ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

THE FUTURE OF FEMALE-DOMINATED OCCUPATIONS

THE FUTURE OF FEMALE-DOMINATED OCCUPATIONS

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Pursuant to Article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

- to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;
- to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development; and
- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

The original Member countries of the OECD are Austria, Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The following countries became Members subsequently through accession at the dates indicated hereafter: Japan (28th April 1964), Finland (28th January 1969), Australia (7th June 1971), New Zealand (29th May 1973), Mexico (18th May 1994), the Czech Republic (21st December 1995), Hungary (7th May 1996), Poland (22nd November 1996) and Korea (12th December 1996). The Commission of the European Communities takes part in the work of the OECD (Article 13 of the OECD Convention).

Publié en français sous le titre :

L'AVENIR DES PROFESSIONS A PRÉDOMINANCE FÉMININE

FOREWORD

In 1991 a High-level Group of Experts submitted its report, "Shaping structural change: the role of women",* to the Secretary-General of the OECD. Among the priority policy issues it identified, occupational segregation and the need to enhance the status of women's occupations and the career prospects they offer were the focus of special attention.

Gender segregation in employment is a permanent feature of labour markets throughout the OECD area and is not diminishing with time. Gender inequalities stem largely from this and from the fact that women's jobs are concentrated in just a few occupations: most of these "female-dominated occupations" are at the heart of the information and service economy and are accordingly undergoing sweeping change.

In 1995 the Working Party on the Role of Women in the Economy, reporting to the OECD's Employment, Labour and Social Affairs Committee, decided to address the issue and identify policies that could best promote job prospects in female-dominated occupations. Several networks of national experts were set up and consultants called in to co-ordinate and summarise the work. A conference on "The professionalisation of female-dominated occupations in the service sector" was held at the OECD on 11 and 12 December 1997, on the initiative of France's General Delegation for Employment and Vocational Training.

This publication is the outcome of joint efforts by many national experts, whose contributions we here acknowledge. Each chapter is based on a background report drawn up by consultants: Damian Grimshaw and Jill Rubery on occupational employment and pay; Hilary Steedman on secretaries; John Townshend on primary school teachers; Jozef Pacolet on nurses; Susan Christopherson on carers; and Jacqueline Laufer on professionalisation. Françoise Coré, Principal Administrator in the OECD's Directorate for Education, Employment, Labour and Social Affairs, was in charge of the publication. She was assisted by Leslie Limage, publications consultant. The report is published on the responsibility of the Secretary-General of the OECD.

* *in Women and Structural Change. New Perspectives* (OECD, 1994).

TABLE OF CONTENTS

1

INTRODUCTION AND OVERVIEW

FEMALE-DOMINATED OCCUPATIONS

Gender segregation in occupational employment

Gender segregation across occupations is nearly universal and inherently structural in contemporary socio-economic systems (Anker, 1998). In OECD countries, most workers, and particularly men, hold jobs in an occupation where their own sex is in the majority. More than half of the classified occupations are segregated by sex at rates over 80 per cent. More than one-half of all employees belong to an occupation where most of the employees are of the opposite sex.

The scale and rigidity of this phenomenon are such that it is commonplace to refer to ''male occupations'' and ''female occupations'' or to those which are ''traditionally male'' or ''traditionally female''. These expressions clearly illustrate that segregation derived from dominant social and cultural models is directly transferred through gender-based stereotypes to the world of work. This may however have a positive side, since gender-defined occupations to some extent create a ''reserved'' employment site for one sex or the other.

The concentration of women's employment in a limited number of occupations

National occupational classifications may include between three hundred and five hundred categories at the most detailed level. Female-dominated occupations are relatively few in number, especially when compared with those which are male-dominated. For OECD countries, Anker (1998) observed more than five times as many male-dominated occupations as compared to female-dominated ones, although women represent some 40 per cent of the total work force.

It is well-known that women's employment is concentrated in a limited range of occupations and, that their numbers in these occupations is out of proportion with those to be found in male-dominated occupations. This characteristic indicates that female-dominated and male-dominated occupations are not defined

with the same degree of precision. Indeed, female-dominated occupations remain largely undifferentiated.

Which occupations are female-dominated today?

Female-dominated occupations are usually characterised by a strong concentration of total women's employment and a large work force. At OECD-level, three occupations appear to be outstanding examples of female-dominated occupations: secretaries, primary school teachers and nurses. These three occupations fulfil the three criteria mentioned above in all countries. Other occupations such as those in sales, hotels and catering employ large numbers of workers and show a high degree of female participation (saleswomen, cashiers, waitresses). Finally, several occupations are perceived as strongly resembling traditional female family roles (in fact, as substitutes for these traditional roles) and the rates of female-domination are nearly 100 per cent. Domestic workers as a traditional occupation and home helpers as a newer form of employment are included in the categories of female-dominated occupations.

The identification of specific occupations which can be characterised as "female-dominated" may serve as a warning to avoid amalgamation of objectively different jobs. A simple listing of occupations demonstrates important criteria which differentiate them, levels of qualification being among the most visible and important. From primary school teachers to domestic workers, the range of qualification levels is quite broad. Older traditional occupations are also to be found alongside new ones. The identification of specific occupations draws out a newer characteristic common to female-dominated occupations. In OECD countries today, female-dominated occupations (according to the three criteria used in this chapter) all belong to the service sector.

What special concerns prompt attention to female-dominated professions when examining women's employment?

Women's employment is usually analysed from the perspective of gender equality. The proponents of the concept of absolute gender equality see occupational segregation as direct evidence of inequality. Equality can only be achieved when women and men participate in equal numbers in all jobs and at all levels. Paradoxically, this line of thinking usually focuses on women's access to jobs traditionally held by men rather than on the parallel or inverse possibility of men's employment in jobs dominated by women. This paradox is brought to light when equality is examined in further depth. In contemporary societies, occupation is closely associated with social and economic status of individuals. Gender-based occupational segregation highlights differences which place feminine occupations at a disadvantage in this context. This disadvantage has two dimensions.

Firstly, occupational segregation excludes women from occupations which are associated with the greatest prestige, power and highest incomes. These occupations are generally "reserved" for men. More generally, female-dominated occupations are undervalued either in terms of salary, career prospects or social status. The salary differentials are the most serious. Occupational segregation explains the major part of the overall gender pay gap. This reality leads to the search for de-segregation and equality at the high end, that is to say, by the entry of a greater number of women into the higher-status male-dominated occupations.

Research on segregation does not suggest any spontaneous movement towards occupational de-segregation. On the contrary, segregation appears to be stable if not actually increasing (Jonung, 1998). Active measures which have been taken in several OECD countries in the context of equality of opportunity policies have undoubtedly had symbolic value but very limited concrete results on the scale of occupational gender segregation. Anker (1998) indicates only 5 per cent of women and 3 per cent of men entering an occupation where more than 80 per cent of employees are of the opposite sex. There is no doubt that women's employment will remain highly concentrated in female-dominated occupations for the foreseeable future. This situation is not wholly disadvantageous to women inasmuch as many OECD countries note large-scale destruction of male-dominated occupations. Segregation might be seen in these cases to serve as protection from competition with unemployed men. Moreover, job creation today mainly occurs in the service sector where most female-dominated occupations are concentrated. This sector and these occupations will continue to provide major employment opportunities for women. However, greater emphasis must be placed on the issue of quality of jobs and career prospects in the occupations. Thus, the focus should be more on the factors which render these female-dominated occupations low-status and low-paid rather than on the processes that originate gender occupational segregation as in earlier studies. The objective is to identify the best means through which to neutralise or even reverse the negative effects of occupational segregation for women.

SPECIFIC CHARACTERISTICS OF FEMALE-DOMINATED OCCUPATIONS

Service relationships are at the heart of female-dominated occupations today

Whether women work directly in the service sector (education, health, social services) or in other jobs (secretaries), the notion of a service relationship is central to female-dominated occupations. This service might be directed at an individual, a user, a client, or support in an enterprise. In all instances, however, it represents responsibilities concerned with the management of a service relationship (Gadrey, 1997). While this is usually recognised as of central importance, the

''competencies'' needed to carry out these tasks are not formalised in any way. It is even difficult to name them (reference is made to ''soft'', ''social'' or ''non-objectifiable'' competencies). Interpersonal competencies are in general not identified or described and no effective method to evaluate them is actually available. They are not readily taught in formal training contexts and there is no accepted procedure for validating their acquisition or successful performance in a given professional situation or in situations outside work. Paradoxically, these skills are nonetheless considered central to certain occupations, especially those which are female-dominated. This paradox leads further to underestimation of the technical competencies which also characterise these occupations (information technologies in the case of secretaries, health technologies of concern to nurses, etc.).

The centrality of the service relationship in female-dominated occupations has other consequences. It is linked to the fact that many such occupations are ones in which women work in isolation. The secretary may sit in the front office. The teacher is on her own with her class. The nursing assistant may care for an elderly person in the latter's home. This isolation has a number of implications in terms of autonomy, responsibility, on-the-job learning, criteria for performance evaluation. This specificity is generally unrecognised which may lead to biased perceptions regarding what the work in these occupations actually involves and the conditions in which it is carried out.

Occupations undertaken in very diverse working conditions

Despite an apparent homogeneity, female-dominated occupations generally cover a wide variety of working conditions and contexts. The context provides highly-differentiated conditions within each occupation. With the exception of primary school teachers, most female-dominated occupations are exercised in a variety of enterprises, public institutions and administrations. From one occupation to another and even within the same occupation, the concentration of employment at the worksite can be very high in certain instances (public services, large administrations, large enterprises) and very low in others (shops and local services). Each case corresponds to a specific labour market structure and also different negotiation and work relations structures. The situation of the secretary who works in a large business or administration differs in many ways from that of the single secretary of a small organisation. The same consideration applies to nurses, saleswomen, and cleaning women.

Beyond the size of the workplace, differences in organisational and institutional features (profit-making private enterprises, centralised public sector bodies concerned with global welfare, associations and local authorities attending social needs) exercise a strong influence on employment systems and work statuses, their diversity, and sometimes their fragmentation. The public sector has

undoubtedly played an important role in the development of female-dominated occupations (especially in the context of the welfare state) and the definition of their status. This role needs to be closely examined. It has both positive and negative aspects. In countries with a large public sector, the concentration of female-dominated occupations in the public sector is very high. The global pressures on this sector will directly impact on these occupations. Rationalisation, flexibility, deregulation are all redefining the frontiers between the public and private sectors while at the same time working conditions are becoming more uniform within this larger, less-clearly differentiated context.

STRATEGIES TO ENHANCE FEMALE OCCUPATIONS

"Upgrading female occupations and building career paths", "updating job classifications", "reorganising work", "pay equity": the enhancement of female occupations is a primordial challenge for the improvement of career prospects for women and for gender occupational equality (OECD, 1994). The changes which dominate debate at present concerning job requalification and professional mobility and lifelong learning reinforce the importance of this challenge. The female-dominated occupations are part of this change. Vigilance is necessary to ensure that the situation of women's improves (either in relative terms in relation to men or on an absolute basis in relation to their current situation).

The process of work reorganisation: a closer look

All female-dominated professions, whether "traditional" or "emerging", are affected by the profound upheavals in work organisation in all sectors in which they are found: cleaning, retail, food services sectors; education, health, social services sectors; banking, insurance and finance; public administration. All these sectors have undergone, are undergoing, or will undergo forms of restructuring. While restructuring and adjustments in numbers of jobs are taking place, more efficient methods of operation are sought and put into place. In virtually all cases, work organisation is re-examined.

Several trends concerning work organisation, all of which focus on qualifications and flexibility, can be observed (Betcherman, 1997). Two extremes are distinguishable. In a first case, flexibility is sought based on the qualifications of the entire work force. In the other case, qualifications and flexibility are dissociated. A selected part of the work force have specific qualifications to ensure quality while the majority of workers ensure the flexibility of the enterprise. Female-dominated occupations are found in one or the other model of work organisation. Different models can be applied from one country to another or in public and private sectors, as is the case for nurses. Each model has important consequences in terms of salary, mobility, career prospects and inequality.

Qualifications as an enhancing factor and source of professional mobility

The dual model of work organisation results from the absence of recognised qualifications. Those who have no qualifications are marginalised, with the risk of finding themselves outside the formal labour market. It is not simply a problem of access to the labour market. Increasingly, qualifications will provide access to specific jobs and also for mobility. While it might be overstated to affirm that individuals will have to change occupations several times during working life, it is certain that labour market mobility can no longer be defined in terms of a continuous and linear progression. The trend towards geographic, sectorial and occupational mobility will play an increasingly important role in the evolution of individual careers.

The value of initial qualifications will increasingly depend on their capacity to offer access to ever more education and qualifications. At present, most qualifications to female-dominated occupations do not have this characteristic. Most often, the initial qualification only provides access to the specific occupation. The possibility of engaging in further and broader training is virtually inexistant. Initial qualifications were conceived solely to provide access to the jobs rather than to enable professional mobility at a later date. While this could appear justified at earlier times when women's professional lives were interrupted by marriage or maternity, such approaches now appear outdated in most OECD countries. Given the enhanced role of qualifications in relation to mobility, there is also an urgent need to evaluate all skills acquired and used in real work situations.

The mobilisation of actors on enhancing female-dominated occupations

Institutional actors such as governments and the social partners have so far appeared only marginally responsive to the challenge of enhancing female-dominated occupations, although they recognise that occupational segregation is a major factor in the disadvantaged position of women in the labour market. Measures taken to date have aimed at slowing down and reverting the process of segregation rather than redressing its undesirable effects. Most OECD countries created *ad hoc* programmes in the 1980s to encourage women's access to non-traditional jobs. More general policies to promote equal opportunity, such as training to raise the level of women's qualifications and measures to reconcile family and working life, have had greater impact. By enhancing women's "employability", these programmes have helped women position themselves for more qualified jobs (whether male-dominated, mixed, or female-dominated).

More recently, greater interest has been shown for the issue of upgrading female-dominated occupations, especially by trade unions. Mobilisation is however easier in the case of the more qualified and structured occupations in the public sector (primary school teachers, nurses), than in the case of unqualified occupations or those which are scattered across sectors and employment struc-

tures (saleswomen, home helpers and even secretaries). In the first case, substantial increases in salary have been obtained by collective action (strikes) or legal initiatives (court cases for non-respect of legislation concerning equal pay). These initiatives have been most successful when supported by a coalition of trade unions, women in the occupations and users or clients groups. The full enhancement of an occupation cannot, however, be brought about only by collective action of this type. Broad concertation and negotiation between social partners, training bodies and professional associations is needed. In the case of unqualified occupations, mobilising structures are completely lacking. These occupations usually belong to labour intensive sectors where the pressure to reduce salaries is permanently high, therefore leading to further de-skilling. Professionalisation of these sectors can only become a reality when minimal conditions of employment are imposed. The most appropriate strategies for upgrading female-dominated occupations will thus be different for different occupations. They will also not necessarily be the same from country to country. Each strategy will need to be rooted in a differentiated context and to build upon it (Rubery and Fagan, 1995).

OBJECTIVES AND CONTENT OF THE STUDY

This study aims firstly to define the dimensions of the challenge represented by the enhancement of female-dominated occupations in OECD countries. What is the percentage of female employment in these occupations? What disadvantages do women encounter in terms of salary, career prospect and social status? The study also aims to identify the basis for a strategy to upgrade the occupations.

The study is based on a detailed analysis of several occupational case studies. The occupations are mainly qualified professions since they offer a greater wealth of examples of potential enhancement and also are more fully-documented. The analysis is an international one. The international dimension offers a diversity of situations and experiences across countries, particularly as concerns directions and methods for further action which might be applicable in other contexts as well. The international dimension also offers challenges, especially in terms of comparability of data. The search for enhancing strategies involves observation of changes in the occupations considered as well as changes in the larger context. The efficiency of a strategy will depend to a great extent on its capacity to rely upon mainstream trends and to create a synergy with the dynamics at work in these trends. Too often in the past, equal opportunity policies have inadvertently gone "against the wind" rather than building upon the momentum where it presents positive aspects for their own internal dynamics. The following chapters may modestly serve to indicate ways in which to take up such challenges and use them constructively to promote women's perspectives in female-dominated occupations.

REFERENCES

ANKER, R. (1998), *Gender and Jobs. Sex Segregation of Occupations in the World*, International Labour Office, Geneva.

BETCHERMAN, G. (1997), "Organisational change and its implications for employment and human resource development: an overview paper", OECD, Paris.

GADREY, J. (1997), "Flexibility and professionalisation of work in the service sector: distinct strategies and models", OECD, Paris.

JONUNG, C. (1998), "Occupational segregation by sex and change over time", in I. Persson and C. Jonung (eds.), *Women's Work and Wages*, Routledge, London and New York.

OECD (1994), *Women and Structural Change. New Perspectives*, Paris.

RUBERY, J. and FAGAN, C. (1995), "Gender segregation in societal context", *Work, Employment and Society*, Vol. 9, No. 2, pp. 213-240.

2

THE CONCENTRATION OF WOMEN'S EMPLOYMENT AND RELATIVE OCCUPATIONAL PAY*

Despite the progressive integration of women into the labour force, a strong differentiation in the jobs held by men and women continues to be observed across the OECD countries. Employment remains strongly delineated by sex, involving both horizontal segregation (men and women concentrated in different industries and types of occupations), and vertical segregation (men more likely to work in jobs of a higher grade or occupations of higher status than women). Moreover, women's employment is still concentrated into a relatively narrow range of defined occupational groups. Female employment concentration thus refers to the crowding of women into a few occupations which account for a large proportion of total female employment. Most of these occupations are also female-dominated, that is to say, segregated.

While the differentiation of occupational employment patterns has been extensively analysed (Anker, 1998; Rubery and Fagan, 1993), far less attention has been paid to detailed analysis of its impact. The concentration of women's employment in specific sectors or types of employment has, in fact, provided women some level of protection in recent years against job loss. Segregation has provided some shelter from competition from unemployed male labour. On the other hand, the segregation of women within particular sectors and types of employment is generally associated with a high incidence of part-time work, relatively low pay, few career opportunities and limited access to further training. These specific impacts vary between countries and between sectors of employment. Still, there have been few attempts to quantify differences in the impact of concentration and segregation of women's employment between countries.

* This chapter is a revised and abridged version of the report to the Working Party on the Role of Women in the Economy (Grimshaw and Rubery, 1997). The report includes data for seven OECD countries: Australia, Canada, France, Germany, Norway, the United Kingdom and the United States.

The aim of this chapter is to assess the impact of the concentration of women's employment in specific occupations on the relative earnings of women. The chapter looks at the relative level of pay in those occupations where women are most concentrated and at changes in concentration and pay over the last ten to fifteen years in a cross-country comparative framework. Occupational employment and pay data have been collected for seven OECD countries: Australia, Canada, France, Germany,[1] Norway, the United Kingdom and the United States. They are analysed over the period 1980-95. Differences in the organisation of the occupation which have an impact on pay relativities, such as the extent of public sector and part-time employment, are established whenever possible. Differences in qualification requirements and individual characteristics of women employed in the occupational groups (which may also affect relative pay) are not considered here but are taken up in the following chapters.

DATA AND METHODOLOGICAL ISSUES

The analysis of women's employment concentration and pay relativities requires consistent employment and pay data. No occupational pay data at international level exists. Thus, the analysis relies on national data. For the seven countries covered, it was possible to match the pay data with occupational employment data at a detailed level of disaggregation. Data were, however, collected from a wide range of different sources, which use a variety of definitions and terms as well as different survey methods.[2] The major characteristics of data collected from each of the seven countries are summarised in Table 2.1.

Occupational classifications

Each country applies a different system of occupational classification. Within each country, a standard national classification is used for both the earnings and employment data. In the following sections data are analysed at two levels of disaggregation. The first level corresponds to the two-digit level of the national occupational classifications which usually includes around 80 categories. These categories are referred to as "occupational groups". The second, more detailed level (three or four-digits in the classification) includes from 300 to 500 categories according to the country. These categories are referred to as "detailed occupations". The occupational data from all countries (except France) are broadly comparable in terms of the two levels of disaggregation as shown in Table 2.1. In France, however, the two-digit occupational classification only involves 28 groups. Therefore, only data at the four-digit level is used for France.

The analysis based on data at the most detailed level of occupational classification draws out instances of vertical and horizontal sex segregation that may be concealed at a less-detailed level. High female employment concentration

Table 2.1. **National data sources**

	Australia	Canada	France	Western Germany
a) Years chosen	1987 and 1995	1980 and 1990 Earnings data: 1981 and 1991	1992 (lack of adequate data for 1980s)	1980 and 1990
b) Source of earnings data	Survey of Employee Earnings and Hours	Census of population	Structure of Earnings Survey	*Beschäftigtenstatistik der Bundesanstalt für Arbeit* (Employment Statistics of the Federal Employment Services)
c) Source of employment data	National Labour Force Survey	Same	National Labour Force Survey	Same
d) Groups excluded or underrepresented in data			Sectors excluded: agriculture, fishing, postal/ telecommunications, public hospitals	Part-time workers underrepresented (earnings threshold) *Beamte* excluded (police, central and local government civil servants, some teachers)
e) Classification of full- and part-timers	Full-time: at least 35 hours per week or the normally scheduled hours	1990 data: – full-time: at least 30 hours per week and 49-52 weeks per year – part-time: less than 30 hours per week or less than 49 weeks per year 1980 data: full-time: at least as many as normally scheduled hours and 49-52 weeks per year		Self-assessment

Table 2.1. **National data sources** *(cont.)*

	Australia	Canada	France	Western Germany
f) Occupational classification	Australian Standard Classification of Occupations (ASCO 1986)	Standard Occupational Classification (1980) for Canada	*Professions et catégories socio-professionnelles* (PCS)	*Bundesanstalt für Arbeit*
– Number of 2-digit occupational groups	52	3-digit is used, 80 groups	Only 28 groups, therefore not utilised	83
– Is a 3 or 4-digit breakdown available?	4-digit is used with around 280 categories	4-digit is used, with 514 categories	4-digit is used, with 404 categories	Yes, with 311 categories
g) Earnings data				
– Does hourly pay exclude overtime payments?	Yes	No	No	No
– Is hourly pay data available for full- and part-timers?	Yes	Yes, but part-time data is not utilised because of definitional problem	Yes	Only daily pay data is available. There is no hourly information.

	Norway	United Kingdom	United States
a) Years chosen	Employment: 1981 and 1993 Earnings: 1980 and 1993	1986 and 1995	1982 and 1992
b) Source of earnings data	1980: Norwegian Level of Living Survey 1993: Norwegian Survey of Organisations and Employers	New Earnings Survey (NES) (covers Britain only)	Current Population Survey (March Supplement)
c) Source of employment data	National Labour Force Survey (AKU)	National Labour Force Survey	Same
d) Groups excluded or underrepresented in data	Workers in small firms underrepresented	Part-time workers underrepresented (earnings threshold)	

Table 2.1. **National data sources** *(cont.)*

	Norway	United Kingdom	United States
e) Classification of full- and part-timers	Full-time at least 30 hours per week	NES: Full-time is more than 30 hours per week (except teachers and academics, more than 25 hours) LFS: self-assessment	Full-time: at least 35 hours per week for the majority of weeks worked in the year
f) Occupational classification	Nordic Occupational Classification (NYK) loosely based on ISCO (1958), somewhat revised	Standard Occupational Classification (SOC 1990)	Census Occupational Classification based on Standard Occupational Classification (SOC 1980)
– Number of 2-digit occupational groups	73	77	51
– Is a 3 or 4-digit breakdown available?	Yes	Yes, with around 370 categories	Yes, with around 500 categories
g) Earnings data			
– Does hourly pay exclude overtime payments?	No	Yes	No
– Is hourly pay data available for full- and part-timers?	Yes	Yes	Yes

measured on broadly-defined occupational groups may cover horizontal sex segregation where men and women work in different detailed occupations within the same group. Similarly, disaggregation of the occupational group may demonstrate underlying vertical sex segregation if the detailed occupational categories reveal supervisory and non-supervisory detailed occupations, such that men are present within the same broad occupational group but at higher grades. Whenever there is high horizontal and vertical segregation within a given occupational group, average earnings measured for the whole group may not be a significant indicator of female earnings relativities for the same group.

Measuring earnings relativities

In this chapter women's occupational pay, within those occupations where they are most likely to be employed, are assessed relatively to the average pay of male workers[3] in the whole economy. The results show the extent to which occupations with a high female concentration are associated with wage penalties that are above or below the average penalty experienced by women (the economy-wide gender pay gap) and whether this wage penalty differs across occupations and across countries. Women's pay within high female concentration occupations are also assessed relative to the average pay for all women in order to establish whether these occupations offer women relatively favourable or unfavourable earnings opportunities on a gender-segregated labour market.

All earnings data refer to average gross hourly earnings for employees only. Hourly pay data enable comparison of pay rates of female and male workers with different working hours and comparison of pay rates of full- and part-time workers. Differences in the income-generation potential of different occupations (which would need to take into account hours offered in conjunction with pay rates) are not investigated here.

The data which are available for the seven countries do not allow separate consideration of pay differentials between men and women as the result of differential access to overtime payments and shift premium. Earnings data exclude overtime payments in Australia and the United Kingdom but include them in all other countries (Table 2.1). Hence, since men have greater access to overtime payments, calculations of the gender pay ratios in the two countries are likely to be overestimated.

Part-time work

There are major differences in national definitions of part-time workers (OECD, 1997). Each of the seven countries has its own definition of what constitutes full- or part-time employment. In most cases, the definition is based on the number of hours worked per week. Part-time workers are under-represented in

the data for Germany and United Kingdom due to minimum earnings thresholds which apply in the collection of data; this may also lead to a bias in the data on wages of part-time workers. The definition for part-time workers used in the Canadian data conflates part-time weekly work with part-time annual work, so that the data are not comparable with that of the other countries. Part-time work is thus not considered for Canada in the chapter.

General limitations of the study

The purpose of this study is to provide quantitative results concerning the relative earnings of women across a range of occupations for a selection of countries. The analysis remains largely descriptive and does not attempt to explain why occupations with the same degree of women's employment concentration and segregation in the different countries reveal significant differences in pay relativities.

These differences may be due in the first place to differences across countries in the way the occupational categories are delineated and composed. The use of data at a detailed level of classification should minimise this first type of discrepancy. The distribution of occupational jobs across sectors is another intervening factor. The spread of an occupational group across various industries, or between the public and private sectors, may vary from one country to the other, with the possibility of the same occupational group being concentrated within an industry/sector of relatively high pay in one country and a low-paying one in another. There are many other grounds on which the composition of each occupational group may vary. For example, when the level of employment in a particular occupation expands in a particular country, it usually involves an increase in the proportion of less highly-paid staff (assuming new employees are recruited at the bottom of the pay scale). A fall in relative average occupational earnings will thus occur. Comparisons over time of the level of relative pay in different occupations should reflect all these compositional changes.

Institutional factors also are determinant for pay relativities. Variation in wage penalties associated with different occupations are very much a function of the country's overall wage structure. For example, if men and women are concentrated among high-skill and low-skill occupational groups respectively in two countries, but the return to the high-skill occupations is higher in one country, then that country will register wider occupational pay differentials. In particular, centralised wage-setting institutions (typical of Norway and Australia among the countries covered here) tend to reduce inter-occupational wage variation and will, therefore, raise the relative pay of low-skill workers (Blau and Kahn, 1992). In general, the relative occupational pay of women is a function of the overall shape of the wages distribution.

Country-specific institutions may also require different types of qualifications, training and professional certification for access to particular occupations which may translate into earnings differentials. The empirical assessment of relative occupational earnings presented in this chapter needs to be complemented by the more detailed analysis of the institutional construction of occupational groups which follows in later chapters.

THE "TOP-TEN" APPROACH FOR MEASURING THE IMPACT OF EMPLOYMENT CONCENTRATION

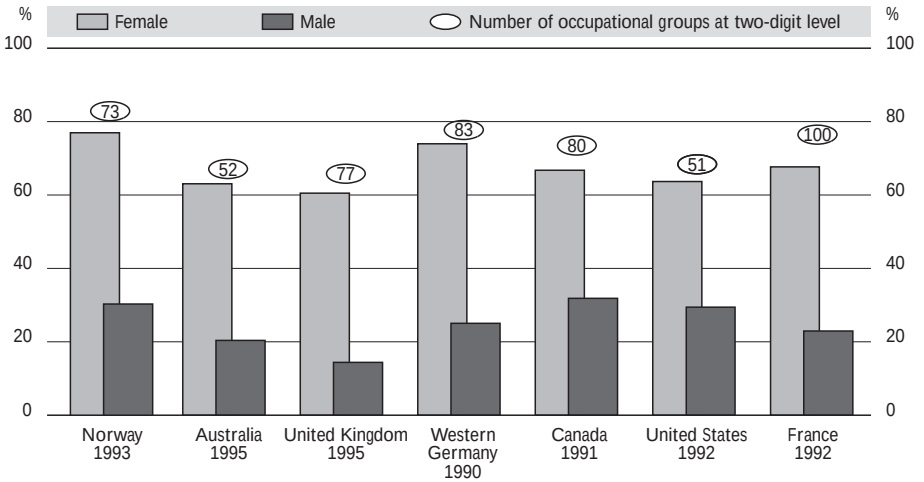
One method most commonly used to analyse occupational concentration is to rank all occupations in decreasing order according to the numbers employed and to consider the first ten occupations listed against all other occupations. This "top-ten" approach is applied to the analysis of women's employment concentration in the seven countries covered. The analysis is based on occupational data at the two-digit level of national occupational classifications. This includes from 50 to 80 occupational groups.

The degree of concentration of women's employment

If female employment was evenly distributed over 80 occupations, then each occupation would account for 1.25 per cent of total female employment, and ten occupations to no more than 12.5 per cent. In each of the seven countries, data for the most recent year available show that employed women are still highly concentrated in the 1990's into a small number of occupational groups. When occupational groups are ranked according to the proportion of women employed as a share of total female employment, the "top-ten" account for between 60 to 77 per cent of total female employment[4] (Figure 2.1).

The general pattern of female employment concentration is also the result of sex segregation rather than simply a reflection of the overall importance of the top-ten occupational groups for each country. This result is clear from the much less significant concentration of male employment among these occupations. The relative concentration of men compared to women differs widely, however, between the seven countries. In the United Kingdom, where the difference is most apparent, only 14 per cent of male employment is represented by the occupations shown compared to 60 per cent of female employment. In contrast, the concentration of male employment in 1991 was around half the level of female employment in Canada, 32 per cent and 67 per cent respectively. In each country the disproportion between the concentration of male and female employment in the top-ten grouping results in a marked over-representation of women, with a global share ranging between 65 per cent and 80 per cent (see Tables A and B in the Appendix).

❖ Figure 2.1. ***Occupational concentration[1] of female employment***



1. Share of total female (male) employment in the top-ten occupational groups (two-digit level) ranked by the number of female workers in each group.

Source: Appendix of Chapter 2, Table A.1.

Cross-country comparisons of employment concentration

Figure 2.1 indicates that in Germany and Norway, around three quarters of all women employed are categorised within ten occupational groups. In Australia, the United Kingdom and the United States, the level of concentration appears slightly less pronounced, so that around three fifths of women are employed within ten occupational groups. This observation is particularly significant in the case of Australia and the United States given that the systems of occupational classification only include 52 and 51 groups, respectively, compared to the range of 73 to 83 for the other four countries (the exceptional case of France is mentioned above).

Simple comparative observations of this sort based on different occupational classification systems are, however, not very robust. Comparison of the occupational structures of France, Germany and the United Kingdom using employment data from the European Labour Force Survey (ELFS) shows this limitation. Since 1992, occupations in the ELFS have been codified according to ISCO 88 (COM), a variant of the International Standard Classification of Occupations, providing a modern harmonised source of occupational employment data.[5] Analysis of

ISCO 88 (COM) data for 1994 at the three-digit level (the best comparator as this includes 116 occupational groups) shows that women's employment is relatively highly concentrated in France, and follows a very similar pattern of concentration in Germany and the United Kingdom. These results do not mirror the findings derived from national data. If occupations are ranked in a comparable fashion, then the top-ten occupations account for 62 per cent of female employment in France, and 56 per cent and 58 per cent of all women employed in Germany and the United Kingdom, respectively (against 68 per cent, 74 per cent and 61 per cent using national classifications) (Grimshaw and Rubery, 1997). These alternative results based on harmonised employment data for three countries caution against drawing precise cross-country comparisons from the national data. Cross-country comparisons of trends based on national data remain however informative. Working at a more detailed level of the national occupational classifications also reduces potential distortion in cross-country comparison.

Changes in the degree of employment concentration over time

Since the 1980s, there has been little change in the proportion of women employed in the top-ten occupational groups in Australia, Canada and Germany. A reduction in the degree of concentration has occurred in Norway and the United States and, most significantly, in the United Kingdom where the fraction of women employed in the top-ten occupational groups fell from 69 per cent to 60 per cent between 1986 and 1995 (Table 2.2). In the case of Norway, the reduction in female concentration between 1980 and 1993 occurred alongside a substantial increase in the level of male concentration, from 22 per cent to 30 per cent, with an associated drop in the female share among the top-ten occupations from 76 per cent to 70 per cent. This evidence suggests a shift towards a process of desegregation. In the United States, the pattern of change between 1982 and 1992 is similar to Norway, albeit less striking. Again, male employment concentration rose while female employment concentration declined, leading to a slight drop in women's share of employment among the top-ten occupational groups.

There is a remarkable stability in the occupational groups entering the ''top-ten'' in the 1980s and 1990s, although the concentration of women's employment in each group may have changed (the details on the occupational groups entering the ''top-ten'' are shown in Table A in the Appendix). In the United States, exactly the same ten groups are listed in 1982 and 1992. In the other countries, the listing only differs by one or two groups. Germany provides a typical example with one service occupation in 1990, ''social work associate professionals'' having replaced one production occupation of 1980, ''textile workers''.

Table 2.2. **The wage penalty associated with the concentration of female employment**

	Year	Female concentration[1]	Relative pay[2]			Year	Female concentration[1]	Relative pay[2]		
			All	Full-time	Part-time			All	Full-time	Part-time
Norway	1980					1993				
Top-ten groups		81.1	72.3	71.6	73.9		77.0	80.0	81.6	76.5
All remaining		18.9	106.2	96.3	114.8		23.0	85.2	86.5	81.2
Total (73 groups)		100.0	78.7	77.4	80.2		100.0	81.2	83.1	77.6
Australia	1987					1995				
Top-ten groups		63.7	82.5	82.6	82.3		63.0	73.6	76.7	70.0
All remaining		36.3	81.7	79.6	90.3		37.0	89.0	88.9	89.1
Total (52 groups)		100.0	82.2	81.4	84.7		100.0	79.9	82.0	75.3
United Kingdom	1986					1995				
Top-ten groups		68.9	63.5	70.2	54.2		60.4	66.6	78.4	56.9
All remaining		31.1	73.1	80.1	67.4		39.6	77.2	92.0	67.8
Total (77 groups)		100.0	66.5	74.1	56.9		100.0	70.8	79.6	59.6
Western Germany	1980					1990				
Top-ten groups		73.3	..	64.1	..		73.9	..	63.8	..
All remaining		26.7	..	85.7	..		26.1	..	92.0	..
Total (83 groups)		100.0	..	70.2	..		100.0	..	71.7	..
Canada	1980					1990				
Top-ten groups		68.4	68.2	71.3	..		66.7	70.3	73.6	..
All remaining		31.6	70.1	70.7	..		33.3	78.7	77.6	..
Total (80 groups)		100.0	68.8	71.1	..		100.0	73.1	75.0	..
France						1992				
Top-forty occupations		..	..	..	..		67.6	69.2	70.6	62.6
All remaining		..	..	..	..		32.4	94.3	97.5	91.0
Total (404 occupations)		..	..	..	..		100.0	77.3	80.0	69.5
United States	1982					1992				
Top-ten groups		67.5	59.0	61.0	55.1		63.6	65.7	69.2	58.2
All remaining		32.5	71.4	72.5	68.5		36.4	85.5	85.2	85.8
Total (51 groups)		100.0	63.0	64.9	58.9		100.0	72.9	75.4	67.0

.. Data not available.
1. Share of total female employment in the top-ten occupational groups and all remaining groups. Top-ten occupational groups refer to the listing of 2-digit occupational groups ranked according to the concentration of all female employment. In the case of France the top-40 occupations at the 4-digit level have been used.
2. Female average hourly occupational pay relative to the average hourly pay of male workers in all sectors.

Source: Grimshaw and Rubery (1997), Table 7.

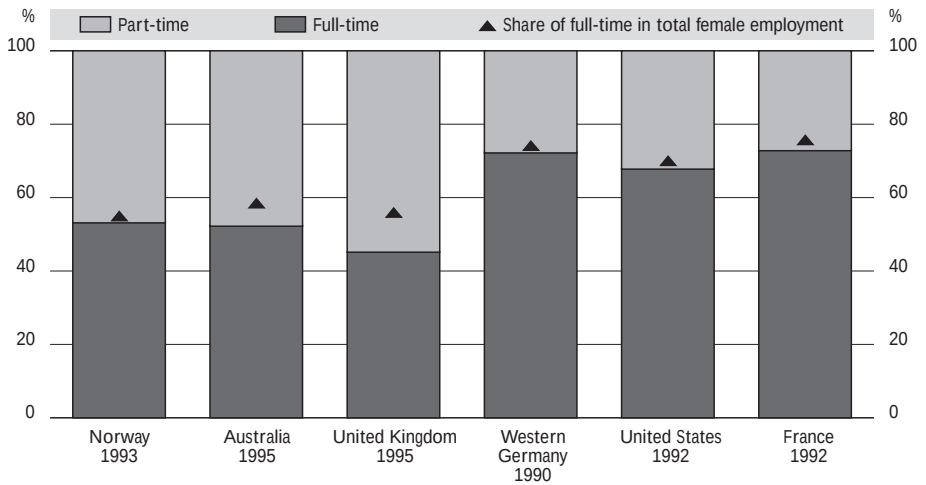
Occupational concentration and part-time work

The role of part-time work adds another dimension to the picture of occupational concentration. There is an over-representation of part-time work among women employed in the top-ten occupational groups where female employment is most concentrated (Figure 2.2). Each of the six countries where part-time data are available bear out this over-representation, although to a different extent. The over-representation is particularly evident in the United Kingdom where women in part-time jobs account for 55 per cent of all female employment in the top-ten grouping in 1995, compared to a share of 44 per cent in total employment. The higher incidence of part-time work in the top-ten grouping is less marked in the other countries. In Norway, and the United States, the contribution of part-time employment to female employment has declined during the period shown. In the other countries, on the contrary, the share of part-time employment has increased, and by more in the top-ten grouping than for total employment.

The "wage penalty" of occupational concentration

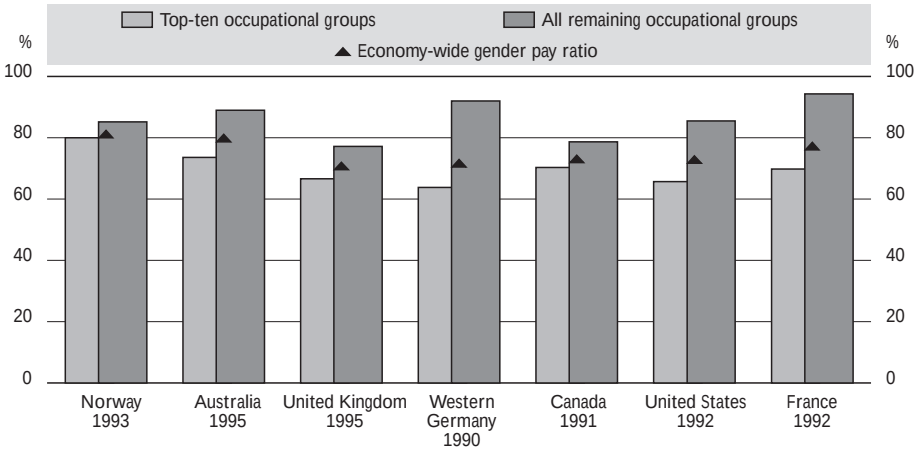
Women who work within the top-ten grouping are, globally, penalised in their earnings. Figure 2.3 shows that the pay penalty (female occupational wage in

❖ Figure 2.2. ***Share of part-time in the top-ten occupational groups of female employment***



Source: Appendix of Chapter 2, Table A.1.

❖ Figure 2.3. ***The wage penalty[1] of women's employment concentration***
Gender pay ratio



1. Female average hourly occupational pay relative to the average hourly pay of male full-time workers in all sectors.
Source: Table 2.2.

relation to the average wage of all male workers) is consistently wider for the top-ten grouping than for "all remaining occupations". In all countries, however, there is a gender pay gap even for "all remaining occupations". Relative to the average wage penalty experienced by women on the labour market, the economy-wide gender pay gap, an above-average penalty applies for the top-ten group and a below-average penalty for "all remaining occupations".

The wage penalty applying to the top-ten grouping varies from 36 per cent in Germany to 20 per cent in Norway. Given the high proportion of total female employment in the top-ten grouping, this wage penalty is a major influence on the economy-wide gender pay gap. In general, the lower the level of female relative earnings in the top-ten group, the lower the total average gender pay ratio (and the higher the gender pay gap). In the United Kingdom and Germany, low levels of female pay in the top-ten grouping (67 per cent and 64 per cent, respectively, as a ratio of average total male earnings) are associated with low total gender pay ratios (71 per cent and 72 per cent respectively). In contrast, in Norway and Australia, the total gender pay ratios are relatively high (81 per cent and 80 per cent respectively) reflecting, in large part, the higher relative earnings of women in the top-ten grouping (80 per cent and 74 per cent respectively).

There is a significant spread in above-average and below-average wage penalties experienced by women across countries. In Norway, Canada and the United Kingdom, there is a narrow divergence in wage penalties experienced by women employed in top-ten occupations compared with ''all remaining occupations''. In Norway, however, the wage penalty is consistently low while it is much higher in the other two countries. In Norway, the relative hourly pay of women employed among the top-ten grouping is 80 per cent of average male hourly pay in all sectors and only five percentage points less than for those employed in ''all remaining occupations''. In the other four countries, there is a much greater variation in the wage penalty. In Germany, where this wage penalty is most marked, if we compare women's relative pay among ''all remaining occupations'' with the relative female pay among the top-ten grouping, there is a drop of 28 percentage points (from 92 per cent of average male earnings to 64 per cent). In the United States, there is a drop of 20 percentage points (from 86 per cent to 66 per cent) and in France, relative earnings are reduced from 94 per cent to 69 per cent. Figure 2.3 shows that the total gender pay gap may conceal marked inequalities in earnings levels among women themselves and that, in some countries, the great majority of women in the top-ten grouping suffer from a considerable above average-wage penalty.

Over a ten-year period,[6] the total gender pay ratio increased in all countries except Australia (Table 2.2). The relative earnings position of women employed in the ''top-ten'' and ''all remaining occupations'' did not follow a uniform pattern of change. Only in Canada, the United Kingdom and the United States did both groups experience an improvement of the earnings situation of women, and this was more marked for ''all remaining occupations''. In Australia, there was a marked regression for the ''top-ten'' and in Norway for the ''all remaining'' category.

The greater role of part-time work in the occupational groups where women's employment is most concentrated has been indicated above. For five of the seven countries (Australia, France, Norway, the United Kingdom, and the United States), the availability of comprehensive pay data enables a distinction to be made between the relative earnings position of women employed in full-time and part-time jobs (Table 2.2). Part-time pays less on an hourly basis than full-time work in the top-ten grouping in every country. The differential is mainly significant in the United Kingdom where it reached 21 percentage points in 1995. Over the period, part-time relative earnings have increased but in a lesser proportion than full-time allowing the differential to increase (Australia shows a peculiar situation with a fall of relative earnings in the ''top-ten'' both for full-time and part-time over the period. The drop was particularly marked in the case of part-time).

MOST COMMON OCCUPATIONAL GROUPS

Major areas of women's employment

An examination of the occupational groups included in the "top-ten" allows for the identification of four occupational areas that provide a high level of female employment in each of the seven countries. Because of variations among classification systems, several of the top-ten occupational groups were brought together in some cases to establish some homogeneity across countries in the way each area is defined. Even so, some important differences remain and the figures can only be taken as broad approximations. Clerical work comes clearly as the first of the four areas. Clerical work appears among the top-ten occupational groups in diverse forms in each country: stenography and typing, book-keeping, numerical clerks, other clerical or administrative support workers. Taken together, these diverse forms of clerical work account for between 17 per cent and 30 per cent of all female employment in each country. Sales work comes as the second major occupational area. Sales work ranks in the top-three occupational groups in all countries. When all sales occupational groups appearing in the "top-ten" are regrouped this accounts for between 7 per cent and 19 per cent of female employment according to the country. A health-related occupations group, which includes nursing care, is also found among the "top-ten" of each country except France (where hospital nurses are not included in the data). The corresponding employment covers 5 to 14 per cent of total female employment. Finally, teaching professionals also rank in the top-ten occupational groups in all countries except Germany (where secondary school teachers are excluded from the data) (see Table A in the Appendix).

Women are over-represented in these four areas of high female employment concentration – clerical work, sales, nursing and teaching – although to a different extent. Nursing and clerical occupations are more highly female-dominated than sales and teaching occupations. For example, in Norway where "nursing care" represents the largest occupational group for female employment, the female share is 93 per cent, and among the different forms of clerical work the female share varies between 75 per cent and 98 per cent. Within sales occupations and "pedagogical work" the female share is 54 per cent and 60 per cent respectively. This general pattern holds true for each country. Since the 1980s, the female share among teaching professionals has increased significantly in each of the five countries where it appears among the top-ten occupational groups, marking a widely recognised shift towards an increasingly female-dominated occupational area.

Beside these four common areas of employment concentration, there are a number of other occupational groups which are more or less peculiar to each country as an important site for female employment. Some are female-dominated, others not. Among the female-dominated groups, cleaning occupa-

tions are identified as a separate group listed among the "top-ten" in Australia, Germany, and Norway (4 to 7 per cent of total female employment). Personal service workers in Australia, Canada and the United States (3.5 to 5 per cent). Food service and related occupations appear in one way or another in Canada, Norway, United Kingdom and the United States. In Norway, the occupational group "hotel, restaurant and domestic work" represents more than 9 per cent of female employment and the female share is 85 per cent. In the other three countries, the proportion of employment and the over-representation of women is lower (see Table A in the Appendix).

Male-dominated management jobs account for a relatively high proportion of employed women in the United States and Canada, where 6 per cent of women in employment were employed as "salaried managers" and "other managers and administrators", respectively, and in both countries the level of female employment concentration in these jobs has risen significantly over the period. Also, occupational groups within the manufacturing industry account for a relatively large fraction of female employment in Germany and the United States. This pattern is most obvious in Germany where three such occupational groups appear in the top-ten ranking which together account for more than 8 per cent of female employment (see Table A in the Appendix).

Comparing pay relativities across occupational groups

In the previous section, it was established that, globally women are more likely to have lower earnings through employment in those occupational groups of highest female concentration. However, when looking at a more detailed level, this risk does not apply equally to all top-ten groups or to the same extent. In each country, clustered among those occupational groups at the bottom of the pay range are sales and cleaning, and among those where women receive relatively high pay are teaching professionals and nursing staff.

The distinction of occupational groups may, however, be insufficient to get a good grasp of female wage relativities. Earnings averaged on a whole occupational group can only be a significant indicator if all individual earnings within the occupational group are clustered around the average. Grimshaw and Rubery (1997) have looked at wage dispersion within each occupational group for each country. In terms of the lowest and highest decile earnings in relation to average male earnings they found that for the top-ten occupational groups decile ratios ranged between around 25 per cent and 120 per cent in Germany, compared to an approximate range of 30 per cent to 140 per cent in Australia and the United Kingdom, and from less than 20 per cent to around 190 per cent in the United States. They also observed that reliance on quantitative assessment of wage dispersion within occupational groups does not allow for unambiguous interpreta-

tion. For example, where the level of wage dispersion is relatively high, a polarisation of wage opportunities among women may prevail, segmenting those in low-paid and high paid positions. Alternatively, however, it may indicate a high level of potential earnings mobility for women employed in the particular occupational group, providing a wage structure along which women may progress through promotion, training, or experience.

The broader the definition of occupational groups, the greater the risk that pay relativities based on average earnings will conceal important intra-occupational earnings differences. In the case of broadly-defined occupational groups, the wage dispersion is likely to reflect a wide variety of wage structures across a set of diverse detailed occupations. The analysis of pay relativities is continued in the following section by looking at the next more detailed level of the occupational classification (three- or four-digits level) and focusing on detailed female occupations within each of the four most common occupational groups identified above.

THE FIVE POLES OF WOMEN'S EMPLOYMENT AND WAGE RELATIVITIES

The top-ten detailed occupations

The most detailed level of the national occupational classifications (3 or 4 digits) includes from 300 to 500 entries in the countries studied. The top-ten female occupations (after detailed occupations have been ranked according to the numbers of women employed) regroup between 32 per cent and 56 per cent of female employment within each country (see Table B in the Appendix). Nearly all occupations listed in the "top-ten" fall within the four occupational groups already identified: sales, clerical work, nursing and teaching. Aside from the four broad occupational groups mentioned, there is one additional detailed occupation, cleaners or charworkers, which is an important employer of women. It is listed among the "top-ten" in all countries except the United States. Women are in a majority in all top-ten occupations with the exception of "janitors, charworkers and cleaners" in Canada, and "managers and administrators" and "supervisors and proprietors" in the United States.

Clerical work

Despite a variety of detailed occupations in the whole clerical area within each country's classification system, there is a certain degree of homogeneity in terms of those detailed occupations where women's employment is most concentrated (Table 2.3). Two occupations can be approximately identified and compared across the seven countries: secretaries and stenographers on the one hand and book-keepers and accountants on the other hand. The secretarial occupation

Table 2.3. **Clerical occupations (1990s data)**

	Occupational code	Employment			Relative pay[1]		
		Female concentration	Female share	Part-time share	Full-time	Part-time	All
Secretaries							
Australia	5101	6.1	97.4	26.7	77.8	79.9	78.4
Canada	4111	7.8	98.7	..	70.1	..	70.9
France	5411	6.3	96.1	21.5	75.1	68.3	74.1
Germany	782	4.2	97.2	25.2	78.3	..	..
Norway	211	3.6	98.4	31.3	83.1	89.7	84.1
United Kingdom	459	5.3	99.0	29.3	78.4	65.8	74.8
United States	313	6.4	99.4	19.5	71.1	63.8	69.7
Book-keepers, accountants							
Australia	5301	9.2	75.7	34.6	75.8	75.8	75.8
Canada	4131	5.4	84.1	..	69.0	..	71.1
France	5421	3.0	82.4	19.7	74.3	75.2	74.4
Germany	772	1.5	68.6	26.2	79.7	..	..
Norway	201	2.6	74.3	26.0	92.8	74.5	91.8
United Kingdom	410	4.0	75.0	30.4	68.9	62.5	67.0
United States	337	2.9	90.5	30.3	65.9	97.1	75.1
Receptionists							
Australia	5601	5.3	91.3	39.2	68.0	70.6	68.6
Canada	4171	2.2	93.0	..	60.8	..	60.5
France	5444	0.4	87.2	24.9	70.3	63.7	69.3
United States	319	1.6	97.2	32.7	58.2	54.3	56.9
General office clerks							
Canada	4197	3.1	82.4	..	70.0	..	70.0
Germany	784	1.2	71.0	37.2	50.0	..	..
Norway	299	7.4	89.7	41.3	74.8	76.3	75.3
United Kingdom	430	4.3	81.2	37.2	64.4	56.9	61.6

.. Data not available.
1. Female average hourly occupational pay relative to the average hourly pay of male workers in all sectors.
Source: Grimshaw and Rubery (1997), Tables 13 and 14 and Appendix Table 4.

employs around 4 to 6 per cent of all working women but the concentration of female employment on this specific occupation shows a downward trend over the period; it is an almost exclusively female occupation and presents an above-average rate of full-time employment in every country. The situation of accountants shows more variation across countries, in particular as concerns the degree of concentration of female employment (from a high 9 per cent in Australia to less than 2 per cent in Germany). Different definitions may partially account for this variation. Accountancy is an increasingly female-dominated occupation, with the share of women between 70 and 90 per cent. Two other clerical occupations are

found among the top-ten detailed occupations in some of the seven countries: general office clerks and receptionists and information clerks. Information on these occupations is presented in Table 2.3 for all countries where they can be identified in the detailed classification, even if they do not belong to the "top-ten".

The relative hourly pay of women employed as secretaries (and stenographers) varies between 70 per cent in Canada and the United States and 84 per cent in Norway. In relation to the average wage penalty experienced by women (the economy-wide gender pay gap), secretaries experience a small above-average wage penalty in Australia, Canada, France and the United States. On the contrary, there is a wage premium of working as a secretary in Germany and the United Kingdom and in Norway, especially as concerns the 30 per cent of secretaries employed part-time (Norway is the only country where secretarial work seems to be paid more on a part-time than on a full-time basis). Among the approximate detailed category of book-keepers and accounting-clerks, the highest relative pay is again found in Norway (92 per cent) and the lowest levels in the United Kingdom and Canada (just below 70 per cent). Again in Germany and Norway women get a premium by working as accountants whereas they are slightly penalised in the other countries, markedly so in the case of full-time accountants in the United States. The gap is rather striking in the United States between full-time accountants who make only 66 per cent and part-time who make 97 per cent of the average male earnings.

The position of women in the two major female occupations in clerical work has a similar variation across countries. The highest levels of relative female pay are found in Norway (between 80 per cent and 92 per cent of male average hourly pay), and the lowest levels in Canada and the United States (70 per cent). More than simple differences in the overall gender pay gap are involved since in Norway and Germany women receive more than average female earnings, whereas in the other countries the opposite is true. Canada and the United States are the only countries where women's relative pay has increased since the 1980s for the two occupations, but the wage penalties still remain among the highest. By contrast, the relative pay in Australia has slipped substantially during the period shown for both occupations. In terms of relative full-time earnings in 1995, secretaries earn similar levels of relative pay in Australia and the United Kingdom. If part-time hourly earnings are included, however, there is a negative impact on overall female relative pay in the United Kingdom since part-time secretaries tend to earn 15 per cent less than their full-time counterparts, whereas in Australia full- and part-time earnings are similar.

General office clerks and receptionists together constitute a large share of women's employment in the clerical area. Both occupations have very high proportions of women (general office clerks more than 80 per cent, and receptionists

more than 90 per cent). In terms of earnings however, these two occupations offer substantially lower levels of pay than secretaries and accountants. The relative earnings of general office workers and of receptionists are well below the average earnings of all women workers. General office workers in Germany get only half of the average male hourly pay and receptionists in Canada and the United States receive no more than 60 per cent. Whereas general office work is a decreasing area of employment for women, some countries show an increase in women working as receptionists and information clerks.

Sales occupations

The high concentration of women employed in sales occupations in each country is consistently accompanied by one of the highest pay penalties, although this varies in scale (Table 2.4). The category of shop/sales assistants represents the largest concentration of female employment within sales occupations. Across the seven countries, this category accounts for between 3 per cent and 10 per cent of all female employment, and, in each case, there is an over-representation of women. Cashiers also appear among the top-ten detailed occupations in some countries. This occupation provides 4 to 5 per cent of total female employment in Canada, the United Kingdom and the United States and from 1 to 3 per cent in the four other countries (probably reflecting different national distribution systems). More than 80 per cent of cashiers across the seven countries are women.

The two occupations of sales assistant and cashier offer the highest rates of part-time work within female employment in each country. Only for sales assistants in France and Germany is the incidence of part-time work about the average for all female employment (at the level of one out of three). In all other cases, there is a much higher incidence of part-time work in these two occupations than in female employment as a whole. More than six out of ten sales assistants in Australia, Norway and the United States and more than three out of four in the United Kingdom work part-time. Most cashiers work part-time in every country (more than four out of five in Australia). The much higher incidence of part-time work is most striking in the United States where the part-time rate in each of the two occupations is more than double the average rate for all women.

If we compare "shop assistants" (France and Norway), "sales assistants" (Australia and the United Kingdom), "sales occupations" (Germany), "sales clerks and salespersons" (Canada), and "sales workers" (United States), we find a level of wage penalty which is highest in Germany and the United Kingdom (with pay ratios around 45 per cent of the average male wage) and lower in Norway and France (where the pay ratios are 63 per cent and 59 per cent). But even in those two countries women sales assistants bear a much higher than average wage

Table 2.4. **Sales occupations (1990s data)**

	Occupational code	Employment			Relative pay[1]		
		Female concentration	Female share	Part-time share	Full-time	Part-time	All
Sales/shop assistants							
Australia	6301	10.8	66.3	63.3	58.8	57.2	57.8
Canada	5135	6.0	53.9	..	55.6	52.5	
France	5512 = > 5518	5.5	80.0	36.0	59.0	59.0	59.0
Germany	682	10.0	80.0	37.2	46.4	..	..
Norway	333	8.2	72.1	63.5	64.0	62.4	63.0
United Kingdom	720	8.4	76.2	75.9	47.3	43.5	44.4
United States	264 + 274	2.7	73.0	59.4	52.2	50.7	50.4
Cashiers							
Australia	6403	2.7	82.9	81.5	58.2	54.1	55.7
Canada	4133	5.0	88.3	..	51.6	..	50.1
France	5519	1.7	91.2	51.4	59.2	59.8	59.4
Germany	773	0.9	88.7	57.0	51.4	..	..
Norway	203	1.2	91.0	68.8	..	..	..
United Kingdom	411 + 721	4.1	81.8	61.0	62.8	57.3	60.0
United States	276	4.2	79.1	59.6	42.6	42.4	42.4
Sales associate professionals							
Canada							
(supervisors)	5130	0.6	39.2	..	60.0	..	59.6
France							
(shopkeepers)	22	3.7	44.0	12.9	..	..	..
Germany							
(associate prof.)	681	1.6	39.8	12.1	71.7	..	..
Norway							
(shop managers)	332	1.0	34.6	..	70.2	..	71.7
(office sales)	331	1.1	24.2	..	87.4	..	87.8
United States							
(supervisors proprietors)	243	2.6	36.5	15.8	70.7	69.2	69.4

.. Data not available.
1. Female average hourly occupational pay relative to the average hourly pay of male workers in all sectors.
Source: Grimshaw and Rubery (1997), Tables 13 and 14 and Appendix Table 3.

penalty. Pay rates for cashiers are at a still lower level than sales assistants, with the exception of the United Kingdom where the category of relatively well-paid "counter clerks and cashiers" is combined with "retail cash-desk operators" who are paid less than half the average male pay (and 80 per cent of whom work part-time). Those low levels of pay together with a high incidence of part-time employment mean that a great number of women working in sales earn very little from their employment.

Disaggregated data for the seven countries reveal that women's employment in sales is concentrated within the least-paid detailed occupation while male employment is more evenly distributed. Moreover, this pattern has proven to be resilient over the time period shown. In Norway, for example, around 80 per cent of women employed in sales in 1993 work as "shop assistants". Within this female-dominated detailed occupation, women earn, on average, 63 per cent of the average hourly pay of all male full-time workers. In contrast, where women are employed within the male-dominated category of "shop managers" or "office sales" they can expect to earn from 72 per cent to 88 per cent of the male reference earnings. Canada, Germany, and the United States also illustrate this pattern of uneven employment distribution and a crowding of women into the lowest-paid category of sales occupations (Grimshaw and Rubery, 1997).

Nursing

Nursing care appears among the top-ten detailed occupations in every country. In five countries (Norway, the United Kingdom, Germany, Canada and the United States), there is a distinction in the occupational classification between qualified (or registered) nurses and less-skilled nursing assistants. In Australia, data are only available for "registered nurses". The data for France exclude employees in public hospitals and therefore vastly understates the concentration of female employment in nursing occupations. Nursing occupations are more than 90 per cent female-dominated in each country with the exception of professional nurses in Germany (87 per cent). Taken together the two categories of nursing staff represent from 6 per cent to 10 per cent of all female employment according to the country (Table 2.5).

The incidence of part-time work is high among qualified nursing staff in Australia, Norway and the United Kingdom. Part-time workers are still more markedly over-represented among less-skilled nursing staff in the two last countries (there is no data for the less qualified category of staff for Australia). Data which are available for the United Kingdom and Norway show that the majority of women employed as unqualified nurses work part-time, 54 per cent and 63 per cent respectively (1990s data). In contrast, part-time work does not seem to play much of a role among nursing professionals in France and Germany. In the United States, the share of part-time work among women employed either as nursing aides or as registered nurses is equivalent to the average share of part-time work among all female employment. The variation in importance of part-time employment may reflect different forms of employment organisation within health services from one country to the other.

Nursing is an example of a mainly public service occupation which accounts for a large proportion of women's employment and is relatively well-paid. How-

Table 2.5. **Nursing occupations (1990s data)**

	Occupational code	Employment			Relative pay[1]		
		Female concentration	Female share	Part-time share	Full-time	Part-time	All
Professional nurses							
Australia	3401	4.7	91.7	46.5	102.6	106.2	104.2
Canada	3131	4.4	94.7	..	94.4	..	97.1
Germany	853	3.7	87.2	24.3	75.4	..	..
Norway	041	5.2	92.6	45.5	86.0	91.1	88.2
United Kingdom	340	4.0	90.1	40.8	96.0	92.0	94.3
United States	95	2.8	96.2	29.3	146.4	123.6	131.0
Nursing assistants/auxiliaries							
Canada	3134 + 35	1.8	85.1	..	62.6	..	65.3
France	5221	2.3	90.1	24.4	72.9	72.0	72.7
Germany	856	3.3	99.7	16.8	51.4	..	..
Norway	045	5.4	97.3	62.8	73.6	79.8	77.2
United Kingdom	640	1.5	94.8	53.7	63.3	62.2	62.8
United States	447	3.0	90.2	29.8	51.8	63.1	55.2

.. Data not available.
1. Female average hourly occupational pay relative to the average hourly pay of male workers in all sectors.
Source: Grimshaw and Rubery (1997), Tables 13 and 14 and Appendix Table 5.

ever, a comparative assessment of the relative hourly pay of women in nursing occupations requires recognition of the different levels of skills and training that accompany the various occupational classifications. It is possible to make an approximate comparison of the relative pay of qualified nurses in Australia ("registered nurses"), Canada ("nurses, registered, graduate and nurses-in-training"), Germany ("nursing associate professionals"), Norway ("professional nurses"), the United Kingdom ("nurses"), and the United States ("registered nurses"). According to the most recent data, the highest level of relative pay is found in the United States, where female qualified nurses earn 31 per cent more than the average hourly pay of all male workers. In Australia, qualified nurses also earn more than total average male pay, with a pay ratio of 104 per cent. In the United Kingdom and Canada the level of relative occupational pay is slightly below total average male earnings, 94 per cent and 97 per cent respectively. In the three countries with a high share of part-time employment among qualified nurses, Australia, Norway and the United Kingdom, the average hourly pay of women employed part-time as qualified nurses is comparable to those working full-time, and therefore, part-time work does not appear to have a significant negative influence on overall rates of pay.

Comparison of unqualified nurses is possible for Canada (''registered nursing assistants'' and ''nursing attendants''), France (''auxiliary nurse''), Norway (''other practical nurses''), the United Kingdom (''assistant nurses, nursing auxiliaries''), Germany (''nurse secretaries'') and the United States (''nursing aides''). Compared to average male earnings, the pay ratio of unqualified female nurses varies across these six countries from 77 per cent in Norway to a low of 55 per cent in Germany and the United States. In each country, nursing assistants bear an above-average wage penalty, which is particularly severe in Germany and the United States (around 20 points). Part-time work does not, however, add to this penalty.

The pay differential between unqualified and qualified female nursing staff gives some indication of variations across the countries in the length of the pay scale among nurses. The widest pay differential is in the United States, where ''nursing aides'' earn less than half of the average pay of ''registered nurses''. In Canada, Germany and the United Kingdom, ''nursing attendants'' and ''assistant nurses, nursing auxiliaries'' earn around two-thirds of the pay of registered nurses. Finally, in Norway, the pay differential is far more compressed. ''Other practical nurses'' earn close to 90 per cent of the pay of ''professional nurses''.

Compared to the 1980s, the pay position of qualified nurses has improved in Canada, the United Kingdom and more markedly so in the United States (where it rose from 99 per cent to 131 per cent of the average male pay). It has, on the contrary, deteriorated in Australia and in Germany. In Germany, the relative pay of ''nursing associate professionals'' has fallen from 79 per cent to 75 per cent between 1980 and 1990 (full-time workers only). At this level, it stands far lower than relative pay ratios for nursing in the other countries.

Teaching

The occupational group representing teaching in schools was listed in the top-ten ranking at the two-digit level for each country, with the exception of Germany (due to the exclusion of secondary school teachers from the data source). In general, the disaggregation of teaching occupations includes the three levels: secondary school, primary school and nursery school (Table 2.6). Taken together these three levels account for between 4 to 6 per cent of all female employment (Norway has a higher global percentage at 7.6 per cent apparently due to higher employment in pre-primary education). Part-time work accounts for a lower level of female employment in teaching than in all female employment in most cases where data are available, with the exception of pre-primary teachers in the United States. There are important variations across countries, however, in the way the concept of working time applies to teachers which may be reflected in part-time as well as in hourly pay data

Table 2.6. **Teaching occupations (1990s data)**

	Employment			Relative pay[1]		
	Female concentration	Female share	Part-time share	Full-time	Part-time	All
Australia						
Pre-primary	0.4	100.0	34.6	90.2	92.8	90.7
Primary	3.1	81.5	23.8	101.0	113.9	103.6
Secondary	2.3	58.8	16.8	108.8	116.5	109.8
Canada						
Pre-primary + primary	3.1	81.4	..	107.7	..	109.9
Secondary	1.2	47.3	..	116.1	..	118.1
France						
Primary and others	5.1	63.5	17.5	91.0	96.8	93.5
Norway						
Pre-primary	1.9	97.9	..	83.1	75.6	80.8
Primary + vocational	4.5	60.8	36.8	88.8	115.7	94.8
Secondary	1.2	53.1	..	94.5	..	..
United Kingdom						
Pre-primary + primary	2.6	83.8	21.6	104.3	160.5	..
Secondary	1.6	83.8	21.6	104.3	153.5	..
United States						
Pre-primary	0.9	97.5	31.8	68.8	59.3	65.7
Primary	2.6	86.3	17.0	98.5	89.6	97.0
Secondary	1.2	55.5	14.5	107.9	83.0	104.2

.. Data not available.
1. Female average hourly occupational pay relative to the average hourly pay of male workers in all sectors.
Source: Grimshaw and Rubery (1997), Tables 13 and 14 and Appendix Table 6.

In each country, the female share of each detailed occupation increases as the level of education decreases. For example, in Norway, the female share among secondary school teachers is 53 per cent compared with 98 per cent among nursery school teachers, and in Australia these figures are 59 per cent and 100 per cent respectively. Relative pay follows a reverse pattern: the higher the level of teaching, the higher the pay. In each country pay is higher at the level of secondary schools than primary schools, and higher also for primary than for pre-primary school teachers. With the exception of pre-primary teaching in Norway and the United States, teaching pays more at each level than the average female pay in the whole economy.

Primary school teaching employs more women than any other level of teaching and it appears among the top-ten detailed occupations in all of the six countries. Primary teaching was the highest paid occupation for women in terms of

the "top-ten" in the 1990s in all six countries with the exception of the United States (where nurses earned substantially more). Moreover, in Australia, Canada and the United Kingdom, the average pay of female primary teachers is higher than the average pay of all male workers. This favourable situation was already observed ten years earlier. It has, however, deteriorated over the period. In Norway, where teaching accounts for a higher proportion of all female employment compared to the other countries, female primary teachers earn less in 1990 than the average level of pay of all male workers. Data for 1980 show that the relative pay of female primary teachers was 115 per cent of the average male pay economy-wide. The decline since then is primarily due to the substantial drop in the relative earnings of women in part-time teaching positions. Teachers in Norway have suffered from the massive drop in public sector earnings relative to the private sector in the 1980s.

Considering all levels of teaching, levels of pay are compressed within a relatively narrow range in Australia, Norway and the United Kingdom, but are relatively dispersed in Canada and the United States. Female teachers in Australia, for example, earn between 91 per cent and 110 per cent of total average male earnings, whereas in the United States they earn between 66 per cent and 104 per cent of total male earnings. Explanation for the difference in wage structure among female teachers in each country is likely to depend upon the particular national system of pay determination, an issue which is beyond the scope of this study.

In terms of the relative pay of female teachers, the cross-country pattern varies according to the level of teaching. For teachers in nursery and/or primary education, the lowest levels are recorded in the United States and Norway, and the highest in the United Kingdom and Canada. For secondary school teachers, the highest level of relative female pay is in Canada, and only Norway records a level of relative pay that is below the average earnings of all male workers in all sectors (disaggregated data for France are unavailable). In addition, since teaching is highly concentrated in the public sector, the difference between countries in the relative earnings position of women in teaching occupations also reflects the broader inter-sectoral pay differential between public and private sector pay.

Cleaning

In the seven countries surveyed with the exception of the United States, some type of cleaning occupation occurs among the top-ten detailed occupations where women are most concentrated. Obviously, there are definitional variations across countries as indicated by the occupational titles, the degree of concentration of female employment in the specific occupation and the share of women in occupational employment (Table 2.7). In five of the countries, cleaning regroups

Table 2.7. **Cleaning occupations (1990s data)**

	Occupational code	Employment			Relative pay[1]		
		Female concentration	Female share	Part-time share	Full-time	Part-time	All
Australia							
Cleaners	8301	4.1	65.4	77.3	61.3	62.9	62.4
Canada							
Janitors, charworkers, cleaners	6191	2.0	44.9	..	54.5	..	55.7
France							
Cleaners	6891	3.3	71.7	81.6	56.1	52.8	54.0
Cleaners (hospital)	5222	2.1	83.7	26.2	62.6	60.2	62.2
Germany							
Cleaners, domestics	933	6.2	78.6	62.9	38.4	..	..
Norway							
Charworkers	932	7.4	92.0	77.8	69.7	70.2	70.0
United Kingdom							
Cleaners, domestics	958	5.9	87.0	87.5	44.5	43.3	43.4

.. Data not available.
1. Female average hourly occupational pay relative to the average hourly pay of male workers in all sectors.
Source: Grimshaw and Rubery (1997), Tables 13 and 14.

from 4 to 7 per cent of total female employment and is a highly female-dominated occupation (from two out of three in Australia to more than nine out of ten in Norway). In Canada, a low 2 per cent of employed women work in cleaning. Furthermore, since cleaners are counted together with janitors, women are in a minority in the occupational category.

The great majority of female cleaners work part-time, and their relative pay is among the lowest together with sales assistants. In Germany, of those occupational groups where women are concentrated, cleaning is by far the lowest paid. Table 2.7 shows that 6 per cent of all women in employment work as ''cleaners'', yet the average pay is just 38 per cent of the average male wage for all sectors (a decline from 42 per cent in 1980). The situation is not much better in the United Kingdom where cleaners only get 45 per cent of the male average hourly pay and the share of part-time is almost 90 per cent. In Norway and Australia, average earnings among women employed as cleaners rank higher than among sales assistants and the relative earnings penalty is far less than in the other countries. The pay ratio is 70 per cent in Norway and 62 per cent in Australia, compared with average total gender pay ratios of 81 per cent and 80 per cent respectively. Here

again, the smaller economy-wide gender pay gap in Norway and Australia, compared to Germany, appears to correlate with narrower gender pay gaps for women employed in low-skilled occupations.

CONCLUSIONS: A FIRST ASSESSMENT

This chapter has assessed patterns of female employment concentration among the broad categories of ''occupational groups'' as well as the finer classification of ''detailed occupations'' in association with an examination of women's relative occupational earnings for seven countries: Australia, Canada, France, Germany, Norway, the United Kingdom and the United States. Based on the data analysed in this chapter, it is possible to draw some implications for the future earnings opportunities for women in those occupations which have, over the last ten to fifteen years, provided an important site of employment for women. Firstly, the concentration of women's employment among a handful of occupations has been sustained over the period studied. Secondly, as a whole, women who work within these occupations earn less in relation to the average earnings of women economy-wide. Closer scrutiny reveals, however, that occupations with a high concentration of female employment include both occupations at the bottom of the pay scale and relatively high-skilled occupations with higher than average wages.

An examination of the national system of occupational classification for each country shows that more than 60 per cent of women's employment can be accounted for by less than ten occupational groups, out of a total number of between 50 and 80 groups, in each country. During the last ten to fifteen years, there is no clear sign that this trend of high female employment concentration has lessened significantly, although Norway, the United Kingdom and the United States showed some decrease. Four occupational groups stand out as providing important sources of employment opportunities for women in each of the seven countries: sales, clerical work, nursing care and teaching. Together, these occupational groups account for around half of all female employment in each country and, in each group, women's employment is over-represented, although to different extents. Cleaning is another occupational group with high female employment concentration and over-representation in most of the countries surveyed. Part-time work tends to play a more important role in the top-ten occupational groups where female employment is most concentrated than in female employment in general. This trend is particularly evident in Australia and even more so in the United Kingdom where there is a marked over-representation of part-time work in the top-ten grouping.

The economy-wide gender pay gap can serve as a benchmark of the average wage penalty experienced by women in employment. Hourly pay has been con-

sidered in this chapter. There is some variation in the size of the average wage penalty across countries. For the seven countries surveyed, it is smaller in Australia and Norway (a gender pay ratio at around 0.8) and higher in the United Kingdom and Germany (a gender pay ratio at around 0.7). Over the period examined, from the early 1980s to the early 1990s, the average wage penalty decreased marginally in Canada, Germany, Norway and the United Kingdom. In the United States, women's relative average pay increased significantly, from 63 per cent to 73 per cent of male average hourly earnings. There was a slight deterioration in the gender pay gap in Australia, where the average gender pay ratio fell from a relatively high 82 per cent to 80 per cent between 1987 and 1995. (Data for France do not provide for comparisons over time.)

Women in the top-ten occupational groups in the countries studied have average earnings which are globally lower than the average pay of women economy-wide. There is an above-average penalty attached to working in the top-ten grouping. It varies from just one percentage point in Norway to 8 points in France and Germany. In all countries except Norway, this above-average wage penalty has increased in magnitude over the period studied. In the United States, for example, the levels of the total gender pay ratio and the relative female pay among the top-ten occupational groups changed from 63 per cent and 59 per cent to 73 per cent and 66 per cent, respectively, between 1982 and 1992, marking a widening of the above-average penalty from four to seven percentage points. In Norway the above-average penalty was reduced from six percentage points in 1980 to just one in 1993.

There is also a penalty associated with part-time work. Part-time work pays less than full-time work on an hourly basis in all five countries for which data were available. In the top-ten grouping this penalty ranged from 5 percentage points in Norway to a high of 21 points in the United Kingdom. The part-time work penalty is not significantly higher where female employment is most concentrated, although it tends to affect a higher proportion of women. In the United Kingdom where 55 per cent of women in the top-ten grouping work part-time, the high part-time penalty puts them at a serious disadvantage.

At the level of detailed occupations, among those occupations most important for female employment opportunities, some occupations are associated with a far higher above-average wage penalty than others. Examples are found in sales, cleaning and catering services. These occupations represent major growth areas of female employment during the 1980s, reflecting the importance of the growing private services sector. A great part of employment in those occupations is on a part-time basis. Very low rates of pay associated with short hours of work result in below subsistence income levels for a great number of women employed in sales, cleaning and catering.

This situation contrasts with the high-skilled occupations of high female concentration found mainly within public sector employment, such as nursing or teaching professionals, as well as managerial and high-level administrative positions in some countries. These occupational groups tend to combine a high level of employment opportunities for women with a positive wage premium in comparison to the average gender pay ratio. The public sector as an important site of employment opportunities for highly-skilled women may be at risk in the near future due to changing government expenditure policies, or changes in wage-setting strategies, which may reverse any wage premium attached to public sector employment. Such a negative trend has already occurred in Norway, where, on average, the wage premium in the public sector in 1980 was reversed to a wage penalty by 1993 for all groups of workers with the exception of female part-time workers. This reduction in public spending provides the main explanation for the reduction in the relative earnings of women employed as teachers in Norway, from 108 per cent to 92 per cent of the average male wage during the period. Secretaries, whose employment is not so highly concentrated in the public sector, have seen their relative position deteriorate over the period in some countries. In the countries where there has been an improvement, it remains to be seen whether the gains made will be confirmed in the future.

In conclusion, concentration of female employment in a few female-dominated occupations has a price in terms of relative pay. This price varies across countries due to factors such as the general wage structure, the importance of the public sector and the level of pay in the public *vs* the private sector. Occupations of high female employment concentration include both low- and high-skilled occupations, with very different levels of earnings in each case. The high-skilled occupations pay wages which are at or above the level of the average wage for women economy-wide. There is a concern, however, that in some countries and for some of these occupations, the relative level of earnings has deteriorated. Low-skilled occupations raise different types of concern. Their importance in female employment may be growing. Since they provide less than subsistence income, due to very low rates of pay and a high incidence of part-time work, women confined to these occupations are seriously at risk of dependency.

This chapter has involved a largely quantitative evaluation of results and suffers from reliance on national data-sets which differ widely in systems of occupational classification, sampling methods and information collected. The implications of these results need to be considered alongside the case-study investigation of the occupational groups and detailed occupations presented in the following chapters. Further research on the issues raised here would clearly benefit from more extensive national and cross-national efforts to collect occupational earnings data for men and women. Attempts to collect pay data according

to a harmonised system of occupational classification, accompanied by appropriate case-study and historical analyses, would provide a basis on which to explain cross-country differences in women's occupational employment concentration and relative pay.

NOTES

1. The data for Germany in this text cover only western Germany.

2. This raises many difficulties for cross-country comparisons which are explained in detail in Grimshaw and Rubery (1997).

3. For reasons of data availability average pay of male full-time workers is used for comparison.

4. As noted above, the two-digit level of the occupational classification in France is not equivalent. To enable cross-country comparison, concentration has been measured by using the top-forty occupations in the list of the around 400 at the four-digit level.

5. The reclassification of occupations from the national characterisation to the international variant has however a number of problems. In particular, ''there is no guarantee that countries have adopted and implemented a common interpretation of ISCO 88 (COM)'' (Elias and Birch, 1995). This clearly raises questions regarding the quality of data comparability between countries. Statistical tests do reveal those occupations in a particular country which are potentially problematic in terms of their definitional correspondence with the European average (*op. cit.,* pp. 13-15).

6. The data do not strictly cover a similar period for all countries.

REFERENCES

ANKER, R. (1998), *Gender and Jobs. Sex Segregation of Occupations in the World*, International Labour Office, Geneva.

BLAU, F.D. and KAHN, L.M. (1992), ''The gender earnings gap: learning from international comparisons'', *American Economic Review Papers and Proceedings*, May, pp. 533-538.

ELIAS, P. and BIRCH, M. (1995), ''Implementing a common classification of occupations across Europe'', Discussion paper, Institute for Employment Research, University of Warwick.

GRIMSHAW, D. and RUBERY, J. (1997), ''The concentration of women's employment and relative occupational pay: a statistical framework for comparative analysis'', Labour Market and Social Policy Occasional Paper No. 26, OECD, Paris.

OECD (1994), *Women and Structural Change. New Perspectives*, Paris.

OECD (1995), *Trends in Public Sector Pay in OECD countries*, Paris.

OECD (1997), ''The definition of part-time work for the purpose of international comparisons'', Labour Market and Social Policy Occasional Paper No. 22, Paris.

RUBERY, J. and FAGAN, C. (1993), ''Occupational segregation of women and men in the European community'', *Social Europe*, Supplement 3/93.

SECRETARIAL OCCUPATIONS: THE IMPACT OF TECHNOLOGICAL AND ORGANISATIONAL CHANGE*

Secretarial occupations constitute a very substantial part of total women's employment in all OECD countries. They have been almost entirely female for more than forty years. Mainly for this reason they tend to be perceived in a rather stereotypical and conservative way. Few occupations, however, have been subject to such rapid and far-reaching technological change. In addition, as secretarial occupations are transversal to all sectors and organisations, secretaries also have had to adapt to the structural adjustment waves that have affected industry, construction and more recently, the service and public sectors.

This chapter examines how the secretary's role is changing as the information economy expands and as organisations seek to maximise their efficiency and competitive position by reorganising the way they work. It also investigates whether there have been improvements in the status and earnings of the occupations and the routes by which such improvements can be brought about.

The chapter highlights certain cross national-issues without purporting to be directly comparative. The main focus is on qualitative changes within the occupations, while some statistical information is included to provide quantitative benchmarks.

FOCUS ON SECRETARIES

The secretarial occupation is not a regulated profession. Thus, in principle, any person can work as a secretary. At the same time, the work required from a secretary can vary at the employers' discretion. In spite of this possible breadth of entry points to the profession and quite varied expectations by employers, there

* This chapter is based on a report to the OECD Working Party on the Role of Women in the Economy (Hilary Steedman, 1997). The report is the synthesis of contributions from eight countries: Denmark, Finland, France, Italy, the Netherlands, Switzerland, the United Kingdom and the United States. These national contributions appear in the references of the chapter.

seems to be considerable shared perception of who works as a secretary and what a secretary does, regardless whether the title is explicitly used or not. Moreover, the term "secretary" is a category broadly used in occupational classifications.

Secretaries in the statistical classifications of occupations

In the most recent version of the International Standard Classification of Occupations (ISCO 88), jobs are classified according to unit groups at four-digit level. There are 390 unit groups, consisting in most cases of more than one detailed occupation. ISCO 88 recognises two different skill levels for secretarial occupations: "secretaries" (unit group 4115), at the second ISCO skill level, and "administrative secretaries" (unit group 3431), at the third ISCO skill level. "Secretaries" are distinct from the close occupations of "stenographers and typists" and "keyboard-operating clerks and related operators".

Although one of the objectives of ISCO is to make international comparisons possible, national classifications are not usually fully compatible with ISCO. Going from one classification to the other implies multiple conversions and the merging of categories to take into account different delineations of occupational categories. Secretaries are not always counted separately from other keyboard operators in national classifications, nor is the distinction between secretarial work at different skill levels systematically established. Broadbanding, which is being recommended in the case of many occupational categories, in effect already applies to secretarial occupations which regroup very large numbers of individual workers. Important distinctions, upon which the analysis of changes could be based, are thus obscured.

In the future it seems that the classifications used in labour force statistics will be based more on criteria of skills broadly-defined and on skill levels. This radical change in the way occupational classifications are constructed will make the monitoring of trends rather problematic. For example, in the Netherlands it is no longer possible to directly identify secretaries in the new occupational classification used by Statistics Netherlands since 1994 as secretaries are now part of three groups: junior, secondary and higher clerical/administrative occupations.

Secretaries in organisations

The background study for this chapter defined secretaries as those employees who either have a job title containing the term "secretary" or who describe themselves as secretaries (self-identification). The latter may be a useful approach when trying to identify qualitative changes in secretarial work. It may also serve to track secretaries when the title suddenly disappears from the occupational classifications being used within organisations. The disappearance of the title occurred, for example, in the Australian Public Service in 1987 when many of

the old clerical and keyboard classifications were ''broadbanded'' into the new Administrative Service Officer Structure (a single eight-level structure replaced over one hundred separate classifications in the old clerical/administrative and keyboard streams).

Although the term ''secretary'' is one of the few employment categories for which clear detailed job descriptions are seldom established, the understanding of the work and function of a secretary is remarkably stable across countries. There is general agreement that a secretary works for one individual (usually at senior management) or a group of individuals. The secretary takes on all routine and some non-routine tasks that belong to the manager's role, thus freeing him/her to concentrate on core activities. The secretary's responsibilities include oral and written communication, both inside and outside the office. The secretary processes and prepares text and, increasingly, statistical data; undertakes a range of routine and some non-routine administrative tasks; acts as the gatekeeper to the manager's office; deals with enquiries; and is responsible for time management in the office unit.

Close (or "neighbouring") occupations

While secretaries are the main focus in this chapter, their situation must be considered within the wider group of ''office employees'' or ''office clerks''. Other occupations in this group, as a rule, are less skilled and involve more routine tasks than does the secretary's. Unlike the secretary, many of the tasks that constitute these occupations have either disappeared as a result of technological change (telex operator, data-entry) or radically changed (copy typist). Over the past twenty years, these lower-level occupations would have declined in numbers.

In the same way, in order to understand the situation of secretaries one needs to look also at the category of administrative employees. There has been less research on that, however, than concerning the lower-skilled office clerks. Administrative employees, as well as secretaries, now use the keyboard. Tasks traditionally in the secretarial domain are now being performed as well by other more qualified categories of workers.

Any conclusions we might draw about increasing employment opportunities for women based on the demand for secretarial employees, therefore, need to be viewed within the wider context of trends in office employment generally, trends in administrative positions, and women's access to higher level positions.

THE LABOUR MARKET FOR SECRETARIES

A predominantly female occupation

Female domination of secretarial occupations is very high and there does not appear to be any serious challenge to this domination from the entry of men. Male secretaries do not account for more than 1 to 3 per cent of all secretaries in the countries surveyed. The percentage of men is only marginally higher (around 5 per cent) among keyboard operators. It does, however, increase markedly when the broad category of office clerks is considered. In Denmark and Switzerland, the percentage of women in the broad category of "office employees" was just above 80 per cent in both cases.

Pringle (1993) investigated "male secretaries" in Australia and found that, in addition to the small minority under that label, there was a much larger group doing broadly secretarial work but formally classified as clerical, administrative, or even managerial work. She observes: "The question that needs to be raised is not, why there are so few male secretaries; but rather, why the title 'secretary' is reserved almost exclusively for women" (Pringle, 1993, p. 131).

Employment

Secretarial work constitutes in the range of 5 to 8 per cent of all women's employment in OECD countries, where it can be identified as a separate category (Table 3.1). It is the single most common occupation for women in some countries (and one of the five most common in all countries in the study).

Secretaries work in every sector of the economy, although they have come to be increasingly concentrated in the growing service and public sectors. The financial services sector, in particular, has a high proportion of secretaries in relation to all employment. The public sector accounts for a significant proportion of all secretaries: over 40 per cent in Finland and the Netherlands; in the range of 20 to 25 per cent in France, the United Kingdom and the United States.

The number of secretaries has increased at a particularly fast rate in the 1970s, even faster than total female employment, which grew markedly during that decade. In the late 1980s and early 1990s, clerical occupations experienced a sharp decline as a result of restructuring and productivity-enhancing investments in both the private and public sectors. Although secretarial occupations were affected to a lesser extent than other clerical categories, their numbers grew at a slower space and their proportion as a percentage of female employment started declining in some countries. The data for Finland are striking. The total number of secretaries grew threefold between 1970 and 1980, and further doubled between 1980 and 1993. Since 1980, the public sector has provided 90 per cent of the growth.

Table 3.1. **Concentration of women in secretarial occupations**

	Occupational code	Period 1980-85		Period 1990-95	
		(% of total female employment)			
Australia			(1987)		(1995)
Secretaries-stenographers	5101		7.4		6.1
Typists	5103		2.3		0.7
Word-processing	5105		2.3		0.4
Canada		(1981)		(1991)	
Secretaries-stenographers	4111	8.6		7.8	
Typists	4113	2.2		0.4	
Finland		(1980)	(1985)	(1990)	(1993)
Secretaries	130	2.3	3.0	4.5	5.0
France				(1992)	
Secretaries	5411			6.3	
Germany[1]		(1980)		(1990)	
Secretaries	782	5.9		4.9	
Keyboard operators	783	0.8		0.6	
Netherlands		(1981)	(1985)	(1990)	(1994)
Secretaries, typists, telex	321	8.1	8.2	7.0	6.1
Norway		(1981)			(1993)
Secretaries and stenographers	211	2.5			3.6
United Kingdom			(1986)		(1995)
Typists, secretaries, personal assistants	452 + 459		9.3		5.3
United States		(1982)		(1992)	
Secretaries	313	8.4		6.4	
Typists	315	2.0		0.8	

1. Western Germany.
Source: Grimshaw and Rubery (1997) and national reports.

Because of their high concentration in the public sector, reform in this sector has an overwhelming effect on secretaries. The extent and timing of reform in the public sector vary across OECD countries. In Finland, for example, the public sector has assumed increasing importance as an employer during the recent period of general recession, whereas in the United States, a large drop has occurred in the percentage of all clerical employees employed in the federal administration (from 25 per cent in 1984 to 16 per cent in 1994). The number of federal secretaries dropped from 98 052 in 1985 to 87 880 in 1994.

Available figures show that the share of secretarial employment has increased since 1970 in the public sector, remained roughly steady in the service

sector and declined in trade and manufacturing, presumably as part of the wider employment trends in these sectors.

Unemployment

On balance, it seems that demand for secretaries over the past 15 years has remained high, apart from downturns resulting from changes in the business cycle. Demand has probably been sufficiently high to absorb its share of the growing numbers of women entering the labour market and a number of those displaced from lower-level clerical occupations.

From the available data, there is no evidence that secretaries have been disproportionately affected by recent changes in the level of unemployment. Their unemployment rates do not deviate significantly from the average. It seems likely, however, in view of the evidence on the lack of growth in secretarial salaries in a number of countries, that the high level of supply has kept down secretarial salaries and made it difficult for women to obtain the rewards of higher workplace productivity.

Part-time work

In all OECD countries women are much more likely than men to work part-time. There are, however, important differences between countries concerning the percentage of the female work force that works part-time. Part-time work is seen as a way to combine employment with family responsibilities, and family responsibilities continue to rest mainly on women. One could therefore expect part-time employment to be particularly high in female-dominated occupations such as secretary.

The 1994 European Labour Force Survey found around one quarter of employment in the occupations "secretaries and keyboard-operating clerks" to be part-time compared to an average of just over 30 per cent for the total 116 occupations. Country specific data also shows lower rates of part-time work among secretaries compared to all working women (Table 3.2). The rates of part-time work for secretaries are about average only in France and Germany. The gap in part-time work for secretaries was particularly large in the early 1980s in the Netherlands, the country of the part-time culture. Tijdens and Baaijens (1997) indicate that secretaries in the Netherlands have long argued for more part-time jobs but that their requests have met with management's resistance. Since the late 1980s, however, the number of secretaries working part-time has considerably increased. In 1981, 75 per cent of secretaries in the Netherlands worked full-time. In 1994, this percentage had decreased to 56 per cent (most part-time work was in the range of 20 to 34 hours a week).

Table 3.2. **Part-time work in secretarial occupations**

	Occupational code	Period 1980-85		Period 1990-95	
		(% of total female employment)			
Australia (< 35 hours per week)			(1987)		(1995)
Secretaries-stenographers	5101		24.2		26.7
Typists	5103		24.8		37.2
Word-processing	5105		..		..
All occupations			*36.8*		*41.5*
Finland (< 30 hours per week)				(1989)	
Secretaries	130			3.0	
All occupations				*7.9*	
France (self-assessment)				(1992)	
Secretaries	5411			21.5	
All occupations				*24.2*	
Germany[1] (self-assessment)		(1980)		(1990)	
Secretaries	782	21.9		26.2	
Keyboard operators	783	19.4		30.1	
All occupations		*21.2*		*25.8*	
Netherlands (< 35 hours per week)		(1981)	(1985)	(1990)	(1994)
Secretaries, typists, telex	321	27.5	34.6	38.6	44.4
All occupations		*50.0*	*54.0*	*52.0*	*58.0*
Norway (< 30 hours per week)		(1981)			(1993)
Secretaries and stenographers	211	34.9			30.5
All occupations		*54.8*			*45.0*
United Kingdom (< 30 hours per week)			(1986)		(1995)
Typists, secretaries, personal assistants	452 + 459		30.8		29.3
All occupations			*43.6*		*44.0*
United States (< 35 hours per week)		(1982)		(1992)	
Secretaries	313	19.5		19.5	
Typists	315	28.7		30.2	
All occupations		*32.4*		*29.9*	

.. Data not available.
1. Western Germany.
Source: Grimshaw and Rubery (1997) and national reports.

Apart from the Netherlands, the rate of part-time work among secretaries has been relatively stable over the last decade. It seems to have markedly increased, however, among the less skilled category of typists. Employers demand flexibility in the secretaries' hours but it is of a very different type. Several reports point to the fact that the secretary is expected to adjust her working hours to those of the people for whom she is working and to work overtime on demand. Executive

secretaries are especially likely to work rather long hours. Overtime is more and more often not fully paid. Another type of flexibility in working conditions which is thought to apply to secretarial work in particular, teleworking, does not seem to be expanding significantly.

Age and family characteristics

The working conditions imposed on the majority of secretaries are rather demanding. Combining work as a secretary with family responsibilities is not necessarily easy. The secretarial population is getting older and as a result the majority is concentrated in the age group where raising children is a primary responsibility.

Data for France and Netherlands show that, while the younger age range (below 25) is slightly over-represented among secretaries compared to all working women, the differences are small. In a number of countries, the proportion of secretaries drawn from the youngest age group is declining. In the Netherlands, it declined from 39 per cent in 1981 to 15 per cent in 1994.

There are several explanations as to the decreasing proportion among the youngest age groups. One important reason is the increasing trend to longer initial full-time education. A second reason is that, in a number of countries, more recent birth cohorts have been smaller than those of the 1940s and 1950s. There are also indications that the occupation of secretary is no longer as attractive to young women as was previously the case. Finally, the opening of new secretarial positions has slowed down and older secretaries may be staying longer in the positions they hold. These trends vary across countries resulting in marked differences in the age composition of the secretarial population. In France and Denmark, the proportion of all female secretaries aged under 25 is below 8 per cent whereas in Switzerland and in the Netherlands, the proportion is nearly twice as high.

The preponderance of female secretaries tends today to be in the 25-45 age group. With increasing proportions of secretaries in the prime age range, the question of compatibility of employment with family responsibilities is all the more important. The proportion of all secretaries with children under 16 varies considerably from country to country. The social climate and expectations regarding women's role in society obviously play a part. For example, in Switzerland and the Netherlands, where the tradition of women working outside the home is less well-established and receives little social support, there are rather small proportions of women secretaries with children. One would expect the reverse to be true in France, for instance. In the Netherlands in 1996, half of the secretaries were married (a higher proportion lived with a partner) but only one out of four had a child. In France about two-thirds of the secretaries were married or divorced or

widowed and exactly the same proportion had at least one child. Family responsibility does not appear to be the same obstacle to working as a secretary in France as it does in the Netherlands.

The proportion of secretaries from the older age groups has also started to increase. In some countries the rapid ageing of the secretarial population is starting to raise concern. Denmark, Finland, and France have particularly high proportions of secretaries in the oldest age group (with 20 to 30 per cent more than 45 years). In Finland, the average age of secretaries increased from 32 years in 1970 to 35 in 1980 and 40 in 1993.

Job security

In all countries surveyed an overwhelming majority of secretaries are permanent employees and job security does not seem to be a problem. Where data exist, secretaries appear to stay with the same employer for a number of years. In Switzerland, 40 per cent of female full-time office clerks had been with the same employer for more than 6 years and in the federal administration the median tenure for female office clerks was 5 years. There is, of course, some ambiguity linked to the job tenure indicator as it may evidence a lack of mobility opportunities as well as job security.

In the Netherlands and the United Kingdom, agencies supplying temporary secretarial staff are widespread, but as in the other countries, the vast majority of secretaries hold permanent positions. Employers tend to use temporary employment as a way of filling very short-term gaps and also as a way of assessing the suitability of an individual for permanent employment. It seems obvious that the employer values the secretary as a source of stability and knowledge of the organisation and that this aspect of the secretary's role encourages the employer to provide permanent employment status for secretaries.

Earnings

Several dimensions of secretarial earnings are useful for evaluating what economic outcomes can be expected from this choice of occupation. These relate to the level of secretaries' earnings relative to average female and male earnings; changes in the level of secretaries' relative earnings; and the dispersion of earnings within secretarial occupations. Figures on secretaries' wages are few however and those available are often fragmentary and not mutually comparable.

Relative earnings of secretaries

In the 1990s, in the seven countries examined by Grimshaw and Rubery (1997) (see the previous chapter), female secretaries earned less on an hourly

basis than the average male earnings for the whole economy (Table 3.3). The ratios range from slightly more than 80 per cent of the male average in Norway to no more than 70 per cent in Canada and in the United States. In all seven countries, secretaries fared better than the average for the top-ten female occupations (those with the highest concentration of female employment). Secretaries were paid more than the overall female average only in Norway and in the United Kingdom. Additional data for Denmark, Finland and Switzerland show that, in these countries also, women doing office work earn more than women doing other work, but to varying degrees.

Although it would be difficult to draw firm conclusions, the data which have been collected seem to indicate that secretarial work pays better than most other "traditional" female work and also that, in some countries, secretaries earn more than the average female earnings. Given the gender-segregated labour market,

Table 3.3. **Trends in relative earnings of female secretaries**

	Occupational code	Full-time workers		Part-time workers	
		(ratio of average male hourly rate)			
Australia		(1987)	(1995)	(1987)	(1995)
Secretaries-stenographers	5101	0.82	0.78	0.82	0.80
Typists	5103	0.70	0.67	0.81	0.67
Word-processing	5105	0.81	0.72	..	0.80
Canada		(1981)	(1991)		
Secretaries-stenographers	4111	0.67	0.70		
Typists	4113	0.62	0.68		
France			(1992)		(1992)
Secretaries	5411		0.75		0.68
Germany[1]		(1980)	(1990)		
Secretaries	782	0.78	0.78		
Keyboard operators	783	0.72	0.70		
Norway		(1981)	(1993)	(1981)	(1993)
Secretaries and stenographers	211	0.88	0.83	0.96	0.90
United Kingdom		(1986)	(1995)	(1986)	(1995)
Secretaries, personal assistants	459	0.79	0.78	0.65	0.66
Typists, word-processors	452	0.65	0.64	0.60	0.58
United States		(1982)	(1992)	(1982)	(1992)
Secretaries	313	0.64	0.71	0.60	0.64
Typists	315	0.61	0.71	0.48	0.64

.. Data not available.
1. Western Germany.
Source: Grimshaw and Rubery (1997) and national reports.

the choice of secretarial work provides women with earnings considered to be within the average range. This is not to say that secretarial earnings are necessarily satisfactory. The qualifications required of secretaries in each country and the skills secretaries demonstrate in performing their work would need to be taken into consideration to establish whether earnings are commensurate. Secretaries do in fact express dissatisfaction with wages (and the lack of career opportunities) in most countries studied.

Changes in relative earnings

Changes between the 1980s and the 1990s in female secretarial relative pay are somewhat mixed (Table 3.3). The position of secretaries' earnings relative to all male earnings has deteriorated in the 1990s in Australia and Norway, and improved in Canada and the United States (from a low level in the 1980s). It has remained stable in Germany and the United Kingdom. Similar trends apply to full-time and part-time secretaries. With the exception of Norway, the same tendency is also observed concerning earnings in the top-ten female occupations or the overall gender earnings gap.

Since secretarial work is still almost exclusively carried out by women, the flow onto the labour market of additional women workers during the last 20 years had the effect of increasing the supply of secretaries and the competition for jobs. Overall, secretarial earnings have been held down by the impact of a pool of potential workers ready to take posts without improved earnings. This factor has made it difficult for women to obtain the rewards of higher workplace productivity.

Earnings dispersion

In a given country, secretarial earnings will vary according to qualification, job content, sector, enterprise size, region. There is no formal recognised status for the occupation. As a result, levels of wages for secretaries are set very arbitrarily.

As secretaries work in all sectors and sectors usually pay wages at different levels, the sector will be a determining variable in secretaries' earnings. Secretarial earnings in the public sector are of particular importance since that sector employs a substantial proportion of all secretaries. This proportion has grown markedly up to the early 1990s.

Data allowing comparison between earnings in the public and private sectors are difficult to obtain. Also, other elements of total remuneration need to be taken into account as there may be much greater variations across the two sectors in these elements than in wages (for example, pension entitlements and other allowances). OECD (1996) looks at trends in public sector pay in OECD countries

overall and for a number of specific occupations, including secretary. The earnings of a secretary in the public sector are compared to those of the average production worker in the whole economy (Table 3.4). In all countries but Spain (which shows a rather anomalous situation), public secretaries earn less than the average production worker, with a ratio ranging from a low 0.6 in countries such as Canada, Ireland and the Netherlands, to close to 1.0 in Australia, Denmark, Luxembourg and Italy. Table 3.4 also shows the trends in the real earnings paid to secretaries at entry level. There again marked differences are observed across countries with real earnings having increased by more than 15 per cent in a number of countries (Austria and the United Kingdom for example) and decreased by up to 5 per cent in others (Canada and the United States).

Overall pay dispersion within an occupation gives an indication of the extent of potentially achievable wage progression over an entire career. Grimshaw and Rubery have presented data on pay dispersion for clerical occupations for five countries: Australia, Norway, the United Kingdom, the United States and Germany. In the first four countries, clerical occupations have a more compressed wage scale and a maximum ceiling which is substantially lower than the corresponding average for all women. Only Germany shows the opposite trend. This

Table 3.4. **Secretarial earnings in the public sector**

	Earnings relative to APW[1]	Trends in real earnings at entry level		
	1993	1985	1990	1993
Australia	0.92	..	..	..
Austria	0.71	100	106.5	114.4
Canada	0.57	100	95.7	94.5
Denmark	0.95	100	99.7	101.0
Finland	0.68	100	117.9	108.6
France	0.67	100	98.4	98.2
Germany	0.68	100	108.0	110.8
Iceland	0.64	100	106.1	113.6
Ireland	0.62	..	..	..
Italy	0.99	..	..	..
Luxembourg	0.96	100	132.5	137.0
Netherlands	0.61	100	106.9	106.3
Spain	1.24	100	110.9	124.6
United Kingdom	0.68	100	113.2	116.4
United States	0.67	100	93.3	94.9

.. Data not available.
1. APW = average production worker.
Source: OECD (1996), *Trends in Public Sector Pay in OECD Countries,* Paris.

evidence tends to confirm the view that opportunities for career advancement and higher earnings within secretarial work are limited.

THE IMPACT OF TECHNOLOGICAL AND ORGANISATIONAL CHANGE ON SECRETARIAL WORK

Secretaries have felt the full impact of all the important changes that have affected the economic environment and the way organisations have operated since the mid-1980s. While the literature tends to concentrate on the radically different technology that the secretary has been required to master, other changes may actually prove of longer lasting importance. Increased global pressures to remain competitive are at the origin of these powerful changes. Organisations seek to acquire competitive advantage to respond to these pressures in two ways, both of which centrally involve the secretary.

The first strategy is the efficient exploitation of the possibilities of electronic information technology. Electronic information technology does far more than put a word-processor on the secretary's desk. It provides the secretary with the challenge of the exploitation and analysis of much-increased levels of information. In all but the largest organisations where a distinct documentalist job may be defined, the secretary is at the cutting edge of the retrieval, storage and analysis of information; its transmission by the increased variety of information routes; and its prioritisation and selection for the attention of others in the organisation.

The second strategy is the ''presentation'' of the organisation to the client or customer in such a way as to build a consistent image of professional expertise combined with personal service. The increased importance of ''image'' and ''presentation'' put a premium on the ''soft'' interpersonal skills of communication and initiative. In the age of telecommunications, the secretary is more likely to be the client or customer's first point of contact with the organisation.

Technological change

A virtual revolution appears to have taken place in secretarial work in successive phases. The first phase of the introduction of electronic word-processing had seriously damaging effects on the careers and self-esteem of highly-skilled shorthand typists and experienced clerical workers. These women, especially shorthand typists, had acquired high levels of quite specialised skills and were used to a type of work organisation that made the most effective use of these skills. With the introduction of the word-processor, a lower premium was placed on typing speed and a higher one on general presentation, using the layout and formatting facilities of word-processing programmes. For the shorthand typists, it was not even sufficient to simply replace an out-of-date skill with a new skill. Word-

processing software packages were too varied and too rapidly upgraded for the new skill of mastering a particular package to remain current for very long. In fact, the new skill required was the skill of learning fast and learning "while doing", not even "by doing". This transformation of the technical basis of secretarial work which took place during the 1970s and first half of the 1980s, constituted a severe shock and challenge to many millions of women secretarial and clerical workers whose working lives had consisted of applying high levels of the same skill to a predictable range of tasks.

However, it now appears that simple routine keyboarding jobs are fast disappearing. This trend results from two new developments in information technology. First, optical character readers – or scanners – now provide an automated solution to the problem of data transfer from paper to disk. Second, the development of local area networks and the technical understanding of how to adapt software to the potential of networks mean that many organisations (for example, banks) are moving towards the goal of "once only data entry". A piece of information, a payment made, for example, needs to be recorded in a number of documents in order for accounts to be kept. Previously, a separate entry was made for each account, now, a single keyboard or optical character reading entry flows through linked spreadsheets to reappear as a multiple entry in the appropriate documents.

The evidence from the country surveys indicates that these latest technical developments have had a devastating effect on clerical employment. Employment in the categories of copy typist/data entry clerk, and others affected by electronic automation (for example, switchboard operator) is declining rapidly. By contrast, the available evidence points to a considerable increase in the numbers employed as secretaries over the 1970s and 1980s.

Secretarial work today

The secretary's expertise is as a communicator and handler of information. She is frequently the voice of her boss and her main responsibility is to communicate and to make information work on behalf of those to whom she provides her services. She communicates with clients and customers and receives, selects, records, processes and analyses information. These tasks have always been present in the secretary's work. Because of these wide responsibilities, her work has always been varied and difficult to define. Therefore, if we point out that the secretary in the 1990s is required to be flexible and adaptable, to communicate and process information, we should also make clear that these tasks and qualities have always been expected of the secretary. Yet, expectations of today's secretary are undoubtedly different and evidence indicates, more demanding of higher-level skills. The secretary's ability to project a positive image of the company and

to deal sensitively with customers or clients is at the forefront of the job requirement. She must possess the information technology skills required to present the company's written communications (letters, reports, invoices) as clearly and as professionally as possible.

Most country reports underline the fact that the traditional support role of the secretary is still predominant but that several trends in the way work is being restructured are requiring secretaries to demonstrate new and higher-level skills.

One of the most visible emerging trends is the increase in the number of secretaries working for a group (''team secretary'') rather than for a single manager (''personal secretary''). A survey taken in the Netherlands in 1996 reveals that less than one out of five secretary works in a ''one-to-one'' relationship whereas one out of three works for more than three persons (Tijdens and Baaijens, 1997). This development tends to occur alongside the process of ''delayering'' which has been widely implemented by companies (and in some countries such as Denmark, in the public sector also) in the 1990s to cut costs. But it is also linked to a reorganisation of the production process based on more autonomous work teams. The provision of secretarial services to a number of persons makes greater demands on the secretary's time-management and people-management skills. A team secretary has an important co-ordination and sometimes mediation function in addition to reinforced communication and organisation functions.

Another long-standing trend is increased specialisation of secretaries in a particular professional area, especially in the private sector. Law, medicine and finance are examples of areas where secretaries are expected to acquire extensive specialised knowledge, usually through experience and learning ''on-the-job''. More generally, team work and the pressure on professional staff to rationalise their activities put a growing demand on secretaries to have a better knowledge and understanding of the specific activities and specialist work in their environment. In the past one-to-one relationship, the number of tasks delegated to a secretary was very much a function of the manager's individual decision. Today, some of the tasks previously performed by middle-managers have been transferred to the secretary. She also needs to work in much closer co-operation with her team-workers. Her work has become less distinct from, and more complementary to, the specialist work in the area in which she operates.

IMPLICATIONS FOR EDUCATION, UPGRADING AND THE ACQUISITION OF NEW SKILLS

Initial education

Every country has its own set of initial education and training qualifications which cannot easily be equated with any other (both in terms of general education and that required specifically for secretarial occupations). Basically, three

models can be identified as characterising the training and education received by the majority of the work force in post in the 1990s: compulsory general education plus specialised secretarial skills; "long" training professional education and training (compulsory education plus 2, 3 or 4 years) including general education; and finally, compulsory education plus apprenticeship. The different models may in fact co-exist in any given country at a specific time, with, however, one prevailing model. There seems to be a recent trend towards an increasing predominance of the long professional education and training.

Educational level of secretaries

On average, female secretaries are more educated than the overall female work force. For the purposes of tentative comparison, the number of years of full-time education after the age of 15/16 (end of compulsory schooling) has been used as an indicator of initial education and training levels. Table 3.5 shows that, as of 1995, in many countries only a minority of all secretaries have no more than basic schooling. A substantial majority are well-qualified, having received at least 3 or more years of education and training after the end of compulsory schooling. The United Kingdom stands out as an exception with half of the secretarial

Table 3.5. **Educational attainment of secretaries**

		Years of initial education after end of compulsory schooling			
		None	1-2	3-4	5+
		(% of all secretaries)			
Canada	1986	16	16	29	55
Finland	1985	21	11	47	20
	1993	21	15	51	13
France	1995	13	43	32	12
Netherlands	1985	28	28	51	20
	1995	20	20	61	20
Switzerland	1995	8	84	84	8
United Kingdom	1996	52	34	14	..
United States[1]	1985	..	..	56	44
	1995	..	..	50	50

1. Federal government secretaries only.
Source: Country reports.

population having no more than the compulsory school leaving standard. In Finland and France more than 10 per cent and in the Netherlands up to 20 per cent have studied at tertiary higher education level. In Finland this represents a marked decrease relative to the situation in 1970 (prior to the huge growth in the number of secretaries) when 30 per cent of secretaries had higher-level education.

The general educational levels of women employed in secretarial occupations have risen over the last 10-15 years, in part reflecting the overall rise in women's educational levels in almost all OECD countries over this period. More and more secretaries have followed broad general education up to a certain level. Higher-level vocational qualifications are more widely held, while advanced general education courses have been followed only by a minority of secretaries.

This trend is in line with the evidence pointing to a real increase in the general skills required of the secretary which result directly from changes in role and duties. These skills are predominantly those recognised as being acquired through higher-level general or academic education. For example, in continental Europe, European integration and the internationalisation of trade have made proficiency in at least one foreign language essential for secretaries at almost all levels in all but the smallest companies. The ability to learn new skills, to work without supervision and to react flexibly to a changing business environment are also requirements whose importance have increased in recent years.

Predictably, a trend is apparent for employers to recruit secretarial staff with at least an upper secondary education. The converse of this trend is that the employment and mobility prospects of women with only the lower level general education/vocational education/apprenticeship qualification are worsening. This problem is particularly acute for younger women with lower-level qualifications. Older women with substantial professional experience do not appear to be as badly affected by this trend, to the extent that they have access to further training.

Continuing education

Surveys carried out in the 1980s documented the lack of understanding initially shown by employers of the need for high-quality training for secretaries and clerical employees confronted for the first time with the switch from typing to word-processing. However, evidence indicates that the effects of the shock of that sudden transition are now largely in the past. Almost all office employees today routinely work with personal computers. The skill of adapting to an upgrade of existing software, learning a new software package or a new operating system are some of a range of new skills which secretaries have acquired in the course of the last ten years. This process has been helped by more user-friendly software and

an increasing concentration and convergence within the software industry leading to a smaller range of products. Updating courses are, nonetheless, still needed by secretaries. The use of a sophisticated desk-top publishing package can most efficiently be achieved by attending a specialised course.

There is evidence that, in general, secretaries have broad access to short updating courses. In some countries, up to two-thirds of those surveyed had recently received some additional formal training. The evidence is more mixed concerning the degree of satisfaction with the opportunities offered by employers for improving secretarial skills. In particular, in England and France, secretaries express dissatisfaction. In addition, it does not appear that secretaries normally have access to employer-provided longer periods of training and development nor that they are offered day-release during working hours to upgrade educational qualifications.

There are also indications that female secretaries do not spontaneously participate in the training opportunities that are available. Part-time secretaries, and those with the fewest qualifications, participate the least. Even in Denmark, where participation in continuous education and training is encouraged by law and collective agreements provisions, and where training opportunities offered to office employees within the Labour Market Adult Vocational Training System and the Adult Education Centers are many, HK (The Union of Commercial and Clerical Employees) notes that "women do not make good use of continuing vocational training and career advancement opportunities". HK attributes that to the higher priority women give their family life and children and to employers encouraging men more than women to enter into continuous vocational training (HK/Danmark, 1996). In Switzerland, 80 per cent of female office employees declared that they had too much work to be able to undertake further training and 28 per cent that the training hours were not suitable for them (Curti, 1996).

SECRETARIES' CAREER PROSPECTS

Secretarial work has been characterised as a "female ghetto", a space almost solely occupied by women and one from which they find it difficult to escape. It has also been said that secretaries are "organisational isolates" meaning that they are segregated from the overall organisation's career structure. However secretaries also complain about the lack of career progression possibility within the secretarial occupation. Two questions are pertinent here. Firstly, to what extent is it common for secretaries to move laterally to non-secretarial jobs and, perhaps more importantly, to what extent are secretaries able to move vertically to positions of higher status, responsibility and rewards?

Obstacles to vertical mobility

The problems that women working as secretaries have in securing career mobility to higher level posts have three principal causes.

The first cause is common to many women in the labour force. Many women need to combine family responsibilities with the management of a career. Primarily because of additional responsibilities, a proportion of women work less than full-time hours, and their working lives are subject to discontinuities. They also incur discontinuities brought about by geographical relocation, as a result of a partner or husband's change of job. In an increasingly competitive labour market, such discontinuities constitute a serious handicap. This handicap is aggravated for women in secretarial occupations by the rapid development of technology which means that a career break equals a loss of skill.

The second cause is the nature of secretarial work itself. The secretarial role is a varied and demanding one. It requires specialised technical skill and a whole range of personal qualities. However, it remains a support function. Essentially, the secretary relieves the person or persons for whom she works of all routine tasks and distractions. The qualities that her boss prizes are those of efficient work organisation and carrying out of prescribed procedures. She rarely gets the opportunity to think creatively about the business in which she works; to contribute to strategic planning; and to make decisions which affect the direction of the business. Yet, these are the skills required if the secretary is to progress to the higher levels of management. Thus, the service function which the secretary fulfils keeps her in a ghetto of routine and relatively undemanding activity, even where the demands on her appear wide-ranging and to confer responsibility.

Traditional attitudes and stereotypes also act to limit secretaries' career opportunities. In many organisations, secretaries are simply not expected to, or seen as capable of, progressing in career terms. In addition to acquiring the required higher skills and qualifications, secretaries have to overcome an additional and considerable obstacle: that of prejudice. Prejudice may also be the main obstacle to their moving into neighbouring occupations where most of their skills and expertise would be relevant.

Internal and external mobility

The typical career structure for secretaries within organisations is short, most often involving no more than one or two levels. In countries with a strongly-organised work force, different grades of secretaries are recognised. The most common differentiation is between the secretary as such and the executive or senior secretary. In countries with a less-regulated labour market, the same job differentiation exists in practice with considerable salary differentials between the secretary and the "secretary/personal assistant", as this post is often known in

Anglo-Saxon countries. The executive secretary is better paid and enjoys more autonomy and independence in her work. While it is increasingly common for the secretary to work for a number of bosses, the executive secretary usually works for only one boss, most commonly a highly-placed manager or chief executive. It is still a widely-spread practice that the level of a secretary is determined by the seniority level of her boss (rather than by what she has to do). Traditionally, a secretary accompanied a manager throughout his career and progressed in her own career in that way.

Progression from secretary to executive secretary might still represent today a career ladder of sorts for women in secretarial work. However, it is also clear that employers increasingly seek to appoint executive secretaries from applicants who have secretarial experience at a lower level as well as high level academic and/or vocational qualifications. Furthermore, where figures are available, they show that the number of executive secretary posts is much smaller than the number of secretarial posts available (about one against seven, according to data for France) and that turnover is very low. At best, even where women at the level of secretary have the requisite qualifications, promotion from secretary to executive secretary will only be possible for a small minority. All the available evidence points to there being only severely limited opportunity for progression within the occupation of secretary for the vast majority of secretaries.

The internal mobility ladder within the firm or organisation ought also to offer a prospect of mobility out of the secretarial position. Such occupational mobility would help to overcome the problem of poor promotion prospects of women who have low-level qualifications. The company which was confident of retaining the employee by offering internal mobility opportunities might be more willing to make a serious investment in the education and training of a secretary. There is, however, little evidence that such opportunities are widespread or even available at all in the private sector. Secretaries may not even appear in the formal career structures and organisations are not often seen to develop an overall development and training plan for the occupation. In some countries, there appear to be somewhat better career prospects for female secretaries in the public sector.

Truss (1993) finds in her study of a sample of secretaries in France, England and Germany that secretaries themselves were "not very optimistic" about possibilities of promotion out of secretarial occupations. However, Truss found that their expectations of mobility were actually higher than the reality as reported by the sample of firms for which they worked, as "only five organisations out of a total of 16 were able to think of just a small number of cases over the previous year". The 1996 survey of English secretaries published by Reed Employment (a British employment research firm) found that only 7 per cent of the secretarial work force in the firms in their sample had been promoted to non-secretarial jobs over the last four years.

While, or perhaps because, there is relatively little upward mobility for women secretaries, there appears to be considerable movement of secretaries between employers. Women secretaries seem to move between employers to improve their prospects, pay and conditions as a way of compensating for the lack of a formal career ladder. Secretaries also frequently move from one secretarial position to another with the same employer.

On the whole, there is little indication that there has been any change in the rather small amount of mobility to higher level posts from secretarial positions. While the post of executive secretary is a hypothetical career goal to which secretaries with higher level qualifications can aspire, executive secretaries remain a small group within secretarial work (at the most just over 10 per cent of all secretaries). There are no signs that this proportion has increased over the last 10 years. Indeed, there are indications that the proportion may be decreasing somewhat. In fact, there is evidence in many of the country studied that female secretaries' prospects of upward mobility are deteriorating.

THE NEED FOR ACTION AND PRIORITY AREAS

Poor career prospects are a major source of dissatisfaction for secretaries who seem to enter the occupation with much higher expectations. Their dissatisfaction is further aggravated by the fact that, although secretaries have upgraded their skills, and improved the scope and quality of their work over the last 10 years, these real productivity gains have not been recognised by increased status and earnings.

It would be misleading to claim that secretaries are unique in experiencing a lack of recognition of increases in their productivity in terms of increases in earnings and/or a rise in occupational status. The last decade has witnessed an intensification of the demand shift on the part of employers from low-skilled to high-skilled labour with the result that there has been an oversupply on the labour market of individuals with low- and middle-level skills.

In the area of office work, it appears that a proportion of such displaced women have succeeded in acquiring the upgraded skills which have made it possible for them to switch from routine clerical to secretarial work. This movement, together with an overall upward trend in female labour force participation, has kept the supply of secretarial skills high and provided little incentive for employers to increase status and/or earnings in order to hold key secretarial staff. While this situation is also common to other occupational groups, there are a number of ways in which the secretarial position makes it especially difficult for women in this occupation to achieve recognition and reward for their work.

The following reasons have been put forward to explain the particular difficulties facing women in secretarial work in achieving recognition of their contribution in the workplace:

- Secretaries frequently work on a one-to-one basis with their employer and/or have little contact with other secretaries. This makes it difficult to organise to defend the employment interests of secretaries and also makes job comparisons difficult.
- Secretaries' status is traditionally "contingent" upon the status of her employer/boss. The continuing centrality of the support function in secretarial work creates a problem for the grading of secretarial work independently of the grade of a secretary's employer/boss.
- Many women find it hard to participate in employee organisations unless paid working time is allowed for such activities by employers. This practice is the exception rather than the rule in OECD countries.
- The secretary's role is diffuse and varied. The levels of skill deployed are much less visible than in other service sectors and manufacturing jobs. Job evaluation is thus more difficult.

From the analysis in this chapter it is possible to identify a number of priority areas and measures likely to bring an improvement in the condition and prospects of secretaries.

Better information on the actual tasks and skills required in secretarial work

There is very insufficient knowledge of what secretaries actually do. The fundamental change in the secretary's role and contribution to the organisation have not been well-documented or recognised by employers. Much good secretarial practice is "invisible" except when left undone or badly done. As a consequence, recognition that a secretary is doing her job well is often more difficult to achieve than in other occupations. This lack of recognition contributes to the failure of secretaries' earnings to keep pace with those of other comparable groups.

Action is needed to ensure that employers understand the range of tasks and services that the secretary performs and the nature of her contribution to the organisation. Clear descriptions of the skills required at different levels of secretarial work can then form the basis for salary negotiations, promotion and career and skill development. Efforts to promote greater transparency concerning the skills/qualifications needed for future secretarial employment and for promotion and mobility need to be a primary focus of efforts to improve the status and remuneration of secretaries.

There are examples of some large employers initiating such action. In some countries, it is expected that the current difficult business climate will induce more companies to draw up detailed job descriptions and competency assessments for secretaries. The increased use by employers of an annual appraisal procedure for all employees could also lead to better definition and recognition of secretaries' skills. Such information would be particularly useful as a guide for the provision of upgrading courses when secretaries with low level qualifications need upgrading to meet new challenges.

Individual employers undertaking such initiatives are a small minority. Employee organisations along with professional associations are the most likely advocates for forcing such change to actually take place. In the Netherlands, two initiatives were launched in the early 1990s to try to set out at national level detailed job descriptions for secretaries graded by level of responsibility. One of these initiatives was initially promoted by a trade union, the Commercial Service Union, the other by LOSV, the federation of secretaries' associations. In both cases, the aim was to set out more clearly the range and different levels of skill of the secretarial occupation as a starting point for wage bargaining or demands for greater professional recognition. Both groups identified a number of occupational profiles (four in the first case, five in the second) and designed a career ladder. These results had a considerable impact, particularly on secretaries and their associations. The two sets of occupational profiles were subsequently used to define the attainment targets for the secretarial courses in public education (Tijdens and Baaijens, 1997).

Skills assessment as a basis for mobility

At present, in most cases, suitability for promotion is based largely on a person's work experience. If employers developed more clarity about skills requirements, secretaries would be better-informed about the skills they need to acquire to progress within the organisation

The federal government in the United States has supported the development of an automated system called "Career Counsellor" based on 67 clerical/technical occupations (of which one is secretary) and which allows the user to view the tasks and competencies critical for job performance in each of the 67 occupations. Occupations are clustered on the basis of competency importance (four clusters) and tasks importance (three clusters) (see Box 3.1). The occupations in each cluster are more similar in terms of competency or task requirements. Therefore, career transitions may be easier from one occupation to the other in the same cluster. Moreover, each of the competencies is linked to specific training/developmental activities for facilitation of skill enhancement and movement

Box 3.1. **Career development**

Competency-based occupational clusters and associated competencies

Cluster 1	Cluster 2	Cluster 3	Cluster 4
6 occupations *of which:*	16 occupations *of which:*	16 occupations *of which:*	22 occupations *of which:*
0072 Fingerprint identification	0203 Personal clerical and assistance	0335 Computer clerk and assistance	0344 Management clerical and assistance
0305 Mail and file	0309 Correspondence clerk	0392 General telecommunications (technical)	0361 Equal opportunity (technical)
	0318 SECRETARY	0394 Communication clerical	0503 Financial clerical and assistance
	0326 Office automation clerical and assistance	0679 Medical clerk	
	0986 Legal clerk and technical	1411 Library technician (technical)	
	1087 Editorial assistance	1702 Education and training technician (technical)	
Competencies (associated with each cluster)			
Stamina	*Reading*	*Reading*	*Reading*
	Writing	*Writing*	*Writing*
	Speaking	*Speaking*	*Speaking*
	Listening	*Listening*	*Listening*
	Customer service	*Customer service*	*Customer service*
	Organisational awareness	*Organisational awareness*	*Organisational awareness*
		Managing and organising information	*Managing and organising information*
		Decision-making	*Decision-making*
		Reasoning	*Reasoning*
Clerical/technical basic (associated with all four clusters)			
Integrity/honesty	*Conscientiousness*	*Technical competence*	*Interpersonal skills*
Flexibility			
Self-esteem	*Teamwork*	*Memory*	*Self-management*

Source: Rodriguez *et al.* (1996), Figure 6.

across clusters. The system will serve as an additional source of information in career planning.

Education and further training

Clear career routes for secretaries and national agreement on a transparent and coherent set of high-level (tertiary level) qualifications for secretarial work could assist in the process of improving understanding of the secretary's contribution and role. There is evidence that where such qualifications exist and are taken by a substantial proportion of young women, holders take on a wider range of tasks and greater responsibility than in countries where low-level qualifications are the norm.

Building a standardised qualification structure

A number of sources suggest that most employers have little understanding of the secretarial qualifications on offer. Such lack of understanding may not be surprising in those countries where no national standards are set and training institutions implement their own standards. The training market for secretarial courses is enormous. There may be a myriad of competing private and public institutions.

The case of the Netherlands referred to above can be taken as an example. In the Netherlands private institutions dominate the market for secretarial courses (public vocational schools introduced secretarial courses in the late 1960s). The 1995 edition of a guide on private education lists no less than 43 different institutions that provide secretarial courses. They are mainly large institutions, some of whom have several branches throughout the country, while many of the smaller institutions may have been left out. Each institution is free to set out its own entry requirements and course levels. In January 1996 the Adult and Vocational Act (WEB) came into force with the aim of establishing one coherent, transparent structure for all qualifications. ECABO, the national vocational education body, was given the task of creating a qualification structure for secretarial training. ECABO was able to use the occupational profiles jointly developed by the unions and professional associations. It defined attainment targets for four qualification levels: office clerk, junior secretary, secretary, executive secretary. Attempts are being made to incorporate private institutions in the accreditation structure. This initiative should bring much greater transparency in an area which badly needed it (Tijdens and Baaijens, 1997).

The United Kingdom provides a different example. Secretarial training has traditionally been narrowly-conceived, taken place separately from general academic education and been administered by different accredited bodies. Most secretaries are recruited at no more than General Certificate of Secondary Educa-

tion or O'levels, plus mainly typing qualifications. In that context, it might have been thought that the development of business administration certificates (NVQs/SVQs) would be a better guarantee of secretaries' having the qualifications required for their new roles. The take up seems, however, to have been very low in the first years. The lack of popularity of these certificates with potential students and employers may be attributed to several causes: lack of awareness, lack of relevance of the occupational standards, absence of change in the way employers identify desirable secretarial skills (Giles *et al.*, 1996).

Raising the level of initial vocational training

Given what we know about changes in the secretary's role and responsibilities during the last ten years and the direction of future developments, most commentators consider that the low-level education plus specialised skill-training model no longer enables young women to compete for the opportunities now on offer in secretarial occupations. In France, young people with low level qualifications which were formerly acceptable on the labour market, are already effectively excluded from secretarial jobs. The trend may be more difficult to detect in Anglo-Saxon countries with less transparent qualification structures. Nevertheless, there too, clear signs are reported of employers seeking graduate level candidates when recruiting new secretaries.

Several countries which already had relatively high levels of initial vocational education for secretaries have recently raised this level still further. In Denmark the basic training for commercial and clerical employees (HG) was extended from 3 to 4 years in August 1996. The new "2+2" model (2 years of theory and 2 years of training) will contribute to lifting clerical employees up into the "middle-zone" of administrative positions (HK/Danmark, 1996). The structure and content of vocational education and qualifications were also reformed in Finland in 1996. As a result, most of the secretarial education will be given in the future as higher-level education in the polytechnics/AMK institutions (equivalent to the German *Fachhochschulen*). Qualifications will be acquired through a modular course structure combining theoretical work and basic training. Ten previous different specialisation lines of the basic programme for business administration will be combined into one qualification called Bachelor in Business Administration by the end of the decade. This shift of training of secretaries from upper secondary level to higher-level education is expected to improve the position of secretaries in the labour market (Kolehmainen-Lindén, 1997). The question of introducing initial secretarial training at a higher level is being debated in France also. There are currently seven educational degrees at national level. The highest degree (2 years at higher vocational education level) is the one leading to highest employability today.

Guidance and career advice

The need for better guidance and career advice for women/girls making the secretarial occupation choice is increasingly recognised. In Switzerland, the Swiss Association of Clerical Employees (SSEC) has recently produced a publication to help secretaries take responsibility for their own career. The publication includes information for developing a dynamic career plan as well as advice on how to combine career and family life (Curti, 1996).

Guidance is particularly important in those countries where the production of qualifications remains predominantly at a low level in order to discourage young people from investing in a level of education and training which will no longer be appropriate for secretarial work in the decades to come. There are at least three reasons to encourage young women to attain higher-level professional qualifications before entering secretarial work. Firstly, career progression within the secretarial field is likely to be facilitated by higher level qualifications. Secondly, women holding higher-level qualifications are more likely to receive additional training while in employment. Thirdly, current uncertainty concerning the future roles of secretaries argues for a qualification which allows its holder to switch to other occupations after a brief period of retraining. It is generally agreed that such retraining is greatly facilitated by a level of education equivalent to at least university entrance level.

Increasing real opportunities for training

If secretaries want to take individual action to help themselves, the main areas in which they can do so are education, training and updating. Acting on an individual level, secretaries are more restricted in what they can accomplish to improve their working conditions and career prospects. The main avenue for skill improvement appears to be that of taking advantage of the free provision of higher-level professional education and training that is widely on offer in OECD countries in order to enter secretarial work at a higher level. The upgrading of initial qualification levels should also lead to higher returns on subsequent investment in the upgrading of skills, either by individuals or by employers.

Government incentives to the work force to invest in their own skills upgrading have been shown to provide significant social returns. While such incentives most frequently target those out of employment, the extension of the availability of free education and training to all adults is a powerful way of providing incentives to individuals to invest in their own skills. There is evidence from the surveys that women secretaries do greatly benefit from such provision where it is available. Benefits are particularly great where government encourages and partly subsidises companies to release their employees during working hours to attend updating courses. Denmark has this policy for all employees classified as

unskilled or low-skilled. If access to updating is not provided during working hours, the constraints of family responsibilities apply equally to the take-up of free, publicly provided courses. Difficulties of travel, work overload and child care problems often all combine to prevent women from taking advantage of such opportunities.

More imaginative ways of creating access to such training opportunities need to be investigated. Multimedia CD-ROM, courses provided on public broadcasting networks, and other forms of information technology-assisted distance learning processes could all be of particular benefit to women who have difficulties attending conventional courses of study. Secretaries are particularly well-equipped in information technology skills to be able to benefit from this type of distance teaching and learning.

The public sector as a model of promotion for secretaries

A substantial number of all secretaries, between one quarter and one third in the countries surveyed, work in the public sector. As governments in OECD countries are committed to improving working conditions and career prospects for women, we can expect to see these principles first promoted within the public sector. It is also recognised that the setting up and maintenance of active and effective employee organisations is facilitated by the ethos and organisation of public sector employment.

Although the picture is not complete, a number of country reports describe actions taken on behalf of women secretaries and clerical workers employed in the public sector either by central government or local government agencies. Indeed, the public sector may be the only instance where examples of initiatives to improve the career prospects of secretaries can be found although this is far from systematic.

The Danish report (HK/Danmark, 1996) indicates that office employees in the municipal sector in Denmark have access to a highly developed system of continuing vocational training. All municipal employees must receive continuing vocational training according to the collective agreement. The basic training course *Kommunon* takes 450 hours in total and includes core subjects and optional subjects aimed at a specific specialisation. All subjects are concluded by an exam. The courses are taken during working hours and the students receive full pay. *Kommunon* gives access to diploma studies at the Danish School of Public Administration designed for administrative managers and case officers. Sixty nine per cent of the school's students in 1996 were women (90 per cent in the social counsellor section, 55 per cent in the tax accountant section).

A clerical occupation should no longer be a "dead-end" career in the United States Federal Government. The experience of a secretary or clerical employee is,

in fact, often considered a qualification for an administrative occupation and the majority who enter as a federal clerical employee do eventually move up into other higher paying occupations. The most commonly used strategy is training for higher level work while in a current job. A second strategy is the "bridging" of positions for experience (moving secretaries into target higher-level occupations at the trainee level). The study undertaken by Rodriguez *et al.* (1996) showed however that clerical and technical employees are not highly satisfied with their opportunity for promotion or movement into other jobs. The study recommended the development of "career lattices" in complement to "career ladders" to assist federal employees in their career planning.

The United Kingdom report (Giles *et al.*, 1996) refers to an interesting initiative of the Kent County Council. The Council has successfully introduced a new system of work organisation, self-managed secretarial support work groups, as a response to new technology and budget reductions. This innovation has created more equality of opportunity in relation to development of new skills and other development opportunities, greater recognition of secretarial support staff as an integral part of the organisation and empowerment. This example shows that the development of the content of secretarial work to incorporate greater autonomy, responsibility and specialised skills should also be a policy objective contributing to raising the status and increasing the bargaining power of secretaries in the workplace.

Pressures to reduce or keep the tax burden constant are likely to lead to greater constraints on the public sector in the future. The franchising of public sector activities to privately-run companies is widespread in the Anglo-Saxon countries and may well spread to other OECD countries as pressures to cut costs and improve efficiency increase. It seems likely that public sector employment will diminish in importance in the future and that the proportion of female secretaries working in the private sector will increase.

While programmes and initiatives of the upgrading or bridge-building type may offer a model and many useful lessons for other employers, it is not easy to believe that, in the current climate of down-sizing and cost-containment, private sector employers are likely to implement such programmes very widely. Strong employee organisation and professional associations may be needed to assert the need for new working practices into the private sector.

The crucial role of employee organisations and professional associations

Strong and effective trade unions can have an important role to play in helping to win recognition for the skills and increased levels of productivity achieved by secretaries. Unions can also negotiate with employers to put in place agreements on flexible working hours which can be of benefit to employees with

care responsibilities. They can also press for vocational training access to be included in collective agreements.

The level of unionisation of secretaries appears to be generally rather low with a few exceptions (including Denmark and the Netherlands among the countries surveyed). The isolation of the secretary in the company, her highly dispersed responsibilities and her identification with the work of a manager or group of managers rather than with a group of fellow employees, make it particularly difficult for secretaries to organise in the workplace. This difficulty is increased when a high proportion of secretaries work part-time.

Public sector employees are more likely to be union members than those in the private sector. This trend applies in particular to employees in clerical and secretarial positions. The example of Denmark however shows that even where there is a high level of unionisation in both sectors, it is more difficult to make gains for clerical workers in the private sector.

In some countries unions are organised on the basis of occupational categories. In those countries unions represent large bodies of office employees and they can make a broader input. In Denmark for example, HK makes an input into the planning and development of initial and continuous education and training for all office employees including secretaries. On the other hand, in countries with a high degree of unionisation by sector and industry, it is harder to defend secretaries' occupational interests. Occupationally-based unions seem better suited to meet the needs of secretaries who are found in virtually all sectors and industries.

As this whole section indicates, there is also great scope for professional associations of secretaries to play an active role in supporting and promoting the occupation. Effective professional associations will defend the interests of all secretaries not limiting themselves to the minority who hold executive secretarial positions.

The reports from France and the Netherlands illustrate the many ways in which secretaries associations can help in the promotion of the occupation. In France, professional associations of secretaries have long existed but largely as a forum for meeting and discussion. Recently, however, a national association has been set up with the aim of developing better understanding of secretarial work and associated skills and to encourage and foresee development of the occupation. It now seems likely that, for the first time, secretaries will be represented (by their national professional association) on the Committee of the Ministry of Education which advises on the curriculum of secretarial qualifications offered in schools (Fournier and Liaroutzos, 1996). In the Netherlands, the existing secretaries' associations set up a national platform or confederation in 1990. The role that

this platform has played in developing occupational profiles in co-operation with trade unions was discussed earlier in this chapter.

Equal opportunity framework conditions

Because secretarial work is so heavily affected by technological change, periods out of the work force constitute a serious loss of skill for the women concerned. Not only do they lose their facility with current technology but they also lose out on the opportunity to become familiar with technological change. They are at a disadvantage when seeking to return to the labour market. As women frequently have family responsibilities, spells out of the labour force can often only be prevented by access to care facilities, or the sharing of responsibility with a partner or relative.

Secretaries' pay levels are insufficient to allow them to pay the full cost of child care. Furthermore, as it is rare that in any given establishment there is a sufficient concentration of secretaries to ''warrant'' employee-subsidised child care, they are considerably less likely to receive this than other female workers, such as nurses. Publicly-subsidised care facilities both for children and for care-dependent adults are particularly important for women clerical and secretarial workers whose earnings are not usually sufficient to cover the cost of unsubsidised care. Only a few OECD countries offer widely-available subsidised care for working parents. Entitlements to parental leave for both mothers and fathers can also make an important contribution by distributing more equally in a couple the damage caused by a career break. An OECD study (OECD, 1995) has shown that parental leave is becoming more widely available for OECD countries but that use and conditions of leave vary greatly across countries, particularly for fathers.

Solutions to these issues have to involve concerted action of those in the workplace and also those responsible for the wider social framework. This implies the need for both employers' family-friendly policies and government measures that offer a wide range of opportunities for women and men.

THE FUTURE OF SECRETARIAL OCCUPATIONS

The future expansion of secretarial work is uncertain. Female secretaries do not appear to face increased competition from men but the occupation has not grown in recent years and supply has probably exceeded demand. Greater pressure on companies and the public sector to cut costs could lead to routine secretarial functions being reallocated to other administrative employees. There seems no doubt that the secretarial occupation will survive. However, the secretary will increasingly take on tasks formerly carried out by junior managers and the skills required will be significantly higher than in the past.

Possible future scenarios

There are at least two possible future scenarios for secretarial occupations. One view is that in the future most traditional secretarial functions will disappear or be taken over by other groups of staff. There is a prediction that the secretarial occupation will be reduced to a small number of people at the two extremes of the occupational structure. Another view regarding the future is that there will always be the need for staff to provide secretarial and clerical support but that higher-skill levels will be required in all areas of secretarial work.

The second scenario described above appears most likely to prevail. Earlier in this chapter it was pointed out that the secretary carries out routine and non-routine tasks that would otherwise devolve upon a manager or other employee. By so doing, she ensures that the manager's time is spent on more productive tasks. New technology will extend the range of tasks that can be delegated to a secretary. In the future, she could take a more pro-active role in identifying these tasks and working out ways in which she could extend her range of action. In this way, an efficient use of labour could be developed which is cost-effective for the organisation. As long as the secretary is able to perform part of the manager's work at lower cost, it is likely that she will have an important role to play in any organisation of the future. However, she may need to demonstrate her value to the organisation more visibly than before by being innovative and pro-active; by being highly flexible in the range of tasks that she performs; and by being educated to a higher level than in the past. It is likely (and desirable) that her job title will change to reflect the fact that she may provide services for a number of managers or a whole team.

Still another scenario foresees opportunities for women to become highly-skilled users of new technology and to operate as entrepreneurs providing services to businesses. This scenario raises the difficult question of how important it is for a secretary to be office-based. Many single administrative functions can now be carried out in a variety of locations, including the home, if the technology and the data links can be provided. For example, telephone banking employees who provide a seven-days a week, 24-hour service, can work from home. Administrators can arrange to work part of their time at home because their work can be planned in advance. The secretary may be different. She is, among other things, both team anchor and crisis manager, the one who holds the team together when the boss is away or when emergencies arise. It is not easy to envisage comparable services being provided at a distance from a business's premises by a group for different companies. However, there may be scope for the development of certain specialised services (text production, research, desktop publishing) to be provided centrally by groups of secretaries in response to the needs of small and medium-sized businesses.

Technological developments

Many technological developments are now beginning to affect secretarial work. Multi-media forms of communication are increasingly wide-spread. Secretaries can expect to be required to master the technology to produce a communication on CD-ROM integrating video clips, interviews and paper-based information. The use of the Internet is growing at an even faster rate. In small and medium-sized firms in particular, secretaries will be expected to master the skills of creating and updating a home-page as well as using the Internet for research and information retrieval. Increased Internet use will increase the already high demand for secretaries to acquire good foreign-language skills, principally English. Over the next decade, advances in speech recognition and micro-electronic technology can be expected to routinely permit the production of text directly from speech without the need to key in individual characters using a keyboard. This change will not signal the end of the keyboard, since editing and formatting will still be important tasks best undertaken by using the keyboard. It is therefore not expected that the development of speech recognition technology will have a major impact on the secretarial role.

The need for continuing learning will be greater than in the past. The effects of career gaps/periods out of the work force will probably be even more damaging to secretarial careers than at present in terms of remaining knowledgeable about the latest developments in communication technology. Communications will continue to become more flexible and information sources will continue to multiply. Secretaries will be expected to master the new communication and information sources and to be pro-active in devising innovative and cost-effective ways of using them.

Restructuring

It seems highly likely that in OECD countries the business climate will become even more competitive with continuing pressure on businesses to cut costs by restructuring. Because of the public's increasing reluctance to fund higher government spending, public sector employment in many OECD countries is likely to be subjected to similar processes. The evidence presented in the country reports does not, on the whole, show very much growth in secretarial employment over the last five or six years. It cannot be assumed that secretarial employment will expand or even remain at its present level.

A policy-oriented research agenda

This chapter only offers tentative replies to the questions that were raised. Inevitably, there is much that we still do not fully understand about the factors

shaping the development of the secretarial role and about the way technology and changed work organisation might affect it in the future. Not enough is known about the extent, nature and quality of employer-provided updating and retraining offered to secretaries. Information on mobility and flexible working is also scarce. There is considerable need for research on the impact of mobility and flexibility on job security as well as career advancement in the secretarial occupations. More needs to be known about potential new career routes for secretaries in information technology management and desk-top publishing and the prior qualifications and experience required.

One of the aims of this chapter has been to highlight the main challenges to the future of the occupation and at the same time to highlight questions and areas of research for the future of women's occupations and careers. Perhaps, the greatest challenge will be to diversify women's employment and career possibilities in these occupations in the face of a constricting demand for currently-recognised and visible secretarial services. The invisible contributions may well remain unrecognised unless some of the innovations discussed in this chapter or the advocacy of professional bodies bring them to the forefront for policy-makers and employers.

REFERENCES

CURTI, M. (1996), ''Analyse des professions à prédominance féminine. Étude de cas: les métiers de bureau en Suisse'', OFIAMT, Berne.

FOURNIER, C. and LIAROUTZOS, O. (1996), ''Le secrétariat en France aujourd'hui'', Centre d'Études et de Recherches sur les Qualifications (CEREQ), Marseille.

GILES, L., LA VALLE, I. and PERRYMAN, S. (1996), ''A new deal for secretaries?'', Report No. 313, Institute for Employment Studies, Brighton.

GRIMSHAW, D. and RUBERY, J. (1997), ''The concentration of women's employment and relative occupational pay: a statistical framework for comparative analysis'', Labour Market and Social Policy Occasional Paper No. 26, OECD, Paris.

HK/DANMARK (1996), ''A study of clerical and secretarial occupations in Denmark'', Copenhagen.

KOLEHMAINEN-LINDÉN, S. (1997), ''Occupational and career opportunities of women in female-dominated occupations. Case studies on caring occupations in the sector of elderly care and secretaries in Finland'', Labour Policy Studies, No. 173, Ministry of Labour, Helsinki.

OECD (1995), *Employment Outlook*, Paris.

OECD (1996), *Trends in Public Sector Pay in OECD Countries*, Paris.

PRINGLE, R. (1993), ''Male secretaries'', in C.L. Williams (ed.), *Doing ''Women's Work'': Men in Non-traditional Occupations*, SAGE, Newbury Park, London, New Delhi.

REED EMPLOYMENT (1996), ''Responsibilities of United Kingdom secretaries have escalated'', Press release of 29 August 1996 by Reed Employment, London.

RODRIGUEZ, D.A., USALA, P. and SHOUN, S. (1996), *Occupational Analysis of Federal Clerical and Technical Occupations*, U.S. Office of Personnel Management, Washington.

STEEDMAN, H. (1997), ''Trends in secretarial occupations in selected OECD countries, 1980-95'', Labour Market and Social Policy Occasional Paper No. 24, OECD, Paris.

TIJDENS, K. and BAAIJENS, C. (1997), ''Secretaries in the Netherlands, 1980-1995'', Working Document No. 40, Ministry of Social Affairs and Employment, The Hague.

TRUSS, C. (1993), ''The secretarial ghetto: myth or reality? A study of secretarial work in England, France and Germany'', *Work Employment and Society,* Vol. 7, No. 4, pp. 561-584.

PRIMARY SCHOOL TEACHING: A STORY OF UNACHIEVED EQUALITY FOR WOMEN*

Since 1990, the OECD has examined trends in equal opportunity, work conditions and career perspectives in the field of education in OECD Member countries. In 1992, the OECD developed a series of education indicators, which compares the various education systems in its Member countries, with the emphasis on human resources (OECD, 1997*a*). In addition, as part of its activity on women in the economy (OECD, 1994*c*), the OECD compared the situation of women in education to women in the labour force in general.

Drawing from these studies, this chapter examines the feminisation of the teaching profession, in terms of the degree to which it has been achieved and is in the process of being achieved, and looks as well at the career prospects of women in the field. In the majority of OECD countries, women are concentrated in primary education, and more particularly, pre-primary. This analysis thus focuses on primary school teachers, in the larger context of all levels of teaching, so as to highlight the differences in career opportunities at each level.

This chapter shows the reasons for the high percentage of women, albeit uneven and restrained at certain levels, in the teaching profession in OECD Member countries. It then focuses on current demographic trends, public expenditure and employment and unemployment, so as to determine future strategies to promote both equal opportunity for women and the effective functioning of education systems.

CONTEXTUAL BACKGROUND

Cross-country comparisons of women in the teaching profession are useful to the extent that they are placed in the country-specific context of educational

* This chapter draws from a background paper by John Townshend, consultant, edited by Leslie Limage, editorial consultant for the publication.

structures or school systems; public/private mix of finance and decision-making; diplomas and training required to teach at a particular level or obtain promotion.

Different structural approaches to educational provision and the nature of the employment context – public/private, civil servant status/determinate period-contract, centralised/decentralised governance, finance, administration – have an impact on women's (and men's) career prospects in several ways: *i)* qualifications required to teach at each level; *ii)* possible mobility from teaching one age group to another and relative advantages of doing so; *iii)* degree of feminisation of teaching for each age group; *iv)* degree of feminisation of support staff and administration for school units.

Education systems: different patterns of levels and structures

Education systems across OECD countries vary in many structural ways. According to the International Standard Classification of Education (ISCED), which is used to compile internationally comparable statistics on education, educational programmes are classified by levels, including: pre-primary, primary, lower secondary, upper secondary and tertiary. A systematic presentation of the entire structure of all levels and forms of education appears in *Education at a Glance – OECD Indicators* (OECD, 1996*a*) on a country-by-country basis. For the purposes of this discussion, a selection of educational systems representative of the major institutional frameworks is included in the Appendix to this chapter.

The length and type of first-level or primary schooling differs across countries which may affect the ''quality'' of career in teaching at this level. In most OECD countries, children are in primary education between the ages of six and eleven/twelve. But a number of countries offer entry at age 5, for example, to a *kindergarten* in the United States, an *infants class* in the United Kingdom or some other non-compulsory class within the primary school. The French model provides non-compulsory, free and generalised pre-primary education in separate nursery schools, *écoles maternelles*, the last year of which is devoted to preparing for compulsory schooling. In the Danish model, basic schooling includes primary and lower secondary in a nine-year compulsory programme and offers optional pre-primary education. These three models typify arrangements in other OECD countries with primary or a combination of primary/basic/lower secondary lasting from 5 to 9 years according to national or state structures (see Appendix to this chapter).

Governance, finance and administration: impact on the teaching profession

Educational systems in OECD countries can be grouped in the broadest sense as either federal/largely-decentralised and highly-centralised. Thus, all factors which affect the teaching profession and the educational experience of children and adults are firstly defined by this distinction. Federal countries such as

Australia, Canada, Germany, Switzerland, the United Kingdom and the United States are generally characterised by the fact that decisions concerning governance, finance and administration are made at state, provincial and local levels (with varying mixes across and even within countries). In some federal countries, such as the United States or Canada, the education systems vary greatly from one state or province to another and differences or disparities may be very significant even within a single state or province at local level. As federal systems also usually imply more funding from state and/or local level than do centralised systems, the potential for major disparities of all conditions for teaching and learning is great. Collective bargaining in federal countries may also be highly-decentralised although national teacher unions or professional bodies exist as federations of local, state or regional ones. The capacity for a federal government to have a major impact on the conditions of teaching or learning is constrained by this major structural governance, finance and administrative context. On the other hand, highly-centralised countries with highly-centralised education systems are often viewed as potentially in a better position to re-distribute resources for greater equality of opportunity for both teaching and learning. Country experiences reveal, however, that all regional and local disparities are not necessarily eliminated by a highly-centralised approach. And even in highly-centralised countries, decisions concerning primary level education (*e.g.* staffing) are often made at the local level. The OECD indicators of education systems are established at national level and do not allow for any sub-national distinctions.

Public versus or alongside private schooling

Within the broad context of a centralised or decentralised education system, the issue of the mix of public and private schooling further distinguishes OECD countries and the conditions for teaching and learning. The impact of the mix depends on the extent to which public funding and regulations apply to private institutions as well. At the level of compulsory schooling and more specifically, primary schooling, the focus of this chapter, there is a fairly straightforward continuum among OECD countries, ranging from the United States in which no public funds are allocated to private schools, to France or Spain, in which contractual relations with the State by private, largely confessional schools mean that public funds are transferred to private schools for specific purposes.

The OECD education database collects data separately for public and private institutions. In most countries, the private sector does not play a significant role. In Belgium and the Netherlands, however, it represents the majority of teachers and pupils at primary level, and in a number of other countries, a sizeable share. This is the case in Australia and Spain but to a lesser extent in Denmark, France, the United Kingdom and the United States.

Single-sex versus co-ed schools

In OECD countries, career prospects for women in public or private schools are greatly influenced by the general participation of women in the labour force and socio-cultural attitudes concerning women and employment. For example, in the few OECD countries in which women do not dominate primary schooling, at least at the lower levels (see below), more women may be found teaching in single-sex private schools. Frequently, these schools are also religious. The intent in this context, however, is further segregation of both girls and women along prevailing socio-cultural lines rather than equality of opportunity goals.

The post World War II effort across OECD countries to expand and democratise educational provision did not necessarily involve the elimination of all single-sex or private schools. On the contrary, OECD countries (OECD, 1994*b*) approached expansion and democratisation in their own ways. There was nonetheless a movement towards co-education at all levels of schooling, and above all, at primary level. Many OECD countries, however, did not succeed in introducing or extending co-education until the early 1970s. Interestingly, the private and more selective schools in countries such as the United Kingdom and France were often not co-educational, while public school policy aimed at gender-inclusiveness through co-education.

Contractual context

Another major factor in the quality of conditions of work and women's career prospects in education is the contractual arrangement. This is in part related to the decentralised versus centralised nature of education systems and to the public and private schools distinction. In a number of OECD countries, teachers are civil servants and enjoy the improved and stable conditions of employment associated with public service. On the other hand, many decentralised countries such as Australia, the United Kingdom and the United States recruit teachers at local level with varying conditions of employment and a much lower degree of job security. In the latter countries, many more women are employed on a part-time or yearly contractual basis. Even in countries where teachers are largely civil servants more and more auxiliary teachers are being hired on temporary contracts to meet short-term needs or to avoid long-term solutions to near-crisis situations in ensuring that children receive the obligatory number of hours of schooling defined by law in OECD countries.

EMPLOYMENT OPPORTUNITIES FOR TEACHERS

Education is a major source of employment, not only for teachers but in a range of other occupations such as auxiliaries, canteen staff, secretaries, adminis-

trative officials and non-teaching educational professionals (Table 4.1). On average for OECD countries in 1995, employment in education represented 5.4 per cent of the employed population. Primary and secondary teachers represent half of this total (2.9 per cent) with tertiary education adding another 0.6 per cent. Figures for teachers in primary and secondary education show a surprisingly wide range across OECD countries, from a low 1.7 (Korea) to a high 4.2 per cent (Hungary) of total employed population. The range for tertiary education is still

Table 4.1. **Employment in education, 1995**

Percentage of total employment

	Teaching staff			Educational, administrative or professional support personnel and other support staff	All educational personnel
	Primary and secondary education	Tertiary education	All levels of education combined (including early childhood education)		
North America					
Canada	2.1	1.3	3.5	0.7	4.2
Mexico	3.0	0.5	3.8	1.5	5.3
United States	2.3	0.7	3.2	4.0	7.2
Pacific Area					
Japan	1.8	0.6	2.7	0.7	3.4
Korea	1.7	0.5	2.3	0.7	3.0
New Zealand	2.3	0.6	3.5	2.4	5.9
European Union					
Austria	3.2	0.7	4.2	..	..
Belgium (Flemish)	4.1	0.7	5.3	1.1	6.4
Denmark	3.2	0.4	4.3	2.8	7.1
Finland	..	..	4.0	1.9	5.9
France	3.1	0.6	4.2	..	4.2
Germany	2.1	0.8	3.5	..	..
Greece	2.8	0.4	3.4	0.2	3.6
Ireland	3.4	0.7	4.5	..	..
Italy	3.8	0.4	4.8	1.1	5.9
Spain	3.6	0.7	4.7	..	..
Sweden	3.5	0.7	4.6	..	..
United Kingdom	2.8	0.3	3.2	..	..
Other OECD countries					
Hungary	4.2	0.5	5.7	2.8	8.6
Turkey	2.2	0.2	2.4	..	..
Country mean	2.9	0.6	3.9	1.7	5.4

.. Data not available.

Source: OECD (1997*a*), Table B7.1.

wider (from a low 0.2 per cent in Turkey to a high 1.3 per cent in Canada). The proportion of non-teaching staff among all education personnel shows similar broad variations (although this type of data is less frequently available and more difficult to compare). In countries such as Greece the ratio of support staff to teachers is no more than one to 17 whereas in the United States support staff outnumber teachers by 25 per cent. This range clearly points to differences in the way schools are organised and the role of teachers across countries.[1]

Employment opportunities in teaching are the result of demographic factors (size of the school age population) and the willingness and ability of parents and citizens to devote resources to the education of children and young people. Over the past decades, each of these two factors has exerted a strong influence on the demand for teachers, most of the time in opposite directions. In many OECD countries there has been a decline in birth rates and the size of the school-age population, although each country follows its own pattern and pace. On the other hand there has been a general tendency to lengthen compulsory education as well as a growing demand for education at both ends of compulsory education, at pre-primary and post-secondary levels. The situation of public education budgets is a major factor in explaining the extent to which trends in the numbers of teachers follow trends in enrolment. It should be noted, however, that in some countries there is strong stability of the teaching work force due both to educational policies aimed at ensuring that an adequate supply of teachers is available at all times and strong professional organisations protecting their members from redundancies and dismissals.

As a result of these different trends, employment opportunities for teachers have generally remained stable, and often improved in the ten countries for which data are available.[2] At the same time, the structure of teaching positions by level of education may have changed.[3] Most of the growth in job opportunities has been concentrated in the upper secondary area because of the growth in numbers of students remaining in education beyond the compulsory school leaving age. Due to the continuing low birth rate in most countries, enrolments in primary and lower secondary teaching are declining. However, in many countries numbers of teaching posts have not declined to the same extent, resulting in lower pupil/teacher ratio or part-time positions substituted for full-time ones. At pre-primary level, the impact of lower birth rates has been negated in some countries by higher enrolments. Pre-primary education is increasingly recognised as crucially important from both a social and educational standpoint, and higher proportions of 3-6 year-olds are enrolled.

Changes in pupil/teacher ratios give an indication of the extent to which demographic changes and the overall size of school rolls impact on the teacher population. Pupil/teacher ratios as well as real class sizes are generally higher the lower the level of education. It is often the case that only one teacher teaches the

pupils in the same class at lower primary level. This is also the case for private schools (possibly reflecting parents' preferences). The ratios vary, however, very widely across countries because school teaching is organised in different ways and different levels of resources are allocated to education.[4] In public primary education, student/teaching staff ratios ranged in 1995 from 31.7 in Korea to 9.5 in Norway. The range in public secondary education is slightly narrower, extending from 23.7 in Korea and Turkey to 6.9 in Belgium (Flemish community).

OECD (1996*a*) has looked at the changes in pupil/teacher ratios in a number of countries. Over the period 1985 to 1994 these ratios have decreased at all levels but more steeply at primary level and in countries having experienced a drastic fall in birth rates, and therefore school rolls (most notably Korea and Spain). Some governments seem to have been reluctant to reduce teaching posts in step with the decline in the student rolls and have chosen to protect teachers' jobs and improve learning conditions for children rather than to reduce public expenditure on education. The need to retain small rural primary schools despite falling rolls contributes to the lowering of pupil/teacher ratios in some countries. Such decisions have major implications for the employment of women as they are in the majority in most countries in those sectors (primary and lower secondary) most threatened by falling student rolls.

The main effects of declining rolls have been on the recruitment of new teachers, when teachers' job security has meant that the existing teaching force has been given priority in appointments over new entrants. The long-term effect has been a steady rise in the average age of teachers. Teachers aged 40-49 are now the largest group in public education and substantial numbers are aged 50-60 in many countries. The danger inherent in this situation is of a sudden shortage of teachers as these groups reach retirement age. For potential teachers, however, this means that employment opportunities which have been shrinking at some levels of education for some time will again become more easily available.

Women in the teaching work force

The degree of feminisation of teaching (the share of women among all teachers) diminishes along a spectrum which runs from pre-primary schools to universities. There is no single explanatory factor for this phenomenon but there is a history of feminisation particular to each country. In most countries, it was accepted as "natural" for women to look after young children as nursery nurses or infant teachers, because these tasks were seen as an extension of or alternative to motherhood; even today men are virtually absent from this level, including in positions of authority. By contrast, universities were an exclusively male domain until the end of the nineteenth century in many countries (when women were not

even allowed in the university as students). Secondary teaching was male-dominated until the second half of the nineteenth century when separate secondary schools for girls were created in many countries.

Women's opportunities in teaching have been sharply affected, if not conditioned, by socio-economic factors. In periods of rapid economic development, men have been attracted away from teaching into better paid jobs elsewhere. The two World Wars had the same effect, opening up teaching careers for large numbers of women. Conversely, in periods of economic depression or when men returned from the wars, opportunities for women to teach were restricted in one way or another. In most countries at one period or another, there have been attempts to slow or stop the feminisation of teaching, including a marriage bar on women teachers and lower pay for women.

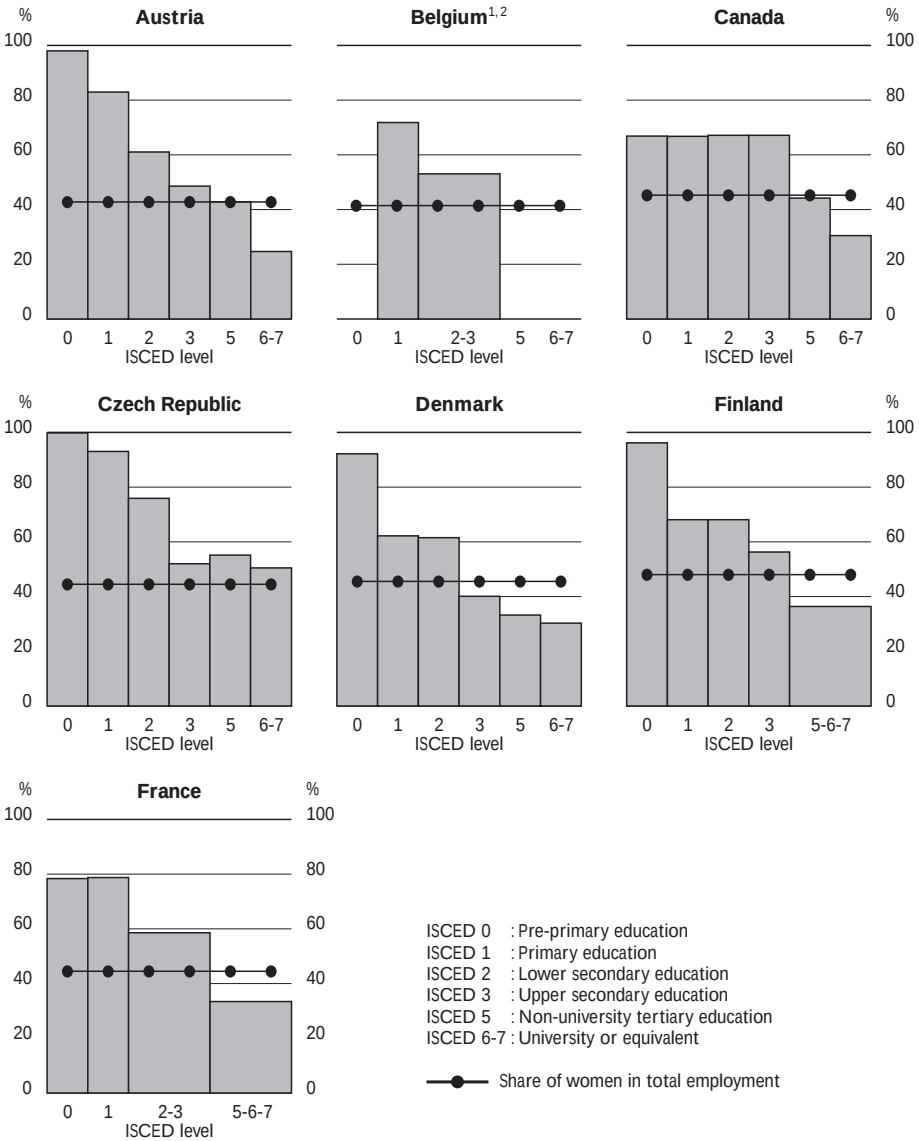
Today, pre-primary and primary teaching are typical female-dominated occupations in the majority of countries. This is also the case of teaching at the lower secondary level in a few countries (Czech Republic, Hungary and Italy). In a small number of countries such as Turkey, Germany, Japan, Korea, and the Netherlands, primary and lower secondary teaching continues to attract substantial numbers, in some cases even a majority, of male teachers. Women are generally under-represented at the higher levels of education. At the level of upper secondary education, parity is only achieved in about half of the twenty countries for which data are available. In higher education women are under-represented in all countries relative to their share in the labour force (Figure 4.1).

There are important differences in the employment opportunities for women to work as teachers across countries. A first group of countries has significantly higher than average levels of feminisation at all teaching levels in primary and secondary education (higher than the OECD average and the national share of women in total employment). They offer substantial employment opportunities for women in the whole education sector. This group includes in particular the Czech Republic, Hungary and Italy. At the other end of the spectrum are countries where feminisation of teaching during the basic school years is significantly below the OECD mean and the country share of women in total employment. This group includes Korea, Japan, Germany and the Netherlands.

In some countries, notably Germany, Ireland and the Netherlands, there are steep differences in the degree of feminisation between primary and lower secondary levels, and/or lower and upper secondary levels of teaching. The employment opportunities for women in the education sector are limited principally to the lower levels of teaching. In other countries, there are only small differences. Canada comes as a striking example of this second case with women representing a two out of three teachers at each level.

❖ Figure 4.1. ***Feminisation of teaching in 1995***

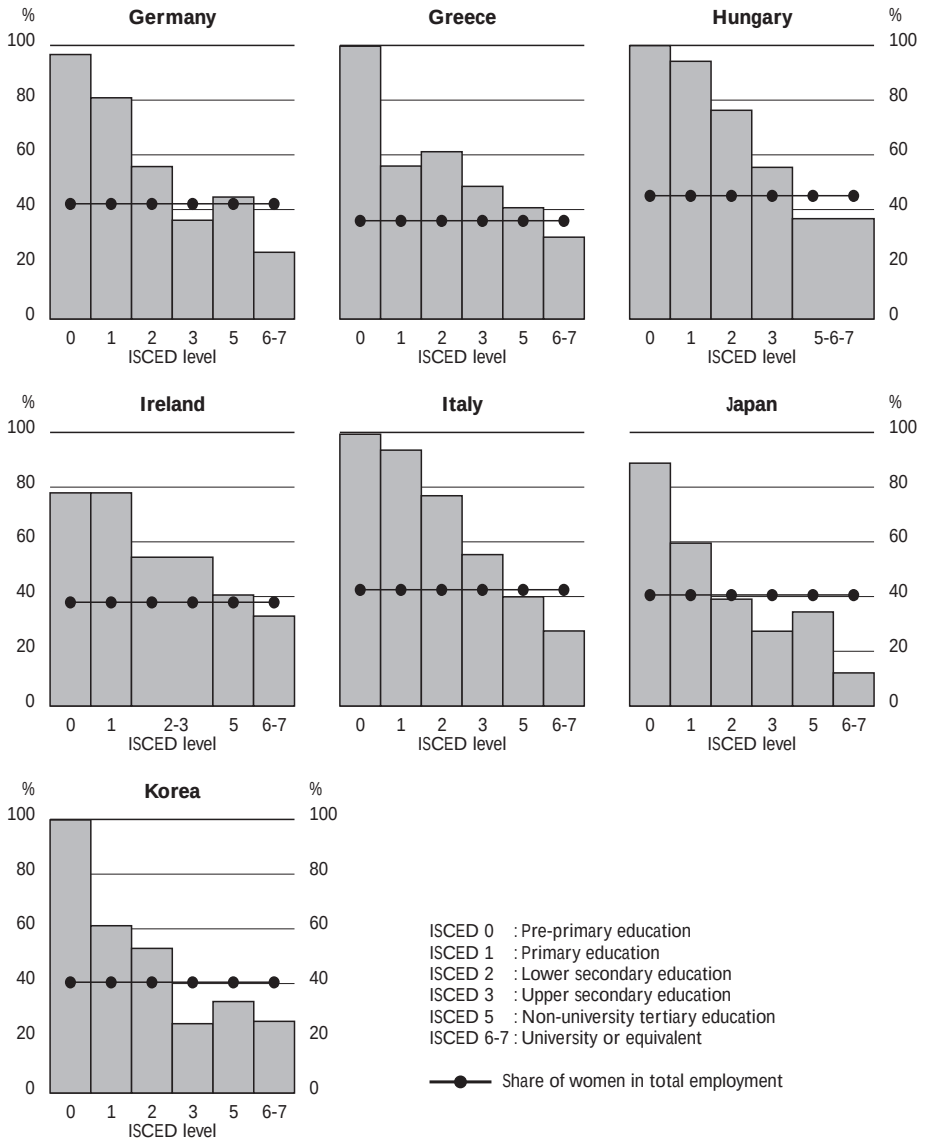
Share of female teachers



1. 1994.
2. Figures not available for some levels.

Source: OECD database on education.

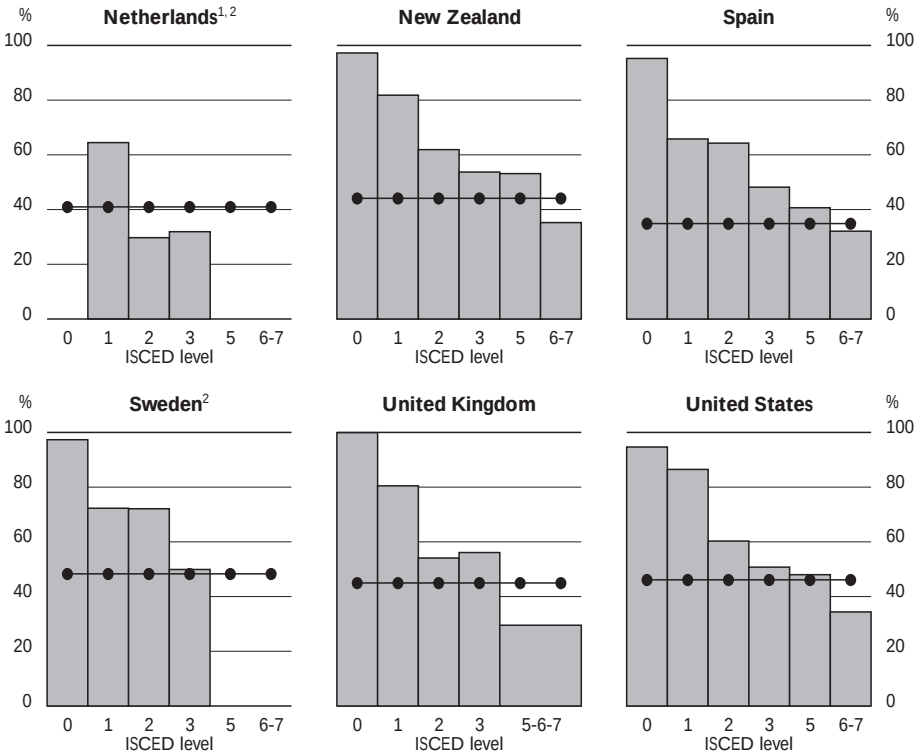
❖ Figure 4.1. *(cont.)* ***Feminisation of teaching in 1995***
Share of female teachers



Source: OECD database on education.

❖ Figure 4.1. *(cont.)* ***Feminisation of teaching in 1995***

Share of female teachers



ISCED 0 : Pre-primary education
ISCED 1 : Primary education
ISCED 2 : Lower secondary education
ISCED 3 : Upper secondary education
ISCED 5 : Non-university tertiary education
ISCED 6-7 : University or equivalent

Share of women in total employment

1. 1994.
2. Figures not available for some levels.

Source: OECD database on education.

It seems likely that the differences between countries reflect deeply held cultural attitudes about teachers and their roles, and about men and women. These attitudes affect political choices at national and local levels and recruitment policies. In those countries where employment opportunities for women as teachers appear more limited, it is likely that feminisation will be slowed or reversed at times of surplus teachers. In Germany, the proportion of female teachers actually fell over the decade 1985-94. The question is raised of whether in those countries where feminisation is least advanced, the status and pay of teaching in basic school years are sufficiently high to continue to attract men and whether there are other obstacles to women's access.

Part-time teaching

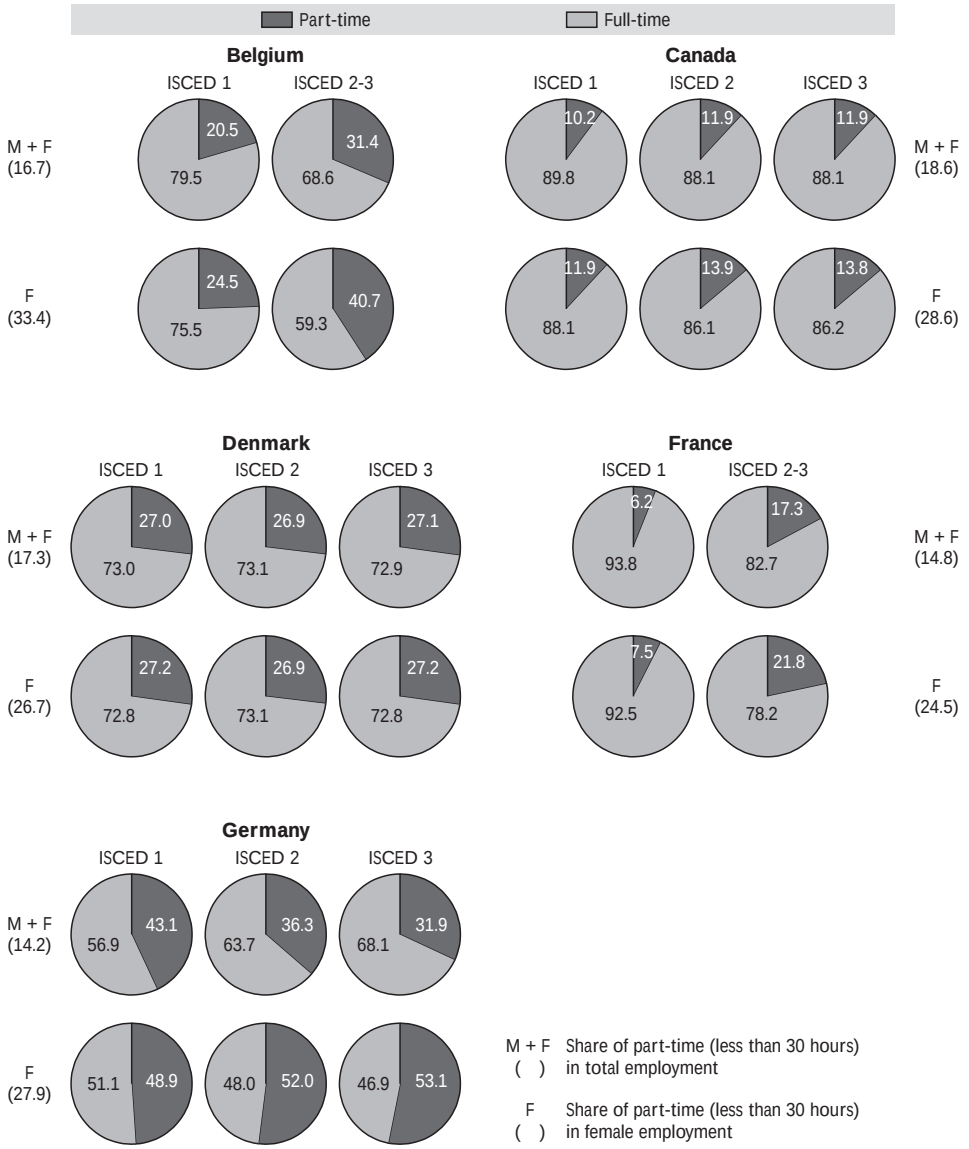
The extent to which teachers work on a part-time basis can be an indication of the relative flexibility of the specialised education labour market, which is largely within the public sector. Pupil/teacher ratios are established on the basis of full-time equivalents for both pupils and teachers, and will therefore conceal any growth in the number of teachers due to the expansion of part-time positions or the substitution of part-time for full-time teachers.

In most countries for which the distinction between part-time and full-time teaching positions is available, part-time does not seem to play a significant role at any level of teaching and the proportion of part-time in teaching is not above the average for total employment. In Germany, the Netherlands and Sweden, however, very high proportions of teachers in primary and secondary education work part-time (between one third to one half which is much more than the average for all employment). There has been a remarkable increase in part-time teaching in those three countries over the past decade. In Belgium, Denmark, New Zealand and the United Kingdom there are lower but still substantial proportions of teachers working part-time (20 to 30 per cent). In most countries the rates of part-time working are higher, the higher the level of teaching (Figure 4.2).

As in other occupations and sectors the incidence of part-time teaching is much more common among women than among men. Most part-time teachers in primary and lower secondary education are women (as is the case of all teachers in some cases) but there is a much better gender balance in upper secondary education part-time teaching. Teaching is clearly an example of a qualified occupation where it is possible to work part-time, at least in some countries.

❖ Figure 4.2. ***The role of part-time in teaching, 1994***

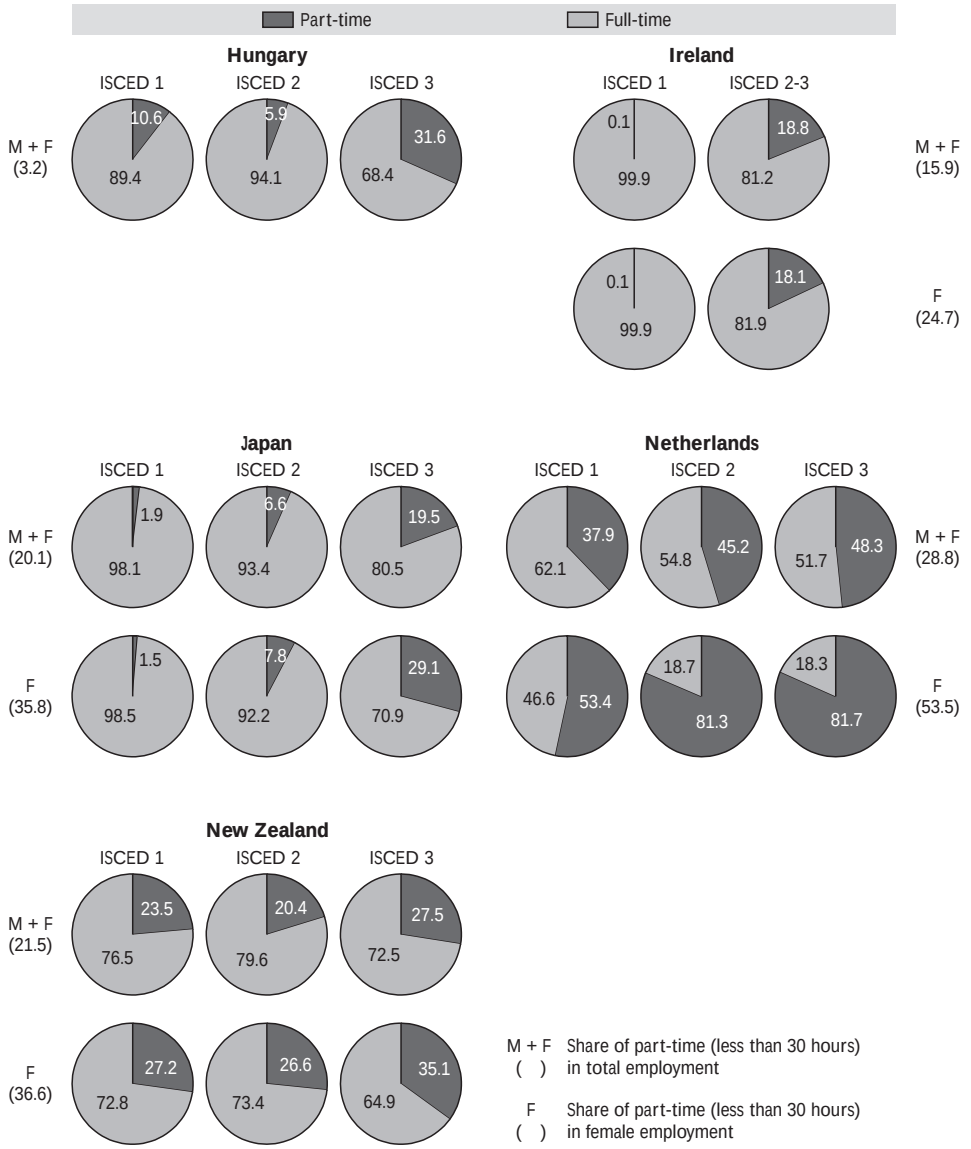
Percentages



Source: OECD database on education.

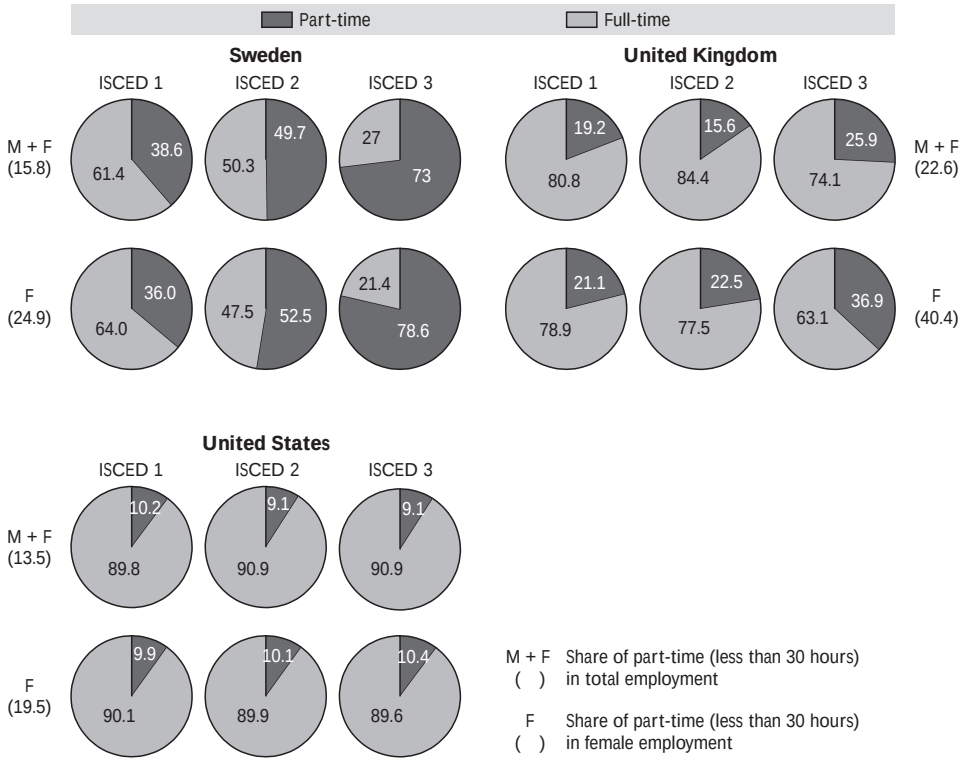
✥ Figure 4.2. *(cont.)* ***The role of part-time in teaching, 1994***

Percentages



Source: OECD database on education.

❖ Figure 4.2. *(cont.)* ***The role of part-time in teaching, 1994***
Percentages



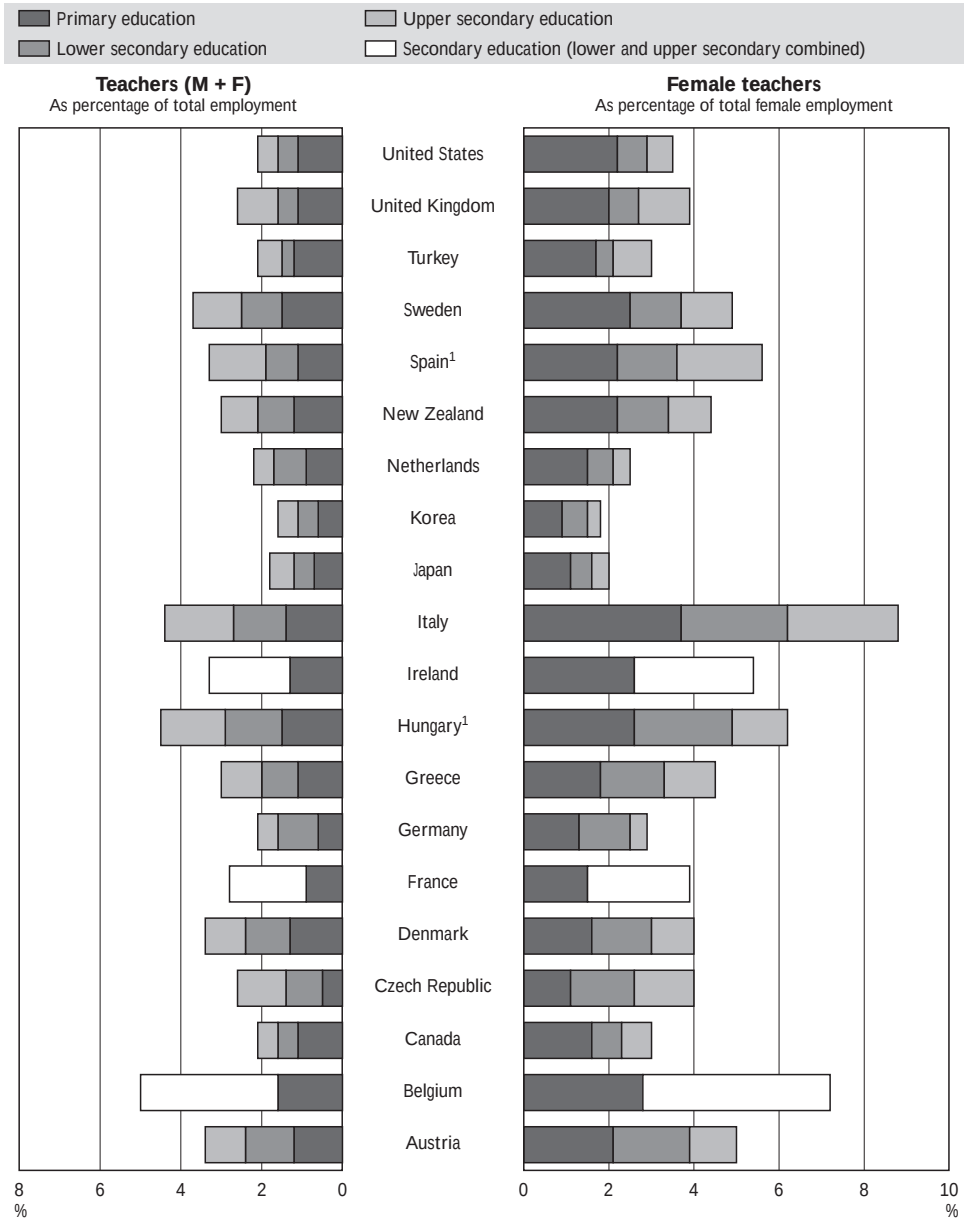
Source: OECD database on education.

WOMEN TEACHERS TODAY

Teachers as part of the female labour force

Figure 4.3 shows employment in primary and secondary education teaching as a percentage of total female employment in 1994.[5] In most countries teaching at that level provides 3 to 5 per cent of all employment opportunities for women. Spain, Belgium and Italy provide still higher opportunities (Italy presents a maximum at almost 9 per cent). At the other extreme, no more than 2 per cent of employed women in Korea and Japan work as teachers in schools.

◆ Figure 4.3. ***Employment opportunities in teaching, 1994***



1. Full-time only.

Source: OECD database on education.

The greatest numbers of female teachers are found in primary schools, and in some countries they represent more than half of all female primary and secondary teachers. In some countries the lower secondary level employs significantly more female teachers than the upper secondary level, whereas in as many other countries about the same number of female teachers are found at each level of the secondary. These distinctions are important because each educational level may define a separate labour market with marked differences in the qualification requirements, status, pay and other conditions applying to the corresponding teachers category. Because of the higher concentration of female teachers in primary and lower secondary levels of teaching and the parallel higher rates of feminisation of teaching at these levels, these two categories are of particular importance in assessing the situation of women in teaching.

As has been indicated above, the growth in the teaching work force over the past decades has been mainly restricted to upper secondary education. At the lower levels, any growth that is observed is due to increased rates of feminisation and the growth in part-time teaching positions. These factors also explain, together with any decline in the pupil/teacher ratio, why the number of female teachers in primary teaching has not decreased more.

The feminisation of primary teaching

The feminisation of primary teaching has continued over the last decade in most OECD countries, but at a slower rate than in previous decades. In 1985, the percentage of women teachers in primary education was already well over 50 per cent in most OECD countries. In Italy it was as high as 88 per cent. However, there was a group of countries where women primary teachers were still a minority. Turkey and the Netherlands are among those countries for which 1985 figures show this to be the case. In most countries the percentage of women teachers in primary education rose between 1985 and 1994, even where they were already in a large majority in 1985.[6] In Denmark, however, the percentage of women primary teachers fell over this period (from 60 per cent to 58 per cent). In some countries some concern is being raised about the feminisation of primary teaching. Although feminisation rates have increased to a similar extent in secondary level teaching, this does not raise the same type of concern because they remain at much lower levels.

Part-time in primary teaching

The reliance on part-time teachers in primary education varies sharply across countries (Table 4.2). In most countries, including those with the highest rates of feminisation of primary teaching, there is low reliance on part-time teachers. Part-time primary teachers are overwhelmingly female but this is not surprising since

Table 4.2. **The role of women in primary teaching, 1994**

Percentages

	Female share of primary teachers			Part-time among	
	All	Full-time	Part-time	All primary teachers	Female primary teachers
Austria	..	83.7	..	..	..
Belgium	71.8	68.2	85.8	20.5	24.5
Canada	66.1	64.8	77.3	10.2	11.9
Czech Republic	..	92.5	..	..	..
Denmark	58.0	57.9	58.4	27.0	27.2
France	77.8	74.6	95.4	6.2	7.5
Germany	85.0	76.4	96.4	43.1	48.9
Greece	..	55.4	..	..	..
Ireland	77.2	77.2	88.2	0.1	0.1
Italy	92.9	92.9	94.8	0.0	0.0
Japan	60.2	60.2	59.6	1.9	1.5
Korea	58.6	58.6	84.4	0.0	0.0
Netherlands	64.5	48.2	91.3	37.9	53.4
New Zealand	81.0	77.0	94.0	23.5	27.2
Spain	..	72.0	..	..	..
Sweden	78.9	82.3	73.4	38.6	36.0
Turkey	..	43.0	..	..	..
United Kingdom	81.4	79.3	89.5	19.2	21.1
United States	86.5	86.7	83.5	10.2	9.9

.. Data not available.
Source: OECD database on education.

women dominate primary teaching. Further analysis of the data on part-time teachers is revealing of the role that women and part-time teaching play in primary teaching in different countries. In the two countries where the reliance on part-time teachers is the highest, Germany and the Netherlands, at respectively 43 and 38 per cent, this situation is coupled with the highest proportions of women among part-time teachers. In fact, in those two countries almost all part-time primary teachers are women. This is not entirely attributable to global feminisation of primary teaching: Germany has a rather high rate of feminisation (85 per cent) but the Netherlands has a relatively low one (64.5 per cent). Half of female primary teachers work on a part-time basis in each of the two countries, while almost none of their male colleagues do. There are two ways to interpret these figures. One approach is to say that part-time teaching positions have served to attract women into teaching. The second argument is to state that access to full-time teaching positions is limited for women.

In the Nordic countries also, part-time accounts for a high proportion of all primary teaching (39 per cent in Sweden and 27 per cent in Denmark). Part-time

teaching is, however, much more equally shared between male and female teachers: 26 per cent of part-time teachers are men in Sweden (a higher proportion of men in fact than for full-time teachers) and more than 40 per cent in Denmark (comparable to full-time teachers). Part-time teaching in this case does not add another dimension to gender differences in primary teaching although it is an important feature of the teaching profession.

The three other countries which show significant proportions (around 20 per cent) of part-time in primary teaching follow a similar pattern to Germany and the Netherlands. Almost all part-timers are women. One out of four or five female primary teachers works on a part-time basis in those countries.

By contrast, in all other countries there is a low reliance on part-time primary teachers and the great majority of women teachers are full-time. In fact women represent the majority of full-time primary teachers even in those countries with significant proportions of part-time female primary teachers. Only two countries (Turkey and the Netherlands) have a majority of male full-time primary teachers. The degree of feminisation of full-time ranges from 92.9 per cent in Italy to 43.0 per cent in Turkey. Most Western European countries, the United States, Australia and New Zealand, have substantial majorities of women full-time primary teachers, as do the two Eastern European countries (Czech Republic and Hungary) for which data are available.

Such striking disparities in otherwise similar educational systems raise important questions for women teachers. National, local and institutional policies in those countries where the reliance on part-timers amounts to a quarter to one half of the total teaching force presumably encourage the employment of part-timers. On the other hand, one can reasonably assume that policies in Korea, Ireland, Italy and Japan do not encourage part-time employment, despite its potential attractiveness to women and other potential candidates. Do these different policies respond to differing public attitudes towards primary teaching as a career? These policies may not relate specifically to the schooling. Do rates of part-time work among female primary teachers reflect the global rate of female part-time employment or do they diverge from it in any important way? To what extent do the policies of Germany and the Netherlands respond to the preferences of women teachers themselves for part-time work? Does the very high proportion of part-timers in Sweden among both male and female teachers suggest that full-time posts are not available to many who want them? Some of these questions are addressed below in the section on career opportunities.

TEACHERS' PAY

Teachers' pay represents the major element in educational expenditure in OECD countries. At the same time, there is a general recognition of the need to

attract good quality teachers which means offering attractive salaries and conditions of work. Pay is indeed the principal component in the attractiveness of teaching as a profession. Other factors such as status, job security, holidays, hours of work and flexibility are also important as is the nature of teaching itself. Policies may be subject to the preferences expressed by teachers. Men and women may have different priorities as to what makes the profession attractive to them. Also, at times of high unemployment, job security will have a greater influence on both men's and women's choices.

The status of teachers varies across OECD countries. In some, teachers have national civil service status, as in France, or have their salaries linked to the national civil service, as in Japan. In federal countries, teachers are usually employed by state rather than federal authorities, though sometimes within national frameworks. When teacher salaries and conditions of work are determined at national level through centralised systems of negotiation, there is more likely to be uniformity within a country. In countries with decentralised systems, variations and conditions range widely, but this will not be reflected in statistics based on national averages (such as those gathered by the OECD).

In Anglo-Saxon countries, there has long been a tendency to devolve pay and recruitment of teachers to the level of the schools without, as yet, making serious inroads into national agreements in pay and conditions. However, job security and nationally-negotiated hours and conditions of work of teachers are coming under increased scrutiny everywhere. In part, this is a response to the growing share of the national budget going to education: greater accountability for standards and performance is the condition for higher pay.

Teachers' pay in primary and secondary education

Teachers' pay can be analysed in various ways. Starting salaries, average salaries or maximum salaries can be seen as most significant according to whether the focus is on attracting students into teacher training, retaining them in teaching or comparing teachers' salaries with other comparable professions. Progressive salary structures is one element of pay attractiveness. High starting salaries are not necessarily maintained at their relative level compared with other professions over a whole career. The OECD indicators of education systems include an indicator on the statutory salaries of teachers in public primary and secondary schools which is displayed along those different dimensions. Statutory salaries are the same for men and women in similar circumstances in all OECD countries. The indicator does not, therefore, allow for investigation of the gender pay gap in teaching. However, because of the generally very unequal distribution of male and female teachers across the different levels of education, comparing salaries at

different levels of education can give an indication of what women lose through being concentrated in the lower levels of teaching.

Figure 4.4 shows the salaries of primary, lower secondary and upper secondary teachers as a proportion of GDP per capita in each country. Comparing teachers' salaries with per capita GDP provides some indication of the economic status of the teaching profession in a country and allows for some international comparison. The salary structure is indicated by showing starting salaries, salaries after 15 years of experience and salary at the top of the scale and the numbers of years needed to reach the top. Figures refer to the scheduled gross salary per year (wages received before deduction of income tax and social security contributions) for a full-time public school teacher with the minimum qualification requirements. Data are available for 19 out of the 29 OECD Member countries.

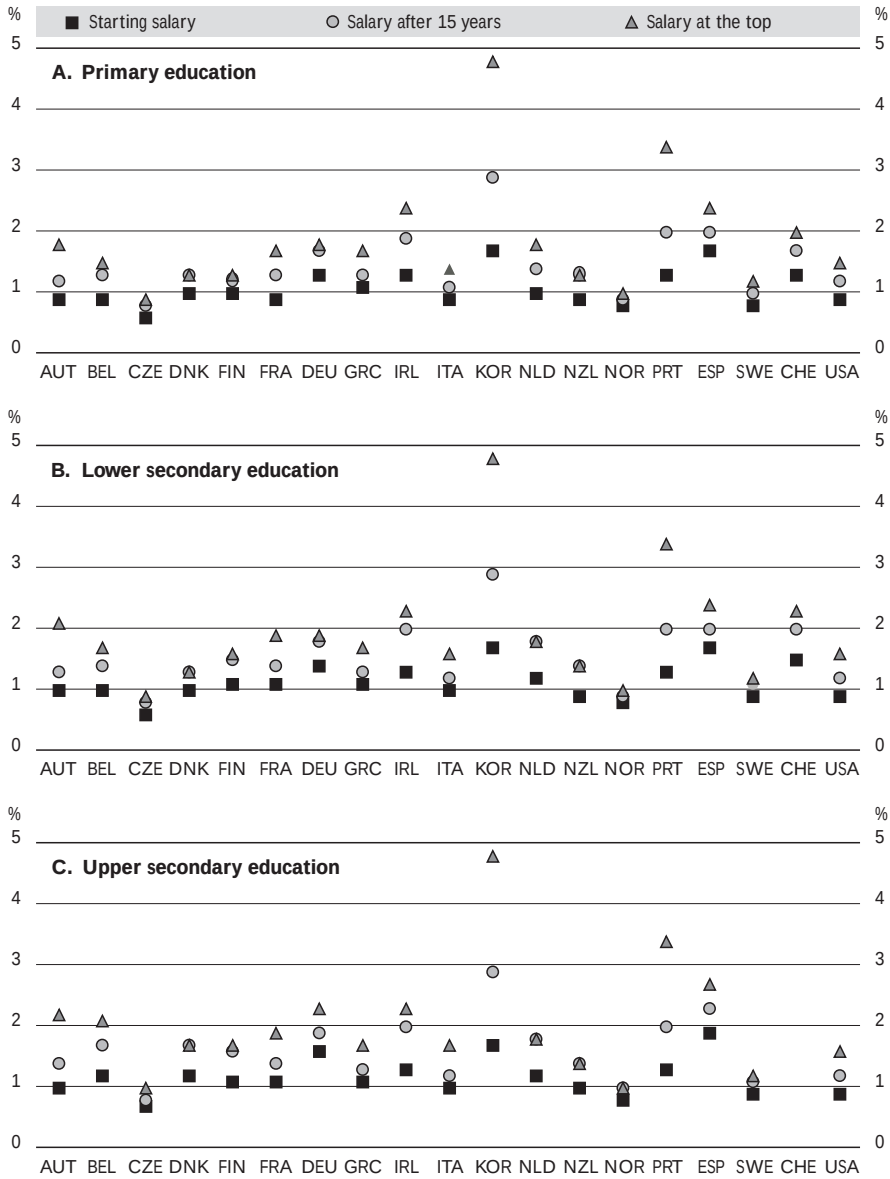
Starting salaries of primary teachers ranged from 0.6 to 1.7 times the level of GDP per capita in 1995 in the countries surveyed. Korea and Spain are at the high end, suggesting that the teaching profession has a high status in those countries. In Germany, Ireland, Portugal and Switzerland, primary teachers also get income well above GDP per capita. The opposite situation prevails in the Czech Republic, and in Norway and Sweden where starting salaries of primary teachers are well below GDP per capita. In all other countries primary teachers start with a salary which is around the level of GDP per capita.

After fifteen years of experience primary teachers have increased their salary by at least 50 per cent in Korea, New Zealand, Ireland, Netherlands and Portugal. The lowest rise is observed in Italy, Norway and Spain, with an increment of no more than 20 per cent. The salary of primary teachers after 15 years of experience are at three times the level of GDP per capita in Korea; two times in Ireland, Portugal and Spain, and more than one and one-half times in Germany and Switzerland. In the Czech Republic and Norway, primary teachers' salaries remain below GDP per capita even after fifteen years.

There are wide variations in the length of time it takes to progress from minimum to maximum salary across OECD countries. This period ranges from 8 years in New Zealand to 40 to 42 years in Italy, Korea and Spain. In Denmark and New Zealand teachers reach the maximum salary in less than 15 years after which there is no further progression. In the Czech Republic, Finland, Germany, and Norway, there is very little further progression. In all other countries, additional years of experience after 15 years continuously add to salary, with a further remarkable progression in Korea and Portugal.

Combining the two criteria of relative level of income and pay progression over a whole career, primary teaching appears to provide a high salary status mainly in Korea and Portugal but also in Ireland. In these countries primary teaching offers starting salaries at a relatively high level and a strong salary

❖ Figure 4.4. ***Teachers' salaries*[1] *by level of education, 1995***



1. Ratio of annual statutory teachers' salaries in public schools to GDP per capita.
Source: OECD database on education.

progression over the career. At the opposite end, salary does not make primary teaching particularly attractive in the Czech Republic, the Nordic countries or New Zealand. In those countries salaries start at a level below or near GDP per capita and show little progression over time.

The same cross-country pattern is observed for teachers' salaries at the lower secondary level. In half of the countries, including all those with high status pay, primary and lower secondary teachers are paid on the same salary scale. In the other countries the salary structure is usually similar to that of primary teachers but lower secondary teachers get a somewhat higher salary. The pay advantage is in the order of 10 to 15 per cent. Switzerland enters the group with high pay status. In the Netherlands and Sweden, the maximum salary of lower secondary teachers is limited to that applying to primary teachers.

For upper secondary teachers in half of the countries, the same pay scale applies to teachers at that level and at lower levels (either lower secondary or primary). In only a few countries, it is financially advantageous to teach at the upper level. This is particularly the case of Belgium, Denmark and Germany, where starting salaries are 20 to 30 per cent higher than those of primary teachers, and salaries at the top 30 to 40 per cent higher.

Correlation feminisation/pay level

It is sometimes argued that feminisation of primary teaching is the result of low pay. Men will not be attracted in sufficient numbers unless salaries rise to the level enjoyed by other male-dominated professions. If there is any substance to this argument, there ought to be a strong correlation between feminisation and relative salary levels across OECD countries. It should be noted, however, that the gender balance within teaching forces is the result of decades of recruitment in changing economic and demographic circumstances and of different traditions and cultures. Changing the balance is a slow process since the turnover within the profession is very low, usually less than 3 per cent of the total teaching force. Even dramatic changes in salaries would take decades to fully impact on the gender balance.

A simultaneous examination of feminisation rates and relative levels of pay for primary teachers (Figures 4.1 and 4.4) does not show a fully consistent connection between feminisation and pay. It is true that the Czech Republic, Austria, Italy, New Zealand, Sweden and the United States, which have high degrees of feminisation, pay their primary teachers relatively less well and Korea, one of the least feminised, relatively well. However, three countries where teachers are paid high relative salaries, Ireland, Spain and Germany, are found in the middle of the range of feminisation. Denmark, Greece and the Netherlands, which are among the least feminised, pay teachers slightly less than the mean. This lack of consis-

tency is in no way surprising. There are many reasons other than pay which explain feminisation rates of primary teaching in the different countries. There are likewise many reasons other than feminisation rates that explain why the relative pay of teachers varies across countries.

Trends in teachers' pay

OECD (1996*b*) includes an analysis of growth in primary teachers' salaries in 16 OECD countries over the period 1985/86 and 1993/94. Changes in salary levels are a more significant factor for explaining the impact of pay on feminisation than cross-cutting country comparisons at a point in time. Over the period considered, teachers' pay increased in real terms in all of the countries except Greece. These increases were quite minimal in Denmark, the Netherlands and Sweden. In only five countries did teacher's pay increase by more than GDP per capita. Austria, Finland, and the United Kingdom stand out as countries where teachers made the greatest relative gains relative to GDP per capita. In Portugal, experienced teachers seem to have benefited from a huge rise in their relative pay. In Greece, Ireland, Japan and the Netherlands, however, their salaries grew at least 10 per cent more slowly than GDP per capita. In Greece, teacher salaries fell off in terms of their buying power. In Ireland and Japan teachers became better off but their pay did not keep pace with rapid general growth experienced in those two countries (Figure 4.5).

CONDITIONS OF WORK: A COMPLEX MOSAIC

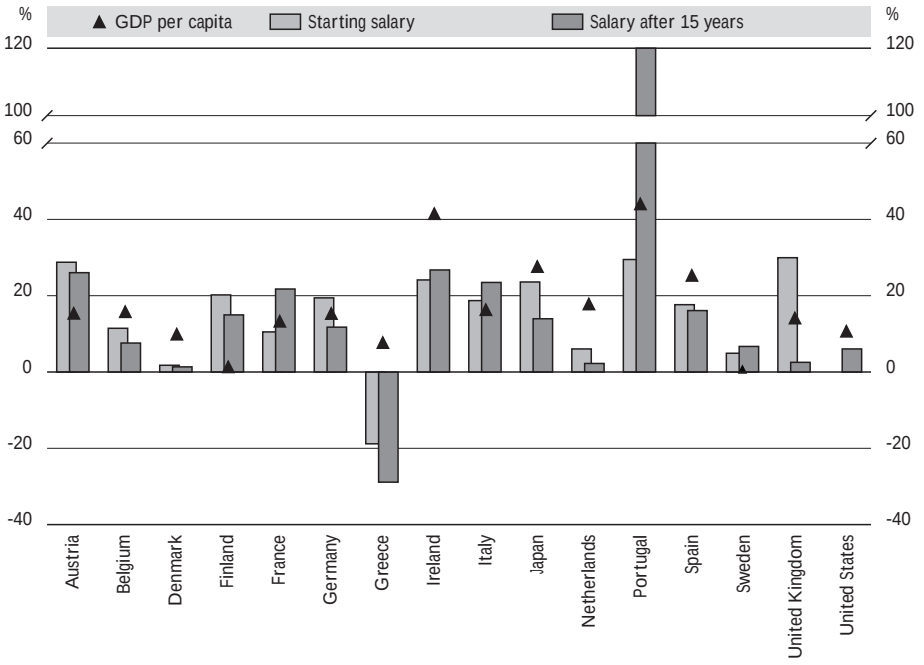
Conditions of work which are particularly important for teachers are the number of hours they work and the number of children in the classes they teach. These conditions differ greatly from one country to another, and may partly compensate for variations in salary.

Teaching time

A teacher usually spends many more hours working than indicated by statutory teaching time. In many countries, however, teachers have considerable freedom in determining the number of non-teaching hours worked, as well as where or when they will work them. Hours other than teaching hours are difficult to measure and statutory teaching time is the indicator most usually used. Statutory teaching hours are much shorter than annual hours worked in other occupations. This, together with the flexibility attached to non-teaching hours, is one of the main elements that makes the teaching occupation attractive.

Annual statutory teaching hours of primary teachers show a wide variation across OECD countries (Table 4.3). Swiss primary teachers are required to teach

❖ Figure 4.5. ***Growth in primary teachers' salary, 1985-93***
Real total growth



Source: OECD (1996*b*), Figure 4.4.

1 085 hours per year compared with 624 in Sweden. Primary teachers in the Netherlands teach almost as long hours as Swiss teachers. Austria, Greece and Luxembourg have relatively low requirements, at less than 730 hours per year. Most other countries require between 800 and 900 teaching hours.

The number of statutory teaching hours is usually lower at secondary than at primary levels of education, although by an amount that varies greatly across countries. Secondary teachers in Portugal and Spain teach 200 to 270 hours less than primary teachers. At the other extreme there is not much difference in the teaching hours required from secondary and primary teachers in countries such as Austria, Netherlands, or Turkey.

Unaccounted time and availability for extra assignments

The conditions of work of teachers also vary across OECD countries in relation to their statutory requirement to take up additional non-teaching

Table 4.3. **Teachers' workload by level of education, 1994**

	Primary level		Lower secondary level		Upper secondary level (general)
	Class size	Teaching hours per year	Class size	Teaching hours per year	Teaching hours per year[1]
Austria	19	709	15	651	664
Belgium	19	832	10	720	660
Czech Republic	..	..	..	657	..
Denmark	..	750	11	750	..
Finland	17	874	..	..	760
France	21	923	19	660	632
Germany	..	760	21	712	673
Greece	17	696	22	569	..
Ireland	24	915	21	735	792
Italy	17	748	17	612	612
Luxembourg	..	730	..	..	..
Netherlands	25	1 000	19	954	954
New Zealand	..	788	20	869	813
Norway	15	686	13	611	627
Portugal	15	828	18	681	612
Spain	20	900	16	900	630
Sweden	21	624	18	576	528
Switzerland	..	1 085	..	1 056	..
Turkey	27	830	..	1 080[1]	1 080
United Kingdom	..	950	..	669[1]	..
United States	..	958	18	964	1 019

.. Data not available.
1. 1992 data; public institutions only.
Sources: OECD (1997*a*), Tables D6.1 and D1.3; OECD (1996*b*), Table 4.1; OECD (1995), Table III.3.12.

responsibilities at the discretion of the head teacher or by custom. In Anglo-Saxon countries, such as Australia, Canada, New Zealand, the United Kingdom and the United States, teachers expect to work with young people outside school hours in clubs and other activities. Parent participation in support of the school or in the classroom is also considered normal, and desirable. Contact time with parents is considered very important. In other OECD countries, such as France, such outside class contact is limited or non-existent.

In many countries, teachers take responsibility for innovation in the curriculum and a variety of teaching and learning approaches is welcomed and natural. In other OECD countries, teachers consider that the body of knowledge to be transmitted is decided at national level and that the teachers are the sole purveyors of that official, school-based knowledge. Obviously, there are shades of interpretation across and within OECD countries.

The fact that the role of the teacher can be quite different across OECD countries invites caution in making comparisons. If the role of the teacher differs, there is a need for qualitative studies of potential differences in teachers' attitudes on these issues, in particular women's and men's, and the implications for their conditions of work and their career prospects. If availability for further outside class activities also conditions promotion prospects, then this factor must be considered in evaluating gender-specific conditions.

Class size

Large classes make teaching more demanding, and sometimes more frustrating. Teachers usually express a preference for smaller class sizes and stress that smaller classes mean better learning conditions for children.

Countries differ significantly with respect to the average class size in primary schools.[7] Teachers in Turkey are responsible for twice as many children than those in Portugal and Norway. Turkish teachers have on average 27.6 children in class compared with 14.5 in Portugal. Class size is significantly higher than average in Ireland and in the Netherlands. In Finland, Greece and Italy primary teachers teach smaller classes than in the remaining countries (Table 4.3).

Larger class-size tends to prevail at the most critical years of schooling for children, the first years. It is in the first years of schooling that children need to gain basic literacy and numeracy. Secondary classes tend to be smaller. Indeed, in school systems in which upper general secondary education is still a fairly elitist phenomenon, it is not unusual to find very small classes of three or four students in tutorial situations (due also to the multiplication of optional subjects and study streams).

This view of the practical reality of the teaching/learning environment is essential to an understanding of who is actually teaching in satisfactory conditions. And since there is an increased call for accountability, especially with respect to the basic skills of reading, writing and numeracy, across OECD countries, it is the teachers of lower primary school who are under greatest pressure while they have the largest classes. Further, as this is the level of teaching which is most feminised (after early childhood and nursery education), class size is a major issue in terms of conditions of work and professional satisfaction of female teachers.

Workload and pay

Combining statutory teaching hours and class size gives a global perspective of the workload of teachers in each country. This can then be related to the relative level of salary to try to explain some of the observed differences in pay.

Three countries stand out as having rather unfavourable workload conditions. These are the Netherlands, Switzerland and Turkey. Primary level teachers in these countries have relatively large classes and, in addition, have to teach relatively long hours. In Austria, Greece, Norway and Portugal, primary teachers have a relatively light burden with smaller classes and fewer teaching hours. In Italy and Sweden also primary teachers benefit from rather favourable conditions of work.

These contrasted country situations concerning the conditions of work of primary teachers go some way in explaining differences in relative pay. For example, Swedish and Norwegian primary school teachers are relatively poorly-paid, but have less than two-thirds as many contracted teaching hours as Swiss teachers, and are on average responsible for only half as many children as Irish teachers, who have high relative pay. In Germany, Ireland and the Netherlands statutory salaries tend to be higher but class sizes are significantly larger and in the Netherlands teaching hours are much higher than average.

Some teachers might prefer higher salaries and other might opt for better working conditions. Policies on these matters affect both recruitment and retention of teachers and may well have differential effects on men and women. Heavy workloads in some countries may go along with lower rates of feminisation and higher part-time work among female teachers (the high rates of part-time work in Sweden where the workload is rather light is in this way surprising). The substantial disparities noted here are mainly the result of tradition (particularly for the number of hours taught) and demographic decline, combined with pressure from teacher unions to maintain teaching posts in some countries despite falling rolls in order to improve teaching and learning conditions with smaller classes. In the future, at a time of teacher shortages, policies might well be altered.

QUALIFICATIONS REQUIRED FOR TEACHING

The OECD indicators of education systems include an indicator on the duration of teacher's education. It has not been possible up to now to develop an indicator of the type of teacher training. The duration of teachers' education is rather uniform (Table 4.4). In most countries teachers have had 15 or 16 years of education before they are allowed to teach at ISCED level 0, 1 and 2. A higher number of years of higher education is required to teach at ISCED level 3 in most countries. In Italy teacher's education requires one year of higher education for primary teachers and five years for secondary teachers. In Spain two more years of higher education are required to teach at upper secondary level than at lower level. In the other countries the difference is only one year. This in no way means that teachers can qualify to teach at higher levels just by staying longer in university. Different types of training generally apply to different levels of

Table 4.4. **Teachers' qualifications: number of years of education, 1992**

	ISCED 0		ISCED 1		ISCED 2		ISCED 3 (general)	
	Primary and secondary education	Higher education	Primary and secondary education	Higher education	Primary and secondary education	Higher education	Primary and secondary education	Higher education
Austria	..	..	12	3	12	3	12	4
Belgium	12	3	12	3	12	3	12	4
Finland	12	3	12	5	12	6	12	6
France	12	4	12	4	12	4	12	4
Germany	13	2	13	6	13	6	13	7
Ireland	13	3	13	3	13	4	13	4
Italy	11	1	12	1	12	5	12	5
Netherlands	11	4	11	4	11	4	11	4
New Zealand	12	5	12	5	12	5	13	6
Norway	12	3	12	3	12	3	12	4
Portugal	12	4	12	5	12	5	12	5
Spain	12	3	12	3	12	3	12	5
Sweden	11	3	12	4	12	4	12	4
Turkey	11	4	11	4	11	4	11	4
United States	12	4	12	4	12	4	12	4

.. Data not available.
Source: OECD (1995), Tables III.3.1 and III.3.2.

teaching, although there is a growing trend towards more university-level training for all levels of teaching.

As in other sectors, the qualifications required for teaching and administrative positions in schools have increased in OECD countries over the past 20 years. While university-level training and diplomas have long been expected of teachers in some OECD countries, other countries have maintained separate and different training for teachers at different levels, only requiring university diplomas for the highest levels of secondary teaching. Available data do not allow for conclusive cross-national comparison of the impact of rising qualification requirements on women's participation in teaching. They do, however, show that across OECD countries, women are more fully reaching parity in higher education alongside men. On the other hand, women still tend to enter shorter forms of higher education than men in most OECD countries.

Education and training: status distinctions between primary and secondary teachers

The status of primary teachers, and therefore of women teachers, who increasingly dominate primary teaching, is partly determined by their training. Primary teacher training has traditionally differed sharply from the training of secondary teachers in most OECD countries. These patterns were set during the early development of public elementary education when women were excluded from the universities and most schools were segregated by gender. Since the education offered to girls was rarely as academic as that offered to boys (who could aspire to a university education), the training required of their (female) teachers was neither lengthy nor academically demanding. Initially, it consisted mainly of learning on the job in an apprentice-type training whereby promising girls were identified early in their school careers and allowed to become monitors, teaching younger children. Boys were trained to teach in elementary schools in the same way. By contrast, secondary boys' schools were headed, and largely staffed, by male university graduates who were not considered to need specific teacher training following their academic studies.

As elementary education became free and compulsory in the industrialising countries in the course of the second half of the nineteenth century, the need for teachers grew and special colleges were set up to train them. These were the *écoles normales* in France, the normal schools of the United States, and the earliest training colleges of the United Kingdom. They were segregated institutions which drew on socially different groups for the male and female colleges. As these institutions were practically the only route into higher education for girls, they attracted middle class girls for whom elementary teaching was considered an acceptable career. Young men were drawn mainly from the urban and rural

Box 4.1. **Overcoming status distinction between primary and secondary teaching**

Development in the United Kingdom

Until the 1960s, most primary teachers took a two-year certificate of education which combined educational studies, professional work in schools and the study to post-secondary level of at least one specialist subject. In the early 1970s this certificate course was extended to three years. Some of the better certificate students continued their studies for a fourth year at a university and were awarded a degree in education, the BEd. Later the certificate courses were abandoned and replaced by a three-year (ordinary) or four-year (honours) BEd which differed only marginally from the certificate courses they replaced. At the same time an alternative route into primary teaching was developed in some colleges and universities whereby university graduates in appropriate disciplines took a one-year Postgraduate Certificate in Education (PGCE) course which entitled them to apply for a post in a primary school.

Since 1980 primary teachers have been trained via these two alternative routes, known as the concurrent and consecutive routes. They are substantially different in content and in their career implications for students. The BEd is a professional degree intended to produce primary teachers (and secondary teachers in a limited range of subjects). Although some students do find jobs outside teaching, the professional nature of the qualification effectively limits their options. Some students embark on this degree at 18 years old but most students – including the most able women and almost all boys – prefer to take a traditional university degree, keeping their career options open. In practice, the BEd is taken by those (usually young women) who are dedicated to primary teaching, especially for the early years, plus many others whose modest A level results preclude university studies.

The problems associated with the consecutive route are the mirror opposite. It is easy for the government to regulate the numbers entering teaching via this route so students risk finding themselves excluded from teacher training in periods of reduced demand for teachers. Some find that the discipline they have chosen for their first degree is not regarded favourably by the professionals who select for the PGCE. Indeed, many of these professionals do not regard the PGCE itself as a sufficient professional preparation for primary teaching (whereas it is the main route for secondary teaching). Part of the problem is that the BEd is mainly offered in the former colleges of education and is associated with the primary professional tradition which those institutions embody. They have lower status than universities and predominantly female students and faculty. They prepare students mainly for primary teaching jobs and they have not until recently undertaken much research. The risk of having two routes is that the traditional stereotyping of primary teaching as intellectually inferior to secondary teaching will persist.

(continued on next page)

(continued)

... and change in France

Similar developments have occurred in France where the former *écoles normales* have been absorbed into *Instituts Universitaires de Formation des Maîtres* (IUFMs) which are hybrid institutions, partly controlled by the regional authorities and partly by universities. There is an IUFM in each of the 23 *Académies* (academic regions). All students entering the two-year postgraduate teacher training courses, whether primary or secondary, are selected on the basis of initial interviews and portfolios and a competitive examination at the end of the first year of the course. If successful, during their second year they have civil servant status and are paid on the teachers' pay scale.

In effect, the reform in France has been more radical than in the United Kingdom since the *écoles normales* have disappeared together with the pre-degree courses they offered, so that all teacher training is postgraduate (the consecutive route). The problems associated with professional preparation of primary teachers in only one year have been overcome by a common two-year course for secondary and primary. Recruitment to primary and secondary teaching courses is on the same basis although of course the content of the competitive examinations differs and the more successful students, in terms of academic disciplines, tend to opt for the secondary route.

working classes, and to a lesser extent, from the commercial lower classes. The training they received in these colleges was very different from the traditional university education of their (wholly male) secondary counterparts. Indeed, in most countries it was not considered to be higher education. Even today, in countries as different as Italy and Russia, this training is regarded as a form of specialised secondary rather than higher education.

Thus, the complex pattern of status differentiation which characterises the teaching profession in most OECD countries developed. When women gained entry to the universities (as early as 1873 in Sweden, and earlier in the United States, but later in most countries), the more able and middle-class girls took that route and many became teachers in the new secondary girls schools set up at the same period. However, most women remained attracted to the very proximity of colleges preparing for primary teaching which in the past were small, located in rural areas where in many cases no university existed, and under the control of local authorities. Entrants to primary training have tended to be recruited on a regional rather than a national basis. In the same way, the fact that most villages had a primary school greatly facilitated combining teaching with raising a family.

The gulf between the professional culture of primary and secondary schools and their teachers has proved difficult to overcome. Over the last twenty years

there has been a strong movement, partly as a result by the feminist movement and partly by a desire to raise educational standards, to remove these distinctions and to move towards an all-graduate, undifferentiated teaching force. The movement has made more progress in the United States than elsewhere, but in both France and the United Kingdom the effort to require that all teachers be graduates has begun, and attempts are being made to remove the status distinction between secondary and primary teaching. A brief review of developments in these two countries illustrates the substantial progress made and the remaining obstacles (see Box 4.1).

CAREER OPPORTUNITIES FOR PRIMARY TEACHERS

Career in primary schools

The teaching profession may not offer many vertical career prospects to women.[8] By and large, a teaching qualification at primary level, for example, cannot lead to more than a two-step career ladder, from teacher to principal or head teacher. While women may dominate both the teaching and headships at pre-primary level, they are unlikely in most OECD countries to become heads of primary schools. It is even more unlikely that, without further training, they will move to lower secondary or secondary teaching. Equal qualifications or even superior qualifications for women are rarely sufficient in and of themselves to guarantee access to higher level jobs.

Women in leadership positions

There are more female teachers than male teachers in primary education in all OECD countries except Turkey, but dramatically fewer, proportionally, have achieved promotion to headships. In most OECD countries, men retain roles within primary teaching which give them authority and better career prospects than women teachers. In those countries where feminisation is least advanced, these characteristics are more marked.

Between 60 and 90 per cent of the primary teaching force is female in most OECD countries. However, the proportion of women heads varied in the late 1980s from 2.5 per cent in Japan to 44.5 per cent in France and was nowhere comparable with the proportion of women teachers (OECD, 1990). The range is still very wide, reflecting major cultural differences in the attitudes to women's position in society. In every country however the chances of women becoming heads are considerably lower than their male colleagues.

A more recent study of women with headships in the European Union came to similar conclusions, while noting the exceptional situation in nursery schools where headships are overwhelmingly in the hands of women everywhere in the

European Union. The study suggests a link between the proportion of women teachers and the career opportunities for women: "The percentage of women heads is particularly low in the Member states with least women in teaching – Denmark, the Netherlands and Finland" (European Commission, 1996).

The two studies diverge on their assessment of progress being achieved. This differing analysis may be due to the fact that each study covers a different period and range of countries. The OECD study looks at the period from the mid-1970s to the mid-1980s and covers all OECD countries. The European Commission study includes data for nine European countries and looks at trends over the period 1985/86 to 1992/93.

The OECD study notes: "Contrary to the expectation of an improvement, based on the generally improving female position in the professions, there has actually been a deterioration in some OECD countries of the situation of women in those leadership posts that represent career advancement from the classroom into positions of authority and administration" (OECD, 1990, p. 35).

Such a deterioration was observed for Australia, Canada and the Netherlands from the early 1970s to the mid-1980s. In Canada, it was mainly attributed to declining enrolments, school closures and the average size of schools. Mixed trends were observed in other countries such as Austria or Sweden, "a country with exceptionally high female labour market participation rates and a long-standing tradition of anti-discrimination legislation". New Zealand, however, registered a significant improvement in the representation of women as heads of schools.

In Europe, there has been considerable progress in some countries over the last decade or so, and in several countries women now hold around 50 per cent of primary headships. The proportion of women appointed to headships is increasing everywhere in the European Union except Belgium. Progress has been particularly swift in Sweden (European Commission, 1996).

Obstacles to reaching leadership positions

There is no doubt that women have not yet reached equality with men in terms of career opportunities in teaching, though the situation varies substantially from one country to another. Despite the advances made in most OECD countries, women continue to predominate in the "other ranks" of the teaching profession, while men are disproportionately likely to hold senior posts. Some of this variation results from different traditions and cultures which may constitute subtle barriers against women's career progress, while others are structural and institutional. Some, however, results from female teachers' apparent reluctance, in comparison to men, to compete for posts of responsibility. This reluctance may itself be culturally determined and therefore susceptible to policies aimed at promot-

ing female role models and positive discrimination in appointments. There is good evidence that where women with headships are the norm, as in nursery schools, greater numbers of women are prepared to come forward for promotion. The absence of women in decision-making positions affects the climate of the schools and in particular the aspirations of young women passing through the school system.

It is often advanced that women teachers seek promotion less than men and that women should be encouraged to apply for promotion. The career pattern for women is often traced through internal promotion where support from local authority representatives is an important factor. Only when women perceive that they can successfully apply to a post of responsibility, do they seek further promotion. Men do not follow that route. Men are more likely to take pro-active steps for their promotional advancement and to apply spontaneously to higher positions.

The creation of part-time posts, whilst probably allowing many more women to enter or remain in the profession, does not necessarily promote their career prospects. Career breaks and part-time teaching combine to reduce the career prospects of women. More women tend to have breaks in their career whereas men's career paths tend to be continuous. Men are always in place when promotions come up, whereas women may be absent at such times, for instance on maternity leave. Part-time posts are also disproportionately held by women and part-timers may miss the opportunities to position themselves for promotion.

Most primary heads are required to have had administrative experience before being selected for promotion, and women have less such actual experience and less encouragement to acquire it than men. While part-time teachers may have less opportunities to participate in administrative tasks, in most countries women are the great majority in full-time teaching positions as well. But men are more likely to fill the full-time posts which tend to lead to promotion and ultimately to headships.

It can be argued that women teachers are less attracted to administrative posts than men and that there is a reluctance among women to leave the classroom because they enjoy the contact with pupils that the classroom afford them. There is certainly also a reluctance to see women in positions of power. The European study supports this hypothesis when trying to explain the low percentage of women headteachers in some countries:

> "The explanation may lie in the role and powers of the headteacher which, depending on the situation, can be more or less wide-ranging. The size of the school, the number of teachers to manage, and the existence of a hierarchy of management functions (deputy heads, heads of departments and administrators) are amongst the factors which would have to be taken into account to

explain the disparities which have been observed'' (European Commission, 1996, p. 102).

Current trends in the management of schools may aggravate the disadvantage women have to access leadership positions. The Local Management of Schools which was introduced in the early 1990s in the United Kingdom, gives heads substantial new financial responsibilities and may mean that senior appointments are more likely to be seen as ''men's business''.

What constitutes a career in education?

A career in education may well mean something different to many people. Lateral mobility at present seems to be the principal means for female teachers, especially at primary level, to affect the quality of their careers. This lateral mobility may be to another teaching post or outside the education sector altogether. Vertical mobility to headships or age-group counselling and social welfare responsibilities occurs more frequently than twenty years ago but still is less frequent than for men and opportunities are rare in any case. Continued economic austerity has meant that teaching appears to be a potentially stable profession in the larger context of underemployment and unemployment. A career evolution is, in that case, defined simply in terms of stability and continuity.

The possibility of teaching at a higher level of education is a real one. It does involve, however, further formal education and training and frequently, competition for scarce available openings. Occasionally, affirmative action policies in some OECD countries are seen to influence women's chances. Equally frequently, however, they may be overlooked in favour of other criteria.

In many OECD countries teacher training and the study of education (philosophy of education, psychology of education, sociology of education, administration, higher education, comparative education and so forth) are taught in faculties or colleges of education in universities or research institutions. These research and degree-granting institutions may represent potential opportunities for teachers' careers. To what extent are former teachers (both women and men) who seek further degrees, recruited to university-level and research positions? To what extent are these positions more usually filled by others who have followed a solely university and research-based career? Very frequently in OECD countries with such research institutions and university faculties, the positions are filled by other academics rather than by former practising teachers. Thus, a further segregation occurs between those who carry out educational research and those who actually have professional teaching experience at pre-primary, primary, secondary or adult education levels. This segregation can lead to many undesirable outcomes including research divorced from practice and policy solutions which lack common sense or realistic potential for implementation.

EDUCATIONAL REFORM AND QUALITY OF TEACHING IN THE FUTURE

Education has higher priority for policy makers and takes a larger proportion of national budgets than ever before. Educational achievement and economic success are seen as closely linked. The debate about how to raise educational standards no longer focuses only on the production of an elite but on how to bring the mass of the labour force to a level at which they can compete globally in technologically-advanced industrial processes. In turn there has been a renewed concern for basic educational standards where primary education is of central importance. The role of teachers and conditions in schools are becoming more open to scrutiny across countries.

Most OECD countries face a potential recruitment crisis in the next decade as the large numbers of teachers currently in their forties and fifties reach retirement age. Policies to attract more young people into teaching may be made more difficult than in previous periods of high demand for teachers, because of the competing demands for highly qualified labour and because of the sharper public focus on the quality of teachers. Women, in particular, now have a wider choice of careers than in the past. Attractive conditions will be needed to recruit qualified women in sufficient numbers.

Under these conditions, the maintenance of a separate primary teaching route, recruiting students at 18 or younger who are not fully integrated into the higher education system, will become problematical. Students recruited into this route are increasingly drawn from less academically able sections of the population and mass higher education will accentuate this process. Furthermore, it is not easy to expand teacher supply rapidly via this route, especially if quality thresholds are to be maintained at entry to and exit from the courses. The post-graduate training route discussed earlier in this chapter has many attractions for governments, not least of which is the opportunity to both flexibly and rapidly channel graduates from expanded higher education systems into either primary or secondary teaching.

Whether the integration of primary training is achieved by adopting the United States model of providing primary teacher training courses within universities or on the French (and British PGCE) model of selection for specialised training courses after graduation, it seems likely that other OECD countries will be led by the logic of mass higher education and teacher supply needs to integrate primary training into the universities. From the perspective of women's career prospects, this trend represents a desirable development.

Professional development does not cease when teachers qualify. Indeed, it is increasingly a lifelong process. Here there have been major developments which may go some way to improving upon one of the less attractive features of primary teaching – the isolation of individual teachers in their classrooms. Education is

increasingly affected by developments in society: the media, information technology, links with industry and commerce. Teachers need to keep abreast of developments outside the classroom. Research on school improvement has focused on the school and teachers as a team. Professional development is now directed less at individual teachers and more at collective initiatives. In this respect too, in-service training is bringing primary and secondary teachers more closely in contact in some OECD countries. On the other hand, public budgetary austerity and closer scrutiny of the impact of public spending will continue to be an obstacle to teachers' salary progression, opportunities for further training and may increase the demands made on teachers' time and work load.

CONCLUSIONS

This chapter has focused on primary teaching as a female dominated occupation. It has shown that although the struggle for equality for women teachers is in many ways incomplete, primary teaching attracts women and offers them considerable employment prospects. Despite continuing inequalities, teaching represents a privileged route for women to advance economically and socially in comparison with other occupations.

Women dominate primary teaching in most OECD countries. Currently, opportunities for women are much greater with younger (especially pre-primary) age-groups than for teaching overall. In the past, men have not been attracted to entering teaching at this level. Promotion prospects for women are improving but still vary across countries and from pre-primary to primary schools. At pre-primary level women have a virtual monopoly on promoted posts. Women are competing increasingly successfully with men for primary headships in most countries but men still have much better chances of being promoted at this level. In those countries which have the lowest proportion of women teachers, the proportion of women heads is also the lowest.

Demographic factors strongly affect the demand and supply of teachers. Over the past decades the demand for teachers has slowed down in many countries, due to declining birth rates. Recruitment of new teachers has also slowed down and as a result, the teaching population has aged rapidly. A significant proportion of all teachers will reach retirement age in the next decades and will need to be replaced. Recruitment policies need to anticipate this need by assessing the potential attractiveness of teaching (for example by early retirement schemes to enable an increase in recruitment of young teachers now). These policy options have major implications for the employment of women both in the short and long term.

The need to expand recruitment and to raise standards of entry to teaching, so as to promote higher quality, should lead governments to develop new poli-

cies in this area. Already demographic pressures and rising career aspirations among girls have led some countries to integrate the training of primary teachers into university education. Separate training routes for early and later primary teaching are being phased out. Such a trend should be beneficial for those young people, mainly women, who would otherwise find themselves locked into a narrow career structure prematurely.

Co-education should mean not only that boys and girls are taught together but that they have male and female role models. Policies devised to improve promotion prospects for women should be accompanied by policies designed to attract a better balance of male and female teachers. Greater flexibility in training routes should help to persuade more men to make careers teaching young children, and more women to teach older children, provided that pay and working conditions are attractive.

Policies on teachers' pay are critically important here. There is some evidence in this chapter that changes in the real pay of teachers have not kept up with economic growth in all countries. These differences will affect the attractiveness of primary teaching to men and women. If governments are serious about raising standards and maintaining or improving the gender balance among primary teachers, then teachers' salaries are probably the most important means at their command. The counterpart might be that teachers be subjected to increased accountability for performance and educational outcomes and, in some countries, larger or more differentiated workloads.

Some countries have very high rates of part-time teaching. The flexibility to move between full-time and part-time teaching without jeopardising their career is crucially important for women who combine working with raising families. Their opportunity to do so varies sharply from one country to another. Women in some countries do not seem to have many opportunities to work part-time while in others their access to full-time posts seems to have been restricted at a time of over-supply of teachers. As in other areas, promotion opportunities are much higher for those working full-time or overtime. For governments likely to be faced with recruitment difficulties and concerned about improving teacher quality, thoughtful approaches to part-time hiring policies need to be devised. Part-time teaching can be both beneficial and potentially disadvantageous, both to teachers and to students. Teachers, like other working people, require job security and stability. Students of all ages need continuity. "Over-exposure" to part-time teachers or auxiliaries may disrupt this if not carefully planned and monitored.

The improvement of the quality of teaching and learning at all levels is closely linked to gender-inclusive and equality issues more than ever before, particularly because of the sharp reduction of public expenditure as a policy response to economic austerity. Education remains both a means and an end in which women have a much fuller role to play.

NOTES

1. The availability of support staff has a considerable impact on the quality of the teaching and learning environment. In many OECD countries, support staff of a less-qualified level is generally female. Although this staff may be less-qualified, they are nonetheless, very important in the overall school environment.

2. The OECD education database includes yearly data for all Member countries starting from 1985. Data have started to be collected on a regular basis only in 1990 and not all countries have provided data retroactively to 1985. Trend data is available only for ten countries.

3. The focus of the chapter will be mainly on primary and secondary education teachers, which covers compulsory education and regroup the majority of female teachers. An international comparison of tertiary education teachers would need a separate analysis.

4. Pupil/teacher ratios are established on the basis of full-time equivalents. In this way they account for the substitution of part-time to full-time teachers.

5. In most OECD countries teaching at pre-primary level offers substantial and growing employment opportunities for women. Data is however missing for many countries in the OECD database so it is not analysed here. From the sample of countries which have provided data on pre-primary teachers, this represents on average 1 per cent of female employment. The range across countries varies between a low 0.2 per cent in Canada to a high 1.8 per cent in Hungary.

6. In OECD countries the percentage of women has risen very generally in most occupations as the result of the rising female participation rates.

7. In some countries there are large within-country differences of class sizes.

8. More qualified positions, such as pastoral care, guidance counselling, might also provide some career mobility for women.

Appendix

EDUCATION SYSTEMS – SELECTED TYPES

DENMARK

Educational structure

Pre-primary education is optional. About 60 per cent of 3- to 4-year-olds attend kindergarten or age-integrated institutions. Nearly 99 per cent of 6 year-olds are enrolled in pre-primary programmes in kindergartens, age-integrated institutions or, most frequently, in pre-school classes in primary schools. Most children start primary school at the age of 7. Education is compulsory for nine years and starts on 1 August in the calendar year of the child's 7th birthday. The municipal *Folkeskole* (primary and lower secondary school) is comprehensive up to grade 10. Grade 10 is optional, but in 1994 some 60 per cent of an age cohort were enrolled in this grade level.

To enter vocational upper secondary education, the completion of compulsory education is normally the only admission requirement. For the general programmes, the applicant qualifies to enter by passing the leaving examination of the *Folkeskole* in a number of specific subjects and by being recommended for further education by the lower secondary school. The duration of an upper secondary programme is typically 3 years but varies between 2 and 5 years. Students are usually 16-19 years of age. In 1994, 95 per cent entered upper secondary education and 78 per cent of the age cohort completed this level.

Teachers

Teachers are trained at different types of institutions. Pre-school teachers are trained at colleges for pre-school teachers and kindergarten training colleges. The duration of these programmes is 3 and a half years. The training of teacher for primary and lower secondary school (*Folkeskole*) takes place at colleges of education and lasts for 4 years. Teachers for general and vocational upper secondary education normally have a university degree corresponding to a Master's degree

and/or a vocational level of education and some professional experience from the labour market.

UNITED STATES

Educational structure

Compulsory education begins at age 6 or 7 in the majority of States, but most children enter kindergarten in an elementary school at the age of 5. Elementary school typically lasts for 7 years (including kindergarten through grade 6), although the duration, including kindergarten, may be as short as 5 years or as long as 9 years in some States and school districts. Secondary education typically starts around age 12 and continues for about 6 years.

Compulsory schooling ends at age 16 in over half the States, but a large majority of young adults continue their education and receive regular high school diplomas. In the period 1990 to 1996, high school graduates as a proportion of the 17 year-old population were between 71 and 73 per cent.

Teachers

Each State has its own standards for teacher education, which occurs in a wide variety of higher education institutions. The typical teacher education programme consists of four years of training, with emphasis on the pedagogy, *i.e.*, the methodology of instruction. Student teachers also participate in brief practicums. Teacher education reforms encourage a fifth year of study to integrate theory and practice better, as well as to provide student teachers with additional time to develop subject-area content expertise.

FRANCE

Educational structure

Since 1967 education has been compulsory from the age of 6 to 16:

– *Primary education* (or first level): pre-primary education (before the age of six) and primary education (from the age of 6 to 11) are provided in nursery schools and primary schools respectively. Nursery school attendance gradually became widespread during the 1960s and 1970s. Today some 2.5 million children attend nursery schools, as do all children between the ages of 3 and 5.

– Secondary education (or second level): the first cycle (from the age of 11 to 15) is provided in *collèges*, and the second cycle (from the age of 15 to 18 or 19) is provided in vocational, general or technical *lycées*. The introduction of the vocational option in 1985 led to a sharp increase in access to the

baccalauréat by making it possible for holders of an initial vocational certificate to continue their studies.

Teachers

Since 1991, all teachers have received training in teacher training university institutes (IUFM). The entrance requirement for these institutes is the *licence*. At the end of the first year, students must pass one of the two competitive examinations (*Professeur des écoles* or *Professeur d'enseignement secondaire*) in order to be admitted to the second year as teacher trainees, for which they will receive a salary. At the end of the second year, they obtain the status of a normal civil servant and their qualification (*Professeur des écoles* or *Professeur d'enseignement secondaire*). Their training includes both theoretical training in how to teach different subjects and teaching practice.

REFERENCES

EUROPEAN COMMISSION (1996), *Key Date on Education in the European Union*, Office for official publications of the European Communities, Luxembourg.

OECD (1990), *The Teacher Today: Tasks, Conditions, Policies,* Paris.

OECD (1994*a*), *Quality in Teaching*, Paris.

OECD (1994*b*), *Education 1960-1990. The OECD Perspective,* Paris.

OECD (1994*c*), *Women and Structural Change. New Perspectives*, Paris.

OECD (1995), *OECD Education Statistics 1985-1992*, Paris.

OECD (1996*a*), *Education at a Glance – OECD Indicators*, Paris.

OECD (1996*b*), *Education Policy Analysis*, Paris.

OECD (1997*a*), *Education at a Glance 1997 – OECD Indicators*, Paris.

OECD (1997*b*), *Education Policy Analysis 1997,* Paris.

5

THE NURSING PROFESSION: ISSUES OF DEMAND, STATUS AND WORKING CONDITIONS*

In OECD Member States, occupational opportunities in nursing, as a major medical profession, are determined by macro-socio-economic perspectives, particularly the level of economic development, the level of public social expenditure (especially on health care), and the ageing of the population. The gender characteristics of the nursing profession are, at the same time, influenced by the general characteristics of the labour market in each country, especially the level of female labour market participation and the level of part-time work.

This chapter examines the broader health care context in OECD countries and then turns to the specific conditions in the nursing professions across and within countries. It looks critically at current and past gender-specific treatment women nurses have encountered, the state of the profession and future prospects and policies to enhance participation, develop careers and improve the status of women in the full range of nursing occupations. It has direct links with Chapter 6 on the elderly and early childhood caring occupations.

SOCIO-ECONOMIC PERSPECTIVES: THE MACRO LEVEL

The "wealth of nations" and their spending on health care

Health expenditure per capita

Studies by the OECD have shown that the higher the (per capita) GDP, the higher the expenditure on health care. For twenty-seven OECD countries, it has been found that each 10 per cent difference in GDP per capita is associated with a

* This chapter is a revised and abridged version of a background paper prepared by Jozef Pacolet, Katia Versieck, Ria Bouten and Mike Deschamps (Pacolet *et al.*, 1998), from the Hoger Instituut voor de Arbeid. The background paper owes to a large extent to a study for the Hospital Committee of the European Community (Versieck *et al.*, 1995) that documented in detail the staffing and human resources problems of the nursing profession in 12 EU-member states.

14 per cent difference in health spending per capita (Schieber and Poullier, 1989). Health expenditure per capita in 1995 expressed in US$ and PPP (purchasing power parity) ranged from a high $3 701 in the United States to a low $219 in Poland (Table 5.1). The level of health expenditure in the United States is disproportionately high. The United States appears indeed as an exceptional case concerning health expenditure and patterns compared to other OECD countries.

Table 5.1. **Health expenditure and employment in the health sector in OECD countries, 1995**

	Health expenditure per capita	Total health expenditure % of GDP		Public share of total health expenditure	Health sector employment[1] % of total employment	
	PPP $ [2]	1985	1995	1995	1985	1995
Australia	1 741	7.7	8.4	67.4	7.0	7.2
Austria	1 634	6.7	8.0	74.7	..	..
Belgium	1 665	7.3	7.9	87.5	5.0	5.6[3]
Canada	2 049	8.4	9.7	71.9	5.0	5.4
Czech Republic	749	4.5	7.5	82.8	..	4.6
Denmark	1 368	8.2	8.0	..	4.2	4.3[3]
Finland	1 373	7.3	7.6	75.3	5.9	9.8
France	1 956	8.5	9.9	78.6	..	6.8
Germany	2 134	9.3	10.4	78.8	5.3	6.7
Greece	703	4.0	5.8	75.9	2.7	3.4[3]
Hungary	562	..	7.1	69.0	2.7	4.0
Iceland	1 774	7.3	8.2	84.1	6.1	6.2
Ireland	1 106	7.9	7.0	79.7	..	5.3
Italy	1 507	7.1	7.7	70.1	4.6	4.8
Japan	1 581	6.7	7.2	79.1	..	3.7[3]
Korea	666	3.9	3.9	39.6	0.9	1.3
Luxembourg	2 206	6.1	6.7	92.8	..	4.3[3]
Mexico	386	..	4.9	57.1	..	1.8
Netherlands	1 728	7.9	8.8	77.3	6.1	5.3
New Zealand	1 203	5.3	7.3	76.0	..	4.0[3]
Norway	1 821	6.7	8.0	82.5	8.8	14.9
Poland	219	..	4.5	..	..	..
Portugal	1 035	6.3	8.2	60.9	2.5	2.7
Spain	1 075	5.6	7.3	78.9	3.2	3.8[3]
Sweden	1 360	9.0	8.5	81.9	9.8	8.0
Switzerland	2 412	7.7	9.6	72.4	8.2	9.5[3]
Turkey	272	2.2	3.3	50.0	0.7	1.0
United Kingdom	1 246	5.9	6.9	85.5	5.2	4.6
United States	3 701	10.6	14.1	46.5	5.7	6.9[3]

.. Data not available.
1. Number of full-time equivalent persons employed in public and private health services.
2. US$ and purchasing power parity.
3. Most recent year for which data is available.
Source: OECD health database.

Other countries with the highest level of health expenditure per capita (Switzerland, Luxembourg, Germany, Canada, France) are also among those with the highest GDP per capita in the OECD. Mexico, Poland, and Turkey have the lowest levels of GDP per capita and spend very little on health. The Czech Republic and Hungary also have very low GDP per capita, but substantially higher levels of health expenditure. In the Czech Republic, in particular, per capita expenditure on health is higher than in Greece or Korea which have twice as high GDP per capita. The share of GDP spent on health care is relatively similar in OECD countries. Most countries spend within a range of 7 to 9 per cent of GDP (Table 5.1). A few countries such as Canada, France, Germany and Switzerland, spend more than 9 per cent of their total income on health. The United States is an exception in that it spends 14 per cent of its total income on health. Countries devoting less than 7 per cent of total resources to health include most of those with low levels of GDP per capita.

Over the last decade, most OECD countries have had a higher percentage of total GDP per capita spent on health, generally in the range of one to two additional percentage points. Only Ireland and Sweden have a lower percentage in 1995 compared to 1985 and in Denmark there was next to no change. There is a group of middle income countries (Greece, New Zealand, Portugal, Spain) which are catching up with the more advanced countries, whereas countries with already the highest level of expenditure in 1985 are those which have increased their effort on health most (United States, Germany, Switzerland).

Public vs. private health expenditure

Health care in OECD countries is very much in the realm of the public sector (Table 5.1). In 20 out of the 29 countries for which data are available more than 70 per cent of total expenditure on health take place in the public sector. In seven countries, Belgium, the Czech Republic, Iceland, Luxembourg, Norway, Sweden and the United Kingdom, the public sector governs more than 80 per cent of total health expenditure. Of those countries with a high level of health expenditure, the United States is the only one where most of this occurs in the private sector (54 per cent). Korea, Turkey, Mexico and Portugal also have high shares of private expenditure in total health expenditure. In a number of countries, health expenditure has increased more in the private than in the public sector over the past decade reflecting public budgets constraints.

Health expenditure and employment

A higher level of health expenditure does not necessarily coincide with a higher share of employment in this sector, since relative wages and the use of expensive health technology vary widely across countries. Nevertheless, there is

a fairly close relationship between relative expenditure and share of employment (Table 5.1).

In most OECD countries with a developed health sector (7 to 10 per cent of GDP) the health sector contributes between 4 to 7 per cent of total employment. The Nordic countries, with the exception of Denmark, and Switzerland seem to have developed a rather labour-intensive health sector. The health sector employs one out of ten of all employed persons in Finland and Switzerland, and one out of six in Norway. The United States has a relatively low employment concentration in the health sector (7 per cent) when comparing the share of the sector in total employment and in GDP. Portugal shows a similar low employment concentration relatively to the share of its total income spent on health. Employment opportunities do not appear to have grown more in the health sector than in the economy as a whole over the past decade in the majority of countries. There were, in fact, relatively fewer employment opportunities in the health sector in 1995 than in 1985 in Sweden, the Netherlands and the United Kingdom. In Norway and Finland, however, the employment capacity of the health sector has markedly expanded.

Social trends in the OECD countries with implications for the employment of nursing professionals

Several social, health and health care trends influence the level of health expenditure, level of employment in the health sector and the number of working nurses. These trends include an overall ageing of the population, technological developments, changes in pathologies and chronic diseases as well as changing consumer expectations. The most important demand-inducing trend is demographic evolution.

Demography

All the OECD-countries experience an ageing of the population. Age to a large extent determines expenditure on health care without a clear linear relationship. The need for and consumption of health and social care service provision increase rapidly after the age of 75. The ''double ageing'' in many countries will disproportionately increase health expenditure and the need for care. Table 5.2 shows that per capita expenditure for those aged 65 and over are, on average, two and a half to five times higher than for younger people, with even higher ratios for people aged 75 and older.

The proportion of people aged 75 or over as a percentage of the total population is rather similar across OECD countries. In 1990 it ranged from 4.1 per cent in Australia to 7.9 per cent in Sweden (after excluding Mexico and Turkey). The process of ageing is only in its early stages in most Member countries, as the

Table 5.2. **Ageing and health expenditure**

	Elderly share in total population				Per capita health expenditure for the elderly[1] (0-64 = 100)	
	65 +		75 +			
	1990	2000	1990	2000	65 +	75 +
Australia	10.7	11.3	4.1	5.3	404	598
Finland	13.3	14.4	6.2	7.3	395	552
France	13.8	15.5	6.7	8.1	296	373
Germany	14.9	16.2	6.9	8.4	268	317
Japan	11.9	16.5	6.3	9.4	479	573
Netherlands	13.2	14.1	6.3	7.2	442	..
New Zealand	11.1	11.3	4.8	5.2	388	616
Portugal	13.0	14.3	5.8	6.7	169	214
Sweden	17.8	17.0	7.9	8.6	283	343
Switzerland	15.0	15.8	7.2	8.7	400	570
United Kingdom	15.7	15.9	7.3	7.9	388	559
United States	12.6	12.5	5.3	5.8	417	522

.. Data not available.
1. The most recent year.
Source: OECD (1996), Tables 3.1 and A.1.

baby-boom generations are still of working age, and will continue into the next century. Its effects are, however, already being felt. However as noted in *Ageing in OECD Countries* (OECD, 1996), health expenditure patterns vary across countries not only because of differences in country age-profiles but also because of institutional factors:

> "Institutional disparities, such as the extent of public coverage of long-term costs, rather than underlying differences in health, account for many of the differences (among countries in health expenditure by *age).* Variations among countries are especially marked in nursing home care expenditure where the per capita cost for elderly people is up to 15 times higher than for the rest of population in some countries. In countries such as Belgium, the Netherlands and Germany, where only minor parts of long-term care for the elderly are included in public health insurance schemes, expenditure for those 65 and over are from two and a half to three times larger than for those under age 65. In Australia, and Finland, for example, comprehensive care for the elderly is included in their public health care systems and expenditure ratios are four to five times higher" (OECD, 1996, pp. 53-55).

This shows that the demand for nursing care in each country will be strongly influenced both by the ageing of population and by the way public policies respond to the needs of the elderly.

Medical technologies and changing health needs

Changes in pathologies and, more particularly, in the frequency of chronic diseases, and improvement in the medical technologies to treat diseases, have also had an influence on the demand for nursing care and thus for nursing professionals. The development of medical science and new medical technologies will particularly influence the demand for highly-educated nursing personnel in (general) hospitals, where the vast majority of specialist care is provided.

Changes in care systems

The care systems in which some form of nursing will be provided can and will change due to various economic and social pressures, so that the overall effect is, however, difficult to estimate. Budgetary constraints will lead to more and cheaper caring facilities outside hospitals which may have long-term effects on the nature and quality of care. For example, these facilities may concentrate on long-term care. The demand for the provision of nursing care at home and in residential services by professional carers has also increased due to changing consumer expectations and attitudes. It is likely that future need for nurses will be high in this area, more so than in the hospital environment. Informal care by relatives is becoming less widespread as a consequence of an increase in labour market participation by women. At the same time, the average career in the nursing profession will also change significantly in the future reflecting the changes in women's labour force participation patterns (more continuous participation over the life cycle).

THE NURSING PROFESSION IN OECD COUNTRIES

Defining the nursing profession

In the background report to this chapter (see note, p. 129), nurses are defined by European Union criteria: "nurses responsible for general care (NRGC)" and the main focus is on hospitals. At the same time, however, the situation of NRGC can only be explained by looking at other categories of nursing professionals, particularly, second-level nurses, specialist nurses and midwives. The focus on hospitals refers to general hospitals, short-stay or acute, and long-term as well as psychiatric hospitals. Non-hospital sectors will have a growing importance for nursing employment in the future. These include in particular: residential services (non-hospital institutional nursing or care services offered to elderly, disabled and psychiatric patients) and community care (district nursing as well as preventive health care such as child care, home care and general medical practice).

Information on nurses in several countries probably refers to a more or less wide definition of sectors of occupation. Different health and social care sectors

would require further identification as it is not always clear which sectors are covered in various statistical sources. No rigourous comparisons are possible from the currently available information and generalisations must be treated with caution.

A quantitative estimation of nursing

Employment of nurses in the health care sector is described by three indicators: total health employment and share of nursing employment in total health employment, and the total number of nurses per 1 000 inhabitants.

Health professions as a percentage of total employment

The relationship between total health expenditure and the share of health sector employment in total employment has been analysed above. It has been shown that there is no strict linear relationship between the level of expenditure and employment, some countries seeming to have a more labour-intensive health sector than others. The case of the United States clearly makes the point that even with high GDP, high levels of expenditure do not coincide with high levels of employment. Also employment does not necessarily increase alongside rising health expenditure, indicating that costs are increasing instead of jobs being created.

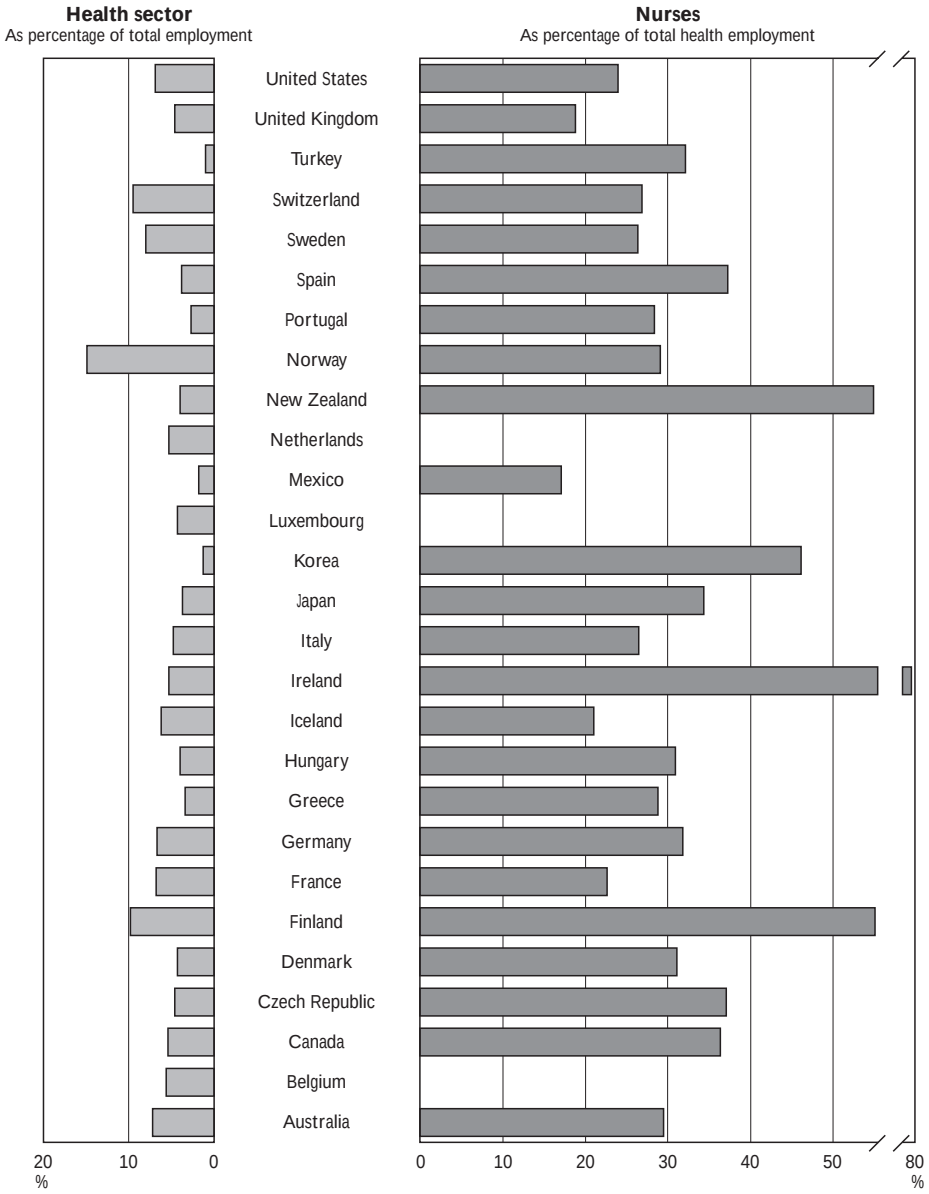
Nurses as a percentage of total health employment

Additionally, there does not seem either to be a direct relationship between the level of total health employment and the number of nurses. The share of nurses in total health employment shows considerable variations across countries (Figure 5.1). Ireland has a surprisingly high share of nurses in total health employment (more than three quarters). In Finland and New Zealand nurses are in a majority in the health work force. Finland has a highly labour-intensive health sector, but this is not particularly the case of Ireland and New Zealand. At the other extreme, in the United Kingdom less than one in five health professionals are nurses and less than one in four in the United States and France. As already noted the United States have a low density of employment in the health sector, but the United Kingdom and France occupy an average position in that respect. In most countries however nurses represent a quarter to one third of total health employment.

Nurses per 1 000 inhabitants

It is generally considered that there is a relationship between income and the relative number of nurses. This is not, however, the only determining factor as

❖ Figure 5.1. ***Employment opportunities in health and nursing,[1] 1995***



1. See notes of Tables 5.1 and 5.3.
Sources: Tables 5.1 and 5.3.

we have seen. The relationship between income and health expenditure on the one hand, and that of health expenditure and employment in the health sector and the share of nurses in total health employment on the other, are not established in a universal way but are as much influenced by the specific characteristics of each country's health system and demographic structures. Societies can choose to develop their public services, including health care, as the Scandinavian countries have done, and thus create both jobs and additional care. Countries with high public employment usually indicate a highly-developed welfare state, and a larger number of nurses (although such is not always the case). Since this sector is characterised in some countries by a high level of part-time work, figures on the total number of nurses per inhabitant would need to be adjusted for this factor.

With more than 20 nurses per 1 000 inhabitants, Finland is far ahead of other OECD countries. The number of nurses per 1 000 inhabitants is well above 10 per 1 000 in Ireland, Norway, and Switzerland. Australia, Austria, Canada, the Czech Republic, Germany, New Zealand, Sweden and the United States also have relatively high rates of nurses per inhabitant. In all of these countries nursing provides substantial employment opportunities. The number of nurses per inhabitant is particularly low in Mexico and Turkey, and also Greece, Korea and Portugal (Table 5.3).

Other caring personnel

The substantial differences across countries in the share of nurses in total health employment and the rates of nurses in the population point to likely differences in the way health care is organised and the role of nurses defined in each country. The availability of other caring personnel is a first indicator of the difference in the content of the nursing profession from country to country. Data are systematically available only for physicians but the sparse data available on other caring personnel show considerable variations across countries.

Table 5.3 shows a very uneven balance in the numbers of nurses and physicians in OECD countries. Rates of physicians in the population show less variation than for nurses. In most countries there are 2 to 3 physicians per 1 000 inhabitants. Therefore, countries with the highest rates of nurses in the population will also have the highest ratios of nurses per physician. This is verified in most cases. Finland and Ireland have seven nurses for each physician, New Zealand and Switzerland almost five. At the other extreme in Greece, Hungary, Italy, Mexico, Portugal, Spain and Turkey there are as many physicians as nurses. With the exception of Mexico and Turkey this reflects high rates of physicians in the population, compensating to a certain extent for the low numbers of nurses. Italy with more than five physicians per 1 000 inhabitants and Hungary and Spain with more than four have the highest density of physicians among OECD countries and

Table 5.3. **Indicators of nursing,[1] 1995**

	Nurses as percentage of total health employment[2]	Nurses per 1 000 inhabitants	Physicians per 1 000 inhabitants	Nurses per physician
Australia[3]	29.3	9.6	2.5	3.9
Austria	..	8.6	2.7	3.2
Belgium	..	5.8[4]	2.9	2.0[4]
Canada[3]	36.1	8.9	2.1	4.2
Czech Republic	36.8	8.2	2.9	2.8
Denmark	30.9[5]	6.7	2.9	2.3[5]
Finland	54.7	21.1	2.8	7.6
France[3]	22.5	5.9	2.9	2.0
Germany	31.6	9.0	3.3	2.7
Greece	28.6[5]	3.4[5]	3.4	1.0[5]
Hungary	30.7	4.9	4.4	1.1
Iceland[3]	20.9[5]	7.0[5]	2.8	2.5[5]
Ireland	78.6	14.2	2.1	6.8
Italy[3]	26.3	5.5	5.5	1.0
Japan	34.1	6.0	1.6	3.7
Korea	45.8	2.6	1.1	2.3
Luxembourg	..	..	..	..
Mexico	17.0	1.0	1.4	0.7
Netherlands	..	..	..	..
New Zealand	54.5[5]	10.2	2.1	4.8
Norway	28.9[5]	13.2[5]	3.1	4.2[5]
Poland	..	5.5	2.3	2.4
Portugal	28.2	3.4	3.1	1.1
Spain	37.0	4.4	4.0	1.1
Sweden[3]	26.2	10.2	3.1	3.3
Switzerland	26.7[5]	13.8[5]	2.9	4.7[5]
Turkey	31.9	1.0	1.1	0.9
United Kingdom[6]	18.7[4]	4.1[4]	1.4	3.0[4]
United States	23.8	8.0	2.6	3.1

.. Data not available.
1. Certified and registered nurses.
2. Total health employment is on a full-time equivalent base, nurses on a head count base.
3. Nursing assistants are not included.
4. 1985.
5. 1990.
6. Great Britain only and full-time equivalents. The ratio to total health employment is underestimated.

Source: OECD health database.

relatively low densities of nurses. The fact that growing numbers of women are becoming physicians in a number of countries clearly indicates that opportunities in more qualified positions in the health sector are increasing.

CHARACTERISTICS AND WORKING CONDITIONS IN THE NURSING PROFESSION

The health and nursing sector has employed large numbers of women over a long period of time which must be seen within the framework of a broad overall increase in female labour force participation over the past thirty years.

Nursing and gender

The nursing profession is by far one of the most female-dominated professions in health care. Midwifery has the highest rates of feminisation. Nursing is female-dominated in Ireland to 93 per cent, in Spain to 86 per cent and in Portugal to 84 per cent. It is striking that even countries known for their long tradition of female emancipation still have low percentages of males in this sector. Denmark has a remarkably low percentage of male nurses (only 3 per cent). In the Netherlands, some increase in the participation of men in the nursing profession was observed in the 1960s, but there has been no further increase since then, even after intensive campaigns concerning equal opportunities and choices based on gender (van der Windt *et al.*, 1997). Since part-time work is so extremely prevalent in this country, the share of males expressed in full-time employment is somewhat higher than when overall labour force participation is considered.

In some European countries, such as Belgium and Spain, the higher the required qualification of the nurse, the more men choose nursing studies and thus the profession. This observation suggests that there is a positive relationship between the level of qualification (and thus the image of a profession in society) and the share of males entering a profession. In Greece, since there is a university degree in nursing, more men may be likely to choose a career in nursing. Half of nursing university degrees have been granted to males. In Germany, the share of female nurses is relatively low, especially for second-level nurses. Only 57 per cent of second-level nurses are female, while more than 80 per cent of higher qualified general and specialist nurses are female. It has to be noted, however, that caring personnel, ambulance staff and conscientious objectors are included in the figure for second-level nurses in Germany. These categories explain the high percentage of male second-level nurses.

In Japan, the sector is traditionally a female profession, but recent information about students admitted to nursing schools reveals that up to 10 per cent are male, approaching the percentage of male nurses in European countries (Japanese Ministry of Health and Welfare, 1997). This figure is even higher for assistant nurses, while it is lower for more highly-qualified nurses.

Employment opportunities in nursing for women

Growth in the numbers of nurses and the fact that nursing remains a highly female-dominated occupation mean that the nursing profession offers considerable employment opportunities for women in all OECD countries, even in those countries with relatively low levels of female labour force participation. Over the past decade the numbers of nurses has grown in all OECD countries with the exception of Canada (Table 5.4). They have doubled in countries such as Korea, Mexico and Turkey which still have relatively under-developed health sectors. In most other countries the numbers of nurses have increased by 10 to 35 per cent. This increase has contributed to the high levels of the nursing indicators shown in Table 5.3 for some countries, including Germany and Finland.

Nursing is an important area of female employment in most OECD countries. One out of ten employed women in Finland and Ireland works as a nurse. The concentration on the nursing occupation represents 4 to 5 per cent of all female employment in about half OECD countries. Apart from Korea, Mexico and Turkey, Portugal is the only country where employment opportunities for women in the nursing profession appear limited (less than 2 per cent of total female employment). Since 1985 employment opportunities for women have increased more in the nursing sector than in the other sectors in all countries but Canada and New Zealand, where they were at a relatively high level in 1985 (Table 5.4). These observations need however to be qualified by considering the extent of part-time work among nurses which varies considerably across countries.

Part-time work and working time

Nursing is a 24-hour activity, often involving long or unsociable hours, shiftwork and overtime. It is also characterised in some countries by extensive part-time employment. Brihaye (1993) has looked at the extent of part-time work in nursing. In European countries, part-time work among nurses is most commonplace in Belgium, the United Kingdom and the Netherlands. In Belgium, many nurses (36 per cent) take up part-time jobs to combine professional and family life or because they are not offered the opportunity to work full-time. In the United Kingdom and the Netherlands, half of nurses work part-time. Part-time work in the United Kingdom is mostly to be found among women on lower salary grades. In the Netherlands, in 1995, two-thirds of nurses work part-time in general hospitals and this figure is approaching three-quarters in psychiatric hospitals (van der Windt *et al.*, 1997). In more and more cases, full-time jobs of 38 hours are being replaced by 80 per cent jobs (30 hours) in the hospital sector. It should be noted, however, that the three countries have high levels of part-time working in their female labour force in general and that the rates of part-time work for nurses do not differ much from the general rate for all working women.

Table 5.4. **Employment opportunities for women in nursing,[1] 1985-95**

	Nurses as percentage of total female employment		Growth in number of nurses
	1985	1995	1985 = 100
Australia[2]	..	4.9	..
Austria	3.6	4.3	145
Belgium	4.1	..	..
Canada[2]	5.6	4.3	95
Czech Republic	3.2	3.8	107
Denmark	2.6	3.0	117
Finland	6.8	10.9	135
France[2]	3.3	3.5	118
Germany	..	4.9	..
Greece	2.0	2.9[3]	152[3]
Hungary	..	3.0	116
Iceland[2]	..	3.0[3]	125[3]
Ireland	..	10.7	129[4]
Italy[2]	3.5	4.4	130
Japan	2.7	3.3[3]	135[3]
Korea	..	1.4	187
Luxembourg	..	..	..
Mexico	..	0.9	247
Netherlands	..	..	..
New Zealand	5.3	5.0	109
Norway	5.1	6.6[3]	138[3]
Poland	..	3.1	118
Portugal	1.5	1.7	136
Spain	4.6	4.1	120
Sweden[2]	3.6	4.7	125
Switzerland	..	6.1[5]	..
Turkey	..	1.0	207
United Kingdom[6]	2.3	2.5	125
United States	3.2	3.7	137

.. Data not available.
1. Certified and registered nurses.
2. Nursing assistants are not included.
3. Most recent year.
4. 1995/1990.
5. 1990.
6. Great Britain only and full-time equivalents. The ratio to total health employment is underestimated.

Source: OECD health database.

The Nordic countries have very different rates of part-time work among nurses. The proportion of nurses working part-time is low in Denmark (relatively to the share of part-time in total female employment: 15 per cent versus 27 per cent). In Norway and Sweden about half the nurses work part-time, which is much more than for all women in the labour force. The Norwegian Nurses' Association

notes that a move towards part-time working amongst nurses has taken place. Part-timers are more frequently used than full-time workers, however, for inconvenient shift work such as at weekends. The same trend is seen amongst auxiliaries. High proportions of part-time work in nursing, in absolute terms and relatively to the share of part-time in the female labour force, are also found in Australia, Canada, New Zealand and the United States.

Workload and stress

When part-time work is not available (because of labour contracts, economic conditions, or the historic evolution of participation of women in the labour force), the stress due to the heavy workload imposed on nurses over long hours may be overwhelming. An extreme example is to be found in Japan, where the first result of the shortage of nursing positions and nurses is that nurses are overworked. Many Japanese nurses are very tired, both physically and mentally. There have even been cases of "karoshi", which means death as a result of overwork. These tragedies are related to the frequency nurses have to work night shifts. One nurse died suddenly of cardiac insufficiency after being on duty continuously for 34 hours (Sawada, 1997). Institutions are relying increasingly on part-time and temporary work, particularly visible amongst support and nursing staff. At the same time, the number of full-time employees has been declining.

Sexual harassment

As part of a wider effort to ensure equal opportunities and a satisfactory environment in the workplace, the elimination of sexual harassment (one particular form of discrimination on the basis of gender) is an important element to be addressed in nursing. One study undertaken among United Kingdom regional health authorities by the Equal Opportunities Commission (ILO, 1992) found that although 90 per cent of respondents had equal opportunities policies, 78 per cent had no procedures for dealing with sexual harassment. Violence from patients is part of this problem mentioned on some occasions, especially in community care situations. This highly-sensitive but quite real factor requires serious study and incisive policies with accessible implementation machinery.

NURSES' SALARIES

A comparison of nurses' relative pay across countries is possible from *Trends in Public Sector Pay in OECD Countries* (OECD, 1995*a*). This comparison applies to public sector nurses in 15 OECD countries. Remuneration has been expressed in US dollars and adjusted for each country's GDP purchasing power parity. Figures are given for general nurses and nursing auxiliaries. Table 5.5 compares this

Table 5.5. **Relative earnings of public nurses, 1993**

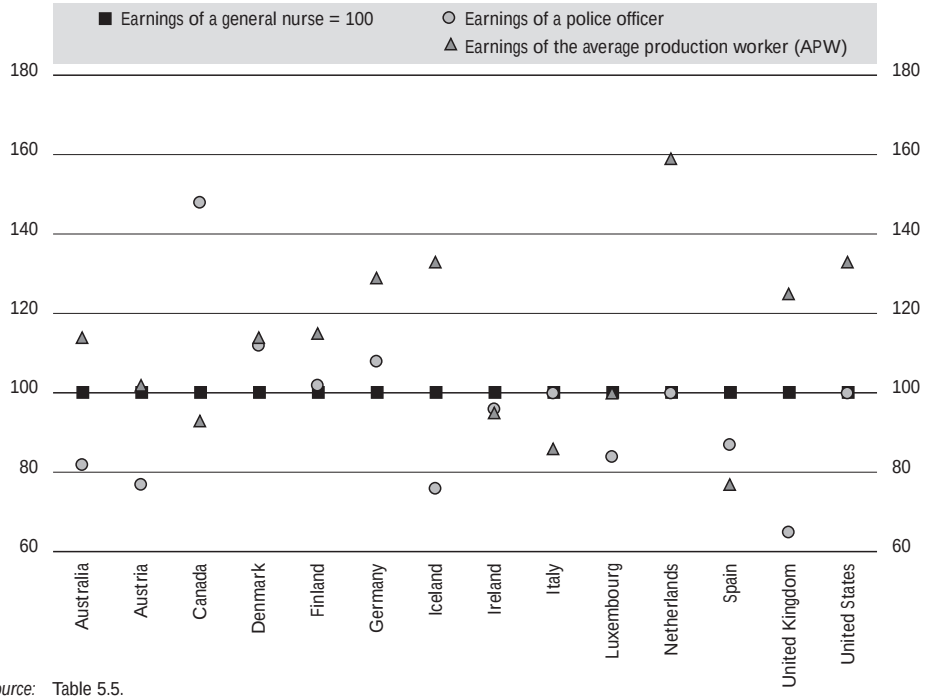
	General nurses			Auxiliary nurses		
	Annual earnings $ PPP[1]	Earnings of a police officer	APW[2] earnings	Annual earnings $ PPP[1]	Earnings of a police officer	APW[2] earnings
		(general nurse = 100)			(auxiliary nurse = 100)	
Australia	19 501	82	114	16 607	97	133
Austria	19 584	77	102	16 122	93	123
Canada	26 918	148	93	24 572	162	102
Denmark	21 704	112	114	19 654	123	127
Finland	16 776	102	115	15 669	109	122
Germany	18 678	108	129	17 348	116	141
Iceland	11 989	76	133	8 595	106	185
Ireland	21 012	96	95	14 742	137	135
Italy	24 444	100	86	22 199	110	94
Luxembourg	24 032	84	100	19 960	101	120
Netherlands	16 125	100	159	14 532	111	175
Spain	20 677	87	77	13 116	137	120
United Kingdom	17 734	65	125	11 500	100	192
United States	18 951	100	133	16 939	112	149

1. US$ and purchasing power parity.
2. APW = average production worker.
Source: OECD (1995), Tables 10 and 11.

average income for the two nursing categories with the income of police officers and the earnings of the average production worker (APW). Figure 5.2 shows the results of this comparison in the case of general nurses. The police officer provides an interesting comparison with a male-dominated occupation in the public sector with similar irregular working hours as the female-dominated nursing occupation. Most of the time, a police officer's wage is below that of a nurse, but by no more than 15 per cent. This earnings disadvantage is most marked in the United Kingdom where a police officer earns less than two-thirds of the salary of a nurse. Canada offers a remarkable counter-example with earnings of a police officer well above those of a nurse (by 50 per cent).

The comparison with the average production worker shows higher earnings for general nurses in Ireland, Italy and Spain and earnings at the same level in Austria, Canada and Luxembourg. It is particularly advantageous in financial terms to work as a nurse in Spain. In Spain general nurses make 20 per cent more than the average production worker. In all other countries the earnings of general nurses are low relatively to those of the average production worker. The earnings disadvantage ranges from 60 per cent in the Netherlands to 15 per cent in Denmark and Finland.

Figure 5.2. ***Relative earnings of public sector nurses, 1993***



Source: Table 5.5.

The same cross-country pattern applies for the relative earnings of nursing auxiliaries as for general nurses. The earnings of auxiliary nurses are lower than those of general nurses in a proportion that varies across countries from more than 30 per cent in Spain, United Kingdom, Ireland and Iceland to less than 10 per cent in most other countries. The earnings of police officers are greater than, or equal to, those of auxiliary nurses in all 15 countries. Apart from Italy, in all countries the earnings of an auxiliary nurse are below the earnings of the average production worker (by as much as 75 to 92 per cent in the United Kingdom, Iceland and the Netherlands).

In the absence of more information, it is not possible to conclude directly from Table 5.5 whether or not wages are at a satisfactory level for the nursing profession. A major part of nurses' remuneration consists of additional payment for working unsociable hours. Nurses who only work night shifts or nurses who frequently work weekends can earn significantly more than nurses or other white-

collar professionals who work during the day. Information would also be needed on earnings mobility over a career in nursing. This is usually more limited in nursing than in the other health professions in most countries.

From the analysis of the data on earnings, it is, however, possible to conclude that some countries opt for high income for nurses, especially Italy, Ireland and Spain. In the case of Italy and Spain, the result is relatively low employment levels in nursing. In a second group of countries, Australia, the Netherlands, and Germany, nurses are relatively underpaid compared to the rest of the economy, but there is a reasonably high number of nurses per 1 000 inhabitants. Other countries, such as Finland, however offer still better employment opportunities for nurses without imposing such a high wage penalty. Conclusions on the United States cannot be drawn on the basis of data for the public sector only, as so much of health activity takes place in the private sector.

CAREERS AND CAREER OPPORTUNITIES

Career length

Average career length is determined by first entry into the job, retirement age, outflow and re-entry into the job. The currently observed average age of nurses in employment is low. In some countries (Belgium, Germany, Greece), due to high recruitment at entry level, the nursing population has become younger compared to its average age a few decades ago. In others, female nurses remain active on the labour market to a greater extent and for a longer period of time than in the past contributing to longer and more continuous careers. The average age of nurses is likely to increase in the future under the impact of lower entry level recruitments and careers stabilisation.

The nursing profession seems to suffer to a lesser extent from the problem of permanent outflow in the early stages of a career. Temporary outflow is frequent mostly due to the fact that the nursing profession is a female-dominated profession. Nurses leave the job when they have children, or to combine professional and family life. Only in a few cases has the harshness of the job been explicitly mentioned as influencing outflow. With the exception of France, Japan (Arai, 1992) and the Netherlands, where the average career is short or permanent outflow in the early stages of the career is high, most outflow from the nursing profession is temporary and for family reasons (maternity leave, child care). In other countries permanent outflow from the profession is only common in the later stages of the career due to the availability of early retirement (Denmark, Italy).

In the Netherlands, there is a tendency for nurses to stay longer in the job and, rather than leaving completely, reduce their working hours, supported by, for instance, better child care facilities (van der Windt *et al.*, 1997). In Spain and Belgium, temporary outflow for family or personal reasons is common. In Spain,

this temporary outflow can last for 10 years. In Belgium, nurses frequently re-enter the labour market in part-time jobs to combine family and professional life. In Belgium and the Netherlands, re-entry programmes are organised.

In Ireland, unemployment among general nurses is one of the reasons for temporary outflow from the nursing profession. Moreover, general nurses in Ireland go abroad or switch to non-health sectors for the same reasons.

In Denmark, nurses think of their jobs as a "life-time" job. In Italy and Portugal, the problem of outflow from the nursing profession seems very marginal. In these countries, average career length seems to be influenced to a large degree by the pension system. As a result of the income-related pension system in Denmark, nurses frequently leave the profession at the age of 60 while the normal retirement age is 67. The pension system has become more rigid in Italy and Greece, and the average career length is expected to rise in the near future.

Career opportunities: constraints, obstacles and alternatives

Nursing and midwifery are occupations with few if any promotion prospects and this is related to permanent outflow from the profession. Current developments may be limiting still further the mobility and career perspectives of nurses. A longer stay in the job and a substantial decline in mobility, to a higher level, are observed in the Netherlands, partly because nurses are changing employers less frequently and partly because fewer opportunities arise in a stagnating sector. In Belgium and Denmark, there is also an observable trend to hire qualified personnel in positions held by lower-qualified staff, thus downgrading jobs. This situation and the qualification inflation are also experienced by other countries and worsen career opportunities.

Men, nevertheless, benefit more than women from whatever internal or external mobility (career opportunity) is available. In general, the higher the qualification or function, the higher the share of male nurses. Male nurses are more directed towards building a career than female nurses. An indicator of career orientation is the level of activity in specialist and management nursing training. Nursing is one of the branches with the greatest scope for specialisation in the sector. Female nurses work less in highly-technical wards and are less likely to choose psychiatric and mental institution work than men. In Canada, Denmark, France and Norway, male nurses, who form a relatively small percentage of the profession as a whole, are disproportionately well-represented in management. The Norwegian Nurses' Association reports that male nurses are more highly-paid, on average, and younger than their female counterparts, moving directly into the middle and upper remuneration brackets. Moreover, men entering the profession are in general in more highly-skilled categories. More poorly-qualified positions,

such as auxiliaries or assistant-nurses, continue to be staffed exclusively by women. The same tendency is observed in France and Canada (ILO, 1992*a* and *b*).

Women also continue to suffer from an inordinate share of family responsibility. With the growth of single-parent families and larger numbers of working women with young children, the importance of striking a new balance between work and family responsibilities is all the more urgent (ILO, 1992*a* and *b*). Nursing career breaks militate against the return of nurses to the workplace. Costly training, valuable experience and know-how are wasted and the potential of women employees thus remains unfulfilled. Re-entry implies additional costs for retraining, so that keeping people in their jobs is perhaps the best strategy.

Many countries have made efforts to improve career prospects for auxiliaries. Initiatives have been taken in Austria, Belgium, the Czech Republic, Finland, Hungary, Japan, Mexico, Norway, Portugal, the United Kingdom and the United States. For nurses, the same movement is still continuing in Belgium, Denmark, Finland, Norway, Sweden, the United Kingdom and the United States (ILO, 1992*a* and *b* and Versieck *et al.*, 1995).

POLICIES TO IMPROVE THE ATTRACTIVENESS OF THE NURSING PROFESSION AND CAREER OPPORTUNITIES FOR WOMEN

Many OECD countries are facing similar problems in the nursing profession. They are typical female sectors, sometimes confronted with shortages, with a high workload and high risk of burn-out, with high turnover and a lack of career opportunities, as well as high levels of part-time work. A battery of policy measures are needed to keep women in the professions and improve their career prospects. Measures which have been taken or are under consideration in different countries are described in detail in Versieck *et al.* (1995) concerning twelve European Union countries. Table 5.6 gives a synoptic view of the priority areas in those countries. The priorities include measures suggested by nursing professionals. Nurses and nursing organisations have a major role to play in bringing forward the reforms that will improve the status of their profession.

Low status

Physicians (male) had (and probably still have) a significant impact on the gender socialisation of the nursing occupation. In Japan it is argued that the low status of the nursing profession stems from Japanese culture (low status of women, low status of caring work) and the history of the medical profession, where nurses were only a kind of servant for the physician, leaving little opportunity until now for nurses to provide direct medical care for patients. Nursing was not a highly regarded profession, and many nurses quit as a result (Sawada, 1997). This analysis probably applies also to most OECD countries.

Table 5.6. **Measures to improve the conditions of nurses in European Union countries**

	Pay	Hours of work	Workload	Child care	Relationship with other professions	Continuing education	Career development	Image/ status
Belgium	X	X	X		X			
Denmark				X				
France	X	X	X	X	X	X		X
Germany	X	X	X	X	X			X
Greece	X	X	X	X	X	X		X
Italy	X							X
Ireland		X				X		
Luxembourg						X		
Netherlands			X	X		X		X
Portugal	X		X					
Spain	X	X					X	X
United Kingdom	X		X	X				

Source: Versieck *et al.* (1995).

Real improvement in career prospects for nursing professionals must include better economic status as well as improved social and legal status. Also, across OECD countries, improvements in relations between different categories of health professionals need to be addressed including relations between physicians and all forms of nursing professionals.

In recent years, many countries have made an effort to achieve higher status for the profession. The low status of the nursing profession can be improved by bringing the level of pay as quickly as possible up to a level which is likely to attract individuals to the profession and keep them in it. Attention should be paid especially to salaries in the later stages of a nurse's career, since these are often below the salaries of other white-collar professions with a similar level of education. This could be facilitated by the fact that of all the health and medical professions, at global level, nursing is predicted to experience the largest single growth in demand. The status of nursing can also be improved by upgrading training and education. Higher entry qualifications can also bring higher salaries.

Measures related to working conditions and pay

At present, in a number of countries, inflexible work and family responsibilities constitute obstacles to women's career development. The inflexibility of working arrangements constitutes a considerable waste of human resources. For instance, in the Netherlands in 1988 only 51 per cent of nurses and caring person-

nel who had obtained the relevant diploma were active in the sector. In 1995 this figure approached 56 per cent (van der Windt *et al.*, 1997).

Part-time work could make the nursing profession much more attractive to the currently inactive (female) nursing population. Offering opportunities for part-time work has advantages for the employee and for the employer, such as retention of skills and experienced staff. As in all cases of part-time work, however, attention needs to be paid to job security, relative remuneration and career prospects. Part-time work is potentially both constructive and an obstacle to women's career development in nursing as in other sectors.

Several measures have been taken in countries to improve nurses' working conditions and pay. Some countries have made employment contracts more flexible (more opportunities for part-time work). In Belgium, Germany, France, Greece, Italy and the United Kingdom, salaries have been raised or adjusted but there is continued dissatisfaction with remuneration levels. In Portugal, on the other hand, an attempt has been made to enhance the supply of nursing manpower by offering the possibility of working more hours than a normal full-time job; the additional hours are remunerated at a higher rate. Nurses working more than full-time are granted a higher pension at a lower retirement age.

Reduction in administrative tasks, more support and/or logistic personnel to assist nurses, and use of computers can enhance working conditions. Belgium and Portugal promote more efficient use of nursing skills.

In the area of child care programmes and facilities, much work remains to be done. Early child care and school-age child care is erratic in terms of availability and adequacy across OECD countries. Moreover most nurses work unsocial and irregular hours which are not compatible with the usually rigid opening hours of traditional child care centers. Appropriate responses to the child care needs of nurses need to be developed to a greater extent.

Improving human resource management and labour force planning

Within the area of improving qualitative working conditions, an important task is reserved for the management of health care organisations. Management, within the bounds of possibilities, can improve working conditions by meeting nurses' individual preferences (flexible working schemes, part-time work, choice of shifts). Nurses wish to be more involved and informed. A permanent form of discussion between the organisational management and nursing professionals, between different categories of personnel and interaction between the organisation and the environment needs to be developed. The establishment of a satisfying relationship with other health professionals appears as a most immediate priority and physicians are an important target group.

Effective human resource management will be necessary in the future but steps towards more managerial discretion will require greater independence (more financial autonomy) for the institutions. More funds will have to be made available, for example, for the development of in-service training programmes and child care facilities. Increased autonomy and discretion need to be focused on improving career quality in nursing and are not ends in themselves in this context.

Measures related to the education system

In the majority of OECD countries, differing proportions of general nurses, specialist and second-level nurses are trained. Thus, the distribution of the total number of study hours among theoretical (and technical) and clinical instruction also varies greatly across countries (Versieck *et al.*, 1995).

Across OECD countries, the adequacy of training and general education needs to be addressed. In many countries, the attractiveness of nursing studies and the nursing profession will have to be enhanced and the image of the profession improved. In some OECD countries, outdated entry requirements, ineffective selection procedures and qualifying examinations constitute obstacles to making use of training to improve the nursing profession as a whole. The measures suggested by nursing professionals with respect to the education system and the demand and supply of nursing staff are diverse and closely linked to the specific nursing situation and problems in each country.

In France and Ireland, efforts have been made to adapt the nursing education system to the present context and to solve shortages of personnel in certain areas. It is suggested in France that nursing studies might be made more attractive by improving the financial situation of students and giving a greater place to human sciences in primary and secondary schools. In Luxembourg, a reform the nursing education programme is under debate because of the problems of declining numbers of first year enrolments.

Some countries have developed university nursing courses to increase the attractiveness and the scientific status of the profession. This is the case in Italy, Greece and Portugal. In Portugal, the capacity of nursing studies has been raised by allowing students to enter nursing programmes twice per year.

In Ireland, where imbalances of nursing professionals (oversupply in some areas, shortages in others) exist, improved planning of student nurse capacity is under consideration. Some countries have developed re-entry programmes for nurses who have temporarily left their positions. On the other hand almost no measures to influence the demand for nursing professionals are being taken. Only in Ireland is the shortage of public health nurses being resolved by redefining their role.

POTENTIAL SHORTAGES OF NURSING PROFESSIONALS AND RESPONSIVE STRATEGIES

The nature and extent of shortages

Shortages in the supply of nursing personnel do not seem to be as widespread as frequently assumed. In recent decades, there has been an increasing demand for nurses in outpatient care, but the demand for nurses in inpatient care has been declining. Over the years, the situation, at times, has been reversed.

In Denmark there is no consensus on the issue. Nursing supply is controlled by planning the number of students entering nursing education programmes, which is based on forecasts of future needs. The professional nursing organisation argues for the education of more nurses. The professional organisation of the other health (caring) professionals and the government are convinced that the mix of caring and nursing professionals, as planned and reflected in the numbers of students to be accepted in the different programmes, should be capable of meeting demands. If shortages in the numbers of health professionals arise, they are due to the fact that the educational system is in a transitional phase: the standards which have been set for numbers of caring personnel to be educated have not yet been reached.

In Germany and Spain, imbalances existed until recently, but are reported to have been corrected. In Germany, the shortage of nursing professionals, which existed both in regional terms and in different professions, has been markedly alleviated since 1990. The attractiveness of the profession to young people has improved substantially in recent years and outflow from the profession has decreased due to improvements in working conditions and the recent recession in the country. In Belgium, it was said that there were shortages in all nursing specialities but this statement is no longer held to be true by several experts. Moreover, the shortage of nurses is combined with unemployment among caring personnel. New evidence is available that young people are again choosing this profession, while the older generations are staying longer in those jobs (the labour market participation of the nursing profession is higher, for all age groups, than the rest of the population) (De Man *et al.*, 1998; Leclercq *et al.*, 1998).

In Greece, there is a shortage of more highly qualified nurses and a current over-supply of less qualified nurses (second-level nurses). The shortage in Greece is more budgetary in nature. In 1986 a decree established a ratio between hospital beds and health personnel. Consequently, many new nursing positions were created in the health services, but because of the shortage of general nurses at that time, many jobs were taken by other categories of nurses. Over the past few years there has been no additional recruitment of personnel due to economic restrictions. In the meantime, many general nurses have graduated and are unemployed. In the United Kingdom, an imbalance of nurses exists in some areas

because training capacity is based on past turnover rates which have fallen, partly due to the recession.

In France and Portugal, general shortages of nursing professionals exist. In France the nursing profession is said to be unattractive. In Portugal, notwithstanding present problems, nursing studies are becoming more attractive. Portugal and Spain mention imbalances in certain health care sectors: general hospitals seem to be more attractive to nurses, as a rule, than psychiatric hospitals and jobs in the elderly care or community care sector.

In Ireland, public health nurses are in short supply. Very often, nurses regard jobs in general hospitals as more prestigious. Young nurses in particular are attracted by jobs in general hospitals since these jobs are oriented more towards the provision of specialised and professional care and less towards the provision of basic nursing care to the elderly or people in the community. Ireland is facing an oversupply of general nurses, but a shortage of nurses with specialist training and/or acceptable levels of experience in areas such as intensive care, operating-theatre nursing and coronary care. France, Greece and Germany also refer to shortages of nursing personnel in special units (intensive care, oncology and operating theatre).

In Japan, a high outflow rates exist among nurses that is barely compensated by the inflow of new nurses. However, new nurses do not have the level of experience of older nurses. In this respect, Japan has shortage problems in hospitals and in high-technology services. There may also be a shortage of new nurses due to a lack of training capacity. There is a selective entrance examination and the capacity of the education system is well-below the number of students needed for the profession (Japanese Ministry of Health and Welfare, 1997).

Attraction to the profession

In most European Union countries, the numbers of persons choosing the nursing profession are stable or even increasing. In the United Kingdom, Ireland, Denmark and Greece, the demand for training is greater than the availability. In Belgium and Luxembourg, absolute numbers of first year enrolments in general nursing programmes have been rising again since 1990. In Greece, students are admitted to the nursing education programmes through a national system of entrance examinations for all schools and institutions. Students are assigned to departments of nursing by a computerised system on the basis of their examination marks and expressed preferences. They have the right to express a preference for many schools. This system of student selection means that students may not consider the profession they have selected as their first choice, especially in the case of nursing. A high drop-out rate from the programme and later from the profession itself often result from this selection system.

Degree of non-activity

Many women holding nurses degrees do not actually practice nursing, either because this is less attractive than other employment opportunities or because it is seen as not allowing the combining of work and family responsibilities. Little information is available on the degree of non-activity of nurses. Non-activity could be considered as a labour reserve. Still, it is not always possible to make use of this reserve as the general female participation rate remains low in some OECD countries. However, it is clear that the participation rate is higher for nurses than for women on average. Furthermore, in most OECD countries non-activity rates of nurses are probably low.

Responsive policy strategies to shortages

Job differentiation

The shortage which occurs in some countries is a multi-dimensional phenomenon. In some countries there are shortages of certain categories of (more highly qualified) professionals, while an oversupply exists of second-level nurses or caring professionals. In those countries, efforts could be made towards stimulating co-operation between different categories of health care professionals. Less-qualified caring professionals could take up caring and guiding tasks such as providing help with eating and housekeeping tasks. Logistics assistants could take care of the internal transportation of patients, distributing meals. More co-operation with less well-qualified personnel and logistical assistants is also in line with the budgetary constraints that are imposed on the health care sector, an area in which personnel costs are by far the most important cost generator. Higher co-ordination and information costs may however occur if more caring personnel are employed to assist nurses.

This proposal for co-operation does not seem to be opposed to primary nursing roles and status since the assistance of nursing professionals by caring or logistical personnel could relieve nurses of certain tasks, leaving more time for direct patient care. Too little information is currently available to examine in detail the effects which a distribution of tasks (job differentiation) would generate in terms of quality of care or unit labour costs in relation to output.

Specialisation

Several countries mention shortages in certain specialist areas (intensive care, coronary care, etc.) where workload and responsibility are high and patients need intensive and specialised, highly technical care. Nursing in these areas requires a certain level of experience and special skills. Since these areas involve medical technology, nursing skills have to be updated on a regular basis.

Shortages in specialised areas could, however, be alleviated and nurses attracted to these areas by providing a combination of effective continuing education programmes and facilities. In particular, when entering a specialised area, nurses should be offered opportunities for updating and reorienting their skills towards this speciality so as to be able to function effectively. Such programmes can be organised by schools, by hospitals (more practical courses such as the use of medical equipment) or by professional organisations (more theoretical courses to develop skills) which are well-positioned to follow trends and needs in these sectors. Moreover, training opportunities should be enhanced and additional education rewarded as part of career development. In-service training will become more important, with organisations having to increase their training capacity.

However, the organisation of continuing education programmes should be combined with the provision of opportunities for women to actually take up places in further education. It has become clear in many countries that, notwithstanding the fact that the possibilities and facilities for continuing education are legally regulated, financial problems prevent continuing education from being well-developed and accessible. The budgets in many countries received by hospitals or professional organisations to run programmes are insufficient (understaffing, under-equipped, lack of release time). The fees or additional costs are not always covered and frequently have to be paid by the person who takes the course. Nurses who have obtained additional diplomas do not necessarily receive any financial or other kind of reward. Moreover, nurses are reluctant to go on study leave since this increases the workload of colleagues which, in many cases, is already high.

Sector of employment

Imbalances in the supply of nurses according to sector of employment may also occur. Nursing in general hospitals frequently seems to be more attractive to (young) nurses than nursing in non-hospital residential services for the elderly and nursing in community care. Health care, however, is becoming less hospital-centred and the demand for nurses is expected to increase especially in the non-hospital areas. Moreover, increasing emphasis is being placed on preventive health care which will stimulate community care nursing.

Young nurses have to be encouraged to choose a job in alternative forms of health and social care. An important role is reserved for the education system. Student nurses should, to a larger extent, be brought into contact with these new kinds of care and with their importance during the theoretical and clinical training period (either by including more clinical training in non-hospital and especially elderly care settings and primary care, or by developing specialisation pro-

grammes aimed at educating nurses, for example in geriatric nursing). Moreover, the poor image of some of the non-hospital sectors needs to be improved. In countries where working conditions (remuneration, workload) in these sectors are less favourable, priority policies should remedy these disadvantageous conditions.

THE FUTURE OF NURSING PROFESSIONS

Each country is confronted with a unique mix of problems related to nursing. The situation can also change substantially over time. The future of the nursing profession in most OECD countries will however depend to a great extent on how the health sector will develop in response to the ageing of the population.

Supply and demand in the sector

As a result of various factors, in recent years there has been an enormous increase in the demand for health and social care and thus in the demand for nursing professionals. In non-hospital and residential care services for the elderly, and in community care in particular, the demand for nursing professionals has increased rapidly. In the general hospital sector, notwithstanding reductions in the number of beds, the demand for nursing professionals has also increased. This trend in demand can be extrapolated to the future but is not certain. The same is true for supply. At present, explicit general shortages in terms of the supply of nursing professionals exist only in a limited number of countries. Where such shortages exist or have existed in the recent past, they are frequently due to the enormous increase in demand for personnel and not to a reduction in supply. Both the demand and supply sides can be influenced to prevent such future problems.

Notwithstanding the observation that, at present, general shortages of nursing professionals do not seem to be as widespread as frequently assumed, it should be noted that the situation can change quickly. Since the situation can develop rapidly, it would be desirable to shorten the planning period for human resources development in OECD countries. On the other hand, stop-start policies or irrevocable solutions have generally negative impact as recent policy history has amply demonstrated.

Financing of care: a crucial problem

The largest problem, however, is, and will most probably remain, the budgetary constraints imposed on the health and social care sector. Such constraints make it difficult to enhance the attractiveness of the profession. Financial cutbacks influence the number of nurses employed, leading to potential shortages in

the numbers of nurses. All OECD countries are confronting budgetary austerity for social services and health care services are among the first to suffer from reductions in public expenditure. Those budgetary restrictions also occur in the education system in many countries, leading to complaints about shortages on the one hand and, on the other hand, limits on educational opportunities that might alleviate these shortages. A decent care system cannot be organised without reasonable funding. However, once funding becomes available, choices remain to be made concerning the jobs to be created, levels of qualification and resources to be targeted for further training of each category of personnel.

CONCLUSIONS

The development of the welfare state implied, in many OECD countries, a great many jobs being created in the caring and nursing professions. These jobs, be they full-time or part-time, meant a significant supply of jobs for women with both low and high levels of qualification. The stagnation in the growth of the sector, due to public budgetary austerity, stopped this trend, although new needs (the ageing of the population) are emerging and must be met.

The nursing and caring professions have long been and remain female-dominated professions. Women are even more dominant at the level of lower-paid and lower-qualified jobs. The sector has not guaranteed the best working conditions across the full range of nursing professions. The secondary status of working conditions is not necessarily determined by the fact that it is a female-dominated sector, since it is also a public sector, or publicly-financed sector. In many countries, improvements have been made in relative pay. Better hours, better staffing, more part-time work and more child care facilities might solve problems faced by women nursing professionals with respect to family responsibilities. Better career opportunities, training opportunities, a lighter workload and more recognition for responsibility might increase attractiveness, prevent early exit, increase entry to the profession and avoid shortages.

In a world of massive unemployment, especially among women in general, and less well-qualified women in particular, the challenge is to create more jobs in those nursing and caring sectors, not by substituting the less well-qualified by the more highly-qualified, but through an enlarged labour force in medical, nursing, caring and helping professions. Since those sectors will, for decades, remain female-dominated professions (women entered the profession and stayed longer than expected), strategies for combining private and family life with working careers should be supported.

In the countries of the OECD with lowest GDPs, the first step to be taken is to progressively bring the level of expenditure on health and social policy into line with needs and with standards comparable to those of the other countries. Job

creation is inevitably necessary. The strategy of increased job creation through a general reduction in working time, or increased part-time work, can benefit not only employees but also, in many instances, employers. Appropriate safeguards must always be present, however, to ensure job security, adequate remuneration and safe and adequate working conditions.

Finally, educational opportunities must be expanded and re-visited to ensure their relevance to current needs in the nursing professions in particular and in the wider health care sector. Well-targeted but definitely increased public investment in the health care sector is the surest means to improve the quality of the nursing professions for women and at the same time, the general well-being of all populations in OECD countries.

REFERENCES

ARAI, C. (1992), *Problems of Nursing in Japan – Basic Education, Shortage and Adapting to Changes*, National Women Education Centre, Vol. 9, No. 9, Tokyo.

BRIHAYE, A. (1993), "Un atout pour la santé: la remunération du personnel infirmier, Programme des activités sectorielles", Document de travail, Service des employés et travailleurs intellectuels, International Labour Office, Geneva.

DASSEN, T., NIJHUIS, H. and PHILIPSEN, E. (1990), "Male and female nurses in intensive care wards in the Netherlands", *Journal of Advanced Nursing*, Vol. 15, pp. 387-393.

DE MAN, P., DESCHAMPS, M., PACOLET, J. and GOS, E. (1998), *Vraag naar en aanbod van verpleegkundigen en het verplegend werk in de Vlaamse Gemeenschap*, Hoger Instituut voor de Arbeid, Katholieke Universiteit Leuven, Leuven, p. 42.

INTERNATIONAL LABOUR OFFICE (1992*a*), "General report I", Sectoral Activities Programme, Standing Technical Committee for Health and Medical Services, First session, Geneva.

INTERNATIONAL LABOUR OFFICE (1992*b*), "Equality of opportunity and treatment between men and women in health and medical services, report II", Sectoral Activities Programme, Standing Technical Committee for Health and Medical Services, First session, Geneva.

JAPANESE MINISTRY OF HEALTH AND WELFARE (1997), *Statistical Data on Nursing Service in Japan*, Nursing Division, Health Policy Bureau, Tokyo.

JAPANESE NURSING ASSOCIATION (1997), *Nursing in Japan*, Tokyo.

LECLERCQ, A., LORANT, V. and LEROY, X. (1998), *Offre et demande de praticiens de l'art infirmier en Communauté française*, UCL, Service Socio-économie et Santé, Brussels.

OECD (1995*a*), *Trends in Public Sector Pay in OECD Countries*, Paris.

OECD (1995*b*), *Employment Outlook,* Paris.

OECD (1996), *Ageing in OECD Countries – A Critical Policy Challenge*, Paris.

PACOLET, J. and VERSIECK, K. (1996), "The state of the welfare state, 1992, First conclusions of the comparative study", in M. Alestalo and P. Kosonen (eds.), *Welfare Systems and European Integration*, University of Tampere, Tampere, pp. 3-33.

PACOLET, J., VERSIECK, K., BOUTEN, R. and DESCHAMPS, M. (1998), *The Nursing Profession in OECD Countries*, Hoger Instituut voor de Arbeid, Katholieke Universiteit Leuven, Leuven.

SAWADA, A. (1997), ''The nurse shortage problems in Japan'', *Nursing Ethics*, Vol. 4 (3), pp. 245-252.

SCHIEBER, G.J. and POULLIER, J.P. (1989), ''International health care expenditures trends, 1987'', *Health Affairs*, Vol. 8, No. 3, pp. 169-177.

STATISTICS NETHERLANDS (1996), *International Comparison of Health Care Data, Phase 1: Intramural Health care*, Centraal Bureau voor de Statistiek, The Hague.

VAN DER WINDT, W., CALSBEEK, H. and HINGSTMAN, L. (1997), ''Verpleging en verzorging in kaart gebracht'', *De Tijdstroom*, Utrecht.

VERSIECK, K. and BOUTEN, R. (1995), *Manpower Problems in the Nursing/midwifery Profession in the EC, Country Report*, Vol. 1 and 2, Hoger Instituut voor de Arbeid, Katholieke Universiteit Leuven, Leuven.

VERSIECK, K., BOUTEN, R. and PACOLET, J. (1995), *Manpower Problems in the Nursing/midwifery Profession in the EC, Country-comparative Report*, Hoger Instituut voor de Arbeid, Katholieke Universiteit Leuven, Leuven.

6

CARERS: THE IMPACT OF NEW MODES OF FINANCE AND PROVISION*

The need for qualitative and quantitative expansion of caring services for dependent people is strongly felt across OECD countries. Quality child care is today recognised as essential for the future of children and the demand for quality child care services on the part of working families goes largely unsatisfied in most countries. Similarly, as life expectancy continues to rise, the needs and expectations of the fast-growing elderly population require new policy responses.

Women's employment is intertwined with the provision of caring services in profound and complex ways. Women's earning ability and career mobility across the employment spectrum is affected both by the extent to which they are expected to be primary or exclusive caregivers to dependent family members, and/or the degree to which they may rely on provided services. Both the child care and elderly care sectors are affected by the loss of informal family care givers as women enter the labour force. At the same time the demand for waged carers, jobs primarily held by women, increases.

Because a substantial and increasing number of women across OECD countries are employed in caring occupations, knowledge of their working conditions, career opportunities, and earnings patterns is important in understanding women's overall situation in the labour market. Despite growing recognition of the significance of caring activities economically and socially, there is little information on how employment in the caring sector is taking shape as it expands and as the modes of financing and provision change. Whereas no country can be seen to have achieved a model of balance between quality and comprehensiveness of provision, recent trends in OECD countries concerning more effective and more

* This chapter is based on a report to the OECD Working Party on the Role of Women in the Economy (Christopherson, 1997). The report is the synthesis of contributions from ten OECD countries: Belgium, Canada, Finland, France, Germany, the Netherlands, Norway, Spain, the United Kingdom and the United States. These contributions appear in the references of the chapter.

efficient provision of care suggest a diversity of responses and corresponding diverse effects on conditions of employment in the caring sector.

This chapter focuses on the impact on the caring occupations of new methods of financing and providing social services. While recognising that the educational and health sectors are major providers for children and elderly people, this chapter only focuses on the social services where most of the expansion is occurring and which have been less well-researched. As with the other chapters in this volume, data available across countries are neither homogeneous nor complete and rigorous comparison is not possible. The chapter attempts to use the limited data available to examine the quality of women's employment in the caring professions, including such aspects as mobility and career paths.

EMERGING TRENDS IN THE CHILD CARE SECTOR

Demand and patterns of provision

Women with young children in OECD countries have increasingly entered the labour market since World War II. While the social and political climate in a few OECD countries has discouraged this trend for a variety of reasons, by and large, the need and/or the aspiration for gainful and satisfying employment has led women to seek jobs regardless of additional family responsibilities. The trend toward the employment of women with young children has brought a concomitant increase in the demand for child care services.

There are major differences in national provision of child care services which derive from different philosophies regarding public responsibility for children and how that is expressed. In some countries, child care is considered a basic social need and therefore made available to all children. In others, it is considered the private responsibility of parents. In the latter case, government programmes or funding are directed mainly toward meeting the needs of underserved population groups.

Funding for child care services is quite different from country to country, ranging from maximum public responsibility to maximum private responsibility. The major forms include: *i)* tax-based national public financing, exemplified by Scandinavian countries; *ii)* family allowance funds (either directly or via tax reductions) through which national government allocations to families support locally organised and provided public services, as in France; and *iii)* private for-profit service provision, as in the United States and the United Kingdom.

Because of differences in women's labour force participation and in the history and regulation of provision, the patterns of child care provision and employment opportunities in the child care sector vary considerably across countries. In countries where women have long had high labour force participation

rates encouraged by public policy, early childhood care has been well-regulated, diverse so as to meet diverse needs, and accessible to families from all socio-economic backgrounds. By contrast, in countries where market forces dominate early childhood care, provision is frequently unregulated, precarious or inaccessible to the families most in need.

Differences in the types of child care provided and in the ways in which child care is financed are associated with variations in employment and working conditions and career prospects for workers in this sector. The character and extent of regulation of the sector (determining, for example, the proportion of skilled and certified workers to uncertified workers in child care centers) also plays a differentiating role. Countries which have well-regulated and comprehensive public-supported services offer better-paid, more stable and satisfactory employment opportunities to women who enter child care occupations.

While these basic differences remain, it is also the case that the forms of provision have changed considerably in some countries. This is particularly true in countries relying on public financing, due to the trend towards reductions in public social spending. Major changes include the decentralisation of the responsibility for provision from the national to the local governmental level and the diversification of providers to include a higher proportion of private providers (for profit and not-for-profit) and self-employed carers. There is also a common pattern across countries of a *de facto* deregulation, particularly due to the expansion of child care in home settings (Karlsson, 1995).

In the remainder of this section, France on the one hand, and Canada, the United Kingdom and the United States on the other, will serve to illustrate trends prevailing in child care employment in countries with different systems of child care provision. The latter three countries provide examples of a system which may become more predominant in the future.

Key occupations in the child care sector

The key occupations in the child care sector are quite similar across countries although different terminology is used to define them in each case (Table 6.1). In the institutional care sector (child care centers), the two most important occupations are referred to as childhood educators and child care assistants. Child care is, however, mainly provided in home settings (in the carer's own home or in the child's home). This category of child care providers is referred to as "childminders". The key occupations are distinguished from one another by differences in entry level qualifications, the average educational level of job incumbents, relative earnings, and potential mobility.

Comprehensive and reliable data on the child care work force are not usually available. Occupational classifications utilised in the population census or labour

Table 6.1. **Key occupations in child care**

	Institutional setting	Home care setting
Canada	1. Child care teacher 2. Child care assistant	1. Family day care provider
France	1. Early childhood educator (*éducateur de la petite enfance*) 2. Child care assistant (*auxiliaire*)	1. Parental assistant (*assistante maternelle*)
United Kingdom	1. Nursery nurse 2. Playgroup leader	1. Childminder
United States	1. Pre-school teacher 2. Pre-school assistant	1. Family day care provider

Source: Country reports.

force statistics do not always identify the different categories of carers separately. For example, ISCO 88, the most recent version of the International Standard Classification of Occupations, only has one category, that of "child care worker" (unit group 5131). Another data problem is the under-reporting of childminders in surveys, for in most countries, a great majority remains undeclared workers.

Whatever the data limitations, there is clear evidence that the number of people employed in child care occupations is significant and growing. In the United Kingdom, census data show that child care occupations made up 3 per cent of the female work force in 1996 and an increasing portion of the total work force (increasing from 1.2 per cent to 1.5 per cent from 1991 to 1996). In Canada, child care workers made up nearly 1 per cent of the total work force in 1990.

Parents' surveys on how their children are cared for give some indirect information on the structure of the child care work force and changes over time. Table 6.2 shows recent trends in the distribution of children of employed mothers by type of care in France and the United States. Data for the United States cover children under 5 years, whereas data for France cover children under 3. In France, however, all children aged 4 and 5 attend pre-elementary school on a full-time basis and it should be considered that they are in institutional care for the purposes of comparison. The number of young children in need of care is increasing in the United States while it remains at a relatively stable level in France. In both countries the predominant form of care remains care by a family member, although it is decreasing. Child care centers and home care providers each attend to between one quarter to one third of all children. Center care is increasing whereas care by a home care provider shows divergent trends.

Table 6.2. **Type of care for children of employed mothers**

(France and the United States)

	Care in child's home			Care in another home		Organised child care	
	Mother/ father	Relative	Non-relative	Relative	Non-relative	Day care centre	Nursery school
France							
(children under 3 years[1])							
1990	18.3	9.2	3.9	13.8	31.6	11.5	11.5
1982	21.3	11.1	3.6	14.4	30.6	8.5	9.7
United States							
(children under 5 years)							
Fall 1991	28.7[2]	10.4	5.4	13.1	17.9	15.8	8.9
Fall 1986	21.9[2]	8.6	5.5	16.7	24.0	14.9	8.3

1. In France, all 4- and 5-year-olds attend school full-time.
2. Includes mothers caring for the child at work.

Source: France: country report; United States: "Who's minding the kids?", *Current Population Reports,* Bureau of the Census, Washington, pp. 70-136.

Other data support the strong growth in the numbers of child care workers in formal settings. In France, the number of places in child care centers throughout the country grew 45 per cent and the number of childminders 65 per cent from 1985 to 1993. In the United Kingdom, over a shorter and more recent period, 1991 to 1996, the category of childhood educators (nursery nurses) grew 75 per cent and child care assistants (playgroup leaders), 45 per cent. Other child care occupations (nannies, childminders) grew only 8 per cent, which may reflect under-reporting as noted above. By contrast, the total of employed women grew 25 per cent and the total employed population declined 1 per cent. In Canada, the home care sector of childminders grew 27 per cent between 1984 and 1994 and that of childhood educators and assistants, 67 per cent. Over the same period, total employment in Canada grew 17 per cent. These figures show that child care is a relatively high growth occupation even in economies where the overall rate of employment growth is low.

Occupational characteristics and access to key occupations

Child care occupations remain almost exclusively female occupations (typically over 95 per cent). With respect to their age profile, child care workers working in centers or at the home of their employer are typically younger than the female work force as a whole. In Canada, for example, 45 per cent are under 30. Childminders providing care in their own home tend to be married women with

one or two young children of their own. They are more concentrated in the 30-40 age group.

Access to entry level child care occupations is relatively open across OECD countries. The lack of child care workers may have caused the qualifications necessary for employment as child care assistant or home-based childminder to remain at a minimal level. The home-based child care sector is open to any woman who identifies herself as a care giver and this employment is largely unregulated across OECD countries. This is changing marginally in some countries to the extent that childminders have been required to register with the local government and an increasing number do so. In Canada, some provincial jurisdictions require pre-service or in-service training for regulated family child caregivers. In France, registered *assistantes maternelles* are required to participate in 60 hours of training over 5 years following registration. In the United Kingdom, registration entails undergoing a pre-registration training programme.

There are considerable differences among countries, however, in training requirements for the more stable, higher-paid jobs in the sector. The major difference among countries lies in the degree of professionalisation expected of early childhood educators. France is at the high end of qualification standards as early childhood educators require three years of post-secondary vocational education and a state diploma. A still higher qualification is required from child care center directors (Acker and Gottely, 1996). Qualification requirement at this high level necessarily limits access to the field.

In those countries with more fragmented and decentralised child care provision (Canada, the United Kingdom, the United States), certification requirements may vary by jurisdiction (state, province, locality) and by center. In the United States, for example, a study of sub-national state-level practices in career development in early childhood care and education found that no pre-service training was required for child care center directors in 22 States, for educators in 36 States and for child care assistants in 46 States. Training requirements were even less common for home-based independent carers (Morgan *et al.*, 1993).

Younger workers employed in child care centers tend today to have higher formal qualifications, especially general qualifications, than their older colleagues. These trends may simply mirror trends towards higher general education levels throughout the female population in OECD countries. Moreover, childhood educators also have rising sector qualifications as is observed in North America and the United Kingdom.

On the whole, child care employment is increasingly bifurcated between an educated and professionalised group of educators whose training is acquired before entering the field and a large group of uncertified aides and assistant educators and childminders who have no mobility in the sector without further

education. Even access to further education may be limited because child care assistants and childminders have less formal education than the work force as a whole. In Canada, 47 per cent of childminders providing care in the employer's home and 35 per cent of those providing care in their own home have not completed secondary school and around 80 per cent have no degree or certification beyond secondary school. By contrast, among all workers in formal child care settings, 55 per cent have some post-secondary certificate or diploma (Table 6.3).

It is also increasingly recognised that all child care workers should achieve a minimum level of qualification. Qualifications standards are being set in countries where they do not exist. For example, the United Kingdom has introduced national vocational qualifications (NVQs) in child care and education in 1993. In France, a lower level vocational certificate (*CAP Petite enfance Niveau V*) was created in 1991. These initiatives are designed in such a way that they should benefit workers already in care jobs.

The age profile and ease of entry into child care work suggest that young women enter child care work as the initial job and then move to jobs with higher levels of compensation and better career mobility paths. Turnover rates are greatest for the least-skilled and lowest paid portion of the work force. Data from a study of 227 child care centers in the United States indicated that trained teachers and center directors had much lower turnover rates than assistant teachers. In addition, this study found that although levels of education and training predicted turnover to some extent, the factors of level of wages, ethnicity and age were much more significant (Whitebook *et al.*, 1993). Research from Canada and the United States indicates that turnover rates are much higher in commercial centers than in non-profit or municipal centers.

Earnings

Available evidence indicates that child care workers are at the bottom of the wage spectrum. With few exceptions, the younger the child, the lower the wages. In addition child care wages seem to be declining. In Canada real average wages for child care center staff fell 4.5 per cent between 1985 and 1992 (Canadian Child Care Federation and Canadian Day Care Advocacy Association, 1992). An earlier study of child care staff in the United States similarly indicated that over the period 1977-88, earnings for child care workers declined in real terms (Whitebook *et al.*, 1990).

Low wages are the major source of dissatisfaction and concern in the child care sector. The problem is still more acute in countries where parents' contributions rather than state subsidies determine child care workers' wages. In those countries, in most cases, child care work on a full-time basis does not provide for a living wage, and many child care workers earn an income below the poverty line.

Table 6.3. **The child care workforce and related occupations, Canada, 1991**

Percentages

	Family child caregivers	Caregivers in employers' home	Caregivers in child care centres	Kindergarten and elementary teachers	Elementary and secondary teacher assistants	All occupations (females only)	All occupations
Sex							
Percentage female	98.4	96.8	96.3	82.2	91.4	100.0	46.0
Age							
Less than 30 years old	14.5	43.4[1]	44.5	16.0	19.7	..	31.6
40 years and over	39.0	28.9[1]	25.9	56.3	46.6	..	40.0
Education							
Less than high school graduation	34.9	47.3	18.8	0.7	25.0	26.2	28.9
High school graduate	20.9	17.8	12.7	1.1	18.9	17.7	15.7
Post-secondary diploma or certificate	25.1	17.9	42.5	20.3	31.2	29.5	29.1
University degree	5.4	4.6	11.5	74.8	10.7	13.3	14.1
Work patterns							
Part-time	31.4	38.4	32.5	20.9	55.0	30.0	20.0
Full-time, full-year (49-52 weeks)	36.0	26.0	36.5	62.2	15.0	45.0	52.7
Immigration status							
Canadian citizens	84.8	71.6	80.4	87.4	84.7	81.0	79.7
Marital status							
Married or Common Law	83.2	44.2	50.6	74.8	75.9	63.1	61.8
Family status							
Mothers with youngest child < 6 years	44.8	14.5	24.8	16.9	14.1	16.7	14.8

.. Data not available.
1. Includes a small number of family child caregivers as well.
Source: Beach *et al.* (1998), Table 2.

The Canadian 1992 study noted that 15 per cent of full-time employees in day-care centers hold a second job in order to make a sufficient income. In France, by contrast, most early childhood educators work in a public organisation where earnings are set according to qualification level and work experience. Earnings of registered childminders are protected by a minimum wage fixed at national level. This minimum is set at a lower level than the minimum wage for early childhood educators, but because demand most often exceeds supply, childminders are usually able to charge more than the regulated minimum wage.

As a group, child care workers in the United States earn less than half the average earnings for the female labour force as a whole and a third of the average earnings of men (Whitebook *et al.*, 1990). The relatively low salaries for child care workers are also supported by Canadian data. Annual income of caregivers in child care centers in 1990 was two-thirds of the average for all working women and less than half of the average annual income of male and female workers. When limiting comparisons to the more homogeneous group of workers with post-secondary diploma having worked full-time full-year, caregivers in child care centers were still at a substantial disadvantage. They earned 28 per cent less than women and 44 per cent less than men and women together with the same level of qualification (Beach *et al.*, 1998).

The nature of the work situation is determinant for the level of wages. United States and Canadian studies indicate that wages for child care staff are lowest in for-profit centers and highest in the public sector, with non-profit centers in an intermediate position. In Canada, staff in municipal centers earn 72 per cent more than staff in commercial centers. Staff in non-profit centers earn 25 per cent more than staff in commercial centers. Canadian data also show that child care providers in home-based settings have much lower earnings than those in institutional settings. Total yearly wages of workers providing child care in the employer's home are half of those working in center settings (partly reflecting lower qualifications and higher incidence of part-time work). There are also indications that workers providing care in their own home earn substantially less than child care center workers. It is not possible, however, to compare directly the earnings of workers providing care in their own home with those of other carers as account needs to be taken of a series of expenses that need to be deducted to assess the net income from their caring activity.

Union organisation and collective agreements can make a critical difference to child care workers' earnings and conditions of work. In Canada, those workers in child care centers represented by a union – 20 per cent of child care centers are unionised – make 33 per cent more than staff not represented by a union. In general, unionisation of child care workers, with the exception, however, of workers in municipal centers, who are better protected as a result, tends to be lower relative to the rate of unionisation of the whole female work force. In the United

Kingdom, for example, wages for nursery nurses employed by local authorities are set by national collective bargaining agreements. There is no such mechanism in the private sector and so wages are based on individual bargaining. Only approximately 4 per cent of child care workers in the United States are covered by collective bargaining agreements, most of these in public school child care or in Head Start (a federally-funded early education programme for disadvantaged children). In the vast majority of home-based care situations, independent child care workers bargain individually with their employers and so wages are unpredictable and unstable.

Job evaluation exercises have revealed that the wages of most child care workers are undervalued. In the province of Ontario in Canada, unions and child care advocacy organisations have formed a coalition to enforce implementation of the provincial pay equity legislation passed in 1987 in the child care sector. The original legislation could not apply to child care workers because it included a mechanism based on comparison with a male job within the workplace, whereas most child care workers work in small, mostly all female workplaces. The coalition proposed a new mechanism which included a "proxy" method (using a male job comparator from outside the workplace). The legislation was revised in 1993 and the government of the time made a commitment to provide a pay equity fund to pay for the child care pay equity adjustments which were quite substantial in some cases.

Work organisation and implications for career patterns

Child care workers are employed for the most part in situations with virtually no promotion possibilities. The decentralised nature of care partially explains this lack of career prospects. Child care is carried out in a wide variety of settings across OECD countries but the major distinction is between home-based and institutional contexts.

In the United Kingdom, only nursery nurses employed by the local authority social services departments have the possibility of promotion to more senior posts, such as nursery or center manager. Playgroup workers and childminders have no career mobility prospects and their on-the-job skills are not validated for future potential employment. The situation is similar in the United States in which childminders (baby-sitters or nannies) have no career prospects. As for workers in child care centers, they have no hope of advancement without returning for further formal studies.

Another barrier to career mobility is "tracking" which places entrants in the childhood sector into career training and workplace situations which, although related, do not allow for horizontal mobility. In France, for example, training for early childhood educators and for pre-school teachers (*école maternelle*) are quite

distinct. Although the French system provides a baseline for quality of care across all types of provision, the separate training tracks are not easily bridged. In the same way, the position of director of a child care center requires a nursing degree with a child specialisation (*puéricultrice*), which constitutes a major obstacle for early childhood educators.

The dependence on formal educational credentials for placement in the career path would be less of a barrier for mobility if bridging training programmes existed, which is not currently the case across OECD countries. More integrated approaches to service provision are developing and they are associated with more integrated approaches to training. In some of the Nordic countries, for example, institutions for pre-school age children are seen as part of an over-arching infrastructure of community service, and training is conceived in this broader perspective (Oberhuemer and Ulrich, 1997). Broad-based training which would open the door to a wider range of social services fields or care management is more likely to better equip individuals, women in particular, for more stable and satisfying employment with career prospects while also guaranteeing a higher quality of care services.

EMERGING TRENDS IN THE ELDERLY CARE SECTOR*

As life expectancy and the numbers of very old in OECD countries grow, increasing private and public attention is given to the full range of care needed by the frail or disabled population among the elderly. In most countries, a mix of social and health services is offered to cover different aspects of care and this complicates a clear analysis of quality and effectiveness of provision as well as cost. Some countries provide universal public long-term care, combining social services and health care, in the same way in which they provide health care to the population as a whole. In other countries, long-term care is a personal or family responsibility with the state providing a safety net for those with insufficient resources (OECD, 1996*a*).

Public care financing can occur through both social insurance-based and general taxation-based systems. In countries with social insurance-financed health services segmenting health from other needed ancillary services financed by the general budget, it is more difficult to respond to complex elderly care needs. Among the countries covered in this chapter, Finland, the Netherlands, and Norway follow a comprehensive approach. Examples of the second approach include Belgium, France and Germany. In 1994, however, Germany introduced a compulsory social insurance for long-term care.

* This section is based on information provided by Belgium, Finland, France, Germany, the Netherlands and Norway.

Although the elderly obviously have high levels of health care needs, the focus of the whole chapter being on social care, this section looks at how non-medical care services for the elderly are developing and at employment opportunities for women in this elderly care sector.

Responding to long-term care needs

A major distinction among country practices with respect to provision of services to the elderly is between institutional and home-based care services. This distinction also translates into very different types of employment opportunities.

National differences in coverage through institutional care or home care for the elderly can be attributed to the history of welfare provision, degree of urbanisation and cultural expectations.

Over the past fifteen years two trends are apparent across OECD countries:

– Countries tend to converge in the rate of institutionalisation of their elderly population. According to the 1996 OECD report *Caring for Frail Elderly People*, "there is strong indication, at the level of this most general indicator, that countries with a relatively high provision of institutional care in the early 1980s have either capped the growth or begun a proportionate reduction in such care" (OECD, 1996*a*).

– There has been a marked policy turn towards an "ageing in place" policy and greater provision of home care services.

Both these trends reflect a concern to respond to the needs of the elderly in a more appropriate and efficient manner.

Among the countries covered in this section, countries with high institutional usage (above 7 per cent of people over aged 65) include the Netherlands, Finland and Norway, whereas Belgium, France and Germany fall in the category of those with middle usage (from 4-6 per cent) (Table 6.4). France has already experienced a significant reduction in the proportion of elderly people in institutional care and the Netherlands and Norway have adopted policies to decrease the proportion of elderly people in institutional care and have begun to see a downward trend in institutional care. At the other end of the spectrum, those countries with below average provision in the early 1980s experienced proportionate growth over the subsequent decade. These countries, including Belgium and Germany, also experienced a marked absolute growth in the institutional population since the elderly population was growing substantially during this period.

There seems to be much greater country variation with respect to the provision of formal home care services to the elderly population, although data are

Table 6.4. **Proportion of elderly people (65+) receiving care**

Percentages

	Institutional care		Home care	
	1980[1]	1990[1]	1980[1]	1990[1]
Belgium	4.1	5.2	..	6.0
Finland	7.0	7.0	22.0	24.0
France	5.4	5.0	2.0	..
Germany	4.3	5.4	..	1.3
Netherlands	..	9.1	..	8.0
Norway	6.3	6.5	15.0	14.0

.. Data not available.
1. Or closest year.
Source: OECD (1996*a*), Tables 3.1 and 3.6.

rather incomplete and less reliable. The Scandinavian countries, including Norway and Finland, stand out as having high levels of formal service use (more than 14 per cent). Middle level service use (from 5 to 10 per cent) is found in Belgium, and the Netherlands. Germany has the lowest level of home care among the countries covered by this chapter (under 5 per cent). With the continuing growth in the elderly population and the limits to the institutionalisation of those in need of long-term care, strong growth in the development of home care services is expected. Private initiative tends to be more prevalent in the home care sector than in the institutional care sector, even in those countries with a strong welfare state ideology. The shift of emphasis from the latter sector to the former reinforces the influence of market forces and competition in the elderly care sector marking a profound change in the conditions under which employment in the sector is developing.

When institutional care provision trends and home care trends are combined, the countries included in this study fall into several groups: *i)* countries with a high level of provision in both institutional and home care (Finland and Norway); *ii)* countries with middle level provision of each type of services (France and Belgium); *iii)* a country with an average or above average level of institutional care but where non-institutional care is minimal (Germany); and *iv)* the Netherlands with a high level of institutional care and a middle level of home care provision. These differences in the level and structure of care services for the elderly in each country will be reflected in the corresponding levels and structure of employment opportunities.

Key occupations in the elderly care sector

Critical activities in elderly care include: *i)* care co-ordination; *ii)* technical health care; *iii)* personal care; and *iv)* household maintenance activities. Over the past twenty years and with the expansion of home care, these activities have become more distinct by location and by function. In particular, social (personal and homemaking services) have been separated from health care services.

The structure of key occupations

The structure of key occupations in the elderly care sector is similar across countries (Table 6.5). It is, however, difficult to compare the actual categories of occupations across countries for various reasons. As work with the elderly expands, new job titles appear and supersede old ones. A striking example is that of the practical nurse occupation in Finland which replaces ten former lower level qualifications in the social and health care field. The same job title may also require different qualifications across countries. Finally, differences in organisational status and access to collective bargaining may differentiate workers with similar occupational responsibilities (they may work under considerably different conditions depending on whether they are covered by collective bargaining agreements or not).

In the institutional sector, elderly care occupations are basically organised in two tier structures as was observed with child care. The Dutch report describes a common pattern of institutional occupational structure: ''old people's homes frequently work with only two types of caring jobs which are of considerably different level: the ancillary worker who mainly carries out household work and the carer who carries out caring, nursing and attendance duties'' (van den Herik, 1997). Institutional settings employ a higher proportion of qualified carers who combine personal care and some medical service because they deal predominantly with frail elderly people with more serious health and care problems than those maintained at home. This trend will be further accentuated in the future with institutions having to provide more intensive care for the group of the oldest and most dependent elderly.

A two-tier structure is also observed in the home care sector in some countries. The first tier is composed of home care workers who have some level of formal training, such as the practical nurse in Norway. They provide personal care to the client, including assistance with chronic health or mobility problems, and they may sometimes supervise other carers. The second tier is composed of home helpers who provide clients with basic assistance in daily activities, including housework. This is due to the increasing population of frail elderly and the increasing intensity of care needed to deal with their situations especially under a home care policy. Home helpers, on the other hand, have in some cases assumed

Table 6.5. **Key occupations in elderly care**

	Institutional setting	Home care setting
1. Medical care	(nurses)	(district nurses)
2. Other care		
Belgium	1. Nursing assistant 2. Personal care worker	1. Domestic helper 2. Domestic cleaner
France	1. Nursing assistant (*aide-soignant*)	1. Home helper (*aide à domicile*)
Finland[1]	1. Enrolled nurse 2. Institutional carer	1. Home care assistant 2. Home helper
Germany	1. Geriatic nurse 2. Geriatic nursing assistant	1. Home helper
Netherlands	1. Geriatic carer 2. Geriatic assistant 3. Geriatic ancillary care worker	1. Domestic carer 2. Domestic care assistant 3. Alpha assistant
Norway	1. Practical nurse	1. Practical nurse 2. Home care assistant

1. In Finland, the terms of "enrolled nurse" and "home care assistant" will no longer be applied in the future. A single category "pratical nurse" will apply instead.

Source: Country reports.

some of the responsibilities in the area of personal care. In some other countries, there has, therefore, been a recombination of work that had previously been carried out by separate occupational groups. In France, for example, expansion of the service supply in a very individualised form has caused a hybridisation of what were distinct activity sectors: housework services and the home help services (Causse *et al.*, 1997).

In the rest of the section, the key occupations in the institutional care sector are referred to as "geriatric nurse" and "geriatric assistant" and to those in the home care sector as "home care worker" and "home helper".

Growth in key occupations

Data on numbers employed in key occupations in the elderly care sector are difficult to assemble. Occupational classifications will usually identify personal care workers but not those dealing specifically with elderly persons. ISCO 88 separates institution-based personal care workers (unit group 5132) from home-based care workers (5133) and refers to impairment due to old age in the latter

case without, however, including a sub-classification of categories of patients or persons in need of care. Domestic helpers and cleaners (unit group 9131) also provide care assistance to elderly people but the type of household using the services is usually not identified in the data.

Employing organisations are the principal source of information on employment in the elderly care sector. The very disparate structure of the sector (private, public and semi-private initiatives at different organisational levels) makes data-gathering in that way very problematic. Information is more easily available concerning the public sector whereas the trend is towards the diversification of providers and a greater involvement of the private sector. There is a probable underestimation of some categories of care workers in the statistics, particularly in the home-care sector. Special surveys would be needed in order to get a more complete and precise picture.

Detailed data for Finland and the Netherlands show distinctive patterns of growth for each occupational category and a change in the qualification structure of the elderly care sector over the period 1980 to 1990 (Table 6.6). Both countries had a growth of employment in the institutional care sector, with the more qualified category of geriatric carers growing the fastest. This trend was particularly marked in the Netherlands where the number of geriatric nurses more than doubled. In Finland, employment in the home care sector grew even faster than in the institutional sector. In contrast, the home sector employed fewer workers in the Netherlands in 1990 than in 1980, which was entirely due to an abrupt decrease in the numbers of over-represented less-qualified home helpers. In the two countries, home care workers increased their numbers in a significant way.

The structure of employment in the institutional sector in the two countries is similar, with a much higher proportion of qualified workers in both cases. The home care sector, on the contrary, seems to be organised in very different ways. Finland has a balanced distribution of workers across the two qualification levels, but the Netherlands shows a huge disproportion of the numbers of home helpers, even though they have been reduced substantially. The disproportion in the least qualified level in the home care sector in the Netherlands appears still greater when "alpha assistants" (employed directly by the client) are taken into account. There are one-third less "alpha assistants" than home helpers but their numbers are increasing very rapidly.

Data for other countries confirm the strong growth of geriatric carers in institutional settings (Germany, Norway) and a trend for home care to develop outside the formal home care sector, although this is difficult to monitor (France).

Table 6.6. **Employment in key elderly care occupations**
(Finland and the Netherlands)

		Institutional setting		Home setting	
		Geriatic carer	Geriatic carer assistant	Home care worker	Home helper
Finland					
Head count	1990	8 480	4 140	5 320	5 410
	1985	7 600	4 570	3 340	5 230
	1980	6 580	3 630	2 910	4 170
Growth	*1990/1980*	*+29%*	*+14%*	*+83%*	*+30%*
Netherlands[1]					
1. Head count[2]	1993	18 743 *(72%)*	5 493 *(80%)*	..	..
	1990	16 442 *(59%)*	5 005 *(71%)*	14 924 *(80%)*	61 024 *(96%)*
	1985	12 975 *(42%)*	4 513 *(52%)*	10 457 *(64%)*	65 500 *(96%)*
	1980	7 195 *(20%)*	4 182 *(29%)*	8 794 *(44%)*	77 351 *(94%)*
Growth	*1990/1980*	*+160%*	*+31%*	*+70%*	*–21%*
2. Full-time equivalent	1993	13 102	3 451	9 048	20 505
	1990	12 465	3 312	9 648	24 516
	1985	10 625	3 443	7 458	23 752
	1980	5 775	2 979	6 584	27 417
Growth	*1990/1980*	*+116%*	*+11%*	*+46%*	*–11%*

.. Data not available.
1. Public sector only.
2. Data in brackets correspond to part-time work.
Source: Country reports.

Part-time work

The part-time nature of elderly care work appears to be increasing, due partially to the division of labour and the increasing employment of home helpers. The vast majority of elderly care workers in home settings are employed on a part-time or casual basis. Generally, the proportion of part-time and casual workers in these occupations is considerably higher than for the female work force as a whole. Full-time work is more common in institutional settings and so the countries that have a higher proportion of elderly care in institutional settings have a higher proportion of full-time workers.

Home helpers tend to work very short hours per week. In France, the weekly average for home helpers was 8 hours and only 2 out of 10 workers worked a half-time week (Causse *et al.*, 1997). In the Netherlands, only slightly over 4 per cent of the home care work force is employed full-time, with an average work week of 17.5 hours. In most cases, a maximum of 24-32 hours per week applies because of

the very hard working conditions (van den Herik, 1997). There is a significant amount of part-time work even among the more skilled occupations. In Norway, approximately 55 per cent of practical nurses work part-time (Hoel, 1997). Finland is an exception with only 3 per cent of home care workers employed part-time (Kolehmainen-Lindén, 1997).

Who are the elderly care workers?

Almost all the growth in the elderly care sector is concentrated in the female work force. The key occupations in elderly care are more than 95 per cent female. Women tend to dominate both the increasingly qualified work force and the less-skilled occupations. Home care workers are almost exclusively female across countries. In Germany, however, there is a higher percentage of men in the key geriatric caring occupations (13.2 per cent in 1995) (Meifort, 1997). In general, to the extent that men are present in the sector they are often in maintenance or institutional management and training positions rather than in direct caring occupations.

The elderly care population is ageing and there is a concern that the elderly care sector is not attractive enough for young people. The average age of workers in the key occupations in 1990 in Finland had increased by three years since 1980 and ranged between 38 and 42 years. In the Netherlands, the average age of institutional carers is lower (33 years) and there is evidence suggesting that ageing is particularly associated with growth at the lower end of the occupational spectrum. Of the "alpha assistants", the fastest growing occupational group, 60 per cent are over 40 years old, whereas 50 per cent of other home care workers are over 40. In Finland and Germany similar high proportions of older worker are observed among the least qualified. Belgium shows a younger age structure of its elderly care population which may be attributable to high sector turnover rates.

A considerable number of workers in the elderly care sector have no sector-specific vocational qualification. Qualification requirements have only been introduced recently in some countries or for some categories of workers, in particular home helpers. Formerly qualification was mainly acquired through work experience and on-the-job training. In Belgium and Finland, still more than one out of five geriatric carer had no more than primary education in 1990. This was also the case of one out of two home helpers in Finland. In the Netherlands, in the same year, only 7 per cent of home helpers but 61 per cent of home care workers had specific vocational qualifications.

However, across countries, the labour force employed in elderly care was more educated on average in 1990 than in 1970. In the 1970s, the relatively small labour force in elderly care had, for the most part, primary school credentials. In the 1980s the proportion of the work force with secondary and higher level

educational credentials increased, reflecting the professionalisation of the field and rising general levels of education. In the 1990s, as the labour force expanded, the new labour force was more educated than that in the 1970s but the majority of additions to the work force had only a secondary education.

Earnings

The elderly care sector is situated at the low end of the earnings scale of the broader social and care sector. Generally, earnings have declined for elderly care workers across occupational categories in comparison with the female work force and the work force as a whole. In Finland, women working in elderly care have been paid less on average than the average of all working women since 1980 and their situation has constantly deteriorated for all categories except home helpers (which pay much lower wages) (Kolehmainen-Lindén, 1997). In the Netherlands, elderly care workers emerge as the group with the lowest hourly wage among those with the same educational level. The more qualified are paid 15 per cent less than women with the same qualification level in the broader sector and 24 per cent less than all women with the same qualification level. The less qualified are paid respectively 15 per cent and 34 per cent less. ''Alpha assistants'' are paid at the minimum wage (van den Herik, 1997).

As with child care workers and workers in general, the possibility to engage in collective bargaining makes a major difference in the wages of elderly care workers. Workers covered by agreements in either the public or private sectors or both have better wages and conditions of employment. In France, the mixing of the domestic services and home help sectors has improved the situation of workers employed directly by private employers since these workers have benefited from the collective agreement for home help. In Germany, seven years after the new collective wage agreement was adopted, there is a clearly recognisable improvement of the financial situation of women in geriatric nursing (Meifort, 1997).

In most countries several collective agreements apply in the elderly care sector. This is the case in Belgium, for example, where institutions for the elderly (retirement homes and rest and nursing homes in private, public and non-profit sectors) follow different collective agreements resulting in rather large differences in wages for employees who work in comparable institutions and with the same qualification levels (Bruyninckx, 1996). Two other factors contribute to an increasing diversity in the wages of workers with same qualifications doing similar work. Decentralisation of financial responsibility to municipal level leads to regional disparities. Increased individualisation of home care employment leads to further deterioration of earnings in the home help sector.

Recognition of skills among elderly care workers is an important issue and there are different approaches to both recognising and evaluating the skills of

elderly care workers. In some countries, a task orientation predominates. In others, there is a movement to recognise that caring workers must exercise complex skills in areas such as problem diagnosis and social interaction. A major policy strategy has been to regularise the ways in which elderly care work is evaluated, and to develop job evaluation schemes that reflect the full range of skills utilised by elderly care workers. The Netherlands, Belgium and France are either making use of such evaluations in collective bargaining agreements or experimenting with their possibilities.

The benefits of collective bargaining will, in fact, depend on whether wage-setting is based on job evaluation and the type of job evaluation system which applies. After job evaluation was introduced in the early 1990s in the collective agreements regulating old people's homes and domestic care workers in the Netherlands, the effect was a huge upward assessment of care work: 12 and 18 per cent for the higher and lower qualified workers in old people's homes and 33 and 22 per cent respectively in domestic care. According to van den Herik (1997), care work is still undervalued because the job evaluation system which has been utilised does not take into account a number of aspects of care work. In Finland, where most elderly care workers are municipal employees, there are several experiments concerning job assessment and comparable worth in progress in municipalities.

Qualifications, the organisation of work and implications for career patterns

Qualification requirements

The elderly care occupations are relatively young occupations and the development of formal qualifications for these occupations has taken place only recently. During the initial phase of development of the elderly care sector, the provision of training was left to the initiative of the organisations providing the services. They had to respond to their needs by training their own employees. Many OECD countries today have regulated the qualifications required to fill elderly care jobs, and developed educational programmes leading to those qualifications. The establishment of qualifications and training marks a first step towards the professionalisation of this new occupational sector. In most countries, however, many elderly care jobs remain accessible to those who do not hold officially-recognised qualifications.

The extent to which qualifications have been regulated varies greatly according to the country, the sector (public or private), the type of services (institutional *vs* home-based care), and the nature of care (personal care *vs* household work). In a country such as Finland where elderly care is provided almost entirely through the public social services, the qualifications required for the different occupational positions are set out in the social welfare legislation. In other countries, the

extent to which specific occupational qualifications are required will depend on the applicable collective agreements. In the Netherlands, for example, it was not until 1994 that formal qualification requirements were laid down in the collective agreement for the old people's homes. In the collective agreement governing domestic care, however, there are no qualification requirements as such, although there are "indications" concerning suitable qualifications (van den Herik, 1997).

Most countries have established official vocational qualifications for geriatric carers and home care workers. They are usually acquired through two to three years specialised secondary education. In Belgium, it is possible to get a personal care worker or nursing aid diploma for the elderly. Finland had introduced separate basic programmes in the health and social fields in 1987. The two separate programmes have been merged since 1995 into a single programme qualifying for practical nurse in the social and health field. Norway had introduced a similar united programme already in 1985. In Germany, there is no nationally-recognised qualification for geriatric nurses but each of the sixteen *Länder* has established its own official qualifications. The Netherlands offers two routes to qualify for geriatric nurse or home care worker: intermediate vocational training or apprenticeship. The latter route is followed mainly by adult workers.

Official qualifications for the lower categories of care workers have not been developed to the same extent. There are markedly different positions across countries concerning the qualification of the lower categories of care worker. Some countries are concerned about keeping access to employment opportunities in the elderly care sector broadly open to non-qualified adult women. Thus, in France, a first qualifying degree for home helpers was introduced in 1988 specifically to qualify adults already working as home helpers (the average age of students is 37.5 years). A school education programme qualifying for the same occupation was created only in 1995 (Acker and Gottely, 1996). In the Netherlands, the law on education and vocational training sets a structure of qualifications at four levels in each area. The new educational structure for nursing and caring implemented in 1997 under the law lacks, however, a first qualification level. Home help done by "alpha assistants" was institutionalised, therefore, as unskilled work. By contrast, in Finland, the training for home helpers was withdrawn in 1995 because it was considered that it produced qualifications at too low a level. Since 1987, all job-holding home helpers have been offered upgrading training to the level of home care worker.

In many countries, there is evidence of an emerging pattern of bipolarisation of the qualification structure in elderly care work. Access to the positions in the bottom tier of employment, such as those defined as home helper does not depend upon holding officially recognised qualifications. At the other end of the spectrum, access to the professionalised occupations that are associated with medical care requires formal training and is restricted to those who have obtained

that training. This bipolarisation reflects prevailing trends in the organisation of work in the elderly care sector. Taken together, these two trends bear strong implications for the career prospects of qualified and less-qualified care workers.

Organisation of work and implications for career patterns

Two transformative factors have largely influenced changes in work organisation in elderly care. Firstly, attempts to control expenditure and better respond to needs have led to an increase in home care services and diversification of the types of services available to elderly people. Secondly, attempts to rationalise provision in response to increasing demand have led providers to separate more skilled and expensive work from less skilled work. The result is potential fragmentation of the work force unless work organisation across the different care settings is co-ordinated and some form of co-operation is established between those who provide mainly health, personal or housework assistance.

Elderly care today occurs within increasingly differentiated workplaces. The basic distinction is between home care settings and institutional settings, although intermediate settings, such as residences with access to continuing care, are emerging as more important. With more home-based work and emphasis on intermediate or outpatient care, workplace size has decreased for elderly care workers. Many elderly care workers, in fact, work in very isolated circumstances in private homes. The trend toward more individualised employment has combined with the differentiation of work sites to fragment already quite limited career paths, and increase the tendency toward bifurcated employment structures.

Career prospects are quite different for qualified and non-qualified categories of carers. There are very few opportunities for either institutional care assistants or home carers to achieve upward job mobility. While horizontal mobility is a more realistic alternative, it rarely results in increased employment stability or improved conditions of employment. Additionally, it does not usually require greater skills.

Geriatric carers usually start working in the home care sector where most new employment opportunities are being created. Their occupational career can develop thereafter through horizontal mobility by moving across different institutional care settings up to the more medicalised ones which provide the best conditions and status. There are also a limited number of career advancement possibilities for qualified carers, such as team co-ordinator or team leader in home care, divisional head or ward head in institutional settings, or care trainer. For these and other management positions, carers have to compete in most cases with nurses and social workers who hold diplomas at higher vocational levels. The higher management functions are rarely open to carers. Men are in a majority in positions of leadership in caring institutions.

Even fewer career opportunities exist for the least qualified workers in the elderly sector. One reason is that the gap between household chores and personal/nursing care seems to be widening. The bifurcation of necessary qualifications and the absence of programmes which recognise experience in lieu of training or which provide training that would allow less-skilled providers to obtain higher order skills while "on the job" make promotion in the case of geriatric assistants or home helpers impossible. The necessity of training for the least-qualified care workers is generally recognised but training appears to be one of the areas where budgetary cutbacks are felt first and hardest. The lack of promotion opportunities combined with very low salaries and poor working conditions results in high rates of turnover of low-qualified carers in some countries.

As in child care, there is growing recognition of the need for more skilled workers in the elderly care sector, but few models for generally increasing skills in the sector. The increasingly fragmented labour market aggravates attempts at evaluation of need. Lack of career progress in elderly care occupations is in great part due to *i)* lack of recognition of the required skills; *ii)* a lack of a skill hierarchy in elderly care occupations; and *iii)* the fact that the skills needed for such jobs are not clearly defined. The clear-cut hierarchy of health over care qualifications and the relatively low level of care qualifications mean that care workers are limited in their career progression unless they upgrade their education. Some countries provide possibilities of education at higher levels, but these possibilities seem to be used by only a small minority of carers.

Upward mobility usually involves moving to non-caring positions. Career aspirations of those employed in caring work are, in fact, more often expressed in terms of expanding the scope of work and personal development. Some of the Scandinavian countries, Finland in particular, are experiencing new forms of organisation of care work by replacing vertical hierarchies of care with horizontal multi-professional care management groups or teams. Job satisfaction has increased both for institutional and home carers within this new type of organisation.

RESTRUCTURING WORK IN THE CARING SECTORS

While other female-dominated professions or sectors have seen major organisational transformations in the past decades, the caring sector has only recently begun to demonstrate such effects. The recent trends appear to originate in changes in the regulatory frameworks that govern the provision of services; decentralisation and privatisation of the financing and, in some cases, the provision of caring services; and the indirect effects of economic and social policies (such as those aimed at alleviating unemployment). Until now, technological developments have had negligible effect on the caring sector. It is likely, how-

ever, given the tendencies toward rationalisation, that technology might play a major role in the next ten years.

Changes in regulatory frameworks governing care occupations

National and local regulations, which determine the number and skills of workers in caring institutions (staffing norms); standards of care for individual and institutional care; and occupational qualifications, have a critical influence on the structure of employment. In many cases, these regulatory frameworks have been re-worked to respond to changing demand or to reduce the costs of provision. Either directly or indirectly, changes in regulation have served to increase the private provision of care; to weaken governmental controls over the qualifications of some workers (particularly in home care); and to weaken the influence of collective bargaining on the conditions of work.

The development of a new largely unregulated labour force, especially in the home care sector, while creating jobs and increasing flexibility and cost-competitiveness, undermines the value of credentials in the regulated portion of the sector and decreases the wage bargaining power of the female care work force employed in regulated settings, such as public sector-provided care. France provides an example of the difficult choices governments are having to make when shifting the emphasis from institutional to home care. In a first stage, home care was organised in France as an extension of public social services. Delivery of subsidised home care services was the responsibility of registered non-profit organisations and government could exert some control on the quantity and quality of the services that were supplied. In the early 1990s several measures were taken which created strong financial incentives for the development of domestic employment (*emplois familiaux*). This resulted in a dramatic growth in private employees serving the needs of the aged and caring for young children in French households (Causse *et al.*, 1997). One of the objectives of the law that was passed in 1991 was to allow the substantial amount of undeclared care work to come out into the open. The law undoubtedly brought greater visibility to the care work that is being performed in households and gave many care workers access to a much improved official status. There is, however, no guarantee concerning minimum conditions of work or necessary qualifications in family jobs. Recent reforms point to a predominant concern for financial constraints over quality of care and conditions of work for home-based care workers.

In highly flexible labour markets where care is increasingly provided through the private sector, minimum regulation to guarantee the quality of the care "product", could indirectly encourage the employment of more skilled labour with higher wages and better working conditions.

Decentralisation of financing and provision

The changing ways in which caring work is financed are intended to both provide better services and to reduce public costs. These goals are not necessarily compatible. The country studies examined in this chapter indicate that alterations in the financing of caring activities include commercialisation, compulsory insurance programmes, and increasing direct purchases of services by individual clients. Another major trend in those countries where public sector services prevail is the decentralisation of responsibility for service provision to local authorities.

Decentralised financing has historically shaped the provision of caring activities in some countries, most notably Canada and the United States. In Canada, provincial government regulation and financing of social services have created a complex of different systems within the Canadian policy. In the United States, where caring services are largely provided by commercial or non-profit organisations, a plethora of sub-national state regulations dramatically affect and differentiate the working conditions and wages of caring workers across localities and among public, commercial, and non-profit service providers. This differentiation which is most characteristic of countries where care is provided via the market is also occurring in countries with nationally financed and organised care systems, although the differentiation is largely confined to the portion of the sector concerned with home care. A move toward more home-based care has coincided with a general decentralisation of service provision and employment from the national to the local level.

In some countries community care is, in reality, care by female relatives. The use of relatives or self-employed workers to carry out caring functions is a very different concept than that of community care with its focus on co-ordinated care, thereby bringing both the recipients and the providers into a community of care. A critical literature has developed, particularly in the Scandinavian countries, which recommends that policy makers recognise the extent to which community care means care by female family members, and that consequently, policy be oriented to support these informal carers (Waerness, 1990). Support for home-based "community carers" is more extensive in those countries with social welfare state commitments to provide for children and people in their old age. Where care is primarily a family responsibility, family members have fewer community resources to assist them.

The inter-relationship of child care and elderly care policies to other social and economic policies

Policies that directly affect the labour market opportunities available to child care and elderly care workers are embedded in a broader social and economic

policy framework. Policies on employment, retirement, decentralisation and immigration all have implications for the care available, and indirectly, for employment practices governing caring workers. In some cases, these "indirect" policies may contradict the stated aims of policies developed specifically for the care sector.

In the United States, for example, policies to encourage women currently receiving welfare assistance (Aid to Families with Dependent Children) to enter the caring sector as a source of employment will increase the number of unqualified carers. This policy directly contradicts policy aims in the sector to increase qualifications of the work force. At the other end of the spectrum, general policies to increase the qualifications of the work force could limit access to caring occupations. A more open labour market policy may alleviate unemployment for groups of potential workers who could enter the sector and do well with training received in the course of their work.

Technology and care management

Technological innovations have not played a major role in the restructuring of work in the caring sectors. Efforts to rationalise expenditure may in the future lead to more use of technology – *e.g.* monitoring at a distance to reduce employment costs – while being presented as increasing the self-sufficiency of the elderly. Nonetheless, technology appears more readily applicable in care management rather than in care provision, that is to say, in getting information, procuring services, and co-ordinating and supervising services. It will be interesting to note whether women accede to these care management roles in greater numbers than before. Evidence from all countries surveyed in this chapter suggests that women are under-represented in managerial jobs in the caring sectors. Since care managers play a central role in defining the content of caring work, it is critical that occupational linkages be developed between the "grassroots" caring work force and care management jobs.

CARING PROFESSIONS AND CONDITIONS FOR CARING: THE CHALLENGES

The changing role of the public sector dominates the future of caring professions. Although social expenditure levels have risen across OECD countries (OECD, 1996*b*), governments are devising new ways to make those expenditure more cost-effective in the face of increasing service demands. Governments are resorting to privatisation, decentralisation of financing and wage bargaining, decreased use of institutional and increased use of home care that are dramatically altering service provision. The restructuring of the public sector also appears to alter the quality of work in caring occupations in different ways. There are cases of a change in the division of labour, with more specialisation of tasks in some

occupations. In other cases, on the contrary, the ''professional'' qualifications associated with caring work have deteriorated because of the reassignment of work to less qualified and more cost effective personnel.

The role of the public sector is shifting away from service provision and toward a more regulatory and managerial role. This shift has significant consequences for women to the extent that they have benefited from national regulation and collective bargaining agreements or have had the possibility of doing so. The care sector represents a considerable potential labour market for women in the years to come, both in the child care and in the elderly care fields. This potential is, however, being realised in very uneven ways in different countries, and in ways that allow the existence of many ''bad jobs'' alongside many ''qualified jobs'' which, nonetheless, offer little in the way of career prospects.

The increasingly fragmented and decentralised care market in many OECD countries represents major challenges for professionalising the caring professions. These challenges are outlined below.

Employment creation but with wage bifurcation and deterioration

The major policy challenge regarding the care work force is to encourage access to the sector while at the same time developing methods to increase the credentials of care workers who enter the sector without skills. In many countries, a debate has emerged over how to balance the need for a skilled work force with the need to provide both greater access to jobs in the sector and services at a lower cost. So far, this dilemma has not been resolved.

In general, the poor wage prospects and career potential in the care sector have made care occupations less attractive than other alternatives for women. The sector has great difficulty in attracting qualified personnel and employment contracts are precarious which explains the high turnover rates. This leads to crises of staffing in terms of continuity and quality.

Care sector jobs appear to be increasingly divided between a small number of jobs that are more stable and require higher qualifications, and a larger number of jobs in the occupations which offer low wages and no potential for career mobility. The number of workers employed in the least skilled occupations is growing faster than that in the more skilled jobs despite widespread recognition of the need to increase the skills of the care work force so as to improve the quality of care.

As the need for caring workers has expanded, unemployment has somewhat declined. The rate of unemployment among self-identified caring workers appears quite low across OECD countries. However, the studies used in this chapter indicate a deterioration in the relative wage rates paid to caring workers, in particular, where caring services are obtained by the client as an individual

employer rather than through a state agency. Wage stagnation and deterioration is especially affecting the lowest level occupations, such as home care helper and child care assistant, which also have the highest incidence of part-time work. Although carer's wages across countries are, as a whole, lower than those for the female work force and significantly lower than those for the male work force, there is evidence of a relationship between pay and credentials. There is also evidence that workers covered by collective bargaining agreements and represented by unions have higher relative wage rates than those not covered by agreements. In fact, one of the most apparent reasons for the deterioration of overall wages rates and bifurcation of wages within the sector is the decline in coverage of all workers in the sector under collective bargaining agreements. Domestic assistance work, one of the most rapidly growing occupational categories, is most frequently excluded from collective bargaining agreements.

The changing division of labour and the implications for mobility and security

Care workers have historically been employed in workplaces with very short job ladders and in highly isolated work settings. Diminishing public sector provision of caring services may exacerbate the career ladder problem. Public sector provision is associated with the evaluation of job content and evaluation systems are critical to occupational recognition, adequate compensation, and the development of occupational hierarchies. As provision becomes more fragmented and decentralised, evaluation procedures will need to be developed and implemented to encompass the wider labour force of carers.

Although recent trends indicate a more complex division of labour – for instance in the elderly care area with personal, health care, and domestic assistance separated into different occupational categories – the separation of these jobs has not led to the creation of a hierarchy of skill but rather to a segmented labour market. The function requiring the least formal qualification, domestic assistance, has been separated and assigned to workers on the periphery of the labour force. These workers are hired via different labour market mechanisms than the personal carers and especially, the health care personnel. The primary reason for this change in the division of labour has been to reduce costs by limiting the responsibilities of health care professionals to specialised health care. A similar trend exists in child care with an increasing portion of the child care work force made up of family care workers (typically young women) with few if any qualifications.

Another key division of labour in caring work is that between caring performed in institutional settings and that performed in homes of carers or homes of clients. Caring work in institutional settings is more frequently performed within a job hierarchy which includes workers from associated sectors. Caring work per-

formed in the home of carer or client is limited in occupational scope. The available evidence indicates that any career mobility which might exist is associated with institutional settings. As more caring work occurs in isolated, home-based settings, the possibility for a career path decreases. The solution to this problem for independent care work is difficult to identify. One alternative may be found in the creation or growth of intermediary institutions to construct a web of connections among workers replacing that traditionally provided by public sector institutions. There is no guarantee, however, that the intermediaries will serve the interests of individual carers. They may, in fact, provide a further bottleneck unless carefully regulated.

In the highly-fragmented scenario which is emerging in the caring sectors, the priority seems to be economies of scope rather than scale. The potential for carers to move across age groups and types of caring situations might provide an acceptable alternative to the extent that public regulation and leadership in organising more complex labour markets are ensured.

The recognition of skills specific to caring

Caring work and caring occupations are difficult to define but they are certainly characterised by manual, mental and emotional work. ''Caring about involves paying attention to certain aspects of the world in a way which focuses on continuity, reproduction and maintenance. Care giving refers to concrete tasks of caring, to practical maintenance and repair. Caring relationships are based on reciprocity and mediation.'' (Kolehmainen-Lindén, 1997). Caring occupations require a confluence of skills which combine head, hand and heart, that is technical skills, physical skills, and emotional communication skills (van den Herik, 1997). Programmes to evaluate and recognise these skills must move beyond a task orientation to consider how all of the necessary skills intersect.

Access to training

Training for caring workers is provided through both accredited programmes and through informal mechanisms such as workshops, conferences and publications. Access to training is hampered by a range of factors from geographic isolation of some care providers to linguistic and cultural barriers. Combining work and family obligations makes access to training difficult in the caring occupations as in other sectors for women. In most instances, further training costs are to be borne by the workers whose wages do not allow them to absorb the expense. This trend towards worker responsibility for any further training appears to be expanding. Also, lack of accepted standards of training and accreditation makes it more difficult to identify appropriate training programmes worthy of individual investment.

Increased "invisible" caring work and its costs

The countries covered in this chapter and the available research indicate that decisions concerning the provision of social services often presume that care responsibilities will be assumed by the family, that is to say, by women. Recent reforms in France and Germany introducing the option for elderly clients to accept a cash payment in lieu of services creates a situation in which more women assume the burden of care in return for what is not a wage but rather a supplement to household income. Such an outcome undermines the labour market position of those workers who care "for a living", and the collective bargaining agreements that govern the conditions of work in this sector. As many OECD countries face a "care gap", the debate concerning the maintenance of a commitment to women's ability to participate in the labour force on equal terms and the need to provide care to a growing dependent population, will continue. The provision of care always involves costs. The uncompensated care that women provide for children and elderly relatives imposes heavy long-term costs on them in terms of foregone earnings and reduced pension. One critical question that will determine policy directions is whether it is assumed that caring is a woman's inherent responsibility or whether it is a social responsibility.

REFERENCES

ACKER, F. and GOTTELY, J. (1996), France's contribution to the OECD case study on caring occupations.

BEACH, J. *et al*. (1998), ''Our child care work force: from recognition to remuneration'', Child Care Human Resources Steering Committee, Ottawa.

BRUYNINCKX, H.E. (1996), ''Employment and working conditions in the elderly care sector in Belgium'', Hoger Instituut voor de Arbeid, Katholieke Universiteit Leuven, Leuven.

CANADIAN CHILD CARE FEDERATION AND CANADIAN DAY CARE ADVOCACY ASSOCIATION (1992), *Caring for a Living, A Study on Wages and Working Conditions in Canadian Child Care*, Ottawa.

CAUSSE, L., FOURNIER, C., LABRUYÈRE, C. and KERBOUC'H, J.Y. (1997), ''Le développement des emplois familiaux – Effets sur les métiers de l'aide à domicile'', Série Observatoire, Document No. 121, CEREQ, Marseille.

CHRISTOPHERSON, S. (1997), ''Child care and elderly care: what occupational opportunities for women?'', Labour Market and Social Policy Occasional Paper No. 27, Paris.

DEPARTMENT FOR EDUCATION AND EMPLOYMENT (DFEE) (1996), United Kingdom's contribution to the OECD case study on caring occupations.

EUROPEAN COMMISSION NETWORK ON CHILD CARE (1996), *A Review of Services for Young Children in the European Union, 1990-1995*, European Commission, Directorate General V, Brussels.

HOEL, M. (1997), ''Female-dominated occupations in the caring sector in Norway'', Report 97:2, Institute for Social Research, Oslo.

HUMAN RESOURCES DEVELOPMENT CANADA (HRDC) (1996), Canadian contribution to the OECD case study on caring occupations.

KARLSSON, M. (1995), *Family Day Care in Europe*, European Commission, Directorate-General V, V/5187/95, Brussels.

KOLEHMAINEN-LINDÉN, S. (1997), ''Occupational and career opportunities of women in female-dominated occupations. Case studies on caring occupations in the sector of elderly care and secretaries in Finland'', Ministry of Labour, Labour policy studies No. 173, Helsinki.

MEIFORT, B. (1997), ''Berufsbildung, Beschäftigung und Karrieremöglichkeiten von Frauen in der Alterpflege in der Bundesrepublik Deutschland'', Bundesministerium für Familie, Senioren, Frauen und Jugend, Materialien zur Frauenpolitick No. 60, Bonn.

MORGAN, G. *et al*. (1993), *Making a Career of It – The State of the States Report on Career Development in Early Care and Education*, The Center for Career Development in Early Care and Education, Wheelock College, Boston.

OBERHUEMER, P. and ULRICH, M. (1997), *Working with Young Children in Europe: Provision and Staff Training*, Paul Chapman Publishing, London.

OECD (1996*a*), *Caring for Frail Elderly People – Policies in Evolution*, Social Policy Studies No. 19, Paris.

OECD (1996*b*), ''Social expenditure statistics of OECD Member countries'', Labour Market and Social Policy Occasional Paper No. 17, Paris.

VAN DEN HERIK, C. (1997), *De Nederlandse onderenverzorgenden inbeeld*, Ministerie van Socialezaken en Werkgelegenheid, The Hague.

WAERNESS, K. (1990), ''Informal and formal care in old age'', in Ungerson (ed.), *Gender and Caring: Work and Welfare in Britain and Scandinavia*, Hemel Hempstead, Harvester Wheatsheaf.

WHITEBOOK, M., HOWES, C. and PHILIPPS, D. (1990), *Who Cares? Child Care Teachers and the Quality of Child Care in America*, National Center for the Early Childhood Work Force, Washington, D.C.

WHITEBOOK, M., HOWES, C. and PHILIPPS, D. (1993), *National Child Care Staffing Study Revisited*, National Center for the Early Childhood Work Force, Washington, D.C.

WHITEBOOK, M., SAKAI, L. and HOWES, C. (1997), *Making Work Pay in the Child Care Industry,* National Center for the Early Childhood Work Force, Washington, D.C.

7

THE PROFESSIONALISATION OF FEMALE-DOMINATED OCCUPATIONS IN THE SERVICE SECTOR*

INTRODUCTION

In December 1997, a conference on the professionalisation of female-dominated occupations was held at the OECD. The purpose of the conference was threefold. Its first aim was to set out the framework for a discussion on developments in female-dominated occupations in the service sector. More specifically, the conference reviewed the situation in clerical occupations that cut across all sectors, and in the new caring occupations. These occupations were examined in two case studies: that of secretaries for clerical occupations, and that of carers (child care and elderly care) for personal service occupations.

The strategic significance of these discussions should be seen in the context of the larger labour market evolution for women. For several decades now, the development of service-sector employment has been attracting women onto the labour market. To the extent that the increasing female participation in the labour market has occurred in new or expanding activities, women have been shielded to some extent from unemployment. However, given the many different forms that service jobs can take, increased job segregation has also occurred, particularly for the less skilled groups of women. Women have also entered more skilled service professions, such as law, medicine, teaching and health care. However, the increase in part-time work and flexibility affect women in particular, and, although appearing to promote job creation may actually reinforce segregation and discrimination against women on the labour market.

* This chapter is an edited and abridged version of the report of the International Conference on "The professionalisation of female-dominated occupations in the service sector" which was held at the OECD on 11-12 December 1997. The conference was jointly organised by the French Ministry for Employment and Solidarity, and the OECD. The report of the conference was established by Jacqueline Laufer, Groupe HEC, France (Laufer, 1998).

The second aim of the conference was to consider how the professionalisation of these female-dominated service occupations could be enhanced based on the example of caring and secretarial occupations. This has major implications, not only for women's employment but for employment in general. It is through professionalisation that these occupations can develop in terms of both quantity and quality.

The development of new information and communication technologies calls for adaptation in the work force and in-depth reflection on changes in work organisation and on the cross-cutting skills that are so necessary in the clerical service sector. The emergence of new economic and social needs, both in communities and among individuals, may lead to greater employment opportunities but the conditions of work in these jobs requires careful scrutiny. These trends may offer women opportunities for change, but for this change to be positive it will be necessary to promote the professionalisation of such occupations and to upgrade the professional status of the women who are predominant in them, through increased skill validation, more lifelong learning and genuine career development.

The third aim of the conference was to identify a number of strategies for change and good practice conducive to the professionalisation of female-dominated occupations in the service sector. These strategies are based partly on a better understanding of the occupations concerned, in terms of both the change affecting them and the skills they require, and partly on a clearer identification of the range of policies required: training but also human resource management and work organisation; structural policies and equality policies. The implementation of these strategies involves the mobilisation of social actors at every level. Governments, businesses, the training sector, local authorities, associations and unions all have a part to play.

The conference outcomes are provided in this chapter.

MAIN FINDINGS*

Female-dominated service occupations are very diverse. Personal service occupations, for instance, are a recent development, not always well identified and always very heterogeneous with regard to job content. Other occupations, such as secretarial work, have existed for much longer, even if basically little is known about them in terms of all the skills they involve. In spite of their diversity, these occupations share some common features in that, while offering opportunities for women, they are still low in status. It is, therefore, vital to take advantage

* A more detailed analysis is found in Hilary Steedman (1997) and Susan Christopherson (1997). See also Chapters 3 and 6 in this publication.

of the changes affecting these occupations to improve prospects for women's employment.

Occupations offering employment opportunities for women

The emergence of an information and service economy based on the development of new occupations and new technologies may offer substantial occupational opportunities for women. But many job opportunities in the expanding service sector currently consist mainly of jobs that are low-skilled, low-paid and insecure. These new markets should instead generate high-quality jobs and services, ensuring a good match between flexibility and efficiency on the one hand and, on the other, working conditions that show genuine social and economic recognition for such occupations.

With regard to secretarial occupations, which are transversal to all sectors and organisations, the new technologies that are increasingly shaping human activities in every sector and occupation will obviously impact on clerical service occupations. The globalisation affecting every firm increases the pressure to remain competitive and encourages even more intensive use of these technologies. They are bringing about far-reaching changes in work organisation and require increasingly cross-cutting skills. This increase in skill requirements should lead to an upgrading of secretarial occupations.

The trend in the caring sector needs to be set within the context of the redefinition of the role of the welfare state. This trend is common to all OECD countries and involves the increased privatisation of caring services. There is concern regarding the cost and quality of such services but also their adaptation to increasingly diversified personal and home needs, which requires them to be more flexible. It is now more common for child care to be provided outside the home. An ageing population requires longer-term care. In both child care and care for the elderly, there is a growing demand for services and increasingly diverse provision. It is an area in which the number of private (profit and non-profit) providers is growing.

The development of the caring sector may be a step forward, in particular because it helps to convert what is often "moonlighting" into real jobs, and to upgrade the status of work that in many cases is provided free of charge in the home. Yet until now the political debate has focused mainly on the quality and cost of these services. The professionalisation issue is seldom part of the debate. Yet, it is central to the expansion of employment in the sector and to the kind of opportunities they can offer women.

Low-status occupations

Female-dominated occupations have several features in common, including the fact that they have undergone very little professionalisation, particularly in the service sector. Women have thus experienced further discrimination in the labour market. Conversely, the high proportion of women in this type of work stems from a lack of mixed gender occupations on the labour market and the lower status of work done by women. It is one of the reasons why such occupations receive so little social recognition.

The segregation and inequalities characteristic of these female-dominated service occupations are compounded by the low status of these jobs and the skills required for them. This situation is the result of a division of labour along gender lines in the past. The fact that women were mainly assigned to the family and domestic scene, and seen only as temporary employees, was for a long time the justification for subordinating them in working life and relegating them to certain low-skilled jobs. This gender-based approach to labour management was accompanied by a recognition of specific ''qualities'' in women, such as the ''dexterity'' and ''accuracy'' of female operatives, or the ''devotion'' of nurses and the ''interpersonal and organisational skills'' of secretaries. But it was also accompanied by an economic and professional devaluation of these same ''qualities'', seen as something acquired naturally or by socialisation through women's role in the family and society. The greater the similarity between jobs and the work partly carried out free of charge in the home, the greater this devaluation.

This segregation of female-dominated service jobs is also accompanied by a concentration of women within a limited range of jobs. These jobs are defined in very broad terms, unlike those held by men. Even if they are not ''second-rate'' jobs like the examples in secretarial, nursing or teaching occupations, they offer few possibilities of skill improvements and little in the way of career prospects.

Some aspects of secretarial work make it comparable to a profession. It is an identifiable occupation, requiring a number of specific kinds of training and qualifications. Secretarial work is defined by the use of a number of technical skills (involving the preparation of documents and all the applications relating to new information and office automation technologies) and the use of interpersonal skills, particularly with regard to communication and the transmission of information. But secretarial work has not gone all the way towards becoming a profession. It is an activity 90 per cent dominated by women, which in professional life reflects the subordination of women to men. Since this occupational activity is lacking in ''visibility'', secretarial work today seems to be an occupation with vague frontiers, ill-defined professional status and an uncertain future. Lastly, the prospects for professional mobility among secretaries seem to be ill-defined, and the rise in secretaries' actual qualifications and responsibilities does not seem to

translate into a more precise definition of the scope for promotion for secretaries or greater career development.

In service sector occupations, status is an issue since these jobs are characterised by diverse, insecure and part-time working conditions. Low-skilled and low-paid, caring jobs are therefore "invisible", "marginalised" occupations with little identity, or recognition in the mainstream cultural and professional frameworks. They are also occupations characterised by unsatisfactory working conditions, poorly identified and undervalued interpersonal and technical skills, underdeveloped vocational pathways and career/mobility prospects, and poor access to lifelong learning.

In general, female-dominated occupations in the service sector receive little recognition from the usual collective-bargaining partners because they are often characterised by low union membership. Both are difficult to organise because they are cross-sectoral, in the case of secretarial occupations and because they are new and segmented in the caring occupations.

Changing occupations

OECD economies are characterised by major changes in the production model, the spread of a form of flexibility that is both numerical and functional, and a substantial increase in "nonstandard" work forms (Betcherman, 1997). In an emerging information and service society, these occupations are undergoing radical change.

Secretarial work is evolving rapidly, owing to technological change but also, and more importantly, to changes in work organisation. More and more secretaries are working for a group of managers or a team rather than a single "boss", a trend now accentuated by the process of delayering. They are therefore called upon to display skills such as time-management, team-work and relating with a variety of people. Another trend is towards the specialisation of secretaries in a given field, more commonly in the private sector. Law, medicine and finance are examples of areas where secretaries may be expected to acquire specialised knowledge.

The future of secretarial occupations is linked to a set of technological, organisational and policy factors. The profession is not likely to disappear, since secretaries will always be needed both for their mastery of information technology and their skills in handling information. Although employment is not likely to grow in these occupations, since some of the more routine tasks can now be completed by managers themselves, secretarial skills will still have to be developed further. Trends in the number of secretaries will also depend on whether their skills are recognised. If their upgraded skills are not recognised, secretaries will tend to remain assistants (Steedman, 1997).

When it comes to caring occupations, diversification of service supply has widened the range of occupations, working conditions and career prospects for those who work in the sector. Differences in conditions of employment and career prospects stem more specifically from differences in the type of structures providing the service. By and large, the tendency is towards less regulation in this sector of employment (Christopherson, 1997).

In the field of child care services, sectoral organisation has obvious implications for job stability. In the United States, for instance, the work force is less committed to permanent work in this sector, which is unstable and flexible. It is, therefore, easier for low-skilled workers to gain access to these occupations and acquire experience in them. In other cases where the supply structure is public, the jobs on offer are of a more durable nature. Access is at a higher level and the motivation for lifelong learning is stronger. A highly structured sector is more limited in its capacity to absorb low-skilled workers, and opportunities for them to acquire work experience that could prove transferable to other job situations. Finally, in most countries there are few employment and training links between women employed in child care and those in other social and educational services. A more integrated approach to personal service occupations should be tied to a more integrated approach to training. Only the Scandinavian countries, and Finland in particular, have adopted approaches of this kind.

With regard to care for the elderly, it is in the institutional sector that the largest proportion of skilled workers is found, be it in personal care or medical services. The tendency is however more on "ageing in place". Employment growth in this sector is, therefore, linked above all to the development of the lower-skilled occupations. Here too, the gap between health care, personal care and housework contributes to the limited potential of these occupations for professional development. In Finland, where there is not this sharp distinction between health care and home help, this facilitates occupational mobility. It should be noted, moreover, that most occupations in this sector have part-time status, less so though for institutional care, institutions being more likely to employ their personnel full-time. In all these caring occupations, wage levels are obviously contingent on low status and lack of collective bargaining. The current growth in individual arrangements in the sector represents a potential threat to the progress which has been made in this area up to now.

Having studied the trends, we shall now look at their implications for women's employment prospects. The professionalisation of these occupations is in fact central to the strategies required.

CHALLENGES AND COMPONENTS OF PROFESSIONALISATION

Several types of research have been undertaken to identify ways of professionalising female-dominated occupations in the service sector: case-study research by the OECD on female-dominated occupations, future-oriented studies (CEP) on specific occupational sectors in France, work by unions or public-sector training institutions in other countries. The aim has been to identify more closely both the occupations themselves and strategies for professionalising them. Special attention is paid to the issue of whether the goals of professionalisation are compatible with those of a massive entry of the unemployed onto the job market, using caring services as a source of jobs. The challenge is to upgrade these occupations and the professional status of the women in them. Without a concerted approach incorporating these twin goals, such occupations may become even more insecure, less-skilled and lower-paid, thereby putting their development at risk.

There are several components to the professionalisation of these occupations. More must be known about them and the skills they involve. Training, management and work organisation policies also need to be identified if the goal of professionalisation is to be achieved.

Finally, relative to female-dominated occupations, professionalisation calls for complementary policy approaches based on both structural employment/training policies and affirmative action. Affirmative action, or special measures to increase gender equality in employment, could be used to target each of the factors involved in the professionalisation and upgrading of such occupations, namely skills, classification, pay, training, and career paths. Such pro-active approaches rest on a strong political resolve to compensate the imbalance of power between actors on the labour market. Affirmative action of this kind could also be used as a strategy to achieve a better gender mix. As a rule professionalisation strategies will promote the access of men to female-dominated occupations possibly contributing to eliminating a major factor in their low status.

Forms of organisation that are conducive to professionalisation

The conference highlighted a range of different models for professionalisation and human resource management in the service sector (Gadrey, 1997). Two models were opposed: the neo-Taylorian and the flexible professional model. The neo-Taylorian model is typical of low-skilled services. It is based on the rationalisation and control of highly specialised tasks, on numerical flexibility – both internal and external, and on very little vocational training for workers.

The "flexible professional" model is characterised by great organisational adaptability and by individual professional guarantees for employees. It is based on skills that are both specific and technical but also cross-cutting and interper-

sonal, as well as on substantial vocational training, project-based work, and the possibility of internal and external careers. Through the provision of training and the existence of professional rules that protect employees this model prevents the development of socially regressive forms of flexibility. The "flexible professional" model is also a way of promoting more evenly balanced service relationships between employees, employers and users. In the short term, there is a cost associated with this model. It requires substantial training. It also means trade unions and professional associations, which seek higher wages and hence short-term higher average service costs. But these factors will also, in the medium term, lead to higher service quality and the development of corresponding jobs (Gadrey, 1997).

When it comes to applying this model to the caring occupations, the flexible professional model still needs to be developed, be it in a public, private, associative or mixed framework. Applying it to this particular sector means defining a number of relatively restricted occupations, reflecting the wide range of skills required to perform the many tasks involved in personal care occupations. The flexible professional model also implies training leading to qualifications, professional bodies that negotiate collective agreements and are capable of promoting the image of these occupations as being just as valuable as others, and finally reference to a set of professional ethics that may vary according to the occupation and the area of action concerned.

A clear identification of occupations and requisite skills

Since they are similar to domestic work or require skills that are glossed over because they are associated with female roles, caring occupations and secretarial work are intrinsically marked by social and occupational "invisibility" which has overshadowed their potential characteristics as real occupations. Yet these jobs mobilise a substantial amount of know-how which is insufficiently identified as genuine professional know-how that can be learnt at school and in the workplace.

Firstly, there is the professional or technical knowledge specific to each of these occupations, for instance mastery of information technology in secretarial work. Then, there are the "softer" skills. A great deal of research remains to be undertaken concerning these interpersonal or non-objectifiable skills. The fact that the skills required in these occupations are poorly-identified has led to a discrepancy between the common image of these occupations as low-skilled and the actual skills they require, all the more so since such skills must often be practised in problem situations requiring ongoing adaptability to a variety of people and circumstances.

A professionalisation strategy therefore means gaining insight into these occupations, the career routes they involve and the training they require. The

marked change which is taking place in the actual categories of knowledge and action with regard to employment is by no means the least important point to emerge from research projects in this area: the very notions of a job, an occupation, a qualification and a skill are being questioned, since the concepts and instruments developed in the traditional manufacturing world have to be redefined.

If we take as an example the concept of skills and in particular "interpersonal" (or "social" or "non-objectifiable") skills, which are known to be extremely important in service occupations, it can be seen that defining these notions gives rise to complex problems. On one hand, the generalisation of a concept that gives a better idea of the individual's role in jobs that require ongoing adaptability is to be welcomed, and can be seen as an opportunity to grasp much more fully the specific characteristics of some female-dominated service occupations, such as secretarial work or service jobs. On the other hand, it must be stressed that the concept is hard to grasp and use. For example, several conflicting methods of assessing skills exist and the assessment can be subjective or arbitrary so that the individual's inherent qualities are equated with professional, objectifiable and transmissible skills which can be acquired and developed in different working environments.

Occupational pathways

Service sector female-dominate occupations currently offer poor career prospects. In secretarial work, for instance, the career ladder is a short one, except for a minority who achieve executive secretary status. The fact that higher levels of training, skills and responsibility are required has not generated clearer occupational pathways for secretaries. Further, these occupations do not have any bridges or scope for mobility to other same level jobs. This is due partly to the absence of links between initial training pathways, where there is initial training, and partly to problems of access to continuing education, particularly in the case of personal service occupations.

The absence of occupational pathways, scope for mobility to same level jobs and recognition of acquired skills results in moves out of the sector (in the case of service jobs) and to other employers (in the case of secretarial jobs), wage pressure and, in the case of caring services, persisting insecurity. Yet staff turnover, wage pressure and insecurity are not exactly compatible with the goal of higher quality. As the situation stands today, the lack of any career development pathways can be put down to a series of factors: there is no skill identification, recognition or hierarchisation, which makes it difficult to define a hierarchy of occupational employment including service management jobs.

Access to training

While the very future of these occupations in terms of quality and service provision depends on the identification and recognition of the complex and diverse skills they require and on access to lifelong learning, many obstacles still stand in the way, particularly access to training. Problems may include geographical isolation, access to adequate training courses or incompatible training and working hours.

At the same time, there is a need to identify training pathways based on in-work training. Balancing career development and skills training with open access to jobs for a labour force with little initial training represents a major challenge, particularly in the caring occupations sector. Here, the validation of skills acquired through work experience should play a crucial role in providing qualifications. The risk would lie in widening access to these jobs by lowering the requisite skill level without providing bridges between low-skilled and high-skilled jobs, thereby creating a dual job market.

New rules-of-the-game to meet the challenges

The flexibility inherent in a service economy should be accompanied by regulations to ensure the kind of flexibility that takes into consideration a worker's need for economic security and a professional future, namely compensation, career development and job stability. There would otherwise be a risk of fragmentation in the labour market and in the sectors where these occupations are found and in working conditions, either because of the contrast between a regulated "institutional" sector and a "private" sector with little regulation, or because of a complete lack of overarching regulations. With regard to secretarial occupations, these regulations should reflect the fact that such jobs are cross-sectoral. The regulations must focus not only on training but on career paths, wages and working conditions. This means bringing in a variety of actors mobilised through new partnerships.

QUESTIONS TO GUIDE POLICY APPROACHES

These different perspectives raise a number of questions that should guide policy approaches:

– Policy-makers and those involved in collective bargaining should be informed about the specificity of these occupations. These occupations are currently subject to a series of changes. Accordingly, these changes can either help to perpetuate the marginalisation and unsatisfactory working conditions of many women, or they can provide real opportunities for women to gain access to genuine professions.

- There is a need to analyse and benchmark the skills specific to these occupations in order to upgrade them and provide genuine career development.
- There is a need to reconcile flexibility, qualification and cost-containment. All caring occupations raise the issue of how to combine flexibility and qualification. Flexibility can be reconciled with job security by focusing on work organisation, multi-skilling, and building collective skills. Flexible organisation is also relevant to secretarial occupations, be it the internal flexibility associated with multi-skilling or in-house mobility (by appointment to project teams and secondment to temporary team) or external flexibility, particularly with the development of temporary assignments.
- The shift away from institutionally-provided caring services can lead to a rethink of the government's role in funding and establishing a range of "private" services which are nevertheless subject to public, state-controlled regulations. The issue under consideration here is how to combine national and local initiatives to promote services, with central government intervention necessary to prevent the fragmentation and segmentation of labour markets, and to ensure that everyone has equal access to services.
- There is a need to ensure that those employed in cross-sectoral occupations are represented in collective bargaining. The respective roles of trade unions or new forms of group representation (such as professional associations) need to be considered here.
- Structural policies on employment and training should be linked with affirmative action ensuring, for instance, that the training recommended in structural policies is based on affirmative action to upgrade female-dominated occupations and improve their classification (Laufer, 1997).

PATHWAYS TO PROFESSIONALISATION: A NUMBER OF COMPLEMENTARY APPROACHES

The conference discussions made it clear that professionalisation could not be limited to the acquisition of skills, but included a number of complementary dimensions on which actors should also focus their efforts. These complementary approaches were illustrated by the concrete experiences presented during the conference.

To promote a better knowledge of the jobs and occupations concerned among the various actors

In France, for example, the development of contractual future-oriented studies (CEP) on occupational branches has made it possible to define an accurate

profile of service and secretarial occupations. These studies are carried out at the initiative of the public authorities and require the active co-operation of employers' organisations and trade unions. They are also aimed at promoting dialogue and negotiation between employers and employees, in particular regarding further training. With regard to caring occupations, the study on "domestic workers and home help" is an example of an initiative aimed both at analysing the future development of the occupations and skills and at defining a human resource policy in this field.

In a number of countries, trade unions or enterprises have organised similar surveys at their own level. In the field of secretarial occupations, for example, the initiatives taken by the FNV (Confederation of Dutch Trade Unions-Service sector) in the Netherlands or the Danone corporation in France aimed to describe secretarial jobs, identifying different competency levels and analysing emerging trends. This precise practical knowledge of secretarial occupations makes it possible to draw up definitions of duties or job descriptions, tools that are more often used for managerial positions. The job descriptions make it possible to give career guidance to secretaries and to organise group or individual training programmes. They can assist in the smooth conduct of annual performance appraisal interviews; in some cases they can point to the need to reassess organisational choices.

By developing these kinds of tools, employers can achieve a number of objectives. They are able to describe an occupation as it is actually practised in a variety of situations; to define the skills required to achieve a level of professionalisation; to recognise these jobs as fully-fledged occupations and managed accordingly; and to renew the motivation of those in such occupations by identifying the possible paths to career advancement. Better knowledge of the occupations should also bring more recognition and improved status in organisations.

To emphasize the skills required in the various occupations

Both secretarial and caring occupations require technical and interpersonal skills that often go unrecognised, are given little value or are poorly identified. In France, a study carried out by the AFPA (Association for the Vocational Training of Adults) showed the key role of interpersonal skills in service occupations. The main purpose of this ongoing project is to improve in a very operational way the vocational training of service workers, especially concerning personal care occupations.

The ability to identify better the critical skills required in the various occupations makes it easier to validate job experience in real work situations. The validation of skills acquired both inside and outside the workplace is an important area in which progress must be made in service occupations given the

importance of "non-objectifiable" skills and the range of skills that can be acquired outside the workplace but used in these jobs, particularly in personal care occupations.

To develop collective skills

It is useless to develop individual skills, in particular through training, if the way work is organised does not actually give individuals the opportunity to master and use these skills. Consequently, it is necessary to create and develop a work environment and organisation that fosters learning and the development of shared skills. Training must, therefore, go hand in hand with changes in work organisation.

In the case of secretarial occupations, a great deal can be learnt from the experience of Kent County Council in the United Kingdom. To meet the challenge of changing technologies and the need to rethink its organisational structures because of budget reductions, it aimed:

- to set up an integrated support unit that could provide services to all units of the County Council;
- to study possible ways of developing the staff's skills throughout the administrative center in order to help employees to realise their professional aspirations and acquire new skills;
- to improve the quality and effectiveness of services.

Thus, in this case a new work organisation made it possible to use secretaries' skills to the fullest by giving them greater autonomy.

To co-ordinate more effectively initial training, further training and on-the-job training

For the caring occupations which are currently being developed, one of the challenges is to ensure that they are accessible to low-skilled segments of the population. These occupations will only remain open to these groups if it is possible for them to acquire training in a real work environment. Therefore training should not be separated from work. A number of contributions to the conference indicated that this was possible through combining the introduction of first levels of qualification, recognition of work experience and access to long-term education. Research from the NCECW (National Center for the Early Childhood Workforce) in the United States showed that training programmes in the child care field should encompass all aspects of occupational work. In addition to basic general education and child development, child care workers should be prepared for organisation and mentoring functions. Training should enable the workers concerned to advance in their careers by giving formal recognition to the training

they receive and linking training to pay. Mentoring can play a key role in transferring skills and can also be a means of enhancing the role of more experienced workers.

The issues around initial training, continued training and interrelation between training, career paths and pay are also raised as regards secretarial occupations. In the Netherlands, the project carried out by ECABO (the national vocational training agency) made it possible, on the basis of an analysis of job profiles in enterprises and organisations, to define a new qualifications structure for secretarial occupations and to set up corresponding vocational education programmes. The new qualifications have been recognised by employers' organisations, trade unions and vocational training institutions.

To define career paths

In the case of secretarial occupations, the importance of a clearer definition of these occupations and the skills they require in order to identify the career paths to which they might lead has already been stressed. The example of Kent County Council in the United Kingdom has also shown the need to establish a real career management policy for secretaries. The fact is that all too often the possibilities for career development of secretaries are determined by their immediate superior alone. Consequently, a more collective approach to these issues is required.

In Finland, an important initiative has been taken with a considerable impact on career prospects in the personal services sector. A single co-ordinated training programme has been introduced in place of previously separated programmes in the health and social services sector. This has made it possible to consolidate all social service occupations and genuinely to professionalise the sector. A three-tiered occupational and qualification structure (up to the higher education level) has made it possible to better structure the occupational sector and to establish crossovers between qualifications in the field of social services and health care. In that way mobility between social service and health care activities is much facilitated. This represents a development that can significantly change the professional identity of workers and the professionalisation of occupations in this sector.

To improve pay conditions

In some OECD countries, including Belgium and France, central government services in charge of labour and equality issues have established guidelines recommending that equal pay be considered a permanent topic in collective bargaining. Such an approach would contribute to upgrading female-dominated occupations and the relevant skills in collective bargaining by linking equal pay to

other bargaining topics such as the recognition of qualifications, training, the redistribution of working time and working conditions.

As regards the implementation of pay equity legislation, the experience of the State of Ontario in Canada showed the importance of voluntary, systematic action to correct pay levels in female-dominated occupations. The battle fought by a coalition of trade-unionists, professional associations and users groups for an upgrading of child care workers' pay revealed both a marked under-evaluation of these workers' pay and the difficulties in implementing catch-up measures.

THE ACTORS OF PROFESSIONALISATION

The professionalisation of female-dominated occupations in the service sector requires the intervention of a variety of actors whose importance may vary depending on the specific political and social organisation in each country: the central government, local authorities, social partners, training institutions, employers, users and workers. The need for strategies based on complementary action makes it essential to establish new types of partnerships between these actors. The actors present at the conference reported on their experiences and views.

From state to local authorities

Given the changing role of the central government and the public sector and the growing decentralisation at the sectoral and geographical level, the role of the central government in social regulation must be redefined. A number of contributions during the conference argued that the central government should continue to play an important role by laying down the "rules of the game" for pay bargaining, training policy or measures to upgrade occupations.

With regard to personal services in particular, in addition to the role of direct service provider that the public sector has traditionally in some countries, central government should take on new regulatory and management responsibilities, in particular with regard to the organisation of training. Even in countries undergoing less restructuring in the social services, decentralisation is altering the conditions under which working conditions are regulated, and here too, new modes of regulation and organisation need to be devised. In several countries, the sector is regulated at the local level. In this case, local authorities, who may be required to produce services themselves, must also co-ordinate the supply of services provided by the private sector or associations, as well as ambulatory and home care services.

In the case of female-dominated caring jobs, one of the priorities is to establish work structures (enterprises, agencies, non-profit groups) which would

avoid the disadvantages of direct private employer/employee arrangements, or at least place them in a framework in which employment conditions, working time, and entitlements to training are regulated. This mediation and regulation function does seem essential if the women in these jobs are to have a minimum say, whether with regard to managing work schedules, the definition of the work to be done, the pooling of experience through which to build up shared skills, or access to training. The problem of privately hired staff will still remain. For this group, minimum forms of intermediation have to be found, since it is they who are exposed to the greatest risk of persistent traditional domestic status.

The partners in collective bargaining

It is essential that the social partners also take the initiative of ensuring that the actual conditions, characteristics and specific requirements of female-dominated occupations are more systematically included in the bargaining process, both at branch and enterprise level, especially as concerns pay and job classification. In the same way, gender equality in employment should be more systematically addressed in collective bargaining.

Low union membership among employees and employers in the service sector, especially in the dispersed and evolving sector of service occupations, particularly caring services, does not augur well for collective bargaining on pay, classification, training and working time issues with the objective of gender equality. Yet collective bargaining appears of central importance to the future of such jobs. At the same time, it may be necessary to bring in new actors, for instance professional associations for secretaries, or user groups for caring services.

The cross-cutting nature of secretarial occupations may require changes in the structure of collective bargaining. In a number of countries, as the contributions to the conference showed, trade unions have shown their ability to grasp the key challenges facing these occupations. This is the case, for example, in Denmark and the Netherlands, where unions' initiatives have resulted in the design of skills descriptions, career profiles and initial and continued training systems for these occupations.

Alongside traditional forms of bargaining and collective agreements, which obviously must not be overlooked, and alongside government policy, there is also a place here for action involving both trade unions and training institutions, service providers (intermediary associations, enterprises) and users, so that a central forum is created at national and local level for the joint regulation of employment conditions, compensation and training. A number of contributions stressed the role that new actors might play in the regulatory process in order to promote the professionalisation of female-dominated occupations. For example, the role that secretaries' associations might play as a go-between with the public

authorities was emphasised a number of times. In the case of service occupations, users and user associations can contribute significantly to smoother relations between service providers and the consumers of these services. Nevertheless, in the case of service occupations, identifying the relevant actors in an extremely heterogeneous employment system is a complex matter, in particular because, with regard to professionalisation, partly contradictory attitudes can be expected among such different actors as enterprises, trade unions, non-profit groups, local authorities and central government.

Enterprises

Human resource management policies at enterprise level can have a key impact on the development of female-dominated occupations in the service sector. For example, such policies can define frameworks of skills and competencies levels that are used to establish both career paths and training initiatives. In the case of secretaries, it is at the level of the enterprise that career policies can be developed that will change the traditional image of secretarial work.

It is also in enterprises, as in government bodies or associations, that decisions can be taken concerning a wide range of organisational changes favourable to professionalisation. A number of contributions to the conference stressed the importance of making changes in work organisation based on the use of a more versatile work force and closer involvement of staff in implementing the changes planned. In the case of secretarial work, for example, consulting staff more closely on the development of new technologies makes it possible to take advantage of the full potential of new technologies to redefine secretaries' roles.

Emphasis was placed, drawing in particular on the British experience, on the role that might be played by the networking of enterprises at the local or regional level to establish common ground for discussing measures to upgrade secretarial occupations. This might, for example, make it possible to exchange experience on work organisation or training initiatives.

Similarly, in the case of caring occupations, a work organisation that fully uses the possibilities of internal flexibility (development of skills in a working environment, work situations that provide job training, organisation of the pace of work, access to continued training) can only contribute to the professionalisation of these occupations.

New forms of organisation can also be thought of at a different level, as a means of better structuring the supply of services. Social co-operatives in Italy provide an interesting example. They are community business ventures that combine private management methods with social objectives, and which are well suited to providing social services useful to the community. Because of their ability to effectively organise staff with a different job status (paid and volunteer

workers, individuals recruited from disadvantaged segments of the population), these co-operatives can, in partnership with users, improve the quality of community services and corresponding jobs.

Partnerships

Attention must also be given to all forms of partnerships aimed at improving the quality, training and organisation of female-dominated occupations. The North Carolina TEACH Programme in the United States includes, in a single partnership, child care providers, federal and state agencies, university colleges and foundations, all with the objective of upgrading the training and pay of low skilled child care workers. This improves both the situation of these workers, most often "welfare mothers", and the quality of services through a more qualified and stable labour force. In Finland, the integration and regulation of social services at the local level requires improving teamwork between the different types of service providers and co-operation between the sectors of social services and health care services, especially as regards developing services to the elderly. As stressed by Gadrey (1997), it is important for professionalisation initiatives in the caring services sector to have a local anchor which will allow interprofessional co-operation, in a given territory, on projects aimed at developing high-quality services. However, the social validation of this professionalisation must always go beyond the local level.

CONCLUSIONS

The conference drew on multiple perspectives. There were discussions on the implications of the professionalisation of female-dominated service occupations, based on the examples of secretarial work and caring services, and the kind of obstacles that stand in the way of professionalisation. The conference also put forward many practical proposals for the professionalisation of female-dominated service occupations. Professionalisation calls not only for joint action on skill recognition, career paths, training, working conditions and compensation but also for partnerships among stakeholders (central government, local authorities, social partners, training bodies, employers and employees) as well as discussions on new policy and regulatory approaches for these occupations.

The professionalisation of female-dominated service occupations can achieve greater recognition for jobs that contribute to social and economic development but have long been, and still are, characterised by a lack of visibility. The solution is therefore to promote the role of women in the economy while at the same time promoting the development of socially-recognised jobs in the service sector. The conference highlighted the magnitude of the challenge that the expansion of the caring services sector represents for the industrialised world.

The development of caring occupations is at the center of a whole process of change. As well as the upgrading of women's contribution to the economy through the development of service occupations, there is the issue of women's access to the labour market and the adjustment of their participation to demographic trends and changes in the family unit. Service activities, despite their social utility and complex job content, still have low status in OECD countries. There is a need for discriminatory cultural and institutional models concerning caring occupations to evolve.

Finally, from the innovative experiments presented at the conference, including skill identification and validation, in-work training, stakeholder partnerships to regulate these occupations, many lessons can be learnt. They provide insight into new employment and training systems and shed light on the issue of labour market access for the low-skilled. Any initiative that promotes the results of successful experiments, whether through "good practice guidelines" or networks for the exchange of good practice, will contribute to making these experiments better known and to enhancing the social status of female-dominated occupations.

REFERENCES

BETCHERMAN, B. (1997), "Organisational change and its implications for employment and human resource development: an overview paper", OECD, Paris.

CHRISTOPHERSON, S. (1997), "Child care and elderly care: what occupational opportunities for women?", Labour Market and Social Policy Occasional Paper No. 27, OECD, Paris.

GADREY, J. (1997), "Flexibility and professionalisation of work in the service sector: distinct strategies and models", OECD, Paris.

LAUFER, J. (1997), "Implications of the professionalisation of service sector jobs for equality in employment", OECD, Paris.

LAUFER, J. (1998), "The professionalisation of female-dominated occupations in the service sector", OECD, Paris.

STEEDMAN, H. (1997), "Trends in secretarial occupations in selected OECD countries, 1980-95", Labour Market and Social Policy Occasional Paper No. 24, OECD, Paris.

STATISTICAL APPENDIX

Table A.1. **TOP-TEN OCCUPATIONAL GROUPS (2-digit level[1])**

Employment data (percentages)

NORWAY

Occupational group	NYK code	Male concentration	Female concentration	Female share	Female part-time share
		1981			
Other clerical work	29	3.5	14.6	76.2	42.5
Nursing care	04	0.6	13.5	94.8	51.5
Sales work from offices and retail sales work	33	5.7	13.5	64.8	59.3
Building caretaking and charwork	93	1.9	10.0	80.1	84.2
Hotel, restaurant and domestic work	91	1.1	9.9	87.0	65.1
Pedagogical work	06	4.9	6.2	49.7	59.8
Farmwork and livestock work	41	2.3	4.6	60.5	65.7
Book-keeping and cashier work	20	1.2	3.2	67.7	43.4
Postal and telecommunication work	67	1.0	3.0	69.1	42.0
Stenography and typing work	21	..	2.6	95.4	36.5
Total top-ten		22.2	81.1	76.3	57.2
Total (73)		100.0	100.0	43.7	54.8
		1993			
Nursing care	04	1.0	14.1	92.8	56.3
Sales work from offices and retail sales work	33	8.2	10.6	54.2	54.3
Other clerical work	29	3.3	10.5	74.5	36.1
Hotel, restaurant and domestic work	91	1.5	9.4	85.0	53.5
Pedagogical work	06	5.7	9.2	59.8	32.0
Building caretaking and charwork	93	2.7	7.5	71.5	77.6
Other work in group "technical, physical science, etc."	12	3.9	4.7	52.5	34.4
Book-keeping and cashier work	20	1.1	4.3	78.7	37.4
Stenography and typing work	21	..	3.7	97.9	30.0
Public administration	10	2.8	3.0	49.6	14.0
Total top-ten		30.2	77.0	70.0	46.8
Total (73)		100.0	100.0	47.8	45.0

.. Data not available.
1. No equivalent level of occupational classification exists for France.
Source: Grimshaw and Rubery (1997).

Table A.1. **TOP-TEN OCCUPATIONAL GROUPS** *(cont.)*
(2-digit level[1])

Employment data (percentages)

AUSTRALIA

Occupational group	ASCO code	Male concentration	Female concentration	Female share	Female part-time share
		1987			
Stenographers and typists	51	0.1	10.3	98.3	24.0
Sales assistants	63	3.5	10.2	66.9	56.7
Numerical clerks	53	3.3	8.3	63.9	27.4
School teachers	24	2.3	6.3	65.1	21.1
Receptionists, telephonists and messengers	56	0.7	5.4	83.9	31.5
Registered nurses	34	0.3	5.3	92.1	37.6
Cleaners	83	1.6	4.9	69.0	71.8
Miscellaneous labourers, etc.	89	6.9	4.9	33.0	60.1
Miscellaneous clerks	59	1.9	4.3	61.9	38.7
Tellers, cashiers, ticket salespersons	64	0.6	3.9	81.8	55.3
Total top-ten		21.2	63.7	67.8	40.5
Total (52)		100.0	100.0	41.2	36.8
		1995			
Sales assistants	63	4.5	10.8	66.3	63.3
Numerical clerks	53	2.6	9.7	75.1	33.5
Stenographers and typists	51	0.2	7.2	97.3	27.7
Receptionists, telephonists and messengers	56	0.7	6.0	86.8	39.1
School teachers	24	1.9	5.9	71.8	22.1
Personal service workers	66	0.5	5.1	89.6	49.5
Miscellaneous labourers, etc.	89	6.9	4.9	36.4	64.7
Tellers, cashiers, ticket salespersons	64	0.8	4.7	82.0	70.0
Registered nurses	34	0.3	4.7	91.7	46.5
Cleaners	83	1.8	4.1	65.4	77.3
Total top-ten		20.2	63.0	71.8	47.7
Total (52)		100.0	100.0	44.9	41.5

1. No equivalent level of occupational classification exists for France.
Source: Grimshaw and Rubery (1997).

Table A.1. **TOP-TEN OCCUPATIONAL GROUPS** *(cont.)*
(2-digit level[1])

Employment data (percentages)

UNITED KINGDOM

Occupational group	SOC code	Male concentration	Female concentration	Female share	Female part-time share
			1986		
Other clerks	43	3.0	12.1	76.8	30.1
Sales assistants and check-out operators	72	1.8	10.7	82.8	68.9
Other occupations in sales and services	95	1.6	9.2	82.1	86.5
Secretaries, personal assistants, typists	45	..	9.3	99.2	30.8
Health associate professionals	34	0.8	7.1	87.6	40.9
Child care and related occupations	65	..	5.8	98.9	78.7
Teaching professionals	23	3.0	5.1	57.9	26.3
Catering occupations	62	1.2	4.2	74.5	62.6
Other routine process operatives	86	1.8	2.8	55.8	30.3
Textiles, garments and related trades	55	0.8	2.8	73.0	23.3
Total top-ten		14.0	68.9	80.1	50.4
Total (77)		100.0	100.0	44.9	43.6
			1995		
Sales assistants and check-out operators	72	2.7	10.3	77.9	77.3
Other occupations in sales and services	95	2.2	9.0	78.9	82.9
Numerical clerks, etc.	41	2.0	6.5	75.2	34.7
Secretaries, personal assistants, typists	45	..	6.2	99.1	29.6
Health, related occupations	64	0.6	5.9	90.2	54.9
Teaching professionals	23	3.2	5.7	62.3	30.5
Health associate professionals	34	0.7	5.4	88.0	39.9
Other clerks	43	0.9	4.3	81.2	37.2
Child care and related occupations	65	..	3.6	98.2	68.6
Catering occupations	62	1.9	3.5	62.5	69.5
Total top-ten		14.2	60.4	79.6	54.8
Total (77)		100.0	100.0	47.8	44.0

.. Data not available.
1. No equivalent level of occupational classification exists for France.
Source: Grimshaw and Rubery (1997).

Table A.1. **TOP-TEN OCCUPATIONAL GROUPS** *(cont.)*
(2-digit level[1])

Employment data (percentages)

WESTERN GERMANY

Occupational group	BA code	Male concentration	Female concentration	Female share	Female part-time share
			1980		
Clerical and secretarial workers	78	6.8	26.5	71.2	19.6
Sales occupations	68	4.5	12.3	63.4	26.8
Nursing professionals	85	0.5	7.6	90.0	13.2
Cleaners	93	1.1	7.2	80.1	55.6
Textile workers	34-36	0.6	3.7	79.8	16.2
Other assemblers and metal workers	32	2.1	3.6	52.2	8.3
Financial institution officers	69	2.4	3.4	46.9	11.8
Finance and computer associate professionals	77	1.8	3.3	53.7	27.3
Food-processing workers	39-43	2.2	3.0	45.9	13.3
Quality inspectors and packers	52	1.8	2.7	48.1	18.5
Total top-ten		23.8	73.3	67.4	22.6
Total (83)		100.0	100.0	38.8	21.2
			1990		
Clerical and secretarial workers	78	6.2	26.8	74.6	24.2
Sales occupations	68	4.6	12.4	64.4	32.3
Nursing professionals	85	0.8	9.8	89.6	21.4
Cleaners	93	1.1	6.2	78.6	62.9
Social work associate professionals	86	0.6	3.8	80.5	28.9
Financial institution officers	69	2.6	3.7	48.6	16.2
Other assemblers and metal workers	32	2.4	3.1	46.8	9.7
Finance and computer associate professionals	77	2.2	3.1	49.3	32.3
Food-processing workers	39-43	2.5	2.8	43.4	21.4
Quality inspectors and packers	52	1.9	2.2	45.0	18.2
Total top-ten		24.9	73.9	68.0	27.7
Total (83)		100.0	100.0	40.4	25.8

1. No equivalent level of occupational classification exists for France.
Source: Grimshaw and Rubery (1997).

Table A.1. **TOP-TEN OCCUPATIONAL GROUPS** *(cont.)*
(2-digit level[1])

Employment data (percentages)

CANADA

Occupational group	SOC code	Male concentration	Female concentration	Female share	Female part-time share
			1981		
Book-keeping, account-recording and related occupations	413	1.8	14.3	85.0	..
Stenographic and typing	411	0.1	11.1	98.7	..
Sales occupations, commodities	513/514	9.3	7.6	44.9	..
Nursing, therapy and related assisting	313	0.9	7.4	89.3	..
Food and beverage preparation and related service	612	3.3	7.0	67.8	..
Other clerical and related occupations	419	2.0	5.6	73.5	..
Elementary/secondary school teaching and related occupations	273	3.0	5.4	64.7	..
Reception, information, mail and message distribution	417	1.5	3.8	71.3	..
Other managers and administrators	113/114	10.9	3.2	22.5	..
Textile, fur and leather products	855/856	0.9	3.0	76.7	..
Total top-ten		33.7	68.4	66.5	..
Total (80)		100.0	100.0	41.9	..
			1991		
Book-keeping, account-recording and related occupations	413	1.8	12.1	85.5	..
Stenographic and typing	411	0.1	8.5	98.5	..
Sales occupations, commodities	513/514	7.2	7.4	47.4	..
Nursing, therapy and related assisting	313	0.8	7.4	89.5	..
Food and beverage preparation and related service	612	3.2	6.8	64.8	..
Other managers and administrators	113/114	10.1	6.4	35.7	..
Other clerical and related occupations	419	1.6	5.6	75.6	..
Elementary/secondary school teaching and related occupations	273	2.0	5.4	69.8	..
Reception, information, mail and message distribution	417	1.1	3.6	74.0	..
Personal service	614	3.8	3.5	89.0	..
Total top-ten		31.7	66.7	67.3	..
Total (80)		100.0	100.0	46.6	..

.. Data not available.
1. No equivalent level of occupational classification exists for France.
Source: Grimshaw and Rubery (1997).

Table A.1. **TOP-TEN OCCUPATIONAL GROUPS** *(cont.)*
(2-digit level[1])

Employment data (percentages)

UNITED STATES

Occupational group	SOC code	Male concentration	Female concentration	Female share	Female part-time share
		1982			
Other administrative support, including clerical	26	4.9	12.6	66.3	27.8
Secretaries, stenographers, typists	24	0.1	10.5	98.2	21.3
Other sales	22	2.9	9.3	71.0	59.4
Food service	29	3.4	7.9	63.8	59.2
Machine operators, tenders, except precision	43	5.4	5.7	44.8	16.3
Teachers, except post-secondary	15	1.7	5.6	71.2	27.8
Financial records processing	25	0.4	5.0	90.4	26.4
Salaried managers	03	7.3	4.0	29.6	13.9
Health service	30	0.4	3.5	87.8	32.1
Personal service	32	0.7	3.3	78.2	50.9
Total top-ten		27.4	67.5	65.5	34.3
Total (51)		100.0	100.0	43.5	32.4
		1992			
Other administrative support, including clerical	26	5.3	14.4	69.7	25.9
Other sales	22	3.6	8.3	65.7	59.2
Secretaries, stenographers, typists	24	0.1	7.3	98.4	20.8
Food service	29	4.1	6.7	58.1	59.7
Salaried managers	03	8.7	6.4	38.4	11.0
Teachers, except post-secondary	15	1.6	5.9	75.2	23.0
Personal service	32	0.8	3.8	80.6	43.7
Machine operators, tenders, except precision	43	4.4	3.7	41.1	11.7
Health service	30	0.4	3.6	88.4	30.6
Financial records processing	25	0.4	3.6	89.1	28.1
Total top-ten		29.3	63.6	64.6	32.1
Total (51)		100.0	100.0	46.6	29.9

1. No equivalent level of occupational classification exists for France.
Source: Grimshaw and Rubery (1997).

Table A.2. **TOP-TEN OCCUPATIONAL GROUPS (2-digit level[1])**

Pay data (percentages)

NORWAY

Occupational group	NYK code	Female concentration	Relative pay[2]		
			All	Full-time	Part-time
		1980			
Other clerical work	29	14.6	77.8	76.6	79.9
Nursing care	04	13.5	82.6	77.6	88.3
Sales work from offices and retail sales work	33	13.5	60.0	61.7	58.8
Building caretaking and charwork	93	10.0	74.3	66.2	75.8
Hotel, restaurant and domestic work	91	9.9	66.6	67.5	66.2
Pedagogical work	06	6.2	108.4	92.8	128.1
Farmwork and livestock work	41	4.6	..	..	..
Book-keeping and cashier work	20	3.2	76.1	80.8	68.8
Postal and telecommunication work	67	3.0	85.3	80.2	95.4
Stenography and typing work	21	2.6	89.1	85.4	93.9
Total top-ten		81.1	72.3	71.6	73.9
Total (73)		100.0	78.7	77.4	80.2
		1993			
Nursing care	04	14.1	81.9	80.7	83.1
Sales work from offices and retail sales work	33	10.6	66.1	69.1	63.3
Other clerical work	29	10.5	80.0	80.8	78.0
Hotel, restaurant and domestic work	91	9.4	67.8	67.5	68.2
Pedagogical work	06	9.2	92.2	89.9	101.4
Building caretaking and charwork	93	7.5	70.0	69.8	70.0
Other work in "technical, physical science, etc."	12	4.7	101.4	109.0	77.6
Book-keeping and cashier work	20	4.3	94.3	89.3	106.2
Stenography and typing work	21	3.7	83.2	82.0	89.7
Public administration	10	3.0	90.6	89.3	97.5
Total top-ten		77.0	80.0	81.6	76.5
Total (73)		100.0	81.2	83.1	77.6

.. Data not available.
1. No equivalent level of occupational classification exists for France.
2. Female average hourly occupational pay relative to the average hourly pay of male full-time workers in all sectors.
Source: Grimshaw and Rubery (1997).

Table A.2. **TOP-TEN OCCUPATIONAL GROUPS** *(cont.)*
(2-digit level[1])

Pay data (percentages)

AUSTRALIA

Occupational group	ASCO code	Female concentration	Relative pay[2]		
			All	Full-time	Part-time
		1987			
Stenographers and typists	51	10.3	79.7	78.8	82.2
Sales assistants	63	10.2	64.5	60.2	67.8
Numerical clerks	53	8.3	81.2	80.5	83.1
School teachers	24	6.3	118.6	115.3	131.4
Receptionists, telephonists and messengers	56	5.4	75.6	73.7	79.7
Registered nurses	34	5.3	110.5	105.1	119.5
Cleaners	83	4.9	75.7	72.0	77.1
Miscellaneous labourers, etc.	89	4.9	76.3	71.2	79.7
Miscellaneous clerks	59	4.3	85.3	85.6	84.7
Tellers, cashiers, ticket salespersons	64	3.9	66.8	64.4	68.6
Total top-ten		63.7	82.5	82.6	82.3
Total (52)		100.0	82.2	81.4	84.7
		1995			
Sales assistants	63	10.8	57.8	58.8	57.2
Numerical clerks	53	9.7	75.6	75.8	75.3
Stenographers and typists	51	7.2	76.1	75.8	76.8
Receptionists, telephonists and messengers	56	6.0	69.6	69.1	71.1
School teachers	24	5.9	105.7	104.1	112.4
Personal service workers	66	5.1	69.6	67.5	71.1
Miscellaneous labourers, etc.	89	4.9	62.4	61.9	62.9
Tellers, cashiers, ticket salespersons	64	4.7	62.4	64.9	58.8
Registered nurses	34	4.7	104.1	102.6	106.2
Cleaners	83	4.1	62.4	61.3	62.9
Total top-ten		63.0	73.6	76.7	70.0
Total (52)		100.0	79.9	82.0	75.3

1. No equivalent level of occupational classification exists for France.
2. Female average hourly occupational pay relative to the average hourly pay of male full-time workers in all sectors.

Source: Grimshaw and Rubery (1997).

Table A.2. **TOP-TEN OCCUPATIONAL GROUPS** *(cont.)*
(2-digit level[1])

Pay data (percentages)

UNITED KINGDOM

Occupational group	SOC code	Female concentration	Relative pay[2]		
			All	Full-time	Part-time
		1986			
Other clerks	43	12.1	64.3	66.5	58.7
Sales assistants and check-out operators	72	10.7	48.3	51.1	47.0
Other occupations in sales and services	95	9.2	41.9	50.7	40.7
Secretaries, personal assistants, typists	45	9.3	70.8	74.3	63.0
Health associate professionals	34	7.1	82.5	78.2	88.7
Child care and related occupations	65	5.8	47.0	..	47.0
Teaching professionals	23	5.1	..	96.7*	137.6
Catering occupations	62	4.2	48.7	53.4	45.8
Other routine process operatives	86	2.8	55.0	56.3	52.4
Textiles, garments and related trades	55	2.8	51.1	51.1	..
Total top-ten		68.9	63.5	70.2	54.2
Total (77)		100.0	66.5	74.1	56.9
		1995			
Sales assistants and check-out operators	72	10.3	44.6	46.9	43.9
Other occupations in sales and services	95	9.0	43.3	44.0	43.1
Numerical clerks, etc.	41	6.5	68.9	71.5	64.0
Secretaries, personal assistants, typists	45	6.2	72.4	75.9	63.8
Health, related occupations	64	5.9	54.3	54.5	54.1
Teaching professionals	23	5.7	..	106.9*	149.4
Health associate professionals	34	5.4	95.2	96.8	92.8
Other clerks	43	4.3	61.6	64.4	56.9
Child care and related occupations	65	3.6	52.2	55.4	50.7
Catering	62	3.5	41.7	44.4	40.6
Total top-ten		60.4	66.6	78.4	56.9
Total (77)		100.0	70.8	79.6	59.6

* *Data refer to weekly earnings.*
.. Data not available.
1. No equivalent level of occupational classification exists for France.
2. Female average hourly occupational pay relative to the average hourly pay of male full-time workers in all sectors.
Source: Grimshaw and Rubery (1997).

Table A.2. **TOP-TEN OCCUPATIONAL GROUPS** *(cont.)*
(2-digit level[1])

Pay data (percentages)

WESTERN GERMANY

Occupational group	BA code	Female concentration	Relative pay[2]		
			All	Full-time	Part-time
		1980			
Clerical and secretarial workers	78	26.5	..	70.2	..
Sales occupations	68	12.3	..	50.0	..
Nursing professionals	85	7.6	..	69.1	..
Cleaners	93	7.2	..	42.6	..
Textile workers	34-36	3.7	..	52.1	..
Other assemblers and metal workers	32	3.6	..	62.8	..
Financial institution officers	69	3.4	..	81.9	..
Finance and computer associate professionals	77	3.3	..	72.3	..
Food-processing workers	39-43	3.0	..	55.3	..
Quality inspectors and packers	52	2.7	..	73.4	..
Total top-ten		73.3	..	64.1	..
Total (83)		100.0	..	70.2	..
		1990			
Clerical and secretarial workers	78	26.8	..	68.8	..
Sales occupations	68	12.4	..	50.7	..
Nursing professionals	85	9.8	..	65.2	..
Cleaners	93	6.2	..	39.9	..
Social work associate professionals	86	3.8	..	68.1	..
Financial institution officers	69	3.7	..	86.2	..
Other assemblers and metal workers	32	3.1	..	62.3	..
Finance and computer associate professionals	77	3.1	..	75.4	..
Food-processing workers	39-43	2.8	..	51.4	..
Quality inspectors and packers	52	2.2	..	50.7	..
Total top-ten		73.9	..	63.8	..
Total (83)		100.0	..	71.7	..

.. Data not available.
1. No equivalent level of occupational classification exists for France.
2. Female average hourly occupational pay relative to the average hourly pay of male full-time workers in all sectors.
Source: Grimshaw and Rubery (1997).

Table A.2. **TOP-TEN OCCUPATIONAL GROUPS** *(cont.)*
(2-digit level[1])

Pay data (percentages)

CANADA

Occupational group	SOC code	Female concentration	Relative pay[2]		
			All	Full-time	Part-time
		1980			
Book-keeping, account-recording and related occupations	413	14.3	63.2	64.1	..
Stenographic and typing	411	11.1	66.4	66.7	..
Sales occupations, commodities	513/514	7.6	52.8	54.8	..
Nursing, therapy and related assisting	313	7.4	84.5	82.9	..
Food and beverage preparation and related service	612	7.0	47.1	47.1	..
Other clerical and related occupations	419	5.6	66.6	68.1	..
Elementary/secondary school teaching, related occupations	273	5.4	114.5	112.9	..
Reception, information, mail and message distribution	417	3.8	63.2	64.1	..
Other managers and administrators	113/114	3.2	87.6	87.5	..
Textile, fur and leather products	855/856	3.0	50.4	49.1	..
Total top-ten		68.4	68.2	71.3	..
Total (80)		100.0	68.8	71.1	..
		1990			
Book-keeping, account-recording and related occupations	413	12.1	63.6	64.9	..
Stenographic and typing	411	8.5	70.9	70.1	..
Sales occupations, commodities	513/514	7.4	55.4	59.0	..
Nursing, therapy and related assisting	313	7.4	88.2	86.5	..
Food and beverage preparation and related service	612	6.8	46.8	46.2	..
Other managers and administrators	113/114	6.4	89.1	89.3	..
Other clerical and related occupations	419	5.6	70.3	71.3	..
Elementary/secondary school teaching, related occupations	273	5.4	108.3	108.7	..
Reception, information, mail and message distribution	417	3.6	64.7	65.1	..
Personal service	614	3.5	44.8	44.4	..
Total top-ten		66.7	70.3	73.6	..
Total (80)		100.0	73.1	75.0	..

.. Data not available.
1. No equivalent level of occupational classification exists for France.
2. Female average hourly occupational pay relative to the average hourly pay of male full-time workers in all sectors.
Source: Grimshaw and Rubery (1997).

Table A.2. **TOP-TEN OCCUPATIONAL GROUPS** *(cont.)*
(2-digit level[1])

Pay data (percentages)

UNITED STATES

Occupational group	SOC code	Female concentration	Relative pay[2]		
			All	Full-time	Part-time
		1982			
Other administrative support, including clerical	26	12.6	61.4	62.9	57.5
Secretaries, stenographers, typists	24	10.5	62.5	64.0	56.9
Other sales	22	9.3	47.9	45.7	49.4
Food service	29	7.9	42.9	40.3	44.6
Machine operators, tenders, except precision	43	5.7	52.7	52.3	55.0
Teachers, except post-secondary	15	5.6	79.5	81.6	73.8
Financial records processing	25	5.0	66.2	64.4	71.7
Salaried managers	03	4.0	88.1	86.4	99.2
Health service	30	3.5	50.0	48.7	52.8
Personal service	32	3.3	47.5	42.2	51.9
Total top-ten		67.5	59.0	61.0	55.1
Total (51)		100.0	63.0	64.9	58.9
		1992			
Other administrative support, including clerical	26	14.4	68.1	70.0	62.7
Other sales	22	8.3	48.2	48.7	47.9
Secretaries, stenographers, typists	24	7.3	70.0	71.4	64.5
Food service	29	6.7	43.9	43.0	44.5
Salaried managers	03	6.4	97.0	97.7	91.2
Teachers, except post-secondary	15	5.9	92.2	94.8	83.5
Personal service	32	3.8	46.4	44.1	49.2
Machine operators, tenders, except precision	43	3.7	50.3	50.7	47.0
Health service	30	3.6	56.2	53.0	63.4
Financial records processing	25	3.6	74.5	67.3	93.5
Total top-ten		63.6	65.7	69.2	58.2
Total (51)		100	72.9	75.4	67.0

1. No equivalent level of occupational classification exists for France.
2. Female average hourly occupational pay relative to the average hourly pay of male full-time workers in all sectors.
Source: Grimshaw and Rubery (1997).

Table B.1. **TOP-TEN DETAILED OCCUPATIONS (3 or 4-digit level)**

Employment data (percentages)

NORWAY

Detailed occupation	NYK code	Female concentration	Female share	Female part-time share
		1981		
Other clerical workers	299	12.34	86.00	44.3
Shop assistants	333	12.34	78.45	61.9
Charworkers	932	9.83	96.32	84.9
Other practical nurses	045	5.64	96.93	53.7
Teachers (primary and vocational schools)	064	4.60	60.75	66.2
Professional nurses	041	4.29	93.94	54.5
Housekeepers (public service)	915	3.76	98.10	91.8
Farm-helpers (general)	411	2.88	59.88	64.9
Secretaries and stenographers	211	2.48	95.15	34.9
Kitchen assistants	913	1.77	91.44	50.1
Total top-ten		59.9	78.4	61.6
Total		100.0	43.7	54.8
		1993		
Shop assistants	333	8.2	72.1	63.1
Charworkers	932	7.4	92.0	77.8
Other clerical workers	299	7.4	89.7	41.4
Other practical nurses	045	5.4	97.3	62.5
Professional nurses	041	5.2	92.6	45.0
Teachers (primary and vocational schools)	064	4.5	60.8	37.0
Secretaries and stenographers	211	3.6	98.4	31.3
Others in hotel, restaurant, domestic occupations	919	3.3	93.1	42.3
Accountants and book-keepers	201	2.6	74.3	26.0
Social workers	122	2.6	58.9	48.5
Total top-ten		50.2	84.1	51.5
Total		100.0	47.8	45.0

Source: Grimshaw and Rubery (1997).

Table B.1. **TOP-TEN DETAILED OCCUPATIONS** *(cont.)*
(3 or 4-digit level)

Employment data (percentages)

AUSTRALIA

Detailed occupation	ASCO code	Female concentration	Female share	Female part-time share
		1987		
Sales assistants	6301	10.2	66.9	56.6
Accounting clerks	5301	7.6	64.6	28.9
Office secretaries and stenographers	5101	7.4	98.5	24.2
Registered nurses	3401	5.3	92.1	37.6
Cleaners	8301	4.9	69.0	71.8
Receptionists and information clerks	5601	4.6	90.6	31.5
Primary school teachers	2403	3.3	77.3	17.4
Other clerks	5999	2.8	59.7	28.3
Data processing machine operators	5201	2.6	80.6	19.3
Secondary school teachers	2405	2.4	50.3	24.7
Total top-ten		51.1	76.3	37.5
Total (280)		100.0	41.2	36.8
		1995		
Sales assistants	6301	10.8	66.3	63.3
Accounting clerks	5301	9.2	75.7	34.6
Office secretaries and stenographers	5101	6.1	97.4	26.7
Receptionists and information clerks	5601	5.3	91.3	39.2
Registered nurses	3401	4.6	91.7	46.5
Cleaners	8301	4.1	65.4	77.2
Primary school teachers	2403	3.1	82.5	23.8
Data processing machine operators	5201	2.8	77.6	23.9
Cashiers	6403	2.7	82.9	81.5
Child care refuge and related workers	6601	2.4	94.9	54.7
Total top-ten		51.1	80.3	46.9
Total (280)		100.0	44.9	41.5

Source: Grimshaw and Rubery (1997).

Table B.1. **TOP-TEN DETAILED OCCUPATIONS** *(cont.)*
(3 or 4-digit level)

Employment data (percentages)

UNITED KINGDOM

Detailed occupation	SOC code	Female concentration	Female share	Female part-time share
		1986		
Other clerks	430	12.1	76.8	30.1
Typists, word processor operators, other secretaries, etc.	452 + 459	9.3	99.2	30.9
Sales assistants	720	8.7	82.1	68.7
Nurses and midwives	340 + 341	6.1	91.0	41.8
Cleaners, domestics	958	6.0	86.1	92.9
Educational assistants, etc.	652	5.2	98.9	83.5
Secondary education teaching professionals*	233	..	..	..
Primary and nursery teachers*	234	..	..	..
Other teaching professionals*	235 + 239	4.2	63.8	22.4
Retail, cash-desk, check-out operators	721	1.9	90.9	70.9
Total top-ten		49.3	85.8	50.9
Total (370)		100.0	44.9	43.6
		1995		
Sales assistants	720	8.4	76.3	75.8
Cleaners, domestics	958	5.9	87.0	87.5
Other secretaries, personal assistants	459	4.8	99.2	28.2
Other clerks	430	4.3	81.2	37.3
Accounts, wages clerks, etc.	410	4.0	75.0	30.4
Nurses	340	4.0	90.1	40.7
Care assistants	644	3.9	92.0	56.9
Primary, nursery teachers	234	2.6	83.8	21.5
Counter clerks, cashiers	411	2.3	76.9	42.9
Retail cash-desk operators	721	1.8	87.9	83.9
Total top-ten		42.1	84.5	53.9
Total (370)		100.0	47.8	44.0

* *There is no breakdown by level of education.*
.. Data not available.
Source: Grimshaw and Rubery (1997).

Table B.1. **TOP-TEN DETAILED OCCUPATIONS** *(cont.)*
(3 or 4-digit level)

Employment data (percentages)

WESTERN GERMANY

Detailed occupation	BA code	Female concentration	Female share	Female part-time share
		1980		
Administrative associate professionals	781	16.9	66.9	17.8
Sales occupations	682	10.6	80.8	29.6
Cleaners, domestics	933	6.6	94.0	61.4
Nurses and midwives	853	3.9	85.9	15.8
Secretaries	782	5.4	97.7	20.8
Nurse secretaries	856	2.5	99.6	10.2
Bank clerks	691	2.3	54.0	12.9
Packers	522	2.1	56.9	18.2
Book-keepers	772	1.7	68.7	22.4
Electrical and electronic equipment assemblers	321	1.6	79.6	8.0
Total top-ten		53.6	78.5	25.0
Total (311)		100.0	38.8	21.2
		1990		
Administrative associate professionals	781	18.2	72.2	22.8
Sales occupations	682	11.2	80.0	32.7
Cleaners, domestics	933	6.1	91.1	66.8
Nurses and midwives	853	4.7	84.1	24.2
Secretaries	782	4.2	97.2	25.2
Nurse secretaries	856	3.1	99.6	16.6
Bank clerks	691	2.3	53.5	17.9
Social work associate professionals	861	2.0	72.7	27.1
Packers	522	1.9	53.8	19.0
Child care workers	864	1.8	96.3	28.7
Total top-ten		55.5	79.7	29.6
Total (311)		100.0	40.4	25.8

Source: Grimshaw and Rubery (1997).

Table B.1. **TOP-TEN DETAILED OCCUPATIONS** *(cont.)*
(3 or 4-digit level)

Employment data (percentages)

CANADA

Detailed occupation	SOC code	Female concentration	Female share	Female part-time share
		1981		
Secretaries and stenographers	4111	8.6	99.0	..
Book-keepers and accounting clerks	4131	7.4	81.8	..
Sales clerks and salespersons, other commodities	5135	6.3	57.3	..
Cashiers and tellers	4133	4.9	92.7	..
Nurses, registered, graduate and nurses-in-training	3131	3.9	95.3	..
Food and beverage serving occupations	6125	3.9	81.1	..
Elementary and kindergarten teachers	2731	3.4	80.1	..
General office clerks	4197	2.6	80.5	..
Typists and clerk-typists	4113	2.2	97.9	..
Janitors, charworkers and cleaners	6191	2.1	41.0	..
Total top-ten		45.4	82.7	..
Total (514)		100.0	41.9	..
		1991		
Secretaries and stenographers	4111	7.8	98.7	..
Sales clerks and salespersons, other commodities	5135	6.0	53.9	..
Book-keepers and accounting clerks	4131	5.4	84.1	..
Cashiers and tellers	4133	5.0	88.3	..
Nurses, registered, graduate and nurses-in-training	3131	4.4	94.8	..
Food and beverage serving occupations	6125	3.5	77.7	..
General office clerks	4197	3.1	82.4	..
Elementary and kindergarten teachers	2731	3.1	81.4	..
Receptionists and information clerks	4171	2.2	93.0	..
Janitors, charworkers and cleaners	6191	2.0	44.9	..
Total top-ten		42.4	81.9	..
Total (514)		100.0	46.6	..

.. Data not available.
Source: Grimshaw and Rubery (1997).

Table B.1. **TOP-TEN DETAILED OCCUPATIONS** *(cont.)*
(3 or 4-digit level)

Employment data (percentages)

FRANCE

Detailed occupation	PCS code	Female concentration	Female share	Female part-time share
		1992		
State civil servants	52	11.0	76.9	29.4
Secretary	5411	6.3	96.1	21.5
Primary school teachers, others	42	5.1	63.5	17.5
Shopkeepers, others	22	3.7	44.0	12.9
Administrative staff	5424	3.6	77.5	18.1
Cleaners	6891	3.3	71.7	81.6
Accounts and finance clerks	5421	3.0	82.4	19.7
Waiter – restaurant/cafe	5611	2.6	56.7	44.1
Auxiliary nurse – public/private sector	5221	2.3	90.1	24.4
Cleaners/domestics in hospital	5222	2.1	83.7	26.2
Total top-ten		42.9	71.9	28.3
Total (404)		100.0	43.5	24.2

Note: No data available for the 1980s.
Source: Grimshaw and Rubery (1997).

Table B.1. **TOP-TEN DETAILED OCCUPATIONS** *(cont.)*
(3 or 4-digit level)

Employment data (percentages)

UNITED STATES

Detailed occupation	SOC code	Female concentration	Female share	Female part-time share
		1982		
Secretaries	313	8.4	99.0	19.7
Cashiers	276	4.1	84.5	55.5
Book-keepers, accounting and auditing clerks	337	4.1	91.8	28.3
Waiters and waitresses	435	3.2	88.0	62.7
Other managers and administrators	019	3.1	26.7	17.5
Teachers, elementary school	156	2.7	83.6	18.0
Nursing aides, orderlies and attendants	447	2.6	88.1	29.3
Sales workers, other commodities	274	2.6	73.0	59.5
Registered nurses	095	2.6	95.3	34.5
Typists	315	2.0	95.3	28.8
Total top-ten		35.3	74.4	33.6
Total (500)		100.0	43.5	32.4
		1992		
Secretaries	313	6.4	99.4	19.5
Cashiers	276	4.2	79.1	59.6
Other managers and administrators	019	3.3	30.8	11.7
Nursing aides, orderlies and attendants	447	3.0	90.1	29.8
Book-keepers, accounting and auditing clerks	337	2.9	90.5	30.3
Registered nurses	095	2.8	96.2	29.3
Supervisors and proprietors, sales occupations	243	2.6	36.5	15.8
Teachers, elementary school	156	2.6	86.3	17.0
Waiters and waitresses	435	2.5	81.2	62.7
Sales workers, other commodities	274	1.9	69.6	56.7
Total top-ten		32.2	67.1	31.7
Total (500)		100.0	46.6	29.9

Source: Grimshaw and Rubery (1997).

Table B.2. **TOP-TEN DETAILED OCCUPATIONS (3 or 4-digit level)**

Pay data (percentages)

NORWAY

Detailed occupation	NYK code	Relative pay[1]		
		All	Full-time	Part-time
		1980		
Other clerical workers	299	76.5	74.7	79.7
Shop assistants	333	59.1	59.6	58.8
Charworkers	932	74.3	66.2	75.9
Other practical nurses	45	81.9	80.6	83.6
Teachers (primary and vocational schools)	64	115.3	93.6	136.1
Professional nurses	41	89.1	84.7	91.6
Housekeepers (public service)	915	67.0	0.0	66.3
Farm-helpers (general)	411	0.0	0.0	0.0
Secretaries and stenographers	211	91.7	88.2	96.2
Kitchen assistants	913	67.9	0.0	68.0
Total top-ten		72.9	67.7	75.2
Total		78.7	77.4	80.2
		1993		
Shop assistants	333	63.0	64.0	62.4
Charworkers	932	70.0	69.7	70.2
Other clerical workers	299	75.3	74.8	76.3
Other practical nurses	045	77.2	73.6	79.8
Professional nurses	041	88.2	86.0	91.1
Teachers (primary and vocational schools)	064	94.5	94.5	94.9
Secretaries and stenographers	211	84.1	83.1	89.7
Other in hotel, restaurant, domestic occupations	919	64.4	63.8	66.3
Accountants and book-keepers	201	91.8	92.8	74.5
Social workers	122	83.0	87.9	78.4
Total top-ten		76.9	78.8	75.2
Total		81.2	83.1	77.6

1. Female average occupational pay relative to the average hourly pay of male full-time workers in all sectors.
Source: Grimshaw and Rubery (1997).

Table B.2. **TOP-TEN DETAILED OCCUPATIONS** *(cont.)*
(3 or 4-digit level)
Pay data (percentages)

AUSTRALIA

Detailed occupation	ASCO code	Relative pay[1]		
		All	Full-time	Part-time
		1987		
Sales assistants	6301	62.7	60.2	67.8
Accounting clerks	5301	80.5	79.7	83.1
Office secretaries and stenographers	5101	82.2	82.2	82.2
Registered nurses	3401	109.3	105.1	119.5
Cleaners	8301	75.4	72.0	77.1
Receptionists and information clerks	5601	74.6	73.7	79.7
Primary school teachers	2403	116.1	113.6	131.4
Other clerks	5999	85.6	84.7	87.3
Data processing machine operators	5201	78.0	77.1	84.7
Secondary school teachers	2405	120.3	118.6	140.7
Total top-ten		83.5	84.3	84.3
Total (280)		82.2	81.4	84.7
		1995		
Sales assistants	6301	57.7	58.8	57.2
Accounting clerks	5301	75.8	75.8	75.8
Office secretaries and stenographers	5101	78.4	77.8	79.9
Receptionists and information clerks	5601	68.6	68.0	70.6
Registered nurses	3401	104.1	102.6	106.2
Cleaners	8301	62.4	61.3	62.9
Primary school teachers	2403	103.6	101.0	113.9
Data processing machine operators	5201	70.6	70.1	71.6
Cashiers	6403	55.7	58.2	54.1
Child care refuge and related workers	6601	63.4	61.9	64.9
Total top-ten		72.7	75.8	69.6
Total (280)		79.9	82.0	75.3

1. Female average occupational pay relative to the average hourly pay of male full-time workers in all sectors.
Source: Grimshaw and Rubery (1997).

Table B.2. **TOP-TEN DETAILED OCCUPATIONS** *(cont.)*
(3 or 4-digit level)
Pay data (percentages)

UNITED KINGDOM

Detailed occupation	SOC code	Relative pay[1]		
		All	Full-time	Part-time
		1986		
Other clerks	430	64.3	66.5	58.7
Typists, word processor operators	452	64.1	65.1	60.4
Other secretaries, personal assistants, etc.	459	76.0	79.1	64.7
Sales assistants	720	48.3	51.3	46.8
Nurses and midwives	340 + 341	82.5	78.2	88.7
Cleaners, domestics	958	38.8	51.7	37.0
Educational assistants, etc.	652	47.0	..	47.0
Secondary education teaching professionals*	233	..	97.2	..
Primary and nursery teachers*	234	..	95.5	..
Other teaching professionals*	235 + 239	..	90.3	..
Total top-ten		..	..	..
Total (370)		66.5	74.1	56.9
		1995		
Sales assistants	720	44.4	47.3	43.5
Cleaners, domestics	958	43.4	44.5	43.3
Other secretaries, personal assistants	459	74.8	78.4	65.8
Other clerks	430	61.6	64.4	56.9
Accounts, wages clerks, etc.	410	67.0	68.9	62.5
Nurses	340	94.3	96.0	92.0
Care assistants	644	48.9	48.5	49.3
Primary and nursery teachers*	234	..	104.3	..
Counter clerks, cashiers	411	71.5	75.9	65.7
Retail cash-desk operators	721	46.2	45.8	46.2
Total top-ten		59.3	72.1	52.2
Total (370)		70.8	79.6	59.6

* *The relative pay of teachers is calculated using average weekly earnings.*
.. Data not available.
1. Female average occupational pay relative to the average hourly pay of male full-time workers in all sectors.
Source: Grimshaw and Rubery (1997).

Table B.2. **TOP-TEN DETAILED OCCUPATIONS** *(cont.)*
(3 or 4-digit level)

Pay data (percentages)

WESTERN GERMANY

Detailed occupation	BA code	Relative pay[1]		
		All	Full-time	Part-time
		1980		
Administrative associate professionals	781	..	68.1	..
Sales occupations	682	..	45.7	..
Cleaners, domestics	933	..	41.5	..
Nurses and midwives	853	..	78.7	..
Secretaries	782	..	77.7	..
Nurse secretaries	856	..	55.3	..
Bank clerks	691	..	79.8	..
Packers	522	..	52.1	..
Book-keepers	772	..	76.6	..
Electrical and electronic equipment assemblers	321	..	62.8	..
Total top-ten		..	63.4	..
Total (311)		..	70.2	..
		1990		
Administrative associate professionals	781	..	67.4	..
Sales occupations	682	..	46.4	..
Cleaners, domestics	933	..	38.4	..
Nurses and midwives	853	..	75.4	..
Secretaries	782	..	78.3	..
Nurse secretaries	856	..	51.4	..
Bank clerks	691	..	84.8	..
Social work associate professionals	861	..	67.4	..
Packers	522	..	53.6	..
Child care workers	864	..	65.2	..
Total top-ten		..	63.3	..
Total (311)		..	71.7	..

.. Data not available.
1. Female average occupational pay relative to the average hourly pay of male full-time workers in all sectors.
Source: Grimshaw and Rubery (1997).

Table B.2. **TOP-TEN DETAILED OCCUPATIONS** *(cont.)*
(3 or 4-digit level)
Pay data (percentages)

CANADA

Detailed occupation	SOC code	Relative pay[1]		
		All	Full-time	Part-time
		1980		
Secretaries and stenographers	4111	67.5	67.6	..
Book-keepers and accounting clerks	4131	66.4	65.7	..
Sales clerks and salespersons, other commodities	5135	49.4	50.1	..
Cashiers and tellers	4133	53.5	54.4	..
Nurses, registered, graduate and nurses-in-training	3131	93.4	90.9	..
Food and beverage serving occupations	6125	42.9	42.0	..
Elementary and kindergarten teachers	2731	112.7	110.7	..
General office clerks	4197	63.9	64.4	..
Typists and clerk-typists	4113	61.5	62.3	..
Janitors, charworkers and cleaners	6191	53.6	52.4	..
Total top-ten		65.7	69.4	..
Total (514)		68.8	71.1	..
		1990		
Secretaries and stenographers	4111	70.9	70.1	..
Sales clerks and salespersons, other commodities	5135	52.5	55.6	..
Book-keepers and accounting clerks	4131	71.1	69.0	..
Cashiers and tellers	4133	50.1	51.6	..
Nurses, registered, graduate and nurses-in-training	3131	97.1	94.4	..
Food and beverage serving occupations	6125	41.6	40.1	..
General office clerks	4197	70.0	70.0	..
Elementary and kindergarten teachers	2731	109.0	107.7	..
Receptionists and information clerks	4171	60.5	60.8	..
Janitors, charworkers and cleaners	6191	55.7	54.5	..
Total top-ten		67.7	71.3	..
Total (514)		73.1	75.0	..

.. Data not available.
1. Female average occupational pay relative to the average hourly pay of male full-time workers in all sectors.
Source: Grimshaw and Rubery (1997).

Table B.2. **TOP-TEN DETAILED OCCUPATIONS** *(cont.)*
(3 or 4-digit level)

Pay data (percentages)

FRANCE

Detailed occupation	PCS code	Relative pay[1]		
		All	Full-time	Part-time
		1992		
States civil servants	52	65.6	65.4	54.5
Secretary	5411	74.1	75.1	68.3
Primary school teachers, others	42	93.5	91.0	96.8
Shopkeepers, others	22	..	..	..
Administrative staff	5424	70.3	70.7	67.5
Cleaners	6891	54.0	56.1	52.8
Accounts and finance clerks	5421	74.4	74.3	75.2
Waiter – restaurant/cafe	5611	55.8	56.4	54.4
Auxiliary nurse – public/private sector	5221	72.7	72.9	72.0
Cleaners/domestics in hospital	5222	62.2	62.6	60.2
Total top-ten		64.3	64.5	59.4
Total (404)		77.3	80.0	69.5

Note: No data available for the 1980s.
.. Data not available.
1. Female average occupational pay relative to the average hourly pay of male full-time workers in all sectors.
Source: Grimshaw and Rubery (1997).

Table B.2. **TOP-TEN DETAILED OCCUPATIONS** *(cont.)*
(3 or 4-digit level)
Pay data (percentages)

UNITED STATES

Detailed occupation	SOC code	Relative pay[1]		
		All	Full-time	Part-time
		1982		
Secretaries	313	63.5	64.4	59.6
Cashiers	276	46.6	45.0	47.9
Book-keepers, accounting, auditing clerks	337	65.5	63.7	70.5
Waiters and waitresses	435	43.5	39.4	45.8
Other managers and administrators	019	86.2	82.8	105.6
Teachers, elementary school	156	83.3	84.2	79.2
Nursing aides, orderlies and attendants	447	49.3	47.7	53.2
Sales workers, other commodities	274	46.1	44.8	46.9
Registered nurses	095	98.8	110.5	92.7
Typists	315	57.7	61.4	48.2
Total top-ten		56.2	61.4	48.2
Total (500)		63.0	64.9	58.9
		1992		
Secretaries	313	69.7	71.1	63.8
Cashiers	276	42.4	42.6	42.4
Other managers and administrators	019	101.3	101.4	99.7
Nursing aides, orderlies and attendants	447	55.2	51.8	63.1
Book-keepers, accounting, auditing clerks	337	75.1	65.9	97.1
Registered nurses	095	131.0	146.4	124.6
Supervisors and proprietors, sales occupations	243	69.4	70.7	69.2
Teachers, elementary school	156	97.0	98.5	89.6
Waiters and waitresses	435	42.9	39.8	44.8
Sales workers, other commodities	274	52.4	50.9	53.6
Total top-ten		56.0	57.8	52.2
Total (500)		72.9	75.4	67.0

1. Female average occupational pay relative to the average hourly pay of male full-time workers in all sectors.
Source: Grimshaw and Rubery (1997).

Table C. **Employment/population ratios, activity rates and unemployment rates**[1]

Men and women aged 15-64 years (percentages)

	Both sexes																	
	Employment/population ratio						Labour force participation rate						Unemployment rate					
	1990	1993	1994	1995	1996	1997	1990	1993	1994	1995	1996	1997	1990	1993	1994	1995	1996	1997
Australia	67.9	64.1	65.7	67.5	67.3	66.3	73.0	71.9	72.4	73.5	73.7	72.5	7.0	10.9	9.3	8.2	8.6	8.5
Austria	..	..	..	68.4	67.3	67.2	..	..	..	71.5	71.1	70.9	..	..	..	4.4	5.3	5.2
Belgium	54.4 |	56.0	55.7	56.3	56.3	57.0	58.7 |	60.9	61.7	62.1	62.2	62.6	7.3 |	8.1	9.7	9.4	9.5	9.0
Canada	70.5	66.7	67.1	67.5	67.5	67.9	76.8	75.2	75.0	74.7	74.8	74.9	8.2	11.3	10.5	9.6	9.8	9.3
Czech Republic	..	71.3	71.5	69.6	69.4	68.7	..	74.2	74.3	72.5	72.2	72.1	..	3.9	3.8	4.1	3.8	4.7
Denmark	75.4 |	72.4	72.4	73.9	74.0	75.4	82.4 |	81.2	78.8	79.5	79.5	79.8	8.5 |	10.9	8.1	7.0	6.9	5.4
Finland	73.7	60.5	59.7	61.0	61.8	63.6	76.3	73.6	73.1	73.6	73.7	74.3	3.4	17.7	18.3	17.1	16.2	14.5
France	59.9	59.0	58.3	59.0	59.2	58.8	66.0	66.5	66.6	66.8	67.4	67.1	9.2	11.2	12.5	11.7	12.2	12.4
Germany	64.1	65.2	64.8	64.9	64.5	63.5	68.4	70.8	70.8	70.6	70.8	70.4	6.3	7.9	8.4	8.2	8.8	9.8
Greece	54.8 |	53.5	54.1	54.5	54.9	54.8	59.1 |	59.2	59.5	60.1	61.0	60.8	7.2 |	9.6	9.1	9.3	9.9	9.8
Hungary[2]	..	49.3	48.2 |	52.9	53.0	52.7	..	56.0	54.0 |	58.9	58.8	57.8	..	11.9	10.7 |	10.2	9.8	8.7
Iceland[3]	79.9	78.2	78.5	80.5	80.4	80.0	82.1	82.6	83.1	84.7	83.5	83.2	2.7	5.3	5.4	4.9	3.8	3.8
Ireland	52.3	51.0	52.3	53.8	54.8	56.1	60.2	60.8	61.4	61.5	62.3	62.7	13.2	16.0	14.9	12.4	12.0	10.5
Italy	53.9 |	51.8	50.9	50.5	50.6	50.5	59.8 |	57.9	57.5	57.3	57.7	57.7	9.9 |	10.5	11.5	11.9	12.3	12.5
Japan	68.6	69.5	69.3	69.2	69.5	70.0	70.1	71.3	71.4	71.5	72.0	72.6	2.2	2.6	3.0	3.3	3.5	3.5
Korea	61.2	62.3	63.2	63.7	63.8	63.5	62.8	64.1	64.8	65.1	65.1	65.3	2.5	2.9	2.5	2.1	2.1	2.7
Luxembourg	59.1 |	60.9	60.2	58.5	59.1	..	60.1 |	62.4	62.3	60.3	61.1	..	1.6 |	2.3	3.5	2.9	3.3	..
Mexico[4]	58.0	59.3	58.7	58.2	59.1	60.8	59.9	61.4	61.4	61.8	61.9	63.1	3.1	3.3	4.4	5.8	4.5	3.6
Netherlands	61.1	63.5	63.8	64.2	65.4	67.5	66.2	67.8	68.7	69.2	69.9	71.5	7.7	6.3	7.2	7.2	6.5	5.6
New Zealand	67.3	66.0	67.8	70.0	71.1	70.5	73.0	73.0	73.9	74.7	75.7	75.5	7.8	9.6	8.2	6.4	6.2	6.7
Norway[3]	73.1	71.3	72.2	67.5 |	75.3	77.3	77.1	75.9	76.4	70.9 |	79.2	80.6	5.3	6.1	5.4	4.8 |	4.9	4.1
Poland	..	58.9	58.3	58.1	58.4	58.8	..	68.8	68.4	67.4	66.9	66.4	..	14.4	14.8	13.7	12.7	11.5
Portugal	65.5	64.3	62.9	62.5	62.3	63.4	68.8	68.1	67.6	67.4	67.5	68.2	4.8	5.5	7.0	7.4	7.7	6.9
Spain[3]	50.2	46.2	46.5	46.7	47.6	49.0	60.0	59.9	61.3	60.8	61.3	61.9	16.4	22.9	24.1	23.1	22.4	20.9
Sweden	83.1 |	72.6	71.5	72.2	71.6	70.7	84.5 |	79.1	77.6	78.2	77.8	76.8	1.7 |	8.2	8.0	7.7	8.1	8.0

Table C. **Employment/population ratios, activity rates and unemployment rates**[1] *(cont.)*

Men and women aged 15-64 years (percentages)

	Both sexes																	
	Employment/population ratio						Labour force participation rate						Unemployment rate					
	1990	1993	1994	1995	1996	1997	1990	1993	1994	1995	1996	1997	1990	1993	1994	1995	1996	1997
Switzerland[4]	79.6	78.6	77.4	78.1	78.3	78.1	81.1	81.7	80.7	80.8	81.3	81.5	1.8	3.8	4.0	3.4	3.8	4.2
Turkey	54.5	52.2	52.0	52.7	52.5	50.2	59.4	56.7	56.7	56.8	56.0	53.7	8.2	7.9	8.3	7.1	6.3	6.6
United Kingdom[3]	72.4	68.3	68.8	69.3	69.8	70.8	77.8	76.3	76.2	75.9	76.1	76.2	6.8	10.4	9.7	8.7	8.2	7.1
United States[3]	72.2	71.2	72.0	72.5	72.9	73.5	76.5	76.6	76.7	76.9	77.1	77.4	5.7	7.0	6.2	5.6	5.5	5.0
European Union[5]	61.5	59.9	59.6	60.1	60.2	60.4	67.1	67.2	67.2	67.3	67.6	67.7	8.4	10.8	11.4	10.7	10.9	10.8
OECD Europe[5]	61.1	59.3	59.0	59.4	59.6	59.5	66.5	66.3	66.2	66.3	66.4	66.1	8.2	10.5	10.9	10.3	10.2	10.0
Total OECD[5]	65.2	63.9	63.9	64.3	64.5	64.8	69.4	69.3	69.4	69.4	69.6	69.7	6.0	7.8	7.8	7.5	7.3	7.0

.. Data not available.

1. Ratios refer to persons aged 15 to 64 years who are in employment or in the labour force divided by the working age population, or in unemployment divided by the labour force.
2. For years prior to 1995, data cover persons aged 15 and over.
3. Refers to persons aged 16 to 64.
4. The year 1990 refers to 1991.
5. Above countries only.

Sources: OECD (1998), *Labour Force Statistics, 1977-1997,* Part III.
For Austria, Belgium, Denmark, Greece, Italy, Luxembourg, the Netherlands and Portugal, data are from the European Labour Force Survey.

Table C. **Employment/population ratios, activity rates and unemployment rates**[1] *(cont.)*

Men aged 15-64 years (percentages)

	Men																	
	Employment/population ratio						Labour force participation rate						Unemployment rate					
	1990	1993	1994	1995	1996	1997	1990	1993	1994	1995	1996	1997	1990	1993	1994	1995	1996	1997
Australia	78.5	73.1	74.8	76.1	75.9	74.7	84.4	82.7	82.7	83.2	83.4	81.9	6.9	11.6	9.6	8.6	9.0	8.8
Austria	..	..	..	77.6	76.1	75.9	..	..	..	80.8	80.4	80.0	..	..	..	4.0	5.4	5.1
Belgium	68.1 |	67.0	66.5	66.9	66.8	67.1	71.3 |	71.4	72.0	72.3	72.2	72.2	4.6 |	6.2	7.7	7.4	7.4	7.1
Canada	77.9	72.6	73.2	73.5	73.4	74.1	84.9	82.4	82.2	81.5	81.5	81.8	8.3	11.9	10.9	9.9	10.0	9.4
Czech Republic	..	76.8	76.8	77.6	78.1	77.4	..	79.4	79.4	80.4	80.7	80.5	..	3.3	3.3	3.5	3.2	3.8
Denmark	80.1 |	75.9	77.6	80.7	80.5	81.3	87.1 |	84.9	83.7	85.6	85.3	85.2	8.0 |	10.6	7.3	5.7	5.6	4.6
Finland	76.9	62.1	61.5	63.6	64.8	66.7	80.0	77.2	76.6	77.0	77.1	77.5	3.9	19.6	19.7	17.4	15.9	13.9
France	69.7	67.1	65.9	66.6	66.7	66.2	75.0	74.1	74.0	73.9	74.5	74.3	7.0	9.5	10.9	9.8	10.5	10.9
Germany	75.7	75.0	74.3	74.0	73.3	72.1	80.1	80.3	80.1	79.7	79.7	79.3	5.4	6.7	7.3	7.2	8.1	9.0
Greece	73.4 |	71.7	72.2	72.2	72.6	71.9	76.8 |	76.5	77.0	77.2	77.4	76.9	4.4 |	6.3	6.2	6.4	6.2	6.4
Hungary[2]	..	55.6	55.1 |	60.2	60.2	60.3	..	64.0	62.4 |	67.9	67.4	66.6	..	13.2	11.8 |	11.4	10.7	9.5
Iceland[3]	85.1	82.3	82.5	84.0	84.5	84.2	87.2	86.7	86.9	88.4	87.4	87.2	2.4	5.1	5.0	4.9	3.4	3.3
Ireland	67.8	63.7	64.4	66.3	66.6	67.6	77.7	75.9	75.9	75.8	75.8	75.6	12.8	16.1	15.0	12.5	12.1	10.6
Italy	72.0 |	68.1	66.5	65.7	65.3	65.0	77.0 |	74.0	73.1	72.4	72.3	72.2	6.5 |	7.9	9.0	9.3	9.7	9.8
Japan	81.3	82.3	81.9	81.9	82.1	82.4	83.0	84.4	84.4	84.5	85.0	85.4	2.1	2.5	2.9	3.1	3.5	3.5
Korea	73.9	75.8	76.6	77.2	76.7	75.9	76.2	78.3	78.8	79.0	78.6	78.1	3.0	3.3	2.8	2.3	2.4	2.9
Luxembourg	76.4 |	76.6	74.9	74.3	74.4	..	77.4 |	78.1	77.3	75.9	76.3	..	1.3 |	1.9	3.0	2.1	2.5	..
Mexico[4]	84.1	84.3	82.9	81.5	82.7	84.4	86.4	86.9	86.4	86.4	86.4	87.0	2.6	3.0	4.1	5.7	4.3	3.0
Netherlands	75.2	75.1	74.5	75.0	75.7	77.9	79.7	79.3	79.8	79.9	80.0	81.4	5.7	5.4	6.6	6.2	5.3	4.4
New Zealand	76.1	74.2	76.0	78.5	79.0	78.5	83.0	82.6	83.2	83.8	84.2	84.1	8.3	10.1	8.6	6.3	6.2	6.7
Norway[3]	78.6	75.8	76.8	78.1 |	80.0	82.0	83.4	81.3	81.6	82.4 |	84.1	85.4	5.8	6.7	6.0	5.2 |	4.8	4.0
Poland	..	65.9	64.9	64.7	65.2	66.1	..	75.7	75.0	73.9	73.5	73.2	..	13.0	13.4	12.5	11.3	9.8
Portugal	78.6	74.6	72.5	71.2	71.0	71.9	81.4	78.3	77.2	76.4	76.1	76.7	3.4	4.7	6.1	6.8	6.7	6.2
Spain[3]	69.1	61.3	62.2	61.7	62.4	63.7	78.6	75.8	77.4	75.5	75.8	76.0	12.1	19.1	19.6	18.3	17.7	16.2
Sweden	85.2 |	73.1	72.3	73.5	73.2	72.4	86.6 |	80.9	79.5	80.2	80.0	79.1	1.7 |	9.7	9.1	8.5	8.5	8.5

Table C. **Employment/population ratios, activity rates and unemployment rates**[1] *(cont.)*

Men aged 15-64 years (percentages)

	Men																	
	Employment/population ratio						Labour force participation rate						Unemployment rate					
	1990	1993	1994	1995	1996	1997	1990	1993	1994	1995	1996	1997	1990	1993	1994	1995	1996	1997
Switzerland[4]	90.0	88.1	86.6	87.4	86.8	85.9	91.1	91.0	89.8	90.1	89.8	89.8	1.2	3.1	3.6	2.9	3.4	4.4
Turkey	76.9	73.9	73.8	74.6	74.5	74.0	83.6	80.5	80.8	80.5	79.8	78.8	8.0	8.2	8.6	7.3	6.6	6.2
United Kingdom[3]	82.1	74.8	75.4	76.1	76.3	77.4	88.3	85.5	85.2	84.7	84.6	84.4	7.1	12.5	11.5	10.2	9.8	8.2
United States[3]	80.7	78.7	79.0	79.5	79.7	80.1	85.6	84.9	84.3	84.3	84.3	84.2	5.7	7.3	6.2	5.6	5.4	4.9
European Union[5]	74.4	70.6	70.1	70.3	70.2	70.2	79.8	78.2	78.1	77.7	77.8	77.6	6.7	9.8	10.3	9.5	9.7	9.5
OECD Europe[5]	75.1	70.7	70.2	70.6	70.6	70.6	80.5	78.2	78.0	77.8	77.8	77.5	6.8	9.6	10.0	9.2	9.2	8.9
Total OECD[5]	78.2	75.4	75.2	75.4	75.6	75.8	82.6	81.4	81.2	81.1	81.1	81.1	5.4	7.4	7.4	7.0	6.9	6.5

.. Data not available.

1. Ratios refer to persons aged 15 to 64 years who are in employment or in the labour force divided by the working age population, or in unemployment divided by the labour force.
2. For years prior to 1995, data cover persons aged 15 and over.
3. Refers to persons aged 16 to 64.
4. The year 1990 refers to 1991.
5. Above countries only.

Sources: OECD (1998), *Labour Force Statistics, 1977-1997,* Part III.
For Austria, Belgium, Denmark, Greece, Italy, Luxembourg, the Netherlands and Portugal, data are from the European Labour Force Survey.

Table C. **Employment/population ratios, activity rates and unemployment rates**[1] *(cont.)*

Women aged 15-64 years (percentages)

	Women																	
	Employment/population ratio						Labour force participation rate						Unemployment rate					
	1990	1993	1994	1995	1996	1997	1990	1993	1994	1995	1996	1997	1990	1993	1994	1995	1996	1997
Australia	57.1	55.1	56.4	58.9	58.7	57.8	61.5	61.1	61.9	63.7	63.8	63.0	7.2	9.9	8.9	7.6	8.0	8.2
Austria	..	..	..	59.2	58.6	58.5	..	..	..	62.3	61.8	61.8	..	..	..	4.9	5.3	5.3
Belgium	40.8 |	44.8	44.8	45.4	45.6	46.7	46.1 |	50.3	51.2	51.7	52.0	52.9	11.5 |	10.9	12.5	12.3	12.4	11.6
Canada	63.0	60.8	61.1	61.5	61.6	61.7	68.6	68.0	67.8	67.8	68.0	68.0	8.2	10.6	9.9	9.3	9.5	9.2
Czech Republic	..	65.8	66.2	61.6	60.7	60.0	..	69.1	69.3	64.7	63.6	63.7	..	4.7	4.5	4.8	4.6	5.8
Denmark	70.6 |	68.7	67.1	67.0	67.4	69.4	77.6 |	77.4	73.8	73.3	73.6	74.2	9.0 |	11.2	9.0	8.6	8.4	6.5
Finland	70.4	58.9	57.9	58.3	58.7	60.4	72.5	69.9	69.6	70.1	70.4	71.1	2.8	15.7	16.8	16.8	16.6	15.1
France	50.3	51.0	50.7	51.5	51.7	51.5	57.2	58.9	59.2	59.8	60.3	60.1	12.1	13.4	14.4	13.9	14.3	14.2
Germany	52.2	55.1	54.9	55.5	55.5	54.6	56.4	61.0	61.1	61.3	61.5	61.4	7.5	9.6	10.0	9.5	9.8	11.0
Greece	37.5 |	36.4	37.1	38.0	38.5	39.1	42.6 |	43.0	43.2	44.3	45.8	46.0	12.0 |	15.3	14.0	14.1	15.8	15.1
Hungary[2]	..	43.5	41.9 |	45.9	46.1	45.4	..	48.5	46.3 |	50.3	50.6	49.2	..	10.4	9.4 |	8.7	8.7	7.7
Iceland[3]	74.3	73.9	74.6	76.9	76.3	75.5	76.7	78.4	79.1	80.9	79.7	79.0	3.1	5.7	5.7	4.9	4.3	4.4
Ireland	36.6	38.1	39.9	41.2	43.0	44.6	42.6	45.4	46.9	47.0	48.8	49.7	14.0	15.9	14.8	12.3	11.9	10.4
Italy	36.4 |	36.0	35.6	35.6	36.1	36.2	43.2 |	42.2	42.2	42.5	43.3	43.6	15.8 |	14.8	15.7	16.3	16.6	16.8
Japan	55.8	56.6	56.5	56.4	56.8	57.6	57.1	58.2	58.3	58.4	58.9	59.7	2.3	2.8	3.1	3.4	3.6	3.6
Korea	49.0	49.2	50.1	50.6	51.1	51.4	49.9	50.3	51.1	51.5	51.9	52.7	1.8	2.3	2.0	1.7	1.6	2.4
Luxembourg	41.4 |	44.7	44.9	42.2	43.6	..	42.5 |	46.1	47.0	44.1	45.7	..	2.5 |	3.1	4.3	4.4	4.7	..
Mexico[4]	34.2	36.0	36.2	36.5	37.4	39.4	35.7	37.5	38.1	38.9	39.3	41.4	4.3	4.0	4.9	6.1	4.9	4.9
Netherlands	46.7	51.7	52.7	53.2	54.8	56.9	52.4	56.0	57.4	58.3	59.6	61.3	10.9	7.7	8.1	8.7	8.1	7.2
New Zealand	58.5	57.8	59.7	61.5	63.3	62.6	63.2	63.5	64.7	65.7	67.4	67.1	7.3	8.9	7.8	6.4	6.2	6.8
Norway[3]	67.2	66.6	67.5	78.1 |	70.4	72.3	70.7	70.4	70.9	82.4 |	74.1	75.6	4.9	5.3	4.8	5.2 |	4.9	4.3
Poland	..	52.1	51.9	51.8	51.8	51.8	..	62.1	62.1	61.0	60.5	59.9	..	16.1	16.4	15.1	14.3	13.5
Portugal	53.3	54.9	54.1	54.3	54.2	55.5	57.1	58.7	58.8	59.1	59.5	60.3	6.7	6.5	8.0	8.1	8.8	7.9
Spain[3]	31.6	31.1	31.0	32.0	33.0	34.3	41.8	44.1	45.4	46.2	47.0	48.0	24.4	29.5	31.6	30.8	29.8	28.4
Sweden	81.0 |	72.1	70.6	70.8	69.9	68.9	82.3 |	77.2	75.7	76.1	75.6	74.5	1.6 |	6.6	6.7	6.9	7.5	7.5

Table C. **Employment/population ratios, activity rates and unemployment rates**[1] *(cont.)*

Women aged 15-64 years (percentages)

	Women																	
	Employment/population ratio						Labour force participation rate						Unemployment rate					
	1990	1993	1994	1995	1996	1997	1990	1993	1994	1995	1996	1997	1990	1993	1994	1995	1996	1997
Switzerland[4]	68.7	68.5	67.8	68.3	69.3	69.8	70.6	71.9	71.0	71.1	72.3	72.7	2.6	4.7	4.5	4.0	4.2	4.0
Turkey	32.9	31.1	30.6	31.5	31.0	27.2	36.0	33.5	33.2	33.7	32.8	29.4	8.7	7.3	7.8	6.7	5.5	7.7
United Kingdom[3]	62.8	61.8	62.1	62.5	63.3	64.0	67.2	67.0	67.1	67.1	67.5	68.0	6.5	7.7	7.4	6.9	6.3	5.8
United States[3]	64.0	64.0	65.2	65.8	66.3	67.1	67.8	68.6	69.4	69.7	70.1	70.7	5.6	6.7	6.1	5.7	5.5	5.1
European Union[5]	48.6	49.3	49.1	49.8	50.2	50.5	54.5	56.2	56.4	56.9	57.4	57.7	10.8	12.3	12.9	12.4	12.5	12.4
OECD Europe[5]	47.2	48.1	47.8	48.5	48.7	48.4	52.6	54.5	54.5	55.0	55.1	54.8	10.3	11.8	12.3	11.7	11.7	11.7
Total OECD[5]	52.5	52.6	52.9	53.4	53.7	54.0	56.4	57.4	57.7	58.1	58.3	58.6	6.9	8.3	8.4	8.1	8.0	7.8

.. Data not available.

1. Ratios refer to persons aged 15 to 64 years who are in employment or in the labour force divided by the working age population, or in unemployment divided by the labour force.
2. For years prior to 1995, data cover persons aged 15 and over.
3. Refers to persons aged 16 to 64.
4. The year 1990 refers to 1991.
5. Above countries only.

Sources: OECD (1998), *Labour Force Statistics, 1977-1997,* Part III.
For Austria, Belgium, Denmark, Greece, Italy, Luxembourg, the Netherlands and Portugal, data are from the European Labour Force Survey.

Table D. **Incidence and composition of part-time employment,[1] 1990-97**

Percentages

	Part-time employment as a proportion of employment									
	Men					Women				
	1990	1994	1995	1996	1997	1990	1994	1995	1996	1997
Australia[2]	12.2	13.9	14.2	14.9	..	39.4	40.7	40.9	41.3	..
Austria	..	..	2.3	1.9	2.1	..	..	21.6	22.2	22.0
Belgium	5.1	5.2	5.0	5.0	5.0	32.8	33.4	33.5	34.0	34.3
Canada	9.1	10.7	10.6	10.7	10.5	26.8	28.6	28.2	28.9	29.4
Czech Republic	..	..	1.8	2.0	1.9	..	..	5.7	5.3	5.5
Denmark	10.6	10.2	10.0	10.6	11.9	29.9	26.7	25.8	24.4	24.7
Finland	..	..	5.0	5.2	4.8	..	..	11.2	10.5	10.2
France	4.7	5.5	5.8	6.0	6.3	22.0	24.5	24.7	24.6	25.6
Germany	1.8	2.7	3.0	3.3	..	29.6	27.9	29.0	29.8	..
Greece	5.0	5.5	5.2	5.3	5.3	12.8	13.5	13.3	13.9	14.2
Hungary	..	..	1.9	1.8	1.8	..	..	4.6	4.6	5.0
Iceland[3, 4]	7.6	8.2	8.3	6.7	..	40.3	37.4	37.7	33.0	..
Ireland	4.6	6.9	7.4	7.1	8.0	19.8	24.7	26.5	26.5	27.1
Italy	4.0	4.2	4.6	4.6	5.1	19.7	22.3	22.8	22.6	24.0
Japan[2, 5]	9.5	11.7	10.1	11.7	..	33.4	35.8	34.9	36.6	..
Korea[2, 6]	..	3.0	2.9	2.7	3.3	..	6.9	6.7	6.9	7.8
Luxembourg	1.5	1.9	1.9	2.1	..	19.3	26.4	29.2	25.3	..
Mexico	..	..	9.6	8.0	8.6	..	..	31.3	25.3	29.9
Netherlands	13.3	10.7	10.9	10.8	10.6	50.8	53.5	54.2	55.2	54.6
New Zealand	8.4	9.7	10.0	10.4	10.9	35.0	36.6	36.1	37.3	37.4
Norway	6.7	7.6	7.5	8.0	7.9	39.1	37.6	37.4	37.3	36.8
Portugal	2.1	3.0	2.2	2.5	2.7	12.5	13.1	13.2	13.5	14.1
Spain	0.9	2.0	2.0	2.4	2.8	10.8	14.4	15.8	15.8	16.6
Sweden	5.3	7.1	6.8	6.7	6.5	24.5	24.9	24.9	24.1	22.6
Switzerland[3]	8.5	8.5	7.8	9.4	7.9	45.9	48.7	48.5	49.1	47.8
Turkey	..	5.0	5.2	4.0	2.9	..	20.4	19.4	13.9	12.7
United Kingdom	4.8	6.3	6.7	7.2	7.6	39.3	40.4	39.8	40.6	40.1
United States[4]	8.3	8.0	7.8	7.7	..	20.0	19.5	19.3	19.1	..
European Union[7]	4.1	4.6	4.9	5.2	6.1	28.4	29.3	29.1	29.4	29.6
OECD Europe[7]	4.4	4.9	4.7	4.8	5.9	28.3	29.0	27.0	27.2	28.5
Total OECD[7]	6.4	6.5	6.6	6.4	6.6	25.1	24.3	24.1	23.8	26.5

.. Data not available.

1. Part-time employment refers to persons who usually work less than 30 hours per week.
2. Data refer to actual hours worked.
3. 1990 refers to 1991.
4. Employees.
5. Less than 35 hours per week.
6. Civilian employment.
7. Above countries only.

Sources: OECD (1997), "The definition of part-time work for the purpose of international comparisons", Labour Market and Social Policy Occasional Paper No. 22, available on Internet (http://www.oecd.org/els/papers/papers.htm).

Table D. **Incidence and composition of part-time employment,[1] 1990-97** *(cont.)*

Percentages

	Part-time employment as a proportion of total employment (M + F)					Women's share in part-time employment				
	1990	1994	1995	1996	1997	1990	1994	1995	1996	1997
Australia[2]	23.5	25.2	25.6	26.2	..	69.4	68.2	68.3	67.4	..
Austria	..	..	10.6	10.7	10.8	..	..	87.9	89.9	89.1
Belgium	15.8	16.9	16.7	17.1	17.4	80.0	82.0	82.5	83.1	83.2
Canada	17.0	18.8	18.6	18.9	19.0	70.1	68.8	68.8	69.1	69.7
Czech Republic	..	..	3.5	3.4	3.4	..	..	70.5	67.4	68.9
Denmark	19.9	18.0	17.3	17.0	17.9	72.4	70.1	68.9	66.7	64.8
Finland	..	..	8.4	8.0	7.5	..	..	72.6	69.5	68.6
France	12.6	14.5	14.8	14.8	15.5	79.6	79.9	79.1	78.8	78.8
Germany	13.2	13.5	14.2	15.0	..	91.7	88.7	88.2	87.6	..
Greece	7.7	8.4	8.2	8.5	8.7	57.8	58.3	60.6	61.3	62.9
Hungary	..	..	3.2	3.1	3.3	..	..	67.7	69.4	71.3
Iceland[3, 4]	24.1	23.3	23.5	20.0	..	84.0	82.1	82.9	82.8	..
Ireland	10.7	14.8	15.9	15.7	16.7	74.1	74.0	74.4	74.9	74.0
Italy	9.6	11.0	11.5	11.6	12.4	73.7	76.1	75.3	75.4	74.7
Japan[2, 5]	19.2	21.4	20.1	21.8	..	70.7	67.6	70.1	68.0	..
Korea[2, 6]	..	4.6	4.4	4.4	5.1	..	60.6	61.2	63.5	62.4
Luxembourg	7.6	10.9	11.8	10.7	..	87.5	88.9	89.4	87.8	..
Mexico	..	..	16.6	14.8	15.8	..	..	60.8	62.4	63.7
Netherlands	27.3	28.4	28.8	29.4	29.1	69.4	77.9	77.6	78.5	78.9
New Zealand	20.0	21.5	21.5	22.4	22.7	76.4	75.1	74.0	74.3	73.4
Norway	21.3	21.2	21.2	21.4	21.2	82.9	81.2	80.9	80.1	80.0
Portugal	6.4	7.6	7.3	7.6	7.9	81.2	78.4	83.6	81.9	81.3
Spain	4.1	6.3	6.9	7.2	7.9	84.7	79.4	81.1	78.6	77.1
Sweden	14.5	15.8	15.1	14.8	14.2	81.1	76.8	76.8	76.5	76.3
Switzerland[3]	24.4	25.7	25.2	26.7	25.4	80.1	81.3	82.1	80.1	82.5
Turkey		9.5	9.3	6.9	5.8	..	62.6	60.3	59.2	63.7
United Kingdom	20.8	22.6	22.5	23.2	23.1	87.6	85.5	84.4	83.7	82.8
United States[4]	13.8	13.5	13.3	13.2	..	68.2	69.0	69.3	69.8	..
European Union[7]	14.1	15.3	15.5	15.9	16.5	83.0	82.7	82.2	81.8	79.3
OECD Europe[7]	13.9	14.8	14.0	14.2	15.9	80.9	80.7	80.5	80.6	79.4
Total OECD[7]	14.4	14.3	14.1	14.0	14.9	74.6	74.5	73.3	73.7	74.3

.. Data not available.

1. Part-time employment refers to persons who usually work less than 30 hours per week.
2. Data refer to actual hours worked.
3. 1990 refers to 1991.
4. Employees.
5. Less than 35 hours per week.
6. Civilian employment.
7. Above countries only.

Sources: OECD (1997), "The definition of part-time work for the purpose of international comparisons", Labour Market and Social Policy Occasional Paper No. 22, available on Internet (http://www.oecd.org/els/papers/papers.htm).

OECD PUBLICATIONS, 2, rue André-Pascal, 75775 PARIS CEDEX 16
PRINTED IN FRANCE
(81 98 10 1 P) ISBN 92-64-16149-X – No. 50297 1998