.1	4.0	4.3
New Zealand	0.3	1.0	-0.4	4.8	3.9	3.5
<b>OECD Europe</b>	<b>41.3</b>	<b>2.9</b>	<b>1.1</b>	<b>-0.2</b>	<b>1.9</b>	<b>2.8</b>
EC	36.1	2.9	1.0	-0.4	1.9	2.8
<b>Total OECD</b>	<b>100.0</b>	<b>3.1</b>	<b>1.7</b>	<b>1.2</b>	<b>2.6</b>	<b>2.9</b>

a) Aggregates are computed on the basis of 1991 GDP weights expressed in 1991 purchasing power parities.

b) Up to and including 1991, western Germany; subsequent data concern the whole of Germany.

c) GNP.

Source: OECD Economic Outlook, No. 55, June 1994.

Source : OECD, Employment Outlook, July 1994, p. 5 (table 1.2.)

Table 3 Employment and labour force growth in the OECD area<sup>a</sup>

	Employment						Labour force					
	1992	1983-91	1992	1993	1994	1995	1992	1983-91	1992	1993	1994	1995
	000s	Average	Annual percentage change				000s	Average	Annual percentage change			
<b>North America</b>	129 835.7	1.9	0.5	1.4	3.0	1.9	140 781.2	1.5	1.2	0.9	2.5	1.3
Canada	12 240.5	1.8	-0.8	1.2	1.9	2.7	13 796.4	1.6	0.3	1.1	1.5	2.0
United States	117 595.2	1.9	0.6	1.5	3.2	1.8	126 984.8	1.5	1.3	0.8	2.6	1.3
<b>Japan</b>	64 357.2	1.3	1.1	0.2	0.3	0.9	65 779.6	1.2	1.2	0.6	0.7	0.8
<b>Central and Western Europe</b>	102 310.2	2.0	-1.3	-1.4	-0.5	0.6	112 048.1	1.8	-0.2	-0.2	0.1	0.4
Austria	3 542.7	0.9	2.1	-0.7	0.1	0.5	3 675.1	0.9	2.2	-0.1	0.4	0.6
Belgium	3 802.0	0.8	-0.4	-1.3	-0.7	0.6	4 237.0	0.2	0.6	0.6	0.3	0.5
France	22 419.5	0.5	-0.8	-1.2	-0.4	0.6	25 019.9	0.6	0.3	0.2	0.3	0.5
Germany	35 830.5	1.4	-1.7	-1.9	-1.8	0	38 808.0	1.0	-0.6	-0.6	-0.5	-0.1
Ireland	1 141.0	0.1	0.5	1.1	2.0	1.5	1 364.0	0.4	1.4	1.4	0.9	1.2
Luxembourg	166.4	1.2	0.2	-0.4	-0.5	0.4	169.1	1.2	0.4	0.1	0.2	0.2
Netherlands	6 654.0	2.1	2.0	0.8	-0.5	1.3	7 133.0	1.4	1.7	2.3	1.4	1.0
Switzerland	3 479.6	1.1	-2.2	-2.3	-0.5	0.8	3 568.3	1.1	-0.8	-0.8	-0.5	0
United Kingdom	25 274.5	1.1	-2.7	-1.3	1.2	1.4	28 073.8	0.7	-0.9	-0.9	0.3	0.6
<b>Southern Europe</b>	60 231.8	1.2	-0.7	-2.5	-1.7	0.3	67 952.9	1.1	0.2	-1.4	0.8	1.0
Greece	3 685.0	0.3	1.5	-0.8	-0.7	-0.1	4 034.0	0.3	2.6	0.5	0.3	0.3
Italy	21 271.1	0.6	-0.6	-4.8	-1.6	0.2	24 071.0	0.8	0	-6.1	-0.2	0.4
Portugal	4 309.4	1.5	-6.4	-2.0	-0.7	0.2	4 497.1	1.0	-6.4	-0.6	0.2	0.8
Spain	12 366.3	1.5	-1.9	-4.3	-1.1	1.0	15 154.8	1.2	0.5	1.1	1.2	0.9
Turkey	18 600.0	1.6	1.0	0.9	-2.5	0.1	20 196.0	1.7	1.1	1.8	1.8	1.8
<b>Nordic countries</b>	11 070.2	0.4	-3.2	-3.4	0	1.1	12 066.8	0.5	-0.8	-0.9	-0.3	0.6
Denmark	2 516.9	0.5	-0.1	-0.6	1.2	0.9	2 835.2	0.5	0.7	0.6	-0.2	0.4
Finland	2 173.7	-0.3	-7.1	-6.1	-0.9	1.4	2 501.8	0	-1.2	-0.7	-0.1	0.3
Iceland	125.0	1.9	-6.7	-1.1	-2.0	0	128.8	2.0	-5.1	0.3	-0.2	0.2
Norway	2 003.9	0.4	-0.3	0	1.0	1.5	2 130.0	0.7	0.2	0	0.6	1.1
Sweden	4 250.8	0.6	-4.1	-5.3	-0.7	0.9	4 471.0	0.6	-1.8	-2.3	-0.9	0.6
<b>Oceania</b>	9 201.7	2.1	-0.3	0	2.2	2.5	10 301.0	2.2	0.8	0	1.3	1.6
Australia	7 735.1	2.5	-0.5	-0.4	2.3	2.7	8 665.6	2.5	0.9	-0.2	1.3	1.7
New Zealand	1 466.6	0	0.4	2.0	1.6	1.6	1 635.5	0.7	0.4	0.8	1.0	1.0
<b>OECD Europe</b>	173 612.2	1.6	-1.2	-1.9	-0.8	0.6	192 067.9	1.5	-0.1	-0.7	0.3	0.6
<b>EC</b>	139 436.6	1.7	-1.4	-2.1	-0.7	0.6	155 396.9	1.5	-0.2	-1.0	0.2	0.4
<b>Total OECD</b>	377 006.8	1.6	-0.2	-0.3	0.8	1.1	408 929.7	1.4	0.6	0.1	1.2	0.9

a) For sources and definitions, see *OECD Economic Outlook*, No. 55, June 1994.

b) Up to and including 1991, western Germany; subsequent data concern the whole of Germany.

Source : OECD, Employment Outlook, July 1994, p. 6 (table 1.3.)

Table 4 Unemployment in the OECD area\*

	1992	1983-91	1992	1993	1994	1995	1983-91	1992	1993	1994	1995
	000s	Percentage of labour force <sup>c</sup>					Millions				
<b>North America</b>	<b>10 945.5</b>	<b>7.0</b>	<b>7.8</b>	<b>7.2</b>	<b>6.8</b>	<b>6.3</b>	<b>9.2</b>	<b>10.9</b>	<b>10.3</b>	<b>9.9</b>	<b>9.2</b>
Canada	1 555.9	9.5	11.3	11.2	10.8	10.2	1.2	1.6	1.6	1.5	1.5
United States	9 389.6	6.7	7.4	6.8	6.3	5.8	8.0	9.4	8.7	8.3	7.8
<b>Japan</b>	<b>1 422.3</b>	<b>2.5</b>	<b>2.2</b>	<b>2.5</b>	<b>2.9</b>	<b>2.8</b>	<b>1.5</b>	<b>1.4</b>	<b>1.7</b>	<b>1.9</b>	<b>1.9</b>
<b>Central and Western Europe</b>	<b>9 737.9</b>	<b>8.5</b>	<b>8.7</b>	<b>9.7</b>	<b>10.2</b>	<b>10.0</b>	<b>8.6</b>	<b>9.7</b>	<b>10.9</b>	<b>11.4</b>	<b>11.2</b>
Austria	132.4	3.5	3.6	4.2	4.5	4.6	0.1	0.1	0.2	0.2	0.2
Belgium	435.0	11.0	10.3	11.9	12.8	12.7	0.5	0.4	0.5	0.5	0.5
France	2 600.3	9.7	10.4	11.7	12.3	12.2	2.4	2.6	2.9	3.1	3.1
Germany <sup>b</sup>	2 977.5	7.3	7.7	8.9	10.0	10.0	2.1	3.0	3.4	3.8	3.8
Ireland	223.0	16.0	16.3	16.6	15.7	15.4	0.2	0.2	0.2	0.2	0.2
Luxembourg	2.7	1.5	1.6	2.1	2.7	2.5	0	0	0	0	0
Netherlands	479.0	9.5	6.7	8.1	9.8	9.5	0.6	0.5	0.6	0.7	0.7
Switzerland	88.8	0.8	2.5	4.5	4.5	3.8	0	0.1	0.2	0.2	0.1
United Kingdom	2 799.2	9.4	10.0	10.3	9.6	8.9	2.6	2.8	2.9	2.7	2.5
<b>Southern Europe</b>	<b>7 721.2</b>	<b>11.4</b>	<b>11.4</b>	<b>12.4</b>	<b>14.5</b>	<b>15.0</b>	<b>7.4</b>	<b>7.7</b>	<b>8.3</b>	<b>9.8</b>	<b>10.3</b>
Greece	349.0	7.6	8.7	9.8	10.7	11.0	0.3	0.3	0.4	0.4	0.5
Italy	2 799.9	11.2	11.6	10.4	11.7	11.9	2.6	2.8	2.4	2.6	2.7
Portugal	187.7	6.7	4.2	5.5	6.4	6.9	0.3	0.2	0.2	0.3	0.3
Spain	2 788.5	19.0	18.4	22.7	24.5	24.4	2.7	2.8	3.5	3.8	3.8
Turkey	1 596.0	7.9	7.9	8.7	12.6	14.0	1.5	1.6	1.8	2.6	3.0
<b>Nordic countries</b>	<b>996.6</b>	<b>4.6</b>	<b>8.3</b>	<b>10.6</b>	<b>10.3</b>	<b>9.8</b>	<b>0.6</b>	<b>1.0</b>	<b>1.3</b>	<b>1.2</b>	<b>1.2</b>
Denmark	318.3	9.2	11.2	12.2	11.0	10.5	0.3	0.3	0.3	0.3	0.3
Finland	328.2	5.0	13.1	17.9	18.5	17.7	0.1	0.3	0.4	0.5	0.4
Iceland	3.9	1.1	3.0	4.3	6.0	6.2	0	0	0	0	0
Norway	126.1	3.6	5.9	6.0	5.6	5.2	0.1	0.1	0.1	0.1	0.1
Sweden	220.2	2.1	4.9	7.8	7.6	7.4	0.1	0.2	0.3	0.3	0.3
<b>Oceania</b>	<b>1 099.4</b>	<b>7.7</b>	<b>10.7</b>	<b>10.6</b>	<b>9.8</b>	<b>9.0</b>	<b>0.7</b>	<b>1.1</b>	<b>1.1</b>	<b>1.0</b>	<b>1.0</b>
Australia	930.5	8.1	10.7	10.9	10.0	9.2	0.6	0.9	0.9	0.9	0.8
New Zealand	168.9	5.8	10.3	9.2	8.7	8.1	0.1	0.2	0.2	0.1	0.1
<b>OECD Europe</b>	<b>18 455.7</b>	<b>9.3</b>	<b>9.6</b>	<b>10.7</b>	<b>11.7</b>	<b>11.8</b>	<b>16.6</b>	<b>18.5</b>	<b>20.4</b>	<b>22.4</b>	<b>22.6</b>
<b>EC</b>	<b>15 960.2</b>	<b>10.2</b>	<b>10.3</b>	<b>11.3</b>	<b>12.0</b>	<b>11.9</b>	<b>14.7</b>	<b>16.0</b>	<b>17.4</b>	<b>18.6</b>	<b>18.4</b>
<b>Total OECD</b>	<b>31 922.9</b>	<b>7.4</b>	<b>7.8</b>	<b>8.2</b>	<b>8.5</b>	<b>8.3</b>	<b>28.1</b>	<b>31.9</b>	<b>33.5</b>	<b>35.3</b>	<b>34.7</b>

a) For sources and definitions, see *OECD Economic Outlook*, No. 55, June 1994.

b) Up to and including 1991, western Germany; subsequent data concern the whole of Germany.

c) The rates are not necessarily comparable between countries. For rates standardized to common definitions, see Table K of the Statistical Annex.



Source : OECD, *Employment Outlook*, July 1994, p.7 (table 1.4)

Table 5 Alternative measures of labour market slack in selected OECD countries, 1993

	Standardised unemployment rate	Alternative unemployment rates including		
		Discouraged workers <sup>a</sup> (1)	Involuntary part-time workers <sup>b</sup> (2)	Both (1) and (2)
Australia	10.8	12.2	14.2	15.5
Canada	11.1	11.9	13.9	14.6
Japan	2.5	4.5	3.5	5.4
New Zealand	9.5	10.4	..	10.4
Sweden	8.2	9.9	8.6	10.3
United Kingdom	10.3	10.8	11.9	12.3
United States	6.7	7.5	8.6	9.4
Average <sup>c</sup>	6.5	7.5	8.1	9.2

.. Data not available.

a) For definitions of discouraged workers, see Annex 1.A, *OECD Employment Outlook*, 1993. Discouraged workers are included in both the number of unemployed and the labour force.b) For definitions of involuntary part-time workers, see the notes to Table 1.6 of *OECD Employment Outlook*, 1993. Half the total of involuntary part-time workers is included in the number of unemployed.

c) Weighted by 1993 labour force shares.

Source: National submissions.

Source : OECD, Employment Outlook, July 1994, p. 8 (table 1.5.)

Table 6 Business sector labour costs in the OECD area<sup>a</sup>  
Percentage changes from previous period

	Compensation per employee						Unit labour costs					
	1980-90	1991	1992	1993	1994	1995	1980-90	1991	1992	1993	1994	1995
North America	5.1	4.0	5.3	3.8	4.0	3.8	4.2	3.8	2.3	2.2	2.3	2.7
Canada	6.4	4.7	4.1	2.6	1.9	2.8	4.9	4.2	2.2	1.2	0.1	1.2
United States	5.0	4.0	5.4	3.9	4.2	3.9	4.1	3.8	2.4	2.3	2.5	2.8
Japan	3.9	4.4	1.8	0.5	0.4	2.2	0.9	1.6	1.6	0.5	-0.3	0.2
Central and Western Europe	5.9	5.6	6.4	3.8	2.9	2.9	3.7	4.4	3.6	2.3	0.1	0.5
Austria	5.3	6.3	4.8	5.1	3.2	3.7	3.4	5.0	5.4	4.4	1.1	1.2
Belgium	5.5	7.8	6.1	4.0	2.4	2.6	3.4	6.1	4.0	4.0	0	0.5
France	7.3	4.6	3.6	2.2	2.0	2.0	4.7	3.7	1.1	1.5	-0.7	-0.5
Germany <sup>b</sup>	3.6	4.7	9.9	4.5	3.1	2.8	1.8	2.8	5.8	3.8	-0.5	0.3
Ireland	9.5	3.8	5.5	5.3	5.4	4.8	5.1	0.9	0.5	3.7	2.9	1.4
Netherlands	2.5	4.5	4.4	3.2	2.3	2.0	0.8	3.9	3.9	2.7	-0.4	-0.4
Switzerland	4.8	7.6	5.2	2.3	2.0	2.5	3.8	7.5	2.6	-0.3	-0.2	0.5
United Kingdom	8.6	7.6	5.8	4.7	3.7	3.9	5.9	6.7	3.3	0.8	1.8	1.9
Southern Europe <sup>c</sup>	11.7	9.2	7.7	5.5	4.4	4.2	9.5	8.0	4.9	2.7	1.4	1.6
Greece	18.1	14.7	12.1	13.7	12.7	9.0	17.5	7.9	12.8	12.8	10.6	7.1
Italy	11.5	8.6	6.1	3.7	3.4	4.1	9.4	8.2	4.1	1.2	0.2	1.1
Portugal	16.8	15.4	13.7	7.3	5.6	4.7	15.0	16.5	3.0	5.3	3.2	2.3
Spain	10.1	8.5	8.9	7.4	4.6	3.5	7.2	6.1	5.5	3.5	2.0	1.6
Nordic countries <sup>c</sup>	8.3	5.3	3.3	2.0	3.1	2.9	6.2	4.7	0.3	-1.9	-0.2	0.5
Denmark	6.5	4.9	3.1	2.8	3.5	3.6	4.2	2.0	0.6	0.2	0	0.9
Finland	9.8	3.8	4.9	1.8	2.9	2.6	6.3	5.8	0.2	-3.2	0	-0.8
Norway	8.0	4.8	3.4	1.0	2.8	3.0	6.8	4.2	0.4	-1.7	1.0	1.2
Sweden	8.8	6.6	2.5	2.0	3.1	2.6	7.1	6.0	0.2	-2.5	-0.9	0.7
Oceania	8.7	3.0	3.6	5.7	3.0	3.7	7.3	2.5	1.2	0.7	1.2	2.0
Australia	8.5	3.3	3.6	6.2	3.2	4.0	7.2	2.2	0.6	0.9	1.4	2.3
New Zealand	9.5	1.0	3.6	2.6	2.3	2.3	7.5	3.9	4.9	-0.3	0.1	0.5
OECD Europe <sup>c</sup>	11.4	6.6	6.6	4.1	3.3	3.2	5.4	5.4	3.8	2.2	0.4	0.8
EC	7.7	6.6	6.8	4.3	3.3	3.3	5.5	5.4	3.9	2.4	0.5	0.8
Total OECD <sup>c</sup>	6.0	5.1	5.2	3.4	3.1	3.3	4.2	4.1	2.8	1.9	1.1	1.5

a) Aggregates are computed on the basis of 1991 GDP weights expressed in 1991 purchasing power parities.

b) Up to and including 1991, western Germany; subsequent data concern the whole of Germany and the whole economy.

c) Countries shown.

Source: OECD Economic Outlook, No. 55, June 1994.

Source : OECD, Employment Outlook, July 1994, p. 201  
(statistical annex, table G and table H)

Table 7 Total labour force - men  
Average annual growth rates in percentages

	1973-75	1975-79	1979-83	1983-91	1992	1993	1992 Labour force (thousands)
Australia	0.8	1.0	1.3	1.6 <sup>f</sup>	1.3	0.2	5 065
Austria	-0.7	0.9	1.5	0.7	1.0	-	2 147
Belgium	0.4	-0.1	-0.3	-0.5	-0.1	-	2 444
Canada	2.6	1.9	0.9	0.9	0.1	0.9	7 649
Denmark	0.3	0.1 <sup>a</sup>	0.1	0.6	-	-	-
Finland	0.5	0.0 <sup>b</sup>	0.8	0.0	-1.1	-0.8	1 341
France	0.2	0.2	-0.1	0.1	-0.3	-	14 047
Germany	-1.1	0.0	0.8	0.4 <sup>c</sup>	0.1	-	18 055
Greece	-0.4	0.6	1.8	0.0	-	-	-
Ireland	0.6	1.4	0.8	-0.2	-	-	-
Italy	0.4	0.2	0.4	0.3	-0.5	- <sup>d</sup>	15 452
Japan	0.9	0.7	0.9	1.0	1.2	0.9	38 990
Luxembourg	1.1	-0.6	-0.5	2.6 <sup>f</sup>	-	-	-
Netherlands	0.0	0.1	0.7	1.4	1.3	-	4 283
New Zealand	2.1	0.5	0.6	-0.1 <sup>e</sup>	0.4	-	522
Norway	1.4	1.0	0.2	0.0	0.3	-0.3	1 166
Portugal	1.5 <sup>a</sup>	0.5	0.2 <sup>c</sup>	0.8	- <sup>f</sup>	-1.7	2 674
Spain	0.8	-0.1 <sup>b</sup>	0.3	0.3	-0.9	-0.1	2 012 <sup>g</sup>
Sweden	0.5	-0.1	-0.2	0.1 <sup>c</sup>	-2.0	-3.4	2 306
Switzerland	-2.5	-0.6	1.0	0.8	-0.6	-0.7	2 206
United Kingdom	-0.3	0.1	-0.2	0.0	-0.8	-1.5	16 006
United States	1.3	1.8	0.9	0.9	1.1	0.5	70 588
North America	1.4	1.8	0.9	0.9	1.0	0.6	78 237
OECD Europe <sup>h</sup>	-0.1	0.0	0.4	0.3	-0.3	-	92 008
Total OECD <sup>i</sup>	0.6	0.8	0.7	0.6	0.0	-	215 222

<sup>a)</sup> Break in series between 1973 and 1974.

<sup>b)</sup> Break in series between 1975 and 1976.

<sup>c)</sup> Break in series between 1982 and 1983.

<sup>d)</sup> Break in series between 1985 and 1986.

<sup>e)</sup> Break in series between 1986 and 1987.

<sup>f)</sup> Data refer to 1983-90.

<sup>g)</sup> Break in series between 1991 and 1992.

<sup>h)</sup> Break in series between 1992 and 1993.

<sup>i)</sup> Above countries only.

Sources: OECD, Labour Force Statistics; and Quarterly Labour Force Statistics.

Table 8 Total labour force - women  
Average annual growth rates in percentages

	1973-75	1975-79	1979-83	1983-91	1992	1993	1992 Labour force (thousands)
Australia	4.0	2.0	2.6	3.7 <sup>f</sup>	1.5	1.1	3 614
Austria	-0.9	1.2	1.3	1.9	3.4	-	1 532
Belgium	2.6	2.6	1.8	1.2	1.7	-	1 793
Canada	5.6	4.7	3.4	2.6	0.4	1.3	6 224
Denmark	1.8	4.1 <sup>a</sup>	2.1	1.1	-	-	-
Finland	2.0	0.8 <sup>b</sup>	1.8	0.0	-1.5	-0.7	1 185
France	1.6	2.3	1.4	1.5	1.2	-	11 062
Germany	0.6	0.8	1.2	1.7 <sup>c</sup>	1.9	-	12 895
Greece	2.0	1.1	6.5	0.9	-	-	-
Ireland	2.6	2.2	3.2	1.2	-	-	-
Italy	1.9	3.4	1.9	1.8	0.9	- <sup>d</sup>	9 160
Japan	-1.5	2.1	1.8	1.7	1.1	0.1	26 790
Luxembourg	4.7	1.7	2.1	3.8 <sup>f</sup>	-	-	-
Netherlands	4.5	3.3	6.2	4.6	2.4	-	2 850
New Zealand	5.2	3.2	1.9	1.8 <sup>e</sup>	0.6	-	714
Norway	3.2	4.3	2.1	1.6	0.1	0.5	964
Portugal	1.5 <sup>a</sup>	3.0	0.8 <sup>c</sup>	2.1	- <sup>f</sup>	0.5	2 090
Spain	-0.6	0.0 <sup>b</sup>	1.5	3.6	2.6	2.5	5 551
Sweden	3.8	2.1	1.6	0.7 <sup>c</sup>	-1.8	-3.1	2 123
Switzerland	-1.8	0.6	2.1	1.6	-0.7	-0.5	1 367
United Kingdom	1.8	1.7	0.2	1.9	-0.3	-0.9	12 136
United States	3.8	4.3	2.4	2.0	1.6	1.0	57 960
North America	4.0	4.3	2.5	2.1	1.5	1.1	64 184
OECD Europe <sup>h</sup>	1.9	2.0	1.6	1.8	0.8	-	64 708
Total OECD <sup>i</sup>	2.1	2.8	2.0	1.9	0.9	-	160 010

<sup>a)</sup> Break in series between 1973 and 1974.

<sup>b)</sup> Break in series between 1975 and 1976.

<sup>c)</sup> Break in series between 1982 and 1983.

<sup>d)</sup> Break in series between 1985 and 1986.

<sup>e)</sup> Break in series between 1986 and 1987.

<sup>f)</sup> Data refer to 1983-90.

<sup>g)</sup> Break in series between 1991 and 1992.

<sup>h)</sup> Break in series between 1992 and 1993.

<sup>i)</sup> Above countries only.

Sources: OECD, Labour Force Statistics; and Quarterly Labour Force Statistics.

Table 9 Labour force participation rates by sex  
Percentages

	Men						Women					
	1973	1979	1983	1991	1992	1993 <sup>a</sup>	1973	1979	1983	1991	1992	1993 <sup>a</sup>
Australia	91.1	87.6	85.9	85.6	85.8	85.0	47.7	50.3	52.1	62.2	62.5	62.5
Austria	83.0	81.6	82.2	80.5	80.7	..	48.5	49.1	49.7	56.3	58.0	..
Belgium	83.2	79.3	76.8	72.8	72.6	..	41.3	46.3	48.7	53.2	54.1	..
Canada	86.1	86.3	84.7	83.9	78.9	78.9	47.2	55.5	60.0	68.1	65.1	65.4
Denmark	89.6	89.6	87.6	88.5	..	..	61.9	69.9	74.2	78.9	..	..
Finland	80.0	82.2	82.0	79.6	78.5	77.7	63.6	68.9	72.7	71.9	70.7	70.1
France	85.2	82.6	78.4	75.2	74.7	..	50.1	54.2	54.4	58.2	58.7	..
Germany	89.6	84.9	82.6	79.8	78.9	..	50.3	52.2	52.5	58.2	58.6	..
Greece	83.2	79.0	80.0	73.9	..	..	32.1	32.8	40.4	40.8	..	..
Ireland	92.3	88.7	87.1	81.9	..	..	34.1	35.2	37.8	39.9	..	..
Italy	85.1	82.6	80.7	79.7	79.1	75.1	33.7	38.7	40.3	46.2	46.5	43.2
Japan	90.1	89.2	89.1	88.9	89.7	90.1	54.0	54.7	57.2	61.5	62.0	61.7
Luxembourg	93.1	88.9	85.1	77.7	..	..	35.9	39.8	41.7	44.8	..	..
Netherlands	85.6	79.0	77.3	80.3	80.8	..	29.2	33.4	40.3	54.5	55.5	..
New Zealand	89.2	87.3	84.7	82.6	82.2	..	39.2	45.0	45.7	63.4	63.2	..
Norway	86.5	89.2	87.2	82.9	82.6	82.2	50.6	61.7	65.5	71.1	70.9	71.1
Portugal <sup>a</sup>	..	90.9	87.6	89.4	83.1	81.4	..	57.3	57.2	65.6	61.9	61.9
Spain	92.9	83.1	80.2	76.0	74.8	74.4	33.4	32.6	33.2	41.2	42.0	42.9
Sweden	88.1	87.9	85.9	85.3	83.2	80.3	62.6	72.8	76.6	80.9	79.1	76.5
Switzerland <sup>b</sup>	100.0	94.6	93.5	95.1	93.7	92.9	54.1	53.0	55.2	59.4	58.5	58.1
United Kingdom	93.0	90.5	87.5	85.2	84.5	83.3	53.2	58.0	57.2	65.0	64.8	64.3
United States	86.2	85.7	84.6	84.7	84.8	84.5	51.1	58.9	61.8	68.4	68.9	69.1
North America	86.2	85.8	84.6	84.6	84.2	83.9	50.7	58.6	61.6	68.4	68.5	68.7
OECD Europe <sup>d</sup>	88.7	84.8	82.3	80.0	75.1	..	44.7	48.6	49.8	55.8	53.3	..
Total OECD <sup>d</sup>	88.2	85.9	84.3	83.2	80.9	..	48.3	53.1	55.1	61.3	60.3	..

a) Labour force data include a significant number of persons aged less than 15 years.

b) Data disaggregated by age and sex exclude a certain number of foreign seasonal workers; these are included in the estimates of the working population.

c) Secretarial estimates.

d) Above countries only.

Sources: OECD, *Labour Force Statistics*; and *Quarterly Labour Force Statistics*.

Source : OECD, Employment Outlook, July 1994, p. 17 (table 1.10)

Table 10 Employment growth by sector over recessionary periods  
Annualised percentage change

	Agriculture		Industry		Services		Total	
	1980-1982	1990-1991	1980-1982	1990-1991	1980-1982	1990-1991	1980-1982	1990-1991
Australia	0.6	-3.5	-1.0	-6.7	2.0	0.1	1.0	-1.8
Canada	-2.1	4.3	-4.0	-7.3	1.2	-0.3	-0.4	-1.9
United Kingdom	-1.6	-1.4	-6.5	-7.1	-0.4	-1.6	-2.7	-3.2
United States	0.6	1.0	-3.4	-4.3	1.7	0.3	0.1	-0.9
	1981-1984	1990-1993	1981-1984	1990-1993	1981-1984	1990-1993	1981-1984	1990-1993
Austria	-1.4	-0.7*	-0.1	0.1*	3.3	0.8*	1.5	0.4*
Finland	-1.4	-5.7	-1.6	-10.4	2.9	-4.2	0.8	-6.2
France	-3.3	-4.1	-2.5	-3.0	1.5	0.6	-0.2	-0.7
Germany <sup>b</sup>	-3.2	-5.0	-2.2	-1.4	0.6	1.8	-0.8	0.3
Italy	-3.9	-6.8	-2.7	-1.0	3.1	-1.1	0.1	-1.6
Japan	-2.8	-5.3	0.6	1.3	2.0	1.7	1.1	1.1
Norway	-3.4	-5.0	-1.4	-2.6	2.0	0.8	0.6	-0.4
Portugal	..	-15.3	..	-3.5	..	3.4	..	-1.9
Spain	-1.9	-6.9	-3.9	-4.8	0.6	0.5	-1.4	-2.0
Sweden	-2.7	-3.0	-1.4	-8.4	1.3	-2.5	0.2	-4.2
Switzerland	-1.4	-1.1	-1.4	-3.3	2.0	-0.8	0.5	-1.7

.. Data not available.

a) 1990 Q1 to 1993 Q2.

b) Data refer to western Germany only.

Source: OECD, Quarterly Labour Force Statistics.

### System Characteristics of Cluster 1

Indicator	Denmark	Finland	Norway	Luxembourg	Mean
1.1.5 Women's participation rate in the agricultural sector	2.92%	5.65%	3.10%	3.00%	3.67%
1.2.1 Women's employment ratio	87.40%	89.54%	90.51%	60.70%	82.04%
1.2.5 Women's employment ratio in tertiary sector	81.50%	78.32%	86.43%	84.20%	82.61%
1.3.1 Women's self employment ratio	3.53%	4.82%	2.34%	7.40%	4.52%
2.1.3 Participation ratio of women in manufacturing employment	13.79%	14.95%	8.55%	7.24%	11.13%
2.1.5 Ratio of women's involvement in the food, beverages and tobacco sub-sector	25.28%	20.47%	23.30%	29.55%	24.65%
2.1.7 Ratio of women's involvement in the textile, garments and leather sub-sector	2.91%	10.16%	10.98%	2.44%	6.62%
2.1.9 Ratio of women's involvement in metal, machinery and equipment production	25.04%	24.35%	20.55%	27.27%	24.30%
3.1.9 GDP / Capita	27366.43	21737.74	26318.25	26922.58	25586.25
3.2.3 Share of the food and textile sub-sectors (31 and 32) in total MVA	28.05%	18.20%	28.35%	10.12%	20.18%
3.2.4 Share of metal, machinery and equipment products 38 in total MVA	34.62%	32.23%	28.14%	20.43%	28.85%
4.1.7 Household size	2.31	2.53	2.70	3.1	2.66
4.2.4 Female secondary enrolment ratio	107.00%	114.00%	97.00%	75.00%	98.25%
4.2.10 Ratio of female enrolment in technical subjects	29.11%	27.99%	29.78%	62.15%	37.26%
5.1.1 Share of women in total MP's	32.98%	38.50%	35.78%	13.33%	30.14%
<b>Gender Gap</b>					
1.1.2 Index male / female disparity ( years 15+)	0.16	0.12	0.17	0.43	0.22

### System Characteristics of Cluster 2

Indicator	Canada	France	United Kingdom	United States	Austria	Germany	Belgium	Netherlands	Sweden	Mean
1.1.5 Women's participation rate in the agricultural sector	2.41%	3.78%	1.14%	1.30%	8.22%	3.03%	1.51%	2.95%	1.77%	2.90%
1.2.1 Women's employment ratio	89.59%	87.40%	94.19%	92.81%	96.32%	93.56%	79.70%	90.51%	96.22%	91.14%
1.2.5 Women's employment ratio in tertiary sector	85.61%	78.00%	82.30%	84.47%	70.36%	71.02%	81.90%	81.20%	85.78%	80.07%
1.3.1 Women's self employment ratio	3.57%	7.29%	6.90%	2.79%	3.74%	2.47%	10.48%	7.34%	2.42%	5.22%
2.1.3 Participation ratio of women in manufacturing employment	10.42%	14.85%	13.54%	13.11%	20.07%	20.86%	14.09%	8.66%	10.88%	14.05%
2.1.5 Ratio of women's involvement in the food, beverages and tobacco sub-sector	16.18%	17.21%	12.67%	9.30%	16.60%	12.10%	16.45%	21.44%	15.40%	15.26%
2.1.7 Ratio of women's involvement in the textile, garments and leather sub-sector	10.16%	8.86%	6.29%	20.98%	22.06%	14.51%	10.57%	2.66%	9.14%	11.69%
2.1.9 Ratio of women's involvement in metal, machinery and equipment production	24.35%	30.14%	34.76%	35.65%	31.26%	40.40%	26.73%	21.49%	40.78%	31.73%
3.1.9 GDP / Capita	20723.60	23045.04	13876.86	23678.54	23507.59	21953.42	21872.47	21098.35	28483.15	22028.56
3.2.3 Share of the food and textile sub-sectors (31 and 32) in total MVA	20.43%	18.90%	18.71%	17.28%	21.37%	13.59%	23.92%	19.69%	11.95%	18.43%
3.2.4 Share of metal, machinery and equipment products 38 in total MVA	32.57%	40.09%	39.25%	42.23%	37.12%	50.25%	29.59%	33.78%	43.40%	38.70%
4.1.7 Household size	2.90	2.90	2.80	2.64	2.90	1.63	2.7	2.43	2.30	2.58
4.2.4 Female secondary enrolment ratio	104.00%	96.00%	85.00%	99.00%	81.00%	92.00%	100.00%	103.00%	92.00%	94.67%
4.2.10 Ratio of female enrolment in technical subjects	22.40%	20.31%	11.44%	19.08%	27.76%	36.83%	46.29%	39.09%	33.10%	28.48%
5.1.1 Share of women in total MP's	13.22%	5.72%	6.77%	6.70%	21.86%	21.03%	8.96%	21.33%	38.11%	15.97%
<b>Gender Gap</b>										
1.1.2 Index male / female disparity ( years 15+)	0.18	0.27	0.29	0.18	0.30	0.31	0.36438	0.34424	0.08	0.25

### System Characteristics of Cluster 3

Indicator	Ireland	Spain	Italy	Mean
1.1.5 Women's participation rate in the agricultural sector	2.87%	7.55%	7.31%	5.91%
1.2.1 Women's employment ratio	88.71%	79.80%	83.02%	83.84%
1.2.5 Women's employment ratio in tertiary sector	77.80%	75.10%	69.00%	73.97%
1.3.1 Women's self employment ratio	8.62%	16.07%	19.10%	14.60%
2.1.3 Participation ratio of women in manufacturing employment	17.10%	15.14%	20.95%	17.73%
2.1.5 Ratio of women's involvement in the food, beverages and tobacco sub-sector	17.29%	18.52%	7.33%	14.38%
2.1.7 Ratio of women's involvement in the textile, garments and leather sub-sector	8.63%	11.67%	14.42%	10.91%
2.1.9 Ratio of women's involvement in metal, machinery and equipment production	33.43%	16.01%	25.99%	25.14%
3.1.9 GDP / Capita	14145.99	14709.28	21538.77	16798.01
3.2.3 Share of the food and textile sub-sectors (31 and 32) in total MVA	31.09%	25.39%	20.07%	25.52%
3.2.4 Share of metal, machinery and equipment products 38 in total MVA	35.74%	31.98%	40.44%	36.05%
4.1.7 Household size	4.05	3.50	3.00	3.52
4.2.4 Female secondary enrolment ratio	103.00%	107.00%	78.00%	96.00%
4.2.10 Ratio of female enrolment in technical subjects	8.67%	25.63%	32.96%	22.42%
5.1.1 Share of women in total MP's	7.83%	14.57%	8.10%	10.17%
<b>Gender Gap</b>				
1.1.2 Index male / female disparity ( years 15+)	0.46	0.48	0.46	0.47



### System Characteristics of Cluster 4

Indicator	Czech Rep.	Slovakia	Bulgaria	Poland	Hungary	Romania	Mean
1.1.5 Women's participation rate in the agricultural sector	4.30%	7.40%	5.10%	20.96%	6.00%	26.30%	11.68%
1.2.1 Women's employment ratio	79.20%	88.30%	80.10%	105.50%	77.60%	92.20%	87.15%
1.2.5 Women's employment ratio in tertiary sector	61.60%	61.70%	56.50%	53.39%	68.30%	33.70%	55.87%
1.3.1 Women's self employment ratio	5.50%	3.20%	9.40%	13.30%	18.80%	19.50%	11.62%
2.1.3 Participation ratio of women in manufacturing employment	28.20%	27.18%	35.40%	28.41%	21.80%	36.70%	29.61%
2.1.5 Ratio of women's involvement in the food, beverages and tobacco sub-sector	10.00%	13.79%	13.70%	19.41%	19.30%	9.30%	14.25%
2.1.7 Ratio of women's involvement in the textile, garments and leather sub-sector	30.11%	32.90%	26.80%	31.69%	32.30%	40.20%	32.33%
2.1.9 Ratio of women's involvement in metal, machinery and equipment production	31.84%	23.10%	15.40%	21.45%	17.20%	28.10%	22.85%
3.1.9 GDP / Capita	\$ 1,585.95	\$ 1,879.80	\$ 623.12	\$ 2,179.10	\$ 3,441.06	\$ 777.79	\$ 1,747.80
3.2.3 Share of the food and textile sub-sectors (31 and 32) in total MVA	20.40%	30.70%	27.30%	29.76%	33.70%	39.60%	30.24%
3.2.4 Share of metal, machinery and equipment products 38 in total MVA	40.55%	30.60%	19.30%	30.99%	30.20%	35.30%	31.16%
4.1.7 Household size	2.60	2.98	2.80	3.30	2.60	3.10	2.90
4.2.4 Female secondary enrolment ratio	90.00%	90.80%	56.80%	68.88%	97.00%	66.30%	78.30%
4.2.10 Ratio of female enrolment in technical subjects	36.64%	21.10%	42.60%	63.34%	40.00%	78.50%	47.03%
5.1.1 Share of women in total MP's	9.50%	14.60%	12.90%	13.48%	10.90%	3.40%	10.80%
<b>Gender Gap</b>							
1.1.2 Index male / female disparity ( years 15+)	0.10	0.14	0.15	0.15	0.20	0.21	0.16

### System Characteristics of Cluster 5

Indicator	Greece	Portugal	Cyprus	Mean
1.1.5 Women's participation rate in the agricultural sector	23.35%	12.87%	17.03%	17.75%
1.2.1 Women's employment ratio	87.67%	94.28%	95.10%	92.35%
1.2.5 Women's employment ratio in tertiary sector	56.40%	62.80%	59.01%	59.40%
1.3.1 Women's self employment ratio	19.92%	21.79%	3.54%	15.08%
2.1.3 Participation ratio of women in manufacturing employment	16.38%	23.03%	29.14%	22.85%
2.1.5 Ratio of women's involvement in the food, beverages and tobacco sub-sector	17.55%	11.08%	15.45%	14.69%
2.1.7 Ratio of women's involvement in the textile, garments and leather sub-sector	10.92%	18.70%	64.25%	31.29%
2.1.9 Ratio of women's involvement in metal, machinery and equipment production	5.44%	8.83%	4.13%	6.13%
3.1.9 GDP / Capita	\$ 7,561.89	\$ 8,546.34	\$ 9,292.17	\$ 8,466.80
3.2.3 Share of the food and textile sub-sectors (31 and 32) in total MVA	42.31%	39.81%	51.26%	44.46%
3.2.4 Share of metal, machinery and equipment products 38 in total MVA	16.93%	17.35%	12.57%	15.62%
4.1.7 Household size	3.00	4.00	3.90	3.63
4.2.4 Female secondary enrolment ratio	89.00%	56.00%	87.86%	77.63%
4.2.10 Ratio of female enrolment in technical subjects	10.05%	1.90%	2.38%	4.78%
5.1.1 Share of women in total MP's	5.33%	8.70%	3.75%	5.93%
<b>Gender Gap</b>				
1.1.2 Index male / female disparity ( years 15+)	0.47	0.30	0.39	0.39

### System Characteristics of Cluster 6

Indicator	Slovenia	Mean
1.1.5 Women's participation rate in the agricultural sector	0.47%	0.47%
1.2.1 Women's employment ratio	30.60%	30.60%
1.2.5 Women's employment ratio in tertiary sector	18.40%	18.40%
1.3.1 Women's self employment ratio	1.70%	1.70%
2.1.3 Participation ratio of women in manufacturing employment	38.70%	38.70%
2.1.5 Ratio of women's involvement in the food, beverages and tobacco sub-sector	7.40%	7.40%
2.1.7 Ratio of women's involvement in the textile, garments and leather sub-sector	36.13%	36.13%
2.1.9 Ratio of women's involvement in metal, machinery and equipment production	12.10%	12.10%
3.1.9 GDP / Capita	\$ 6,132.00	\$ 6,132.00
3.2.3 Share of the food and textile sub-sectors (31 and 32) in total MVA	27.45%	27.45%
3.2.4 Share of metal, machinery and equipment products 38 in total MVA	32.79%	32.79%
4.1.7 Household size	3.1	3.1
4.2.4 Female secondary enrolment ratio	67.40%	67.40%
4.2.10 Ratio of female enrolment in technical subjects	22.80%	22.80%
5.1.1 Share of women in total MP's	14.40%	14.40%
<b>Gender Gap</b>		
1.1.2 Index male / female disparity ( years 15+)	0.12	0.12

### System Characteristics of Cluster 7

Indicator	Turkey	Means
1.1.5 Women's participation rate in the agricultural sector	74.50%	74.50%
1.2.1 Women's employment ratio	74.50%	74.50%
1.2.5 Women's employment ratio in tertiary sector	15.30%	15.30%
1.3.1 Women's self employment ratio	10.20%	10.20%
2.1.3 Participation ratio of women in manufacturing employment	10.20%	10.20%
2.1.5 Ratio of women's involvement in the food, beverages and tobacco sub-sector	8.90%	8.90%
2.1.7 Ratio of women's involvement in the textile, garments and leather sub-sector	75.20%	75.20%
2.1.9 Ratio of women's involvement in metal, machinery and equipment production	5.10%	5.10%
3.1.9 GDP / Capita	\$ 2,722.00	\$ 2,722.00
3.2.3 Share of the food and textile sub-sectors (31 and 32) in total MVA	31.20%	31.20%
3.2.4 Share of metal, machinery and equipment products 38 in total MVA	19.69%	19.69%
4.1.7 Household size	4.97	4.97
4.2.4 Female secondary enrolment ratio	31.10%	31.10%
4.2.10 Ratio of female enrolment in technical subjects	21.49%	21.49%
5.1.1 Share of women in total MP's	1.30%	1.30%
<b>Gender Gap</b>		
1.1.2 Index male / female disparity ( years 15+)	0.56	0.56