



EUI WORKING PAPERS EUROPEAN FORUM

EUI Working Paper EUI No. 95/4

**Education, Work and Gender
An International Comparison**

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EUROPEAN UNIVERSITY INSTITUTE



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Printed in Italy in September 1995
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Badia Fiesolana
I – 50016 San Domenico (FI)
Italy

EDUCATION, WORK AND GENDER - AN INTERNATIONAL COMPARISON¹

by

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The paper examines the relationship between education, work and time-use, as the thesis is that the desire to capitalise upon educational skills, which women and men nowadays attain equally, explain the increase in labour market participation by women. One of the consequences of such changes is that women now spend less time on household work than before, and men, as a corollary, spend more. However, the total work-load has increased for both sexes mainly because of improving educational skills, and, as a result, there has been a reduction in the available leisure time. The conclusion is that the countries are gradually becoming increasingly alike with regard to the attachment of women to the labour market and overall time allocation. Furthermore, a similar trend can be discerned in fertility, marriage and divorce-rates.

1. This article was written as a Forum Fellow, European University Institute, Florence, and refers to the project "Arbejde, tid og køn - i udvalgte lande" (Work, Time and Gender - in Many Countries; Bonke, 1995), which was financed by The Welfare Commission, The Danish Ministry of Industry.

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INTRODUCTION

The most important change in society has been the increase in labour market participation by women, which has enabled Danish and Swedish women to enter the labour market at a level that nearly matches male employment. The same trend are also to be found in other countries functioning at a pace that is even more rapid, a dynamic that is likely to result in the disappearance at any significant international differences in the near future.

The political demands of women for equal opportunities, as well as their aspiration for economic independence from the husband explain this development. Furthermore, if one adds to this the desire of women to capitalise upon educational skills, which women attain in Denmark on parity with men, the main arguments for change can, thus, be explained.

One of the consequences of such changes is that women now spend less time on household work than before, and men, as a corollary, spend more. However, the total work-load has increased for both sexes mainly because of improving educational

skills, and, as a result, there has been a reduction in the available leisure time. The implication is clear; the overall allocation of time between the sexes has changed, as women and men nowadays become more and more alike both within countries and beyond.

TRENDS AND EXPLANATIONS

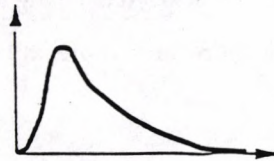
To understand the demographic changes that are taking place in different countries, affiliations to the labour market especially among women are important (figure 1). A "uni-modal"-model, in which women are attached to the labour market until child-birth, in which they then leave the labour market still exists in Spain, Ireland and Luxembourg, while a longer attachment to the labour market, although not until retirement, is the profile - "flat-top"-model - of Greek, Italian, Portuguese and Belgian women. This is followed by a "duo-modal"-model which is characterized by the return of women to the labour market. German, Dutch and British women belong to this model. Finally, a "plateau-modal"-model in which women are permanent participants in the

Figure 1. Womens labour market participation rates - different profiles

Profile 1: Uni-modal

Ireland
Spain
Luxembourg

Participation rate

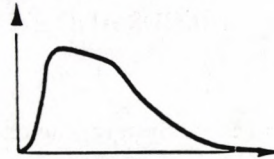


Age

Profile 2a: Flat-top

Greece
Italy
Portugal
Belgium

Participation rate

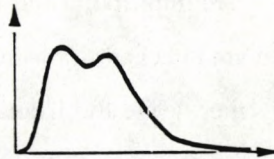


Age

Profile 2b: Duo-modal

Germany
Holland
England

Participation rate

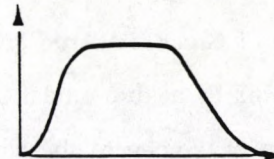


Age

Profile 3: Plateau

Denmark
Sweden
Norway
France

Participation rate



Age

labour market, as has traditionally been the case for men, appears for women in Denmark, Sweden, Norway and also to a

great extend in France. These models or stages are to be applied more or less rigorously to all women in the countries with the specific purpose of demonstrating at which stage each country is to be found at present, and to which stage(s) it, probably, will move into in the future.

Figure 2. Countries classified by womens' labour supply in general (factor 1) and the labour supply among women with small children (factor 2).

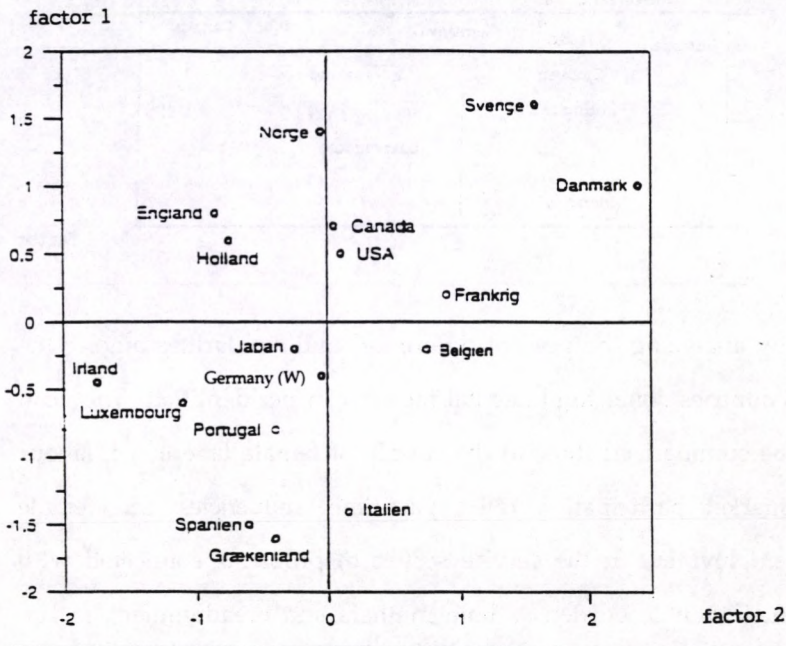
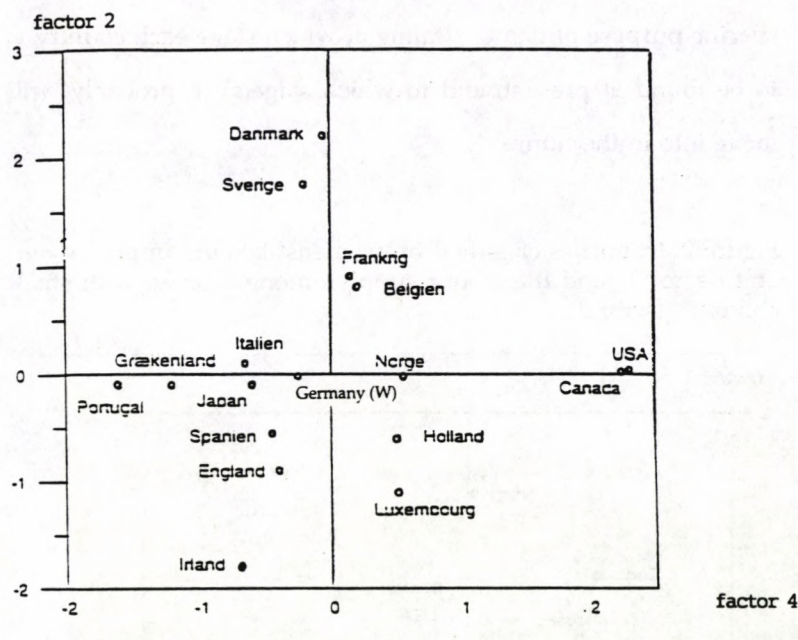


Figure 3. Countries classified by the labour supply among women with small children (factor 2) and educational level (factor 4).



By analyzing the present differences and similarities among the countries some fundamental factors can be identified. They can be summarized thus; a) the supply of female labour, i.e. labour market participation rates, part-time frequencies and female employment in the service sector; b) problems connected with their double burden as both mothers and breadwinners, i.e. labour market participation rates among women with small chil-

dren, supply of childcare facilities, and wages; and c) women's and men's educational skills and the scale of the service-sector (figures 2 & 3). By taking these welfare indicators into consideration most recent differences among countries can be explained. Indeed, it is for this reason that they are used to explain developments in each of the countries in the sample group.

EDUCATION ACROSS BORDER LINES

Everywhere a trend exists that is moving towards ever greater numbers of highly educated women and men. From a figure of one in four young women the factor has increased to more than one in every three during the 1980s - taking a means average for the countries. The same dynamics is also observable for men. Indeed, more than one in three now attend higher education, as opposed to a little over one in four in 1980 (table 1).

In 1980 Danish women were surpassed only by Swedish, Canadian and American women with regard to number being in higher education. Ten years later Norwegian, Belgium, French and Spanish women have surpassed Danish women. Indeed,

only British, Irish, Greek, Italian, Portuguese and Japanese women can the percentage in higher education be found to be significantly lower than in Denmark. For example, in Japan only one in every five young women were in higher education in 1990.

In 1990 the percentage of young men in higher education was greater in Norway, Belgium, France, The Netherlands, Germany, Spain, US, Canada and Japan than in Denmark. Whilst only The Netherlands, US, Canada and Japan had surpassed Denmark ten years before, in 1980. Indeed, Greece and Portugal are the only countries, where significantly fewer young men in 1990 were in higher education relative to their Danish counterparts.

Moreover, the increasing percentage of young women in higher education has been exceptionally high in Norway, France, Portugal, Spain, the US, and Canada, where a 40 per cent increase means four out of five young women - as in the US - are now in higher education. A proportion which matched that of Canadian men. On the other hand, in Sweden more moderate changes can be found, and for Japanese men the percentage in higher education has even declined.

Table 1. Young people in higher education¹ as a percentage of the 5-years age-group, which follows secondary school².

	1980		1990	
	Women	Men	Women	Men
Belgium	23.0	28.9	37.0	38.5
Britain	14.3	23.7	28.1	29.5
Canada	42.1	40.0	81.8	61.0
Denmark	28.4	28.2	35.4	31.8
France	23.3	26.6	42.8	36.6
Germany (V)	21.8	29.1	31.6	44.1
Greece	14.5	19.6	26.3	24.6
Holland	23.8	34.7	31.6	38.6
Italy	23.3	30.6	29.0	30.9
Ireland	15.1	21.1	27.7	30.8
Japan	20.3	40.4	22.7	34.5
Luxembourg	1.8	3.5	-	-
Norway	25.0	25.9	45.8	38.4
Portugal	10.7	10.7	25.6	19.6
Spain	20.5	25.7	36.8	34.1
Sweden	32.9	28.8	34.8	28.4
US	58.0	53.3	80.0	64.7
All countries ³ :				
- average	24.8	29.2	38.6	36.6
- deviation	11.7	9.7	17.7	11.8

1) UNESCO's third level. 2) UNESCO's second level. 3) Excluding Luxembourg. - non-available.

Source: UNESCO. World Education Report. 1994.

Thus, the present differentials between women's and men's possession of educational qualifications are likely to disappear in

most countries in the near future. As a result Denmark will no longer enjoy a special position in this field. Neither is this the case, it should be added, for the total number of young people - women and men - in higher education. In other words, there seems to be no reason for expecting any competitive advantage to be gained by Denmark in the future from education, which is certainly the case today.

EDUCATION MEANS WORK

Not surprisingly the relationship between education and entry onto the labour market, i.e. participation rates, has been found to be positive. In Denmark basic education means participation rates of 77 and 88 per cent for women and men, respectively, as against rates of 87 and 92 per cent using the second level of education as a basis. By comparison, the participation rates for higher educated women and men are 95 and 97 per cent respectively (table 2).

This positive relationship that exists between participation rates and educational levels is found to be active in other countries as

Table 2. Labour market participation rates and educational level¹. 1988.

	<Upper sec.		Upper sec.		Higher educ.	
	women	men	women	men	women	men
Australia	39.5	71.2	60.8	81.9	77.5	89.3
Austria	29.5	61.4	37.8	52.4	75.1	80.7
Belgium	28.3	62.0	58.4	77.7	73.8	85.1
Britain	64.3	86.6	70.9	84.8	81.0	93.6
Canada	34.0	61.9	62.3	82.9	78.5	89.0
Denmark	77.1	87.7	86.9	91.7	94.5	96.7
Finland	57.8	69.5	73.5	74.7	84.4	90.6
Germany	27.2	64.4	51.6	64.5	74.8	86.6
Holland	39.6	83.7	66.2	92.6	86.4	95.8
Italy	37.3	83.5	65.8	81.8	86.6	94.2
Norway	57.9	75.3	74.9	81.1	83.6	89.4
Spain	20.5	65.8	55.9	85.5	80.7	84.5
Sweden	81.9	90.6	85.6	91.5	95.0	96.1
Switzerland	37.6	71.7	54.4	85.3	56.9	82.8
US	30.4	57.1	58.5	81.2	75.0	88.2
All countries:						
- average	44.2	72.8	64.2	80.6	80.3	89.5
- deviation	19.0	11.1	12.9	10.5	9.3	5.0

1) For a description of the educational levels, i.e. (A). (B) & (E), see Annex 2.C in Employment Outlook.

Source: OECD Employment Outlook 1989.

well. In Spain, a very marked relationship can be found for both women and men, whilst in Italy this is mostly the case for women. In the US and Canada, second level education increases participation rates, whereas in Germany, it is higher education

which is the primary factor in the increase in these rates. In Sweden and Denmark the relationship between women's and men's educational skills and their participation rates are more modest - i.e. the participation rates are high for all groups.

When establishing an average for all the countries three interesting conditions appear (table 2). First, as mentioned above, participation rates clearly are positively related to educational levels, and, indeed, most pronounced for women. Secondly, there is a significant decrease in the variation of participation rates among countries the higher the educational level that is under consideration. In particular, this means that highly educated men - but also such women - can be found in the labour force independently of which country they live in.

Thirdly, and finally, the participation rate differentials between the two sexes decrease with the level of their educational skills. In other words, the more education the more equal are women's and men's attainment in the labour market.

In conclusion, it is evident that education has the same positive effect on labour market participation in all the sample countries.

Indeed, this might well be the reason why nearly all countries place strong emphasis on the development of their educational systems.

WORK WITHOUT INTERRUPTIONS

In nearly all countries men can expect to be permanently attached to the labour force from their youth until the age of retirement, which is not, in general, the case among women. Besides Danish women only Swedish, Norwegian, Finnish and French women can expect to be on the labour market to nearly the same extent as men are. In France, however, the level is still lower than in the Nordic Countries, although the trend there is moving towards a "Nordic" profile (table 3).

In the Southern European countries it seems as though women avoid the phase in which the labour market career is interrupted when they have children - the duo-modal model. For this reason the phase during which they usually leave the labour market in their middle twenties - the uno-modal model - is substituted directly by the phase during which they obtain state of perma-

Table 3. Labour market participation rates for women and men. 15-64-years. 1991. Annual growth rates 1981-1991.

	Labour market participation rates 1991		Annual growth rates. 1981-1991	
	Women	Men	Women	Men
Belgium	53.2	72.8	1.3	- 0.4
Britain	64.5	86.1	1.5	- 0.1
Canada	68.1	83.9	2.5	0.7
Denmark	78.9	88.5	1.3	0.5
France	56.8	74.5	1.2	- 0.1
Germany (V)	57.0 ³	80.8 ³	1.3	0.5
Greece	43.5 ¹	75.1 ¹	-	-
Holland	54.8	80.3	3.3 ²	1.5 ²
Ireland	39.9	81.9	1.5	0.1
Italy	45.8	79.4	1.8	0.3
Japan	61.5	88.9	-	-
Luxembourg	44.8	77.7	-	-
Norway	71.1	82.9	1.6	0.0
Portugal	62.8	85.9	1.9	0.8
Spain	41.2	76.0	3.5	0.4
Sweden	80.3	84.5	-	-
US	68.4	84.7	2.0	1.0
All countries				
- average	58.4	81.4	•	•
- deviation	12.7	4.9	•	•

1) 1989. 2) Annual growth rate 1990-1991. 3) 1990. - non available.

Source: OECD. Labour force statistics. 1971-1991.

nency within the labour force - the plateau-model -, as is usually the case all the time for men. Among the other West-european

countries it is only women in Belgium, who behave in a similar manner to women in Southern Europe. Interruptions in the working career, through the years of being a parent of small children are, on the other hand, still apparent in Germany (West), The Netherlands and in Britain (the duo-modal-model in figure 1).

However, development in the various labour markets seems to be going along similar lines, which means that interruptions in women' working careers are likely to disappear. In this respect women are well on their way to matching male behavioral patterns.

Nowadays, Danish women and men enjoy some of the highest labour market participation rates anywhere in the world. Indeed, it is only Japanese men, who compete within the labour force to the same extent. However, amongst men, the international variations are relatively small, while there are still significant differences between women. By order of degree of market penetration, Danish and Swedish women participate most, followed by Norway, American, Canadian, British and Japanese women, two out of three of whom participate on the labour market. Finally, Southern-European women participate least of all, for less than half

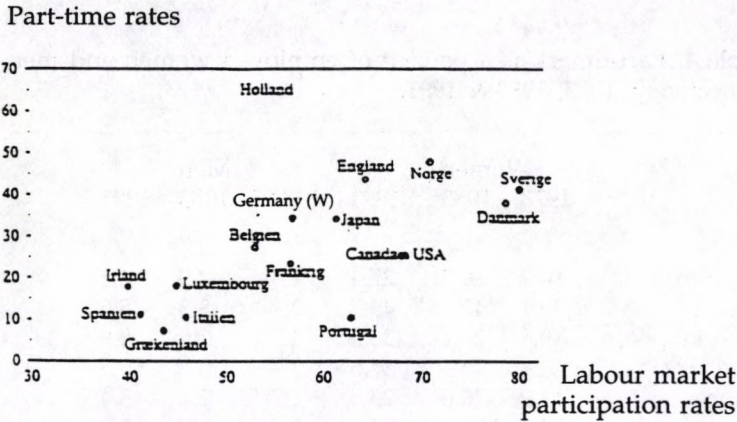
of these women are in the labour force - with the exception of Portuguese women of whom two out of three participate on the labour market.

Nonetheless, rapid movement towards equal labour market participation rates in the Western countries is taking place. In Spain, for example, the participation rate of women increased by 3.5 per cent a year in the 1980's.

WORK IS NOT JUST WORK

A significant part of the labour force entrants have been women who have undertaken part-time occupations. The explanation for this phenomenon is that many of these jobs have been demanded in order to have the opportunity to combine childcare and other household tasks with paid work. This "balance" has become particularly important, when the number of childcare facilities are inadequate or the division of labour between the spouses is pronounced.

Figure 4. The relationship between womens' labour market participation rates and womens' part-time rates. 1991.



The number of part-timers are in fact related to the total number of women on the labour market (figure 4). In countries where women participation rates are low, such as Greece, Italy, Spain, Luxembourg and Ireland, only few women are part-time workers, whilst, on the other hand, many part-time workers in Denmark and Sweden are women. However, there are exceptions such as, for example Portugal, where many women participate on the labour market although few are part-timers, and The Netherlands, where the greater part of the relatively few

women that are on the labour market are in part-time occupations.

Table 4. Part-timers as a percent of employed women and men, respectively. 1973, 1983 & 1991.

	Women			Men		
	1973	1983	1991	1973	1983	1991
Belgium	10.2	19.7	27.4	1.0	2.0	2.1
Britain	39.1	42.4	43.7	2.3	3.3	5.5
Canada	19.4	26.1	25.5	4.7	7.6	8.8
Denmark	–	44.7	37.8	–	6.6	10.5
France	12.9	20.0	23.5	1.7	2.6	3.4
Germany (V)	24.4	30.0	34.3	1.8	1.7	2.7
Greece	–	12.1	7.2	–	3.7	2.2
Holland	–	50.1*	62.2	–	7.2*	16.7
Ireland	–	15.5	17.8	–	2.7	3.6
Italy	14.0	9.4	10.4	3.7	2.4	2.9
Japan	25.1	29.8	34.3	6.8	7.3	10.1
Luxembourg	18.4	17.0	17.9	1.0	1.0	1.9
Norway	46.5	63.3*	47.6	5.9	7.7*	9.1
Portugal	–	–	10.5	–	–	4.0
Spain	–	–	11.2	–	–	1.5
Sweden	–	45.9*	41.0	–	6.3*	7.6
US	26.8	28.1	25.6	8.6	10.8	10.5
All countries						
- average	23.7	30.3 ¹	28.1 ²	3.8	4.9 ¹	6.1 ²
- deviation	4.9	5.5 ¹	5.3 ²	1.9	2.2 ¹	2.5 ²

*) Data division. 1) Excluding DK, S, NL, IRE, GR, E & P; women 28.6, 5.3 and men 4.6, 2.2. 2) Excluding E & P; women 30.4, 5.5 and men 6.5, 2.5.

- non-available.

Source: OECD. Employment Outlook 1993.

Table 5. Unemployment. 1983 and 1991.

	1983 women	men	1991 women	men
Belgium	19.0	8.6	10.6	4.6
Britain	9.9	11.9	7.4	9.4
Canada	11.3 ³	11.2 ³	9.7	10.8
Denmark	10.5	8.2	10.0	8.5
France	10.8	6.3	11.7	7.2
Germany	8.0	8.7	10.7	7.1
Greece	11.7	5.8	12.9	4.8
Holland	14.7	11.1	10.0	5.6
Ireland	16.5	14.6	16.6	15.4
Italy	14.4	5.8	15.8	6.8
Japan	2.6	2.7	2.2	2.0
Luxembourg	5.3	2.6	2.1 ¹	1.1 ¹
Norway	3.8	3.2	5.0	5.8
Portugal	11.8	5.3	5.7	2.6
Spain	20.8	16.5	23.2	12.0
Sweden	3.6	3.4	2.6	3.3
US	7.4 ²	7.0 ²	6.3	7.0
All countries:				
- average	12.2	8.1	9.8	6.8
- deviation	4.7	4.1	5.7	3.9

1) Unreliable data because of a small sample. 2) 1985. 3) 1984.

Source: Eurostat. Labour Force Survey 1991 and national year-books.

Nonetheless, developments concerning part-time jobs are moving towards a synergy with the result that in some countries with many part-time working women the number decreases while the

opposite is occurring in countries with low part-time rates (table 4). Indeed, in these countries an increase in the number of part-time working women is taking place. Because the prevalence of part-time working men is increasing at the same time, women and men are also, at least in this respect, becoming increasingly similar.

With the exception of a few countries, including Britain, women's unemployment is at a higher level than that of men, and in some cases much higher (table 5). This was the situation in the 1980's, even though the overall unemployment rate decreased. However, if all the countries are taken together, the differences have become smaller, for the average unemployment rate of women fell from 12 to 10 per cent, while that of men only fell from 8 to 7 per cent. Nevertheless, the variation among women has increased, not least due to the radical changes that have occurred in Belgian and Portuguese women's unemployment rates, which were halved during the 1980's.

Taking unemployment - as well as some temporary absence from work periods - into consideration, the difference between women's and men's so-called work-frequencies is 14 per cent, com-

Table 6. Measures of work on the labour market. 15-64-years. 1989.

	Labour market participation rates	Work frequencies	Working- time
	per cent and proportional		hours
Denmark - women	77.2	62.5	31.7
- men	88.0	75.6	37.6
- women/men	87.7	82.7	84.3
Finland - women	72.9	60.1	21.4
- men	78.8	67.8	27.7
- women/men	92.5	88.6	77.3
France ¹ - women	62.8	51.3	18.5
- men	83.7	72.7	31.6
- women/men	75.0	70.6	58.5
Norway - women	69.3	56.5	16.5
- men	83.3	70.8	28.2
- women/men	83.2	79.8	58.5
Sweden - women	82.2	64.5	20.7
- men	86.8	73.7	29.3
- women/men	94.7	87.5	70.6
US - women	67.8	60.2	21.0
- men	85.9	77.7	32.2
- women/men	78.9	77.5	65.2

1) 20-64-years. 2) 20-64-years.

Source: Jonung & Persson (1993) and own calculations.

pared to a 12 per cent difference in participation rates (table 6).

Furthermore, for Denmark there is to be found a slower decrease in the former's frequency as compared with the latter's.

Moreover, if work-frequencies and participation rates (-frequencies) for different age-groups are compared the profile for women becomes even more askew, particularly when the actual presence on the labour market - the work-frequency - is the focus of analysis. It is still women, who - temporarily - leave the labour market when having small children, even though the participation rates figure remains high.

Also the number of hours worked, when being at work, are different for women and men. Not only because of part-time work, the effect of which has decreased over the last 10 years, as mentioned above, but also because of over-time and additional jobs, which are mostly the preserve of men. For this reason the labour supply of women is smaller than that of men, as indeed are potential career opportunities for women.

The implication of these findings is that the way that work is measured affects the result, particularly when undertaking international comparisons. When using the actual number of hours worked it becomes clear that the position of Denmark as a country which possesses a greater equality of opportunity between women and men on the labour market has to be approached

with some caution.

HOUSEHOLD WORK - FROM WOMEN TO MEN

Work is not only a 'good' supplied to the labour market, for it also occurs in the homes, where nearly all women work almost every day, even though many Danish men do contribute to this work, and, indeed, in an ever increasing number (table 7). From a situation where only one in four men worked in the home in the middle of the 1960s, half of the men did so 10 years later, to a situation where nearly three out of four men performed household tasks on an average day by the late 1980s. Indeed, it is proviso to assert that whilst women have caused a revolution on the labour market, men have done so at home.

However, more active men does not mean more work among these men for the increase amounted to only two hours more a week in each of the two periods, compared with some 7 hours less work being performed by women in the first period and 4 hours in the second period. In 1987 men doing household work spent 15 hours a week, which is equivalent to a short part-time

job, while in a similar position women spent 25 hours a week, which is equivalent to a long part-time job.

Interestingly, the situation in Canada is rather like that of Denmark for here women also undertake household work which amounts nearly twice as many hours as men. However, in Canada - as well as in Sweden - participating women and men spend significantly more hours on household work than participating women and men in Denmark. In The Netherlands and Spain women complete 45 hours a week of household work, whereas men in these countries only complete 15-20 hours, which is also the case in Denmark.

Indeed, the relationship between - participating the household work of - women and men in Holland in 1988 was only the equivalent of the level attained by Danish women and men in 1975. Furthermore, while the relationship in Spain in 1991 was only comparable the Danish level of 1964. The participation rate of Dutch men, and especially that of Swedish men, is very high, whereas only two out of three Spanish men perform any household work. In Denmark, as mentioned above, three out of four men participate in household work.

Table 7. Household work - participation rates and hours. 25-64-years.

	DK (⁶⁴)	DK (⁷⁵)	DK (⁸⁷)	DK ¹ (⁸⁷)	N (⁷⁰)	N (⁸⁰)	N (⁹⁰)	CDN (⁹²)	E ² (⁹¹)(^{90/91})	S (^{90/91})	NL (⁸⁸)
Participation rate					(percentage/day)						
- women	90	94	95	96	98	99	98	96	99	99	98
- men	28	53	75	76	81	85	88	79	66	95	85
- women/men	321	177	127	126	121	116	111	122	150	104	115
Average per participant					(hours/week)						
- women	35.47 (0.55)	28.85 (0.60)	24.74 (0.66)	25.68 (0.65)	44.57	36.05	32.32	33.95	46.25 (0.76)	34.52	44.50
- men	11.12 (1.03)	12.96 (0.93)	15.21 (0.95)	15.85 (0.92)	19.83	20.30	20.30	21.35	14.50 (1.51)	22.21	20.08
- women/men	319.0	222.6	162.7	162.0	224.8	177.6	159.2	159.0	319.0	155.4	221.6
Overall average					(hours/week)						
- women	31.96 (0.67)	27.21 (0.67)	23.57 (0.71)	24.56 (0.70)	43.87	35.47	31.62	32.78	45.77 (0.77)	34.17	43.61
- men	3.10 (2.53)	6.92 (1.57)	11.27 (1.25)	12.07 (0.92)	16.10	17.38	17.97	17.03	9.60 (1.98)	21.10	17.07
- women/men	1031.0	393.2	209.1	205.2	272.5	204.1	176.0	192.5	476.8	161.9	255.5

1) Including childcare. 2) The diary only includes information on time-intervals for which reason the median-value is used. 0 relative standard deviation.

It also appears that the number of hours spent on household work by Danish women and men, taken together, has decreased slightly over the last 25 years, i.e. one hour a week, which is the equivalent of a 5 per cent decline. As a consequence, therefore, almost the same amount of work has now to be distributed among the spouses, as is also the case with regard to the distribution of the various tasks that are required to be undertaken.

The increase in the number of employed women has not influenced the total amount of household work, only the relative distribution of that work amongst and between women and men has changed.

The implication of this development has been a decrease in the leisure time of familie's, so that Danish women and men, taken together, now have 85 hours a week free of work, which is about the same as that enjoyed Norway, France, The Netherlands, US, and Canada (table 8). By comparison, Japanese, Australian and Finnish women and men have somewhat shorter leisure time, and in Sweden and the former Soviet Union the leisure time only accounts for some 65 hours a week.

Table 8. Time-allocation. 25-64-years.

	Work on the labour market ¹	House- hold work ²	Total work	Leisure time	Personal care ³
hours per week, women/men					
Australia (92)	18.2/40.6	37.3/18.1	55.5/58.7	37.2/36.1	72.1/70.4
Britain (85)	17.3/37.0	35.9/17.3	53.2/54.3	37.5/40.4	66.1/64.9
Canada (92)	23.9/39.9	32.8/17.0	56.7/56.9	37.5/40.8	73.7/70.1
Denmark (87)	31.2/45.2	24.6/12.1	55.7/57.3	41.5/43.0	70.6/67.4
Finland (79)	32.5/44.0	28.6/13.8	61.1/57.8	33.6/38.1	72.7/72.5
Holland (88)	13.2/36.3	38.7/16.8	51.9/53.1	37.9/40.2	74.2/70.4
Italy (88/89)	18.8/46.8	45.4/9.0	64.2/55.8	26.9/34.7	76.9/77.8
Japan (91)	26.9/54.4	33.1/2.6	60.0/57.0	36.1/38.6	71.3/71.1
Norway (90)	25.0/38.4	31.6/18.0	56.6/56.4	40.1/42.6	70.6/68.4
Spain (90)	14.2/44.8	57.1/13.9	71.3/58.7	23.9/32.9	72.8/76.4
Sweden (90/91)	29.7/43.0	34.3/21.2	64.0/64.2	30.7/33.5	70.9/68.3
US (81)	23.9/44.0	30.5/13.8	54.4/57.8	41.9/41.8	71.6/68.2
Ungary (77)	35.1/50.8	33.8/12.9	68.9/63.7	25.3/30.4	73.6/74.0
USSR (85)	39.3/53.8	27.0/11.9	66.3/65.7	32.0/34.6	69.8/67.8

1) Including commuting, education and connected transport. 2) Shopping, house work, diy-work and childcare. 3) Including eating & sleep.

In most countries women have less leisure time than men, with the notable exception of Denmark where both sexes each enjoy 42-43 hours a week free of work.

EDUCATION MEANS LESS LEISURE TIME

The amount of paid work undertaken by Danish women increases significantly in line with their educational skills, i.e. women without education work 25 hours on average compared to 50 hours a week undertaken by highly educated women. Although there is some substitution between paid work and household work, women's total work-load - paid and unpaid - increases by 18 hours a week even when allowing for different numbers of small children, school-age children and variations in women's ages (table 9).

Also for men education means less leisure time, although the "price" is cheaper than that paid by women. This is due to the fact that the number of working hours on the labour market increases, when men become more educated, while the time spent on household work remains the same - only one hour less out of the 12 hours men spend on household work weekly.

That is more education means less leisure time which is more pronounced for women than for men. This calls for the employment of different time-saving and time-buying strategies, as is

Table 9. Time-allocation for women and men classified by educational level. Denmark. 1987.

	None	Semi-skilled	Vocational training	Short theoretical	Median theoretical	University degree	More/less work per educational level ¹	
hours per week								
Women:								
- labour work	24.88	23.16	34.18	32.10	40.37	49.88	5.85	(0.96)
- household work	23.17	25.01	22.18	26.01	21.31	16.11	-1.22	(-0.65)
- (all work)	(48.05)	(48.17)	(56.36)	(58.11)	(61.68)	(65.99)	(3.77)	(0.98)
- care	1.69	2.36	2.45	5.33	3.02	1.49	0.07	(0.08)
- leisure	47.59	47.19	41.78	40.61	35.80	33.04	-3.56	(-0.99)
- personal care	13.96	13.79	13.89	13.37	13.38	11.91	-0.41	(-0.87)
- sleep	58.26	58.40	55.72	55.91	57.14	57.04	-0.28	(-0.46)
Men:								
- labour work	36.07	40.62	43.17	52.29	47.87	52.35	3.51	(0.87)
- household work	11.57	12.79	11.55	10.49	12.06	11.04	-0.22	(-0.46)
- (all work)	(47.64)	(53.40)	(54.72)	(62.78)	(59.93)	(63.40)	(3.04)	(0.93)
- care	0.60	0.87	0.90	1.29	1.80	1.32	0.20	(0.85)
- leisure	51.23	43.94	45.15	39.66	40.69	38.82	-2.77	(-0.88)
- personal care	12.11	14.21	13.11	12.59	11.86	12.48	-0.26	(-0.50)
- sleep	56.75	56.44	54.81	52.97	54.92	53.30	-0.68	(-0.81)

1) Regression coefficient and (correlation coefficient).

Source: The Danish National Institute of Social Research. The time-use survey 1987.

demonstrated by investments in household appliances and the buying of convenient goods and services. Indeed, this is a phenomenon taking place at different levels in many families in an attempt to solve an increasing problem of time-pressure - the report mentions some studies that focus upon this problem.

PUBLIC SERVICES, TAXES AND THE FAMILY STRUCTURE

An important precondition for a supply of female labour is the availability of childcare facilities. In countries where the public sector is involved in childcare the labour market participation rates of women are usually higher than in countries where childcare remains a private task. Not surprisingly, the relationship between childcare facilities and the labour supply of women is most apparent for those with small children (tables 10 & 11).

Furthermore, the nature of the tax-system as well as the performance of public benefits are essential to gaining an understanding of the labour supply and time-allocation of women. The tax-system effects the level of work available on the labour market and, thereby, equality between the sexes. This is especially the

case for single parents where the labour supply is undoubtedly influenced by an interaction that occurs between taxes and means tested transfer payments, which in some countries means marginal tax-rates approaching 100 per cent. This results in a lack of incentives for a single parent to become an independent breadwinner.

Table 10. Public financed childcare - coverage in per cent and school age.

	Year	Children <3 year	Children 3- years to school age	School- age
Belgium	1988	20	96	6 year
Britain	1988	2	35-40	5 year
Denmark	1989	48	85	7 year
Finland	1988	22	53	7 year
France	1988	20	95	6 year
Germany	1990	14	77	6-7 year
Greece	1988	4	65-70	5½ year
Holland	1991	4	50-55	5 year
Iceland	1987	26	56	6 year
Ireland	1988	2	55	6 year
Italy	1986	5	85	6 year
Luxembourg	1989	2	55-60	5 year
Norway	1989	10	55	7 year
Portugal	1988	6	35	6 year
Spain	1988	-	65-70	6 year
Sweden	1989	29	81	7 year

Source: Borchorst (1993).

By taking these conditions together it is possible to explain the existence of the "modern" family structure in the Nordic Countries, especially Denmark and Sweden, where small households, low fertility rates, high divorce rates, many part-time working women, a welfare state, and considerable equal opportunities in two-earner families are the norm (table 12).

In the Southern European countries - Portugal, Spain, Italy and Greece - the family structure is more traditional with big families more often the norm. Although the fertility rates are decreasing in Spain and Italy, low divorce rates, a small service sector, relatively low labour market participation rates for women and many one-earner families, remains a common feature of these economies.

The US and Canada are similar to the Nordic Countries with regard to both family structure and economic structure, but deviate from these by having high fertility rates and a labour force with many temporarily employed people, especially among women.

Table 11. Womens labour market participation rates classified by the age of youngest child. 1988.

	Women 16-39 years without children	Women 16-59 year age of youngest child			Part-timers with children <10 years (participation rate)	
		0-2	3-6	7-15	Women	Men
Belgium	67.9	52.1	56.6	53.3	16 (54)	1 (92)
Britain	82.6	32.6	51.4	70.0	32 (46)	1 (88)
Denmark ¹	83.8	74.0	78.9	84.8	32 (79)	2 (95)
France	77.5	50.3	58.6	66.6	16 (56)	1 (93)
Germany	82.9	31.0	40.9	49.9	21 (38)	1 (94)
Greece	56.1	38.6	39.9	44.0	5 (41)	1 (95)
Holland	77.8	28.2	33.3	41.2	27 (32)	9 (91)
Ireland	74.8	26.7	22.5	23.5	7 (23)	1 (79)
Italy	54.1	40.0	41.9	44.2	5 (42)	2 (95)
Luxembourg	78.0	33.1	39.1	39.6	10 (38)	- (98)
Portugal	64.5	58.0	63.5	63.7	4 (62)	1 (95)
Spain	51.5	28.2	28.2	28.3	4 (28)	1 (89)
Sweden ²		73	82	88	-	-
All countries ³						
- average	71.0	41.1	46.2	50.8	-	-
- deviation	11.8	14.6	16.1	17.9	-	-

1) 1987. 2) Age of youngest child 0-3, 4-6 & 7-16 year. 3) Exclusive of Sweden.
Source: Joshi & Davies (1992).

Table 12. Fertility rates, family sizes, marriage rates and divorce rates. 1991.

	Fertility rates ^a	Family size ^b	Marriage rates ^c	Divorce rates ^d
Belgium	1.57	2.69	6.1	7.8
Britain	1.82	2.71	6.8	12.6
Canada (1990)	1.82	2.7	7.0	12.9
Denmark	1.68	2.31	6.0	12.7
France	1.77	2.63	4.9	8.5
Germany	1.33	2.31	5.7	8.8
Greece	1.40	2.86	6.4	-
Holland	1.61	2.46	6.3	8.1
Ireland	2.10	4.04	4.8	-
Italy	1.26	2.92	5.3	1.9
Japan	1.53	3.01	6.0	5.4
Luxembourg	1.60	2.87	6.7	-
Norway	1.92	2.41	4.7	8.9
Portugal	1.50	3.07	7.3	-
Spain	1.28	2.65	5.6	2.1
Sweden	2.12	2.26	4.3	11.7
US (1980)	1.84	2.6	9.4	20.8
All countries				
- average	1.64	2.73	6.1	9.4
- deviation	0.27	0.40	1.2	5.0

a) Number of children per women. b) Number of persons. c) Per 1.000 inhabitants. d) Per 1.000 married women. 1987.

- non-available.

Sources: Eurostat. Demographic Statistic, 1991, and statistical yearbooks.

France and Belgium are in between regarding the family structure and womens' labour market participation rates. However,

the childcare facilities are well-developed in France and is women's employment found to be on a more permanent basis. The change in demographic characteristics towards lower fertility rates appeared earlier than in the southern European countries. In principle Britain and The Netherlands belong to the middle group too, although the supply of childcare and care for the elderly is rather limited in Britain, the employment of British women is often in unqualified, temporary and uncertain jobs. The Netherlands, on the other hand, is more "traditional" than Belgium and France. In Ireland, the families are big, the fertility rate high, which, along with certain other conditions makes Eire similar to the countries in southern Europe.

Finally, Germany, and to some extent also Japan demonstrate, some unique characteristics for small households, low fertility rates, and at the same time one-earner families as the norm. Furthermore, high employment in the industrial sector and relatively few in the service sector, suggests a social infra-structure with poor developed childcare facilities and a school-system that is not particularly useful for women, who wish to integrate family-life and paid work.

However, in conclusion, the general picture is one of countries that are gradually become increasingly alike with regard to the attachment of women to the labour market and overall time allocation. Furthermore, a similar trend can be discerned in fertility, marriage and divorce-rates. As a result the countries policies, which are ultimately determined by economic factors, might also be traced back to an increasing desire among women and men to improve their educational qualifications.

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APPENDIX

Factors (F) and variables, which explain the differences between the countries - Factor analysis.

Variables:	Factors:				
	F1	F2	F3	F4	F5
Human capital:					
Young women in higher education as a percentage of the 5-years agegroup, which follows secondary school.				X	
Young men in higher education as a percentage of the 5-years agegroup, which follows secondary school.				X	
Productivity/wages:					
Female wages as a percentage of male wages - industrial workers.		X			
Labour supply:					
Labour market participation rates for women. 15-64 years.	X				
Labour market participation rates for men. 15-64 years.					
Female part-time rates	X				
Male part-time rates					
Female unemployment rates				X	
Male unemployment rates				X	
Long-term unemployed women as a percentage of all unemployed women.					
Long-term unemployed men as a percentage of all unemployed men.					

Household work:

Time spend on household work, women. X

Time spend on household work, men.

Leisure time, women. X

Leisure time, men. X

Preferences for role-sharing in
the family.**Demographics:**

Marriage rates.

Divorce rates.

Fertility rates. X

Miscellaneous:Coverage ratios of public-financed
childcare provision. Children < 3. XCoverage ratios of public-financed
childcare provision. 3 - school age. XLabour market participation rates -
mothers with
children < 3. XLabour market participation rates -
mothers with children 3 - school age. XService sector employment relative
to overall employment. XWomen employed in the service sector
as a percentage of overall employment. XAverage number of persons in private
households. X

F1 F2 F3 F4 F5



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