

THE SOCIAL STRUCTURE OF OECD-COUNTRIES
1960 - 1980 AND ITS IMPLICATIONS FOR
SELECTED ASPECTS OF WELLBEING

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Note: Quotation only with permission of the author!
Data have yet to be cross-checked by OECD for
final elimination of ev. computation errors,
graphical misrepresentations and corrigenda in
the primary sources.

Die in diesem Forschungsbericht getroffenen Aussagen liegen im Verantwortungsbereich des Autors und sollen daher nicht als Aussagen des Instituts für Höhere Studien wiedergegeben werden.

CONTENTS

	page
Preface	2
I. Demographic reproduction	3
I.1 Age structure and population growth	3
I.2 Urbanization and household size	5
II. Basic characteristics of working life	15
II.1. Production and reproduction, or: who participates in the labor force and who does not?	15
II.2. Sectoral changes within the labor force and their implications	19
II.3. The structure of the labor force in terms of property, qualification and sex	26
III. Differences of wellbeing between females and males	34
III.1. Life expectancy	34
III.2. Health	44
III.3. Education	53
III.4. The disposition over time	57
Appendix tables	61
Summary	66

Preface

This report was requested by OECD as a preparatory contribution to the planned publication "The OECD Social Indicators". It should help to demonstrate on an empirical basis whether an international presentation of social indicators could make sense in view of the structural and historical differences between countries and the differences in measurement of wellbeing persisting in spite of common efforts at international standardization continuing through several years. Special attention should be given to the possibilities of presenting and analyzing disaggregated data on an international level, since this was one of the aspects in which the OECD Social Indicator Programme attempted at an innovation in the field of comparative social statistics.

For several years the author was Austrian Delegate to the subcommittee "inequality indicators". She was also engaged as a consultant for helping to design the international questionnaire by which part of the data that will enter the Indicator Report were requested from the Member Countries as well as for checking the national data bases of several countries and helping Françoise Coré-Cayet (OECD) in designing the international tables on which this report will be based.

This contribution was supposed to draw specifically on the data collected in the framework of the Social Indicator Programme (quoted as "Social Indicator Reference Tables" resp. "Social Indicator Tables") as well as on previous OECD publications "OECD Demographic Trends 1950-1990", Paris 1979, and ("OECD Labor Force Statistics 1969-1980", Paris 1982). Deviations from other international or national sources were to be disregarded.

I. DEMOGRAPHIC REPRODUCTION

I.1. Age structure and population growth

There exists a well known pattern of change in the mode of demographic reproduction occurring in the course of industrialization that seems to be fairly universal. What stage this process has reached has a lot of consequences for most aspects of social life.

This pattern of change can be looked upon as a transition from an "abundant" form of demographic reproduction (many births and many and early deaths per stock unit) to a relatively "thrifty" form (few births, late deaths). Both forms of reproduction generate a more or less static population resp. a population with relatively small growth (or decline) rates if migration processes are disregarded. But during the transition process a number of highly dynamic changes occur. Typically the death rates slow down before the birth rates: this makes for a rapid population growth. At a somewhat later stage of this transition process there is a phase of "over-aged" population: old people (that still had been born in the phase of high birth rates but already declining death rates) outnumber young people. But this should not be a lasting phenomenon: one or two decades^s later the age structure comes into a new balance corresponding to the "thrifty" type of reproduction.

Among OECD-countries not all patterns will be found: there does not exist any country with an "abundant" form of reproduction any more. But the stages of the transition process should be represented and we can try to identify them, even if the "ideal type" of transformation has been distorted by wars and migration processes. As can be seen from table 1 (and the corresponding data in the appendix table 1a), OECD-countries can well be fitted into the types of transition described above.

Table 1: Demographic reproduction of OECD-Countries: Stages in the transition process from an "abundant" to a "thrifty" type of reproduction 1)

	transition stage I 2)	transition stage II 3)	"thrifty" demographic reproduction 4)
little influence of migration upon population structure	Turkey	Greece	Austria
	Spain	Ireland	Belgium
	Yugoslavia	Italy	Denmark
	New Zealand	Japan	Finland
	Iceland		Germany
			Luxembourg
		Norway	
		Sweden	
		U.K.	
high influence of migration upon population structure	Australia	Portugal 5)	Netherlands 6)
	Canada		France 6)
	U.S.		Switzerland 6)

- 1) Sources: OECD Demographic Trends 1950 - 1990; all data refer to the Mid-Seventies as far as available, population growth for the period 1960 - 1975 (see table 1a in appendix)
- 2) defined by: birth rates, proportion of population under 15 and population growth high (i.e. in top 2 quartiles of OECD-distribution), proportion of population 65 + low (in bottom quartiles) (+++)
- 3) defined by: one or two of the above characteristics "out of pattern" (typically: lower birth rates, lower population growth, all other characteristics as in stage I)
- 4) defined by: birth rates, proportion of population under 15 and population growth low (i.e. bottom quartiles of OECD-distribution), proportion of population 65 + high (top 2 quartiles) (---)
- 5) data on Portugal seem somewhat inconsistent: high births, a high proportion of population under 15, a high positive migration rate - but very low population growth. But this may be attributable to high negative migration rates before 1975 (in 1975 they are highly positive, though, see: Demographic Trends 1950 - 1990; p. 89)
- 6) These countries share all characteristics of "thrifty demographic reproduction" but have had a higher population growth 1960 - 1975.

At a later stage we will ask how these "types" connect to other social characteristics; but upon first sight it should be clear that the emphasis put upon individual survival, i.e. a preservation of healthy life, should increase from one stage to the next. This does not only refer to health care, but to "social security" in a much wider sense. Another very basic correlate of this process should be the changing role of women: their overwhelming function in the reproduction process should give way to other and more variable determinants of their social position. This change in the social definition of the "female" may occur with a certain time lag to the change in the demographic functioning; but it is quite obvious that as long as women are occupied with child-bearing and child rearing (breast feeding, carrying, looking after) from their sexual maturity until their (often early and connected to child-birth) death as we can still see in traditional societies, a redefinition of their social role will hardly take place.

I.2. Urbanization and household structures

Urbanization and contraction of household composition to the nuclear family have long been regarded as necessary and central by-products of industrialization and "modernization" of society. But wherever these changes have occurred they do not seem to be the "endpoint" of development: new patterns emerge, changes in the opposite direction take place...

Changes in settlement structures are very difficult to describe statistically, even on a national level, let alone on an international level. In the framework of the indicator program OECD has not proposed any standard definitions for what countries should consider "metropolitan", "urban" or "rural". The problem with these definitions is that not only cutting points (e.g. of community size) may vary intertemporally and internationally, but also the concepts. Some

countries (such as the U.S.) base their notion of "metropolitan area" on the notion of distance from large centers (and within these areas some rural settlements may persist but still be regarded as part of the "metropolitan area"). Most countries base their classification upon political resp. administrative boundaries of communities and the number of inhabitants within these boundaries. These boundaries may of course change from time to time, and they may represent a more or less appropriate picture of the interconnectedness of settlement patterns. Thus the process of "suburbanization" that took place in the past decades may be statistically represented as growth of metropolitan areas or as de-urbanization. Keeping this in mind one has to be very careful in interpreting the data from table 2 and table 3. Over the past two decades there has been a general tendency in practically all OECD countries towards increased urbanization - there is not one country where the proportion of urban population has actually decreased. But this trend seems to have slowed down in the decade 1970 - 1980: in practically all countries growth rates both for metropolitan areas and for the urban population as a whole slow down. At the same time the rates with which the rural population used to decrease slow down or even turn positive. This is not just true for countries that have reached a high degree of urbanization already, but also for countries with a low degree of urbanization, as can be seen from table 3.

But while it seems possible to carefully formulate a general diagnosis for the vast majority of OECD countries, namely: times of rapid urbanization (and growth of metropolitan areas) seem to be over, and maybe new forms of rural (and not just: suburban) life emerge, it is very difficult to interpret the differences between OECD countries, both in degree and rate of urbanization processes. Here differences of statistical definitions, limitations of data availability and differences in social and geographical reality seem to interweave to a point of obscurity.

Table 2: Degree and process of urbanization 1960 - 1980

	% urban population			annual population growth rates (in %)					
	1960	1970	1980	<u>metropolitan areas</u>		<u>all urban</u>		<u>rural</u>	
				1970/60	1980/70	1970/60	1980/70	1970/60	1980/70
Australia	82	86 ^{a)}	86 ^{b)}		1,2		1,3		0,6
Austria	52 ^{c)}	52		0,2		0,9		0,1	
Belgium	86	94							
Canada	70 ^{c)}	76 ^{a)}	76 ^{b)}	2,9	2,8	3,3	0,6	-0,7	1,8
Denmark	73	79		0,2		1,6		-1,7	
Finland	38	51	60	2,5	1,0	3,4	1,8	-1,7	-1,2
France	69	71							
Germany	60	61	74						
Greece	46	56	63						
Iceland	80	85	88						
Ireland	46	52							
Italy	59 ^{c)}	65 ^{a)}	67			1,8	0,4	-0,4	0,2
Japan	63	72	80	2,3	0,4	2,5	1,5	-1,5	-0,4
Luxembourg	61	68	68						
Netherlands	58	61	66	-0,7	-1,4	1,6	1,7	1,0	-0,8
New Zealand	77	83	84						
Norway	32	42	44	1,6		12,2		-4,6	
Portugal	23	27							
Spain	58	67							
Sweden	73	81	84						
Switzerland	51	58	57						
Turkey	26	36	48						
U.K.	78	77	74						
U.S.	63	68	74	2,3	2,2	1,9	1,2	0,0	1,0
Yugoslavia	28	39							
Median (unweighted)	60	67	74	2,0	1,1	1,9	1,3	-0,7	0,2

- a) 1971
- b) 1976
- c) 1961

Sources: Urban Problems (UP /81/ 5, 1st Rev., p. 14) and Indicator Reference Tables 4

Table 3: Changes in the degree of urbanization 1970 - 1980

	high increase of urbaniza- tion ¹⁾	low increase ¹⁾	unknown
high degree of urbani- zation (% urban 74 % +)	Germany	Australia	Belgium
	Japan	Canada ²⁾	Denmark
	U.S.	Iceland	France
		New Zealand	
		Sweden	
		U.K.	
low degree of urbani- zation (less than 74 % urban)	Finland	Austria	Ireland
	Greece	Italy	Portugal
	Netherlands	Luxemburg	Spain
	Turkey	Norway	Yugoslavia
		Switzerland	

Sources: see table 2

1) derived from the data in table 2: a "high increase" was assumed if growth rates for the urban population lay above the OECD-median, but those for the rural did not; if this was unknown, it was judged by the change in the % urbanized

2) the only country where metropolitan growth is continuing, but urban growth as a whole slowing down - matters of statistical definition?

A similar phenomenon may be observed for household structures: here again a secular process, namely the contraction of families to the nucleus, seems to have reached a relative saturation during the last decade. Leaving aside the difficulties of international statistical comparability that arise from varying definitions of "household", "family" and "children", one may judge from the data in table 4, that OECD countries have passed a climax concerning the proportion of the population living in (complete) nuclear families; several countries show declining fractions already. Thus one may say that the secular process eliminating "extended family"-types of cohabitation and giving the right and chance of marriage to practically everyone, has reached its relative end. Except for Canada (where this may be due to the specific age structure) the proportion living in complete nuclear families nowhere extends beyond 80 %, and in some countries the turning point occurred even below this limit. Practically the only OECD country where the expansion of nuclear family living against "extended" forms is still ongoing (but slowing down in the last decade) is Japan, where "other private households" (with an average number of more than 5 persons) still comprise almost one third of the population. On the other hand the proportion of "other private households" (with an average of just below 4 members, but maybe not the traditional "multigeneration-family-type") is slightly increasing in some of the most highly developed countries such as the United States, the United Kingdom and Norway and now again comprises something like 1/6 of the population.

The dominant tendency, though, still seems to be the decrease of household size, as is documented in table 5. This decrease has not slowed down in the last decade (as far as can be told from the limited number of countries supplying data on this point), and it is not simply a by-product of an increase in the proportion of aged people and the reduction of the number of children per family. The proportion living as singles, although still quite low (median 1980: 7,2 %), is increasing

Table 4: The contraction process to nuclear family living -
and what comes after?

% of the population living in complete nuclear families
(couples with or without children)

	1960	1970	1980
Austria	75,0	77,4	
Canada		79,8	81,1
Finland	78,4	77,8	
Germany	77,9	79,1	77,5
Japan	48,6	55,2	58,8
Norway	80,7*	73,0	
Sweden		71,6 ^{a)}	68,3
U.K.	75,0	73,8	
U.S.	78,1*	75,6*	66,6*
Median	78,1	75,6	(68,3)

* Estimate

a) 1975

Source: Social Indicator Reference tables

Table 5: Changes in household size: average number of persons per household

	1960	1970	1980	percent decrease	
				70/60	80/70
Australia	3,5	3,3	3,0	- 6	- 9
Austria	3,0	2,9		- 3	
Canada	4,0	3,6	3,1 ^{c)}	- 10	- 14
Denmark	2,9	2,7		- 7	
Finland	3,3	3,0		- 8	
Italy	3,6	3,3		- 8	
Japan	4,5	3,7	3,3	- 18	- 11
Netherlands	3,6	3,2	3,0	- 11	- 6
Norway	3,1	2,9		- 6	
Portugal	3,7	3,7		0	
Sweden		2,0 ^{a)}	1,9		- 5
U.K.	3,1	2,9		- 6	
U.S.	3,3	3,1	2,8	- 6	- 10
Median	3,4	3,0	(3,0) ^{b)}	- 6 %	- 10 %

a) 1975

b) very small number of countries to base median upon

c) 1976

Source: Social Indicator Reference tables

in practically all OECD countries, particularly during the decade 1970 - 1980 (see table 6), and this is the case for old people as well as for young people. An extreme case is provided by Sweden, where one quarter of the population leads a single life.

As far as the single living of one parent with child(ren) is concerned, there does not exist a uniform trend. Whereas this proportion seems to have decreased 1960 - 1970 (maybe some of its level in 1960 was still due to World War II disruptions), it rose in several countries (such as: Canada, Sweden, and the U.S.) in the period 1970 - 1980. There is not enough information available to rely upon, but it may well be that single life with or without children is one of the new "post-nuclear family" patterns of living that emerges.

One of the often-complained byproducts of "nuclearization" is the necessity to supply institutional facilities for persons who for matters of age, disablement or lack of adaptation cannot make their living on a private household basis. The statistical information on the institutional population in OECD countries seems indeed to be very scarce. What can be seen from table 7 is that it amounts to something between 1 - 3 % of the population and had a rather decreasing tendency from 1960 - 1970; what happened in the last decade cannot be judged.

Among these institutionalized persons people beyond the age of 65 comprise about one quarter, and their number rises in all (5) countries that submitted data on that point; aged persons living alone relate to those institutionalized somewhere between 7:1 and 2:1; particularly old men seem not to qualify for single living in private households.

The number of young people in institutional households (as well as middle aged, as can be inferred) was decreasing 1960 - 1970, and their proportion to children in private households seems negligible.

Table 6: Households of singles: an increasingly frequent mode of living

	<u>percentage of the population</u>					
	living in single person households			living as single parent with child(ren)		
	1960	1970	1980	1960	1970	1980
Austria	6,5	8,5		9,1	7,5	
Canada	2,3	3,8	5,4		6,8	7,2
Denmark	6,8	8,7		4,4		
Finland	6,4	8,0		9,3	9,0	
Italy	2,9	3,9				
Germany	7,2	9,2	12,2	9,1	6,5	6,3
Japan	1,1	2,9	4,7	5,8	4,6	4,5
Netherlands	3,3	5,4	6,1			
Norway	5,8	7,2				
Portugal	3,3	2,7		4,8		
Sweden		23,4 ^{a)}	26,1		4,9	5,7
U.K.	3,8	6,3		6,2	5,0	
U.S.	4,1	5,5	8,2	3,8	5,3	7,7
Median	4,0	6,3	7,2	5,8	5,9	6,3

a) 1975

Source: Social Indicator Reference tables

Table 7: Percentage of the population living in institutional households 1960 - 1980

	1960	1970	1980
Austria	1,4	1,3	
Canada			
Denmark	2,1	1,8	
Finland	1,1	1,2	
Germany			
Italy	1,4	1,2	
Japan	1,0	1,3	1,3
Netherlands			
Norway	1,4	1,1	
Portugal			
U.K.	3,3	3,0	
U.S.	1,1	1,1	
Median	1,4	1,3	

Source: Social Indicator Reference tables

In general it may be said that "institutionalization" does not seem to be one of the dominant and increasing ways to handle the consequences of size reduction of private households, as was often feared.

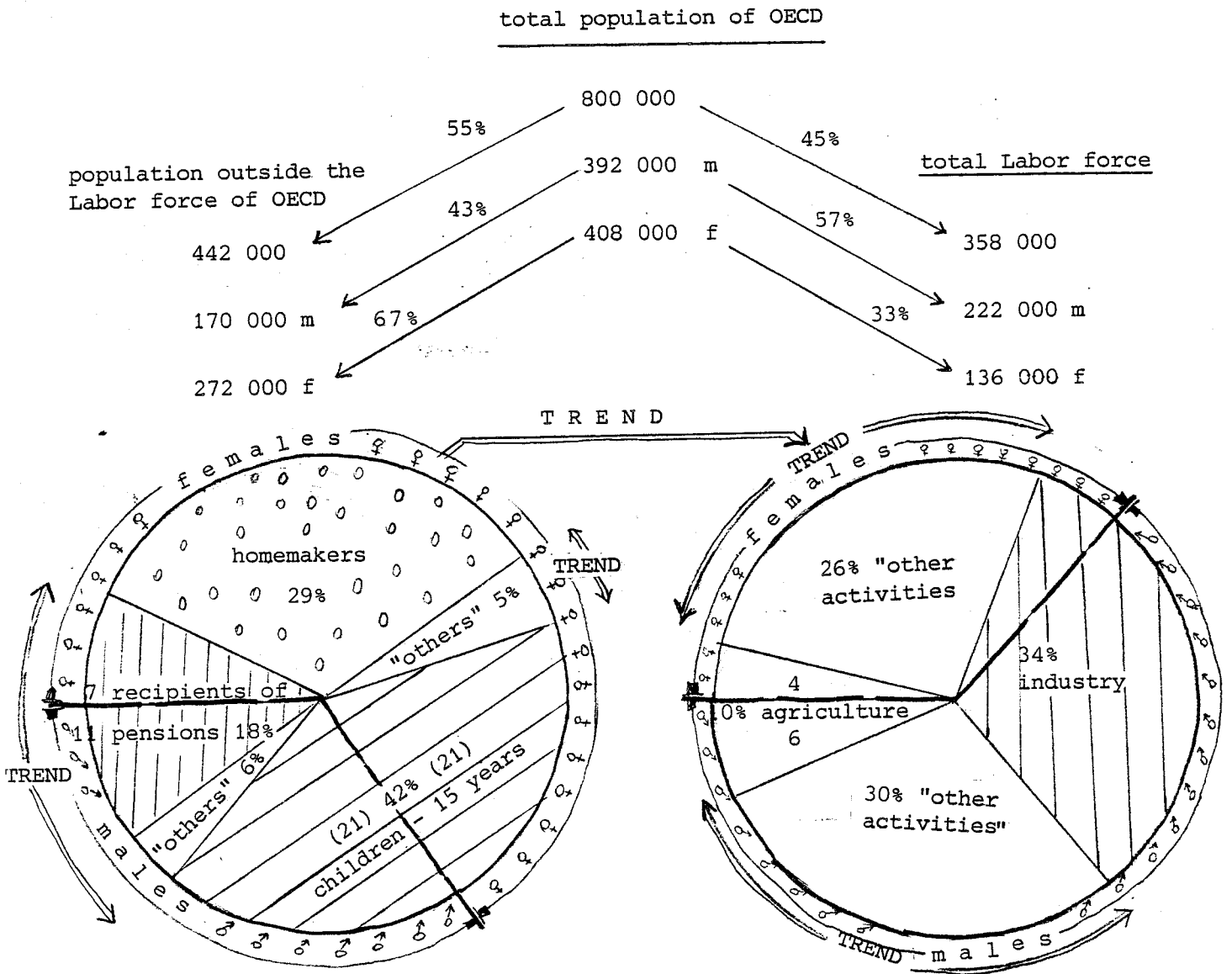
II. BASIC CHARACTERISTICS OF WORKING LIFE

OECD has issued several publications on the structure of the labor force in Member Countries in recent years (e.g. Demographic Trends 1950 - 1990, Paris 1979; Labour Force Statistics 1969 - 1980, Paris 1982) which there is no need nor desire to replicate. But what is needed to do is analyze the possible implications of these structures and also the historical processes behind them for the people concerned, the possible implications for their wellbeing. This basically means to analyze the intersections of economic change with class and sex-structures - and, just as basic maybe, the delineations between "production work" and "reproduction work" and the process of social distribution of these functions.

II.1. Production and reproduction, or: who participates in the labor force and who does not?

National as well as international interest has mainly been concentrated on the labor force, its size and structure; therefore little is known about the population outside. But since people outside the labor force constitute the majority of the population in practically all OECD countries, they deserve a fair interest in the framework of a social indicator programme. Table 8 presents an overview to gain a rough impression of quantitative relations. The overall participation rate in the labor force for OECD countries is 45 % - except for Sweden and Denmark it nowhere exceeds 50 %. It had a slightly rising tendency during the decade 1970 - 1980 in most OECD countries, which was practically entirely due to a shift from housewives to employees.

Table 8: The distribution of the population in and outside the labor force - an overview for all OECD-Countries



Sources: Labor force Statistics and Demographic Trends; all for the year closest to 1980. For the population outside the labor force see table 9

Note: All numbers constitute just rough estimates.

Table 9: The structure of the population outside the labor force
(year closest to 1980)

	% of the total population						
	not in the labor force total	female	male	children below 15	aged 65+	home makers	recipients of retirement pensions
Canada	51.5	61.7	41.3	23.0	9.5		
United States	52.1	70.9	42.8	22.5	11.3		
Japan	51.6	63.1	39.7	23.6	9.1	14.9	
Australia	54.1	66.2	42.0	25.3	9.6		
New Zealand	58.2	71.6	44.8	27.1	9.7		
Austria	58.3	69.3	46.0	20.5	15.5	12.6 ^b	18.4 ^b
Belgium	57.9	69.3	55.9	20.1	14.3		
Denmark	48.2	55.3	40.9	20.9	14.4	14.2 ^b	11.3 ^a
Finland	50.9	55.8	45.6	20.3	12.0		
France	56.9	67.5	45.9	22.3	14.0		
Germany	56.7	68.5	43.8	18.2	15.5		
Greece	64.3	78.9	49.1	23.2	13.0		
Iceland	55.2	n.a.	n.a.	27.5	9.9		
Ireland	63.6	79.7	47.7	30.6	10.7		
Italy	59.4	73.6	44.4	20.5	12.8	16.9 ^b	12.7 ^b
Luxembourg	55.9	74.6	46.1	19.0	13.5		
Netherlands	64.5	77.8	47.5	22.3	11.5		
Norway	52.4	60.9	43.7	22.2	14.8	16.0 ^b	14.1 ^b
Portugal	53.6	64.6	41.9	26.1	10.4		
Spain	64.3	80.0	48.0	25.9	10.9		
Sweden	48.0	53.5	42.5	19.6	16.3	4.5 ^b	12.9 ^b
Switzerland	52.4	67.5	36.6	19.6	13.8		
Turkey	60.4	n.a.	n.a.	40.0	5.2		
U.K.	53.0	64.1	41.2	21.1	14.9	15.8 ^b	9.6 ^b
median (all)	56.3	67.5	43.8	22.3	12.0		
median ^c	52.4	64.1	42.5	20.9	14.8	14.9	12.8

a 1970, 1971

b calculated from SI-reference tables

c only from countries supplying information on homemakers and recipients of retirement pensions

Source: Labour Force Statistics

As can be gathered from table 8, females constitute 63 % of the population outside the labor force; about half of them are considered as housewives. For all countries that have supplied information (except for Japan) this group decreased during the decade 1960 - 1970, and does probably still so, to judge from female labor force participation rates. As can be seen from a case like Sweden this proportion can drop very low (median 14,9 % of the total population, Sweden 4,5 %).

A large but also decreasing fraction is constituted by children below the age of 15, while the proportion of aged people among the "inactive" seems to be rising, both for demographic and labor market resp. social security reasons. While the proportion of children below 15 does not vary too considerably internationally, the proportion of aged receiving a retirement or disability pension seems to be subject to both differences in statistical definition and in social reality. In some countries like Austria or Sweden persons entitled to a pension are almost equal in number to children.

"Other" groups outside the labor force, such as students or people marginalized for one reason or the other, constitute only a small fraction of this population (5 - 6 %).

If we follow the scenario set in part I and extrapolate the changes in the structure of the population, participation in the labor force will increasingly just become a matter of age, and no more of sex; reproduction functions such as children and household will be distributed more equally between the sexes (so far the proportion of male "homemakers" is negligible but rising), and will cause a lessening of intensity of participation in the labor market instead of complete or long drop outs.

II.2. Sectoral changes within the labor force and their implications

The well known economic transformation process from an "agrarian" to an "industrial" to a "postindustrial" society (or however this latest stage, characterized by a large "tertiary" sector, may be called) can be observed at different stages in the various OECD countries - and one may even doubt whether it will take a uniform course from now on.

Almost all OECD countries have experienced a decline in agricultural employment, relatively and absolutely, during the past decade. But for many of these countries this may be looked upon as the final stage of a long lasting process of decline of this sector, whereas for others it implies a period of rapid social transformation into the core of industrial countries; for still others it does not mean this yet.

All OECD countries have experienced an increase in employment in the "tertiary sector", which in many countries has become the largest sector just during the past decade. What varies between the countries is the development of the industrial sector: in the most highly developed countries employment in the industrial sector began to decline in the Mid-Seventies both absolutely and relatively; in the countries where the agricultural sector still plays a larger role this was not the case.

If we look at the results of table 11 (systematized according to our considerations in table 10) we encounter a similar situation as we did when looking at demographic "modernization processes". In general the "tertiarization thesis" still holds true: during the past decade the agrarian sector shrunk (in terms of employment) by almost one quarter, the "other activities", gained at about the same rate and the industrial sector stagnated.

Table 10: Sectoral development in the decade 1970 - 1980
quartiles ¹⁾ by types

<u>TYPE A</u>	<u>agric. sector</u>		<u>industry</u>	<u>"other act."</u>	
	size	change	change	size	change
	1980	80/70	80/70	1980	80/70
<u>stage I: large and stable agrarian sector on the basis of small property</u>					
Turkey	1	1	1	4	1
Portugal	1	1	1	4	4
<u>stage II: medium size agrarian sector on the basis of small property, rapidly declining in favor of industry</u>					
Austria	2	4	2	3	3
Finland	2	4	3	3	2
Greece	1	2	1	4	4
Iceland	2	2	1	3	1
Ireland	1	3	1	4	3
Italy	1	3	2	4	3
Japan	2	4	2	3	3
Norway	2	2	2	1	1
Spain	1	4	3	4	2
<u>stage III: small agrarian sector on the basis of small property, declining but transition towards industry past</u>					
Belgium	4	4	4	1	3
Denmark	3	3	4	1	2
France	3	4	3	2	3
Germany	3	3	4	3	4
Luxembourg	3	3	3	2	1
Netherlands	4	2	4	1	4
Sweden	4	3	3	1	2
Switzerland	3	2	4	3	4
United Kingdom	4	2	4	2	4
<u>TYPE B</u>					
<u>small but stable agrarian sector on the basis of employed labor</u>					
Australia	3	1	3	1	2
Canada	4	1	1	1	1
New Zealand	3	1	2	2	2
United States	4	1	2	1	1
1) QUARTILES: 1 2 3 4					
agr. sector: size 14 - 60 % 9 - 13 % 6 - 9 % 3 - 6 %					
change - 6.2-- 3.7% -15.2--22.1% -22.3--32.9% -34.2--47.8%					
industry: change +19.2--32.4% + 1.8--12.2% - 7.8-- 1.3% -17.0--12.2%					
other act.: size 62 - 66 % 55 - 59 % 49 - 54 % 23 - 48 %					
change +36.1--62.0% +27.7--34.7% +22.1--27.4% +10.8--16.8%					

Source: Table 11

Table 11: Size and development of sectors of economic activity 1970 - 1980 (in terms of employment)

	agricultural sector % of labor force 1980	% change in employment 1980/1970	industrial sector % of labor force 1980	% change in employment 1980/1970	other activities % of labor force 1980	% change in employment 1980/1970
Australia	7	- 6.2	31	- 1.7	62	+30.4
Austria	11	-42.3	40	+ 3.2	49	+24.6
Belgium	3	-35.6	35	-17.7	62	+22.4
Canada	5	- 3.8	29	+24.1	66	+44.6
Denmark	8	-25.0	30	-13.0	62	+34.7
Finland	12	-47.8	34	+ 1.3	54	+31.8
France	9	-34.2	36	- 6.0	55	+23.8
Germany	6	-32.9	45	-12.2	49	+12.9
Greece	31	-19.8	30	+24.4	41	+22.1
Iceland	12	-17.6	38	+32.4	50	+45.4
Ireland	19	-22.3	32	+19.2	48	+23.6
Italy	14	-24.6	38	+ 2.4	48	+27.4
Japan	10	-34.9	35	+ 7.6	54	+25.8
Luxembourg	6	-30.0	38	- 0.8	56	+37.3
Netherlands	6	-15.2	32	-15.9	62	+16.8
New Zealand	11	+ 0.7	34	+ 3.6	55	+33.1
Norway	9	-22.1	30	+ 1.8	62	+62.0
Portugal	29	+ 1.4	36	+28.2	36	+10.8
Spain	19	-38.4	36	- 5.3	45	+30.2
Sweden	6	-24.5	32	- 7.8	62	+27.7
Switzerland	7	-19.0	40	-17.0	53	+12.7
Turkey	60	+ 3.7	16	+30.6	23	+42.6
U.K.	3	-16.0	38	-14.9	59	+13.7
U.S.	4	- 1.1	31	+12.2	66	+36.1
<u>Median</u>	12	-22.2	35	+ 1.5	55	+27.5

Source: Labour force Statistics

In some respects the conception of a "transition process" with certain, distinguishable stages conveys a reasonable picture of reality: distance from the "traditional" starting point of a large agrarian sector, organized on the basis of small property, can be distinguished in three "stages": stage I, where this traditional structure is still quite dominant, employment in agriculture does not shrink and remains organized in the small-property-ownership/family-cooperation manner such as in Turkey and Portugal (though Turkey is much more "traditional" than Portugal). For stages II and III the traditional organization of the agricultural sector by small property and family labor can still be found as quite dominant (in none of these countries the proportion of self employed plus family workers drops much below half of the labor force in this sector, and quite often it exceeds 80%, see table 11) ¹⁾.

The contraction of employment in the agricultural sector may take two forms: either a reduction of salaried employment in favor of mechanization on the basis of family labor, or a (partial) "industrialization" of agricultural labor itself on the basis of salaried work. This latter development seems to be rather typical of countries where long range consequences of feudal society have been eliminated early (such as the United Kingdom, Iceland or Sweden), or a feudal society never

1) Maybe this would be even more so if the statistical treatment of farmers' wives would be more comparable internationally: whereas e.g. in Austria all farmers' wives are considered "family workers" unless they give some other occupational activity, this is obviously not so e.g. for Sweden, Italy or Finland, although there is no good reason to believe that wives of small farmers in these countries contribute less than in the aforementioned. In other instances the difference may be due to a different composition of the "agricultural" sector, namely a dominance of fishing or forestry, where family labor in fact plays a smaller role.

existed, such as in the "Type B"-countries Australia, Canada and the United States. 1) And where this does not take place the organization of agricultural production does not permit stable employment or even growth.

Stage II and III-countries can be distinguished with respect to the relationship of contraction of agriculture to development of industry: whereas in stage III-countries this transition process has taken most of its course in the past already, it is still well under way in stage II-countries. As may be seen from table 10, in practically all stage II-countries (grouped together by a more than median-sized agricultural sector) industrial employment was still expanding during the decade 1970-1980, whereas in stage III-countries it declined, and not necessarily in favor of a growth in the tertiary sector. 2)

Type B-countries cannot be looked upon as a special "stage" in this very same process of transformation. Their small and industrialized agricultural sector is expanding, as well as their industry and the tertiary sector (and their population, see table 1). But one certainly cannot say that they constitute something like the "future" of stage III - countries - stage III does not seem to lead into any clearly discernible "stage IV". This is quite obvious when one looks at the growth rates of the tertiary sector: there exists practically no relationship

1) Why New Zealand as the only previously "colonial country" has organized its agricultural sector so largely on the basis of family labor must have particular historical reasons.

2) It is quite interesting to see that the distinction between stage II and stage III countries corresponds to the degree of development of capitalism in the 19th Century: stage II-countries did not have a rapid capitalist development before the last third of the past century.

Table 12: Salaried employees, self employed and family workers by sector of activity

	all activities % employees	agriculture		nonagricultural activities			
		% self- employed	% family workers	% self- employed	% family workers		
Australia	1979	83,8	62,1	3,5	12,7	12,5	0,2
Austria	1980	82,9	87,6		8,8		
Belgium	1980	83,4	72,3	17,9	14,3	11,2	3,1
Canada	1980	90,1	46,0	13,8	7,0	6,6	0,4
Denmark	1979	83,9	52,7	23,2	10,7	8,6	2,2
Finland	1980	86,3	61,7	15,8	5,4	4,1	1,3
France	1980	82,9	80,6		11,0		
Germany	1980	86,2	84	48,8	9,4	7,9	1,5
Greece	1979	48,6	95,2		31,9		
Iceland	1979	88,4	48,3		6,5		
Ireland	1980	74,3	88	15,5	11,0	10,3	0,6
Italy	1980	71,5	63	14,9	22,9	19,1	3,8
Japan	1980	71,7	92	45,2	20,6	13,7	6,9
Luxembourg	1980	85,9	91,2		9,4		
Netherlands	1980	86,5	74,6		9,3		
New Zealand	1980	81,3	94,2		9,4		
Norway	1980	86,4	77	27,2	7,7	6,6	1,1
Portugal	1980	66,7	79	44,5	14,9	11,6	3,4
Spain	1980	69,5	72	25,3	20,7	16,3	4,4
Sweden	1980	92,0	65	8,0	4,6	4,5	0,1
Switzerland							
Turkey	1979	34,2					
U.K.	1980	92,4	43,7		6,6		
U.S.	1980	90,6	56	8,4	7,7	7,2	0,4
Median		83,8	77,5		9,4		

Source: Labour force Statistics

Table 12a: The proportion of self-employed and its change in relation to stages in economic transition

	overall proportion of self-employed	proportion of self-employed outside the agricultural sector 1970 - 1980	
		decreasing	constant
Stage I	high ¹⁾	Turkey	Portugal
	low ¹⁾	-	-
Stage II	high	Austria Greece Italy Japan Spain	Ireland
	low	Finland Iceland Norway	
Stage III	high	Belgium France	
	low	Denmark Germany Luxembourg Netherlands Sweden U.K.	
type B	high		Australia
	low		Canada U.S.

1) above resp. below OECD-median

between its size and its growth rates in the decade 1970 - 1980. Even if one disregards Type B-countries that both have the largest tertiary sectors and the highest growth rates of this sector, one cannot discern any clear trend among the other countries. A very large tertiary sector does not seem something everyone is marching towards - the "tertiarization theory" somehow loses its grip on future.

II.3. The structure of the labor force in terms of property, qualification and sex

There are three major trends that ruled structural changes of the labor force in practically all OECD-Countries during the decade 1970-1980: one is the decrease of the proportion of self employed and unpaid family workers in favor of salaried employees; the second is the increase of white collar work; and the third is the increasing proportion of female employees.

As may be gathered from table 12, the economy in OECD-Countries is borne by salaried employees: they constitute 84% of the labor force (median). For non-agricultural activities this percentage is even higher (a little above 90%). The degree to which a labor force is dominated by employed labor clearly covaries with its capitalist industrial development: stage I and stage II-countries (see II.2) have a higher proportion of self employed and family labor also in the non-agricultural sectors. This proportion varies between 4,6% (Sweden) and 31,9% (Greece; in Turkey it may be even higher), and a secular process of decline is still ongoing, also in those countries where the proportion is already very low. With the exception of Australia the overall percentage of salaried employees has been rising everywhere from 1970-1980, thus making the experience of work as being subject to a formal hierarchy rather than to direct economic pressures an almost universal one.

Table 13: The structure of the labor force by property and hierarchy (both sexes)

	% self-employed and unpaid fam. workers		% non manual employees			% manual employees			% employees (manual & nonman. val.) total
	agr.	non-agr.	total	high & medium	low	total	skilled & semi-skilled	unskilled	
Austria ^{b)}	11	9	36			43	31	70	79
Canada ^{1)d)}	3	7							90
Denmark ^{a)}	8	11	36	48	52	45	31	69	81
Finland ^{a)}	17	5	32	21	79	47	78	22	79
Germany ^{d)}		12	46			42			88
Italy ^{d)}	9	19	26			47			73
Japan ^{2)d)}	10	18							72
Netherlands ^{d)}	4	8							88
Norway ^{a)}		17							83
Portugal ^{a)}	11	8	23			49			72
Sweden ^{c)}	3	7	41			49			90
U.K. ^{b)}	1	6							87
U.S. ^{a)}	2	6	58			34			92
median	10	8	36			46			83

Source: Reference Tables 2 & 10

(1) Source: Labour Force Statistics

(2) Data given on reference tables do not add up to the totals given (but to a lot more) and do not correspond at all to the informations in Labour Force Statistics. Numbers here from Labour Force Statistics.

(a) 1970

(b) 1971

(c) 1979

(d) 1980

But here again something like the beginning of the end of a secular process might be inferred from the fact that the trend of reduction of self employed work outside the agricultural sector seems to be slightly reversed in Type B-countries: in the United States and Canada no decrease took place anymore, and in Australia the proportion of self employed even started rising again. About New Zealand no information on changes is available.

Still: as long as there exists so little information on the composition of this most heterogenous part of the labor force (ranging from top entrepreneurs over professionals to small grocers or taxi drivers) it is hard to come to any serious conclusions; most probably indicator data will just reproduce this heterogeneity. But it would not be so unreasonable to suspect that economic stagnation and contracting labor markets create something like "compensatory" self employment lacking most of the advantages of salaried work and not sharing many of the advantages of traditional (e.g. professional) self employed work, but nevertheless provide with something to live on.

The second process of structural change that also has certain "secular" qualities and fostered a theory of "middle class society" as the common future of highly developed countries has been mentioned already: the increasing number of "white collar employees", of the "new middle class". Unfortunately the information provided by the countries on this structural characteristic is scarce. As can be seen from table 13, the proportion of blue collar workers in the labor force is quite similar internationally ; it lies between 40% - 50% with the exception of the United States, where it hardly exceeds one third of the labor force. For all countries where there is information available there existed a slight downward tendency of the proportion of manual workers in the years previous to the dates given in table 13.

Just the opposite holds true for non-manual salaried work: its proportion varies considerably internationally, and it reveals an upward tendency. It may be doubted though whether non-manual work is to be expected to outnumber manual work in the way this is the case already in the United States in the near future of the other OECD-Countries: Since the proportion of non-manual work is quite closely connected to the tertiary sector, a slowing down of growth rates of this sector as can be observed for the second half of the Seventies will be reflected by a slowdown of growth rates for non-manual work. This is very important for at least two reasons: one, because non-manual work in the past decades provided with the major channels of both intra- as inter-generational upward mobility and allowed this concept becoming as predominant in the self-image of Western societies as it did. Secondly, because it provided females with an "appropriate" position in the labor market, a position that often was not paid well but looked enough middle-class-like (as far as e.g. cleanliness, social contacts and formal education are concerned) to be attractive. Female participation in the labor force has been increasing in all OECD-Countries over the past decade, both in terms of participation rates and in terms of the female proportion in civilian employment.

At the same time male participation rates are slightly decreasing in many OECD-Countries - thus the gap between female and male participation is diminishing, in Sweden the female participation rate arrived at even 74%, the male does not exceed 87% (see table 14).

If we now look at the relation of what was called demographic transition and female participation in the labor force, we can see that there exists a correlation in the assumed direction, but it is a little more complex (see table 15). The countries in the transition stages I and II, i.e. with at least some characteristics of an "abundant" form of reproduction, do in fact reveal relatively low female participation rates, with two exceptions: Turkey and Japan.

Table 14: Participation of females in the Labour force

	% females in labor force		% of population aged 15 - 64 in labor force 1980		% of employed females in tertiary sector 1980
	1970	1980	females	males	
Canada	40	34	57	86	81
U.S.	42	38	60	85	80
Japan	39	39	55	89	58
Australia	36	32	53	88	80
New Zealand	34	29	46	86	n.a.
Austria	38	38	49	82	n.a.
Belgium	36	33	48	80	80
Denmark	44	40	71	90	n.a.
Finland	47	45	67	78	70
France	38	35	52	83	n.a.
Germany	38	37	49	82	62
Greece	30	28	33	80	38
Iceland	31a	31a	45a	93a	n.a.
Ireland	29	27	35	88	n.a.
Italy	32	28	40	83	56
Luxembourg	29	26a	32a	88a	n.a.
Netherlands	29a	26a	34a	80a	n.a.
Norway	41	31	63	88	80
Portugal	39	25a	56	93	n.a.
Spain	29	25	33	84	59
Sweden	45	39	74	87	81
Switzerland	35	34	50	94	69
Turkey	39a	38a	60a	91a	n.a.
U.K.	36	31	58	89	76
Yugoslavia	36a	36a	45a	83a	n.a.
median	36	33	50	86	73

Source: Labour force Statistics; a): Demographic Trends (projections)

Table 15: Female participation rates in the labor force in relation to stages of demographic transition

	quartiles of female participation rates ¹⁾		
	transition stage I ²⁾	transition stage II ²⁾	"thrifty" demographic reproduction ²⁾
A little influence of migration	Turkey: 1	Greece: 4	Austria: 3
	Spain: 4	Ireland: 4	Belgium: 3
	Yugoslavia: 3	Italy: 4	Denmark: 1
	New Zealand: 3	Japan: 2	Finland: 1
	Iceland: 3		Germany: 3
			Luxembourg: 4
			Sweden: 1
			Norway: 1
			U.K.: 2
B high influence of migration	Australia: 2	Portugal: 2	Netherlands: 4
	Canada: 2		France: 2
	U.S.: 1		Switzerland: 3

1) quartiles: percentage of females aged 15 - 64 participating in the labor force (see table 14)

1 = 60 - 74%

2 = 52 - 58%

3 = 45 - 50%

4 = 32 - 40%

2) For definitions see part I.1, table 1

Table 16: The structure of labor force by professional status - females only

		% self-employed and unpaid family workers		% salaried employees	
		in agricul- ture	outside of agriculture	non manual	manual
Austria	1961	26.5	9.8	27.0	36.8
	1971	14.9	9.8	38.8	36.6
	1980	12.3	7.0	51.7	29.0
Canada (a)	1970	2.8	6.1	91.1	
	1980	1.9	6.8	91.3	
Denmark	1960	5.2	11.1	45.2	38.6
	1970	6.0	9.7	50.5	33.8
Finland	1970	15.1 (b)	4.4 (b)	44.0	36.5
Germany	1961		29.5	34.3	36.2
	1970	9.2	10.6	44.4	35.8
	1980	6.2	6.5	55.9	31.4
Italy	1980	9.7	17.5	32.1	40.7
Japan	1970	21.5	23.5	55.0	
	1980	12.3	24.3	63.4	
Netherlands (c)	1960	3.9	11.7	45.3	39.0
	1970	2.8	14.8	53.3	29.1
	1980	2.3	8.2	89.5	
Norway	1970	6.9	5.0	88.1	
Portugal	1960	3.5	12.8	7.1	71.7
	1970	4.9	6.1	41.2 (c)	41.3
Sweden	1975	3.5	5.2	39.0	52.3
	1979	2.7	4.2	43.6	49.5
U.K.	1971	0.3	3.7	91.1	
U.S.	1960	1.2	6.0	74.9	17.9
	1970	0.4	4.1	78.6	16.8
<u>median</u> (d)	1970	6.4	10.2	39.0	36.6
	1980	4.5	6.9	51.7	31.4

Sources: Reference tables; (a) Labor force Statistics
 (b) without unpaid family workers
 (c) data irritating: correct?
 (d) only the countries that supplied data on both points in time

In both cases the high female participation rates are not due to high rates of salaried employment of women but to high rates of unpaid family labor (see tables 11 and 16), i.e. the traditional form of female labor that tends to encompass both production and reproduction functions.

Among the countries that are already characterized by a "thrifty" mode of reproduction female participation in the labor force is higher and typically exceeds 50% - with the two exceptions of the Netherlands and Luxembourg that seem to have their special tradition of low female employment. And then there exists a systematic difference between the Scandinavian high levels and the rest.

Those countries that owe a high proportion of children and population growth (typical for stage I-countries) to migration processes rather than to high fertility (Australia, Canada and the US) are also characterized by a high level of female employment.

The general increase of female labor force participation happens in connection to a rapid structural change in female employment: away from the traditional activities in the agricultural sector and lately also away from industrial work in favor of non-manual work in the tertiary sector. According to table 14 an average of three quarters of the employed females are occupied in the tertiary sector, and this percentage is now much higher than it ever was (median percentage 1970: 65%).

As is documented in table 16 the female labor force reveals the same changes that seem to happen in the total labor force, only to an even higher extent. Females leave the agriculture much more quickly and they enter non manual work much more quickly than men. In all OECD-Countries that supplied data on this point the proportion of females in white collar jobs is higher than among males (see table 16 compared with table 13). And although they may not be expected to populate the top levels of the hierarchies, these structural changes without doubt internationally improved the occupational chances of women.

III. DIFFERENCES OF WELLBEING BETWEEN FEMALES AND MALES

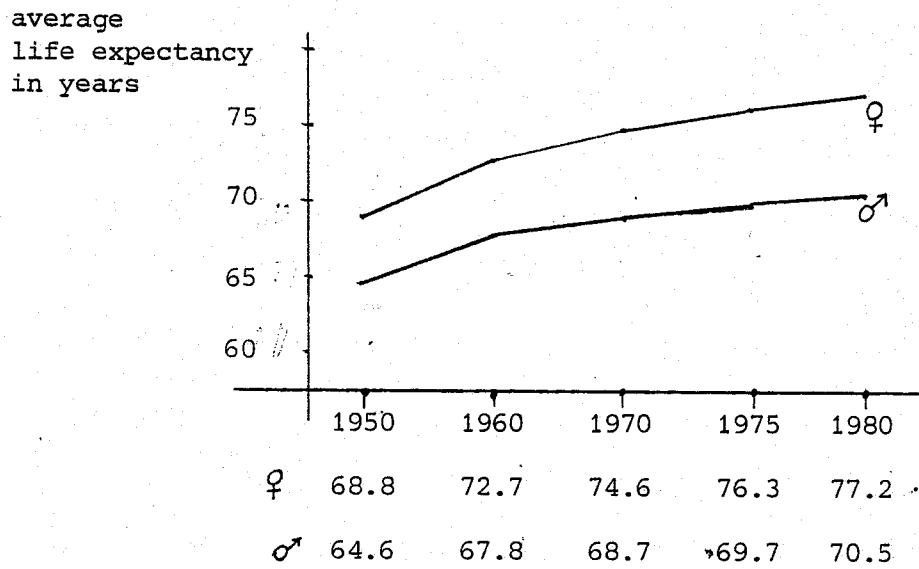
III.1. Life expectancy

The length of life one may expect to be quite a basic prerequisite of wellbeing, and it is well known that there exists a secular process of prolongation of lives in all OECD-Countries. It is also well known that this is one of the dimensions where females are better off than males; not so well known may be the fact displayed in table 17 that the length of female life has increased more than that of males; the difference of life expectancy at birth between the sexes has thereby increased from an average of 4.2. years in 1950 over 5.9 years in 1970 to 6.7 years in 1980. This development can be seen in all OECD-Countries: there does not exist one single country where females have not gained more than males in the period 1960-1980.

Whereas the relative position of OECD-countries with regard to male or female life expectancy has changed (with some countries, such as Japan, showing a very rapid increase, others, such as the U.K., a rather small increase in life expectancy at birth 1960-1980), the relative position with regard to sex differences has remained fairly stable, as can be seen from table 18. Obviously there exists a set of factors (biological, economic and cultural) that determines this relation between the sexes, some of which we will analyze further down.

Clearly the difference in life expectancy between the sexes is not simply a function of something like the stage of economic development (which does regulate the overall life expectancy to a certain extent at least); what is even more amazing is that it does not even relate to the length of male lives: countries with a small and a large sex difference in life expectancy distribute evenly over the whole range of life expectancies of males (see table 19).

Table 17: Life expectancy at birth for females and males 1950 - 1980
(Unweighted averages over all OECD-Countries)



Source: Social Indicator - reference tables

Table 18: Differences of life expectancy at birth between sexes for 1960 - 1980 ranking OECD countries by size of sex differences

	1960	1980
↑ high sex difference	Austria, Finland	Finland
	U.S., France	France
	Australia	United States
	Belgium	Canada
	Great Britain	Portugal
	Luxembourg	Australia, Austria, Luxembourg
	Canada	Iceland
	Scotland	Norway, Germany
	Portugal	
	Switzerland	
	Germany	
		Italy, Netherlands
	5.35	6.70
 OECD average difference	
↓ low sex difference	New Zealand	New Zealand, Switzerland
	Italy	Belgium
	Japan	Sweden
	Spain	Scotland
	Norway	Denmark
	Netherlands	Great Britain
	Sweden	Spain
	Ireland	Yugoslavia, Japan
	Greece	
	Yugoslavia	Ireland
	Iceland	Greece
	Denmark	

Source: Social Indicator reference tables

Table 19: OECD-Countries 1980 by male life expectancy and size of the difference between female and male life expectancy (at birth)

difference in life expectancy between females and males in years		
male life expectancy	<u>high</u> (above OECD-median)	<u>low</u> (below median)
<u>very high</u> (1st quartile)	Iceland Netherlands	Greece Japan Sweden Switzerland
<u>high</u> (2nd quartile)	Australia Canada Italy Norway	Denmark Spain
<u>low</u> (3rd quartile)	Austria France Germany U.S.	Ireland New Zealand U.K.
<u>very low</u> (4th quartile)	Finland Luxembourg Portugal	Belgium Yugoslavia

Source: Social Indicator - reference tables

In general we may assume that in each country females share most of the characteristics of life with males: they live under the same ecological and economic conditions, they have the same genetic composition and are part of the same class structure. Certainly some relevant aspects of daily life may differ between the sexes, such as nutrition, and thereby influence life expectancy. The most important aspect though seems to be the division of labor between the sexes, and the structure of this labor. As can be seen from table 21, the preoccupation of females with child bearing and rearing seems to keep the difference between female and male life expectancy lower: if we group OECD-countries by stage of demographic transition we can see that a large difference in life expectancy between the sexes is characteristic of countries with a "thrifty" form of reproduction, whereas those countries that still have relatively high birth rates reveal less of a sex difference. The relationship is not very strong though: countries like Portugal or Iceland (belonging to stage 1 resp. 2) show higher sex differences than countries like Denmark, Sweden or the United Kingdom that are obviously characterized by a "thrifty" mode of reproduction.

But that a connection of this kind exists may be judged more clearly from table 22 and 23. What enters these tables is not life expectancies but mortality rates for certain age spans, i.e. the probability to die e.g. after having reached the age of 1 but before reaching the age of 20. The process of demographic transition should very specifically improve the survival chances of females (but not of males) in the age spans of child bearing, that is between 20 - 40 and also before 20. Exactly this is what happened in the period 1960-1980: mortality rates for babies 0-1 show the strongest reduction, but equally for both sexes. Next comes the reduction for the age span 1-20 for both sexes, but more strongly for females; and for the main child bearing age 20-40 only female mortality was reduced substantively; the relative improvements of mortality for the age span 40-60 are much smaller for both sexes but also a little stronger for

Table 20 :Average Life-Expectancies by age 1960 - 1980
(unweighted averages over all OECD-Countries)

at the age of ...	1 9 6 0			1 9 8 0 ¹⁾		
	females	males	diff.	females	males	diff.
0	72.7	67.8	4.9	77.0	70.3	6.7
1	73.8	69.1	4.7	77.0	70.5	6.5
20	55.7	51.3	4.4	58.4	52.2	6.2
40	36.6	32.7	3.9	39.1	33.6	5.5
60	19.1	16.3	2.8	21.2	17.0	4.2

Source: Social Indicator - reference tables

1) For countries that did not supply precise data for 1980,
1975-values were used (see SI-tables)

Table 21: Differences between female and male life expectancy at birth 1980 grouped by stage of demographic transition

		female - male life exp. (in years)	
<u>Stage I</u>			<u>averages</u>
Spain	5.8		
Yugoslavia	5.5		
New Zealand	6.7	6.2	} 6.0
Iceland	6.9		
<u>Stage II</u>			
Greece	4.6		} 5.9
Ireland	5.3		
Italy	6.7	5.9	
Japan	5.5		
Portugal (B)	7.5		
<u>"thrifty"</u>			
Austria	7.1		} 7.1
Belgium	6.5		
Denmark	6.2		
Finland	9.1		
Germany	6.8	6.9	
Norway	6.8		
Luxembourg	7.1		
Sweden	6.3		
U.K.	6.2		
Netherlands (B)	6.7		
France (B)	8.2	7.2	
Switzerland (B)	6.7		
<u>Type I (B)</u>			
Australia	7.1		} 7.5
Canada	7.7	7.5	
U.S.	7.8		

Source: Social Indicator - reference tables

Table 22: Decrease of Mortality Rates in the Period 1960 - 1980 for selected age spans by sex and stage of demographic transition.

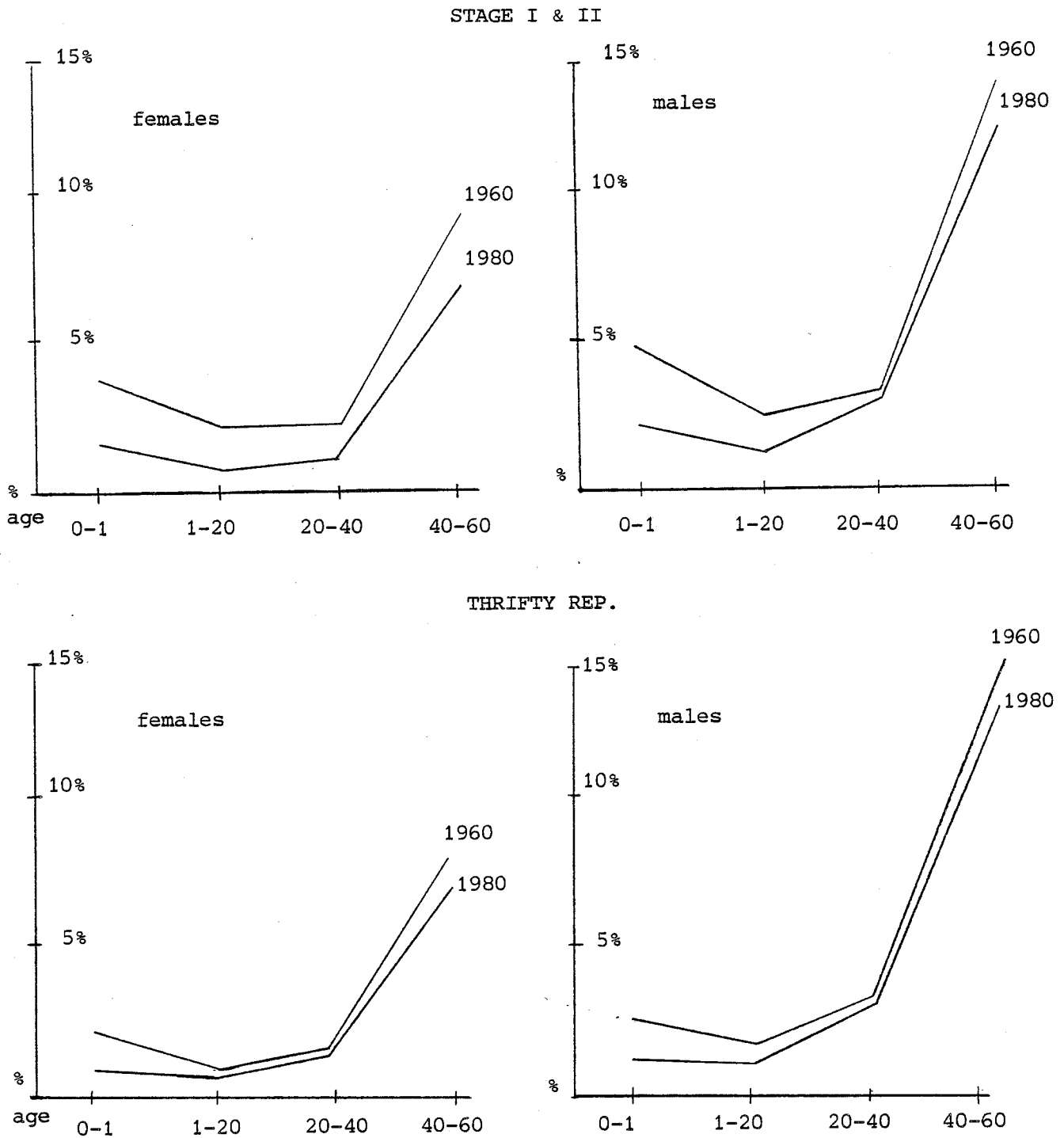
Indexes:
$$\frac{\text{(age specific mortality rates in 1980)} \cdot 100}{\text{age specific mortality rates in 1960}}$$

age span:	f e m a l e s				m a l e s			
	0-1	1-20	20-40	40-60	0-1	1-20	20-40	40-60
<u>Stage I</u>								
Iceland	56	13	59	72	69	88	93	86
New Zealand	50	82	74	102	62	100	107	96
Spain	55	41	67	75	50	65	77	95
Yugoslavia	38	27	45	76	39	33	92	104
<u>Stage II</u>								
Greece	67	32	71	82	66	55	100	93
Ireland	58	55	68	84	61	80	108	99
Italy	36	35	63	73	37	55	70	92
Japan	23	29	36	50	24	41	43	64
Portugal (B)	56	23	61	89	52	53	107	104
<u>I & II Averages</u>	48.8	37.4	56.0	78.1	51.1	63.3	88.6	92.6
<u>"thrifty"</u>								
Austria	41	58	64	79	41	65	80	95
Belgium	52	67	88	92	54	87	85	87
Denmark	42	88	80	98	+	85	100	106
Finland	32	67	60	67	38	59	80	90
Germany	40	55	73	83	42	61	87	96
Norway	50	44	83	88	52	63	93	104
Luxembourg	33	180	55	103	33	56	116	93
Sweden	46	67	80	83	44	62	100	109
U.K.	50	75	80	91	58	77	81	93
Netherlands (B)	57	67	77	87	56	79	82	94
France (B)	45	55	84	77	42	87	97	94
Switzerland (B)	35	64	80	76	42	69	83	83
<u>B I</u>								
Australia	59	58	71	75	57	65	97	83
Canada	50	82	94	89	53	89	106	96
United States	57	64	86	82	55	76	108	80
<u>Thrifty & B I Averages</u>	45.9	72.2	77.0	84.7	47.6	72.0	99.7	93.5
<u>Overall Averages</u>	47.0	59.5	69.1	82.2	49.0	68.8	91.3	93.2

+ obviously wrong data

Source: SI-reference tables

Table 23: Mortality Rates by Age 1960 - 1980 by stage of demographic transition¹⁾

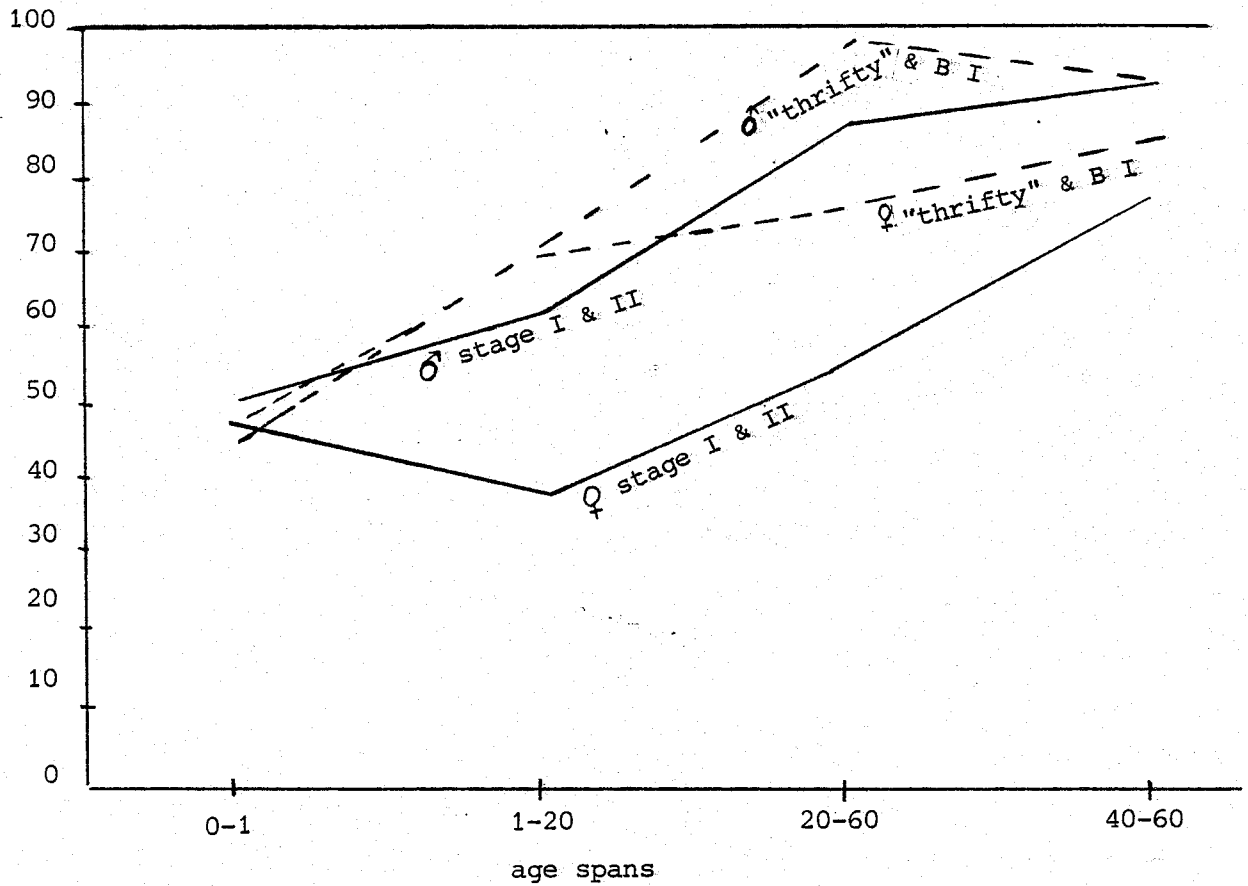


1) unweighted averages over countries; for grouping of countries see table 1 ("thrifty" reproduction including stage IB). For the computation of mortality rates see appendix.

Source: SI-reference tables, see table 22

Table 24: The decrease of mortality rates in the period 1960 - 1980 by age spans, sex and stage of demographic transition (unweighted averages for OECD-countries grouped by stage of demographic transition)

index: $\frac{\text{age specific mortality rate 1980} \cdot 100}{\text{age specific rate 1960}}$



Source: tables 22

females. Out of the 24 countries that enter the table 15 reveal the highest sex difference in reduction of mortality in the age span 20-40, 8 in the age span 1-20. The latter may still have a lot to do with childbearing: young girls (in contrast to their brothers) typically share a lot of the load of babies even before they have their own.

But what makes the argument even more convincing is the systematic difference between those countries that still are in the stage of demographic transition and those with a "thrifty" reproduction as exposed in table 24: Here one can see that the reduction of agespecific mortality in the time span 1960-1980 follows a relatively similar pattern for males irrespective of stage of demographic transition, a pattern that is also followed by the females from the "thrifty" group of countries. Females from countries in stage I of II of demographic transition demonstrate quite a different pattern, though: their mortality was substantively reduced in the child bearing age; in 1980 it was only a little more than a third of what it used to be 1960 for the age span 1-20, and only half of what it used to be for the age span 20-40.

Thus one may say that the reduction of multiple child bearing/rearing (under the typical conditions of transition from an agrarian to an industrial economy) has improved the survival chances of women clearly more than the integration into employed work and the usually resulting "double load" of production/reproduction could detriment them.

III.2. Health

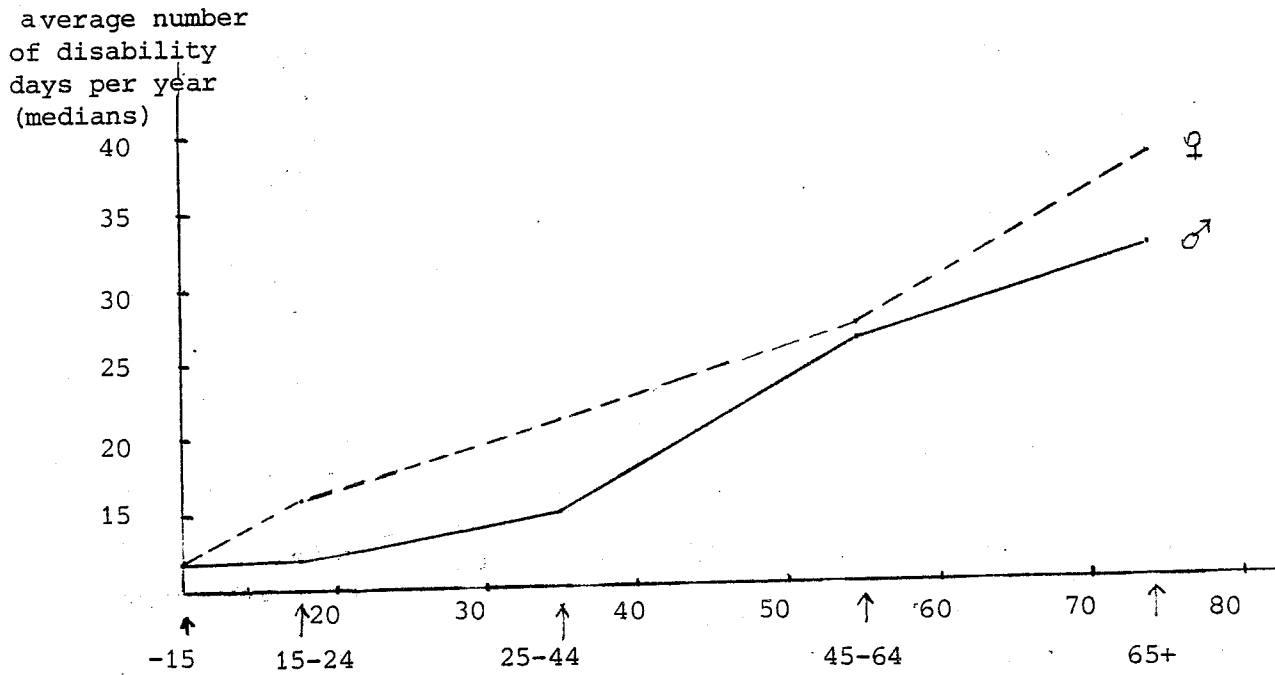
If females do lead a longer life than males, it is not necessarily a healthier one. As far as short term disability is concerned, females report more disability days per year than males. This holds true for the medians over the countries reporting, and it holds true for almost every single country

supplying data, with the only exception of Ireland. Sex differences are very small though. Nevertheless - and despite the fact that the absolute number of disability days varies considerably from country to country - they seem to follow quite a distinct pattern: as can be gathered from table 25, the number of disability days increases with age, and for females this function is almost linear, with a small deviation upwards for the age groups 15-24 and 25-44 (those age groups that carry the double load of work and children) and a small deviation downwards for the age group 45-64. With males this function looks quite different: it deviates strongly downwards from linearity for the two younger age groups, may this mean less strain or a role-specific tendency to understatement of health impairments, or may it be for biological reasons or a mixture of all this, and then they show a sudden increase for the age group 45-64. That "machismo" plays a substantive role in explaining sex differences in disability days is not too likely: as can be judged from table 26, the number of days spent in bed for reasons of illness (which may be an indicator that specifies health impairments more restrictively than disability days) reveals about the same pattern: for both sexes there relate about three disability days per bed day per year.

Another factor that might be responsible for female disability days exceeding those of males in one country more than in another is female labor force participation: but according to table 28, if there exists any relation at all it is a negative one, particularly for the age group 25-44 (that should be most sensitive). Certainly from the data available it cannot be argued that the higher labor force participation of women the higher their level of short term health impairments.

As far as long term disability is concerned, sex differences are quite negligible. Of course the proportion of persons disabled is strongly related to age: as can be seen from table 29, it rises exponentially, but equally for females and males.

Table 25: Average number of disability days per person per year for females and males by age groups (medians¹)



Source: SI-tables

1) Country data from: Australia, Canada, Finland, Ireland, Norway, Sweden, U.K., U.S.

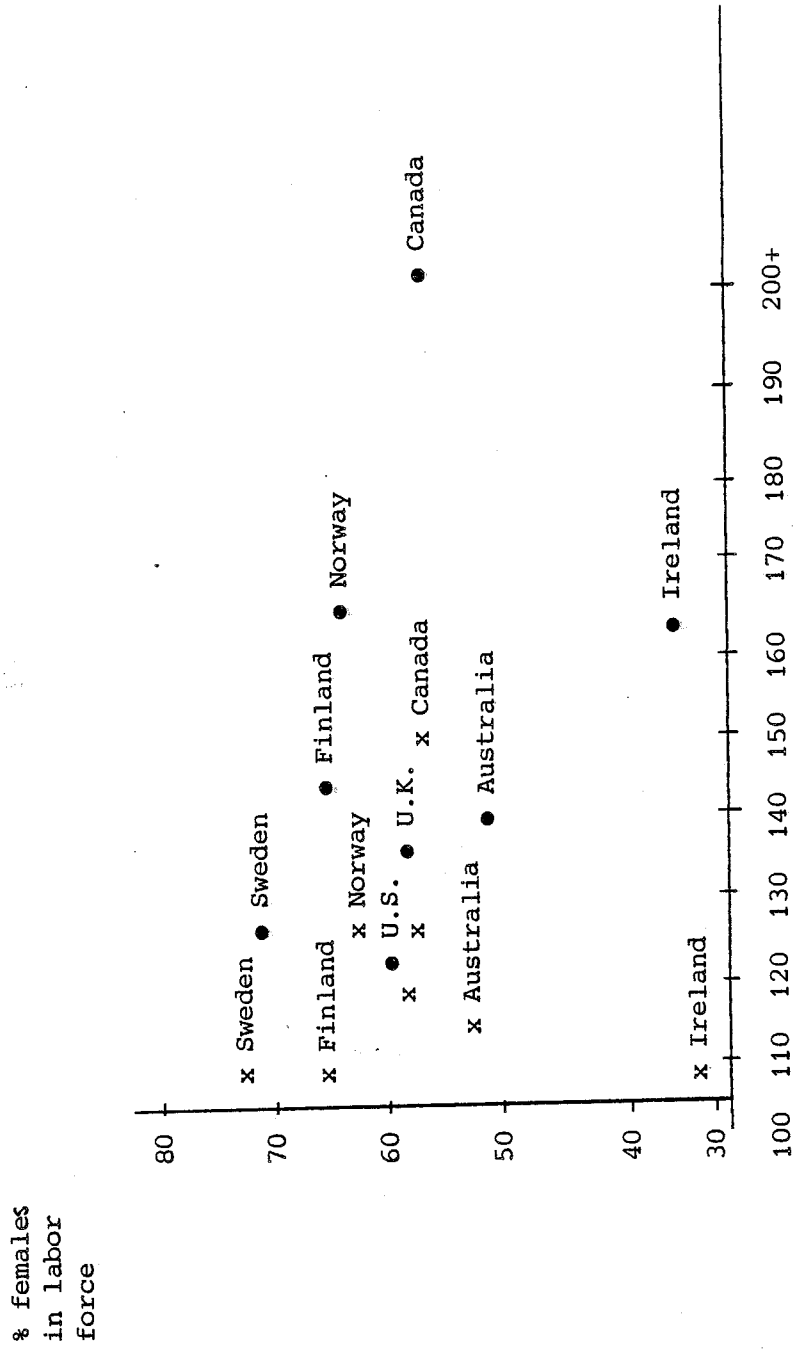
Table 26: Number of disability days per bed day by sex and age

	All ages			Both sexes			
	Females	Males	Total	15-24	25-44	45-64	65 +
Australia	3.5	4.5	4.0	3.8	4.8	3.6	3.5
Canada	3.2	3.3	3.2	2.8	3.5	3.0	2.7
Finland	1.9	1.9	1.9	1.6	2.4	2.9	1.3
Ireland	2.2	4.0	2.8	1.4	2.0	3.5	2.3
Norway	3.2	2.9	3.2	2.3	3.3	3.2	3.4
United States	2.6	2.8	2.7	2.4	2.8	3.4	2.8
Median	2.9	3.1	3.0	2.4	3.1	3.1	2.7

Table 27: Sex differences in disability days by age groups in relation to female participation in the labor force
(average number of disability days of females x 100 divided by average number of d.d. of males)

	All ages	15-24	25-44	45-64	65 +	% of 15-64 old females in labor force
Australia	117	138	138	89	109	53
Canada	146	133	238	129	146	57
Finland	100	129	130	73	100	67
Ireland	92	150	160	40	92	35
Norway	121	130	150	95	121	63
Sweden	100	100	128	76	141	74
United Kingdom	129	131	131	119	129	58
United States	124	140	120	112	124	60
Medians (unweighted)	<u>119</u>	<u>132</u>	<u>135</u>	<u>92</u>	<u>125</u>	

Table 28: The relationship of the number of disability days of females to those of males by female labor force participation ● age group 25 - 44
X all ages

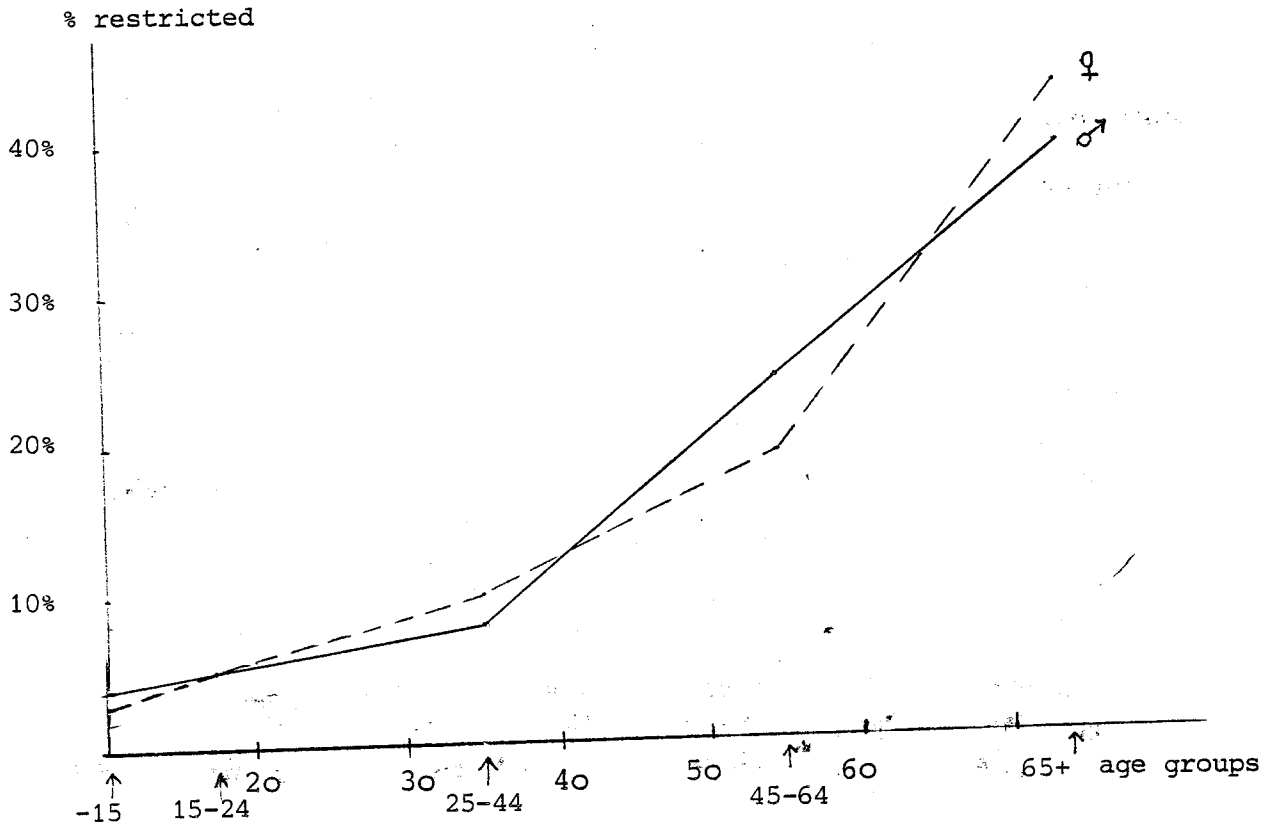


Index: f/m disability days (see table 9)

It is an interesting question whether there does exist a correlation between various aspects of physical wellbeing on an international level. On a micro-level this probably will be the case, but not even this is so obvious: do disabled persons tend to lead a shorter life, do they tend to suffer from short term health impairments more frequently than others? Can one expect at all people who often suffer from short term disability to live less long than others? It could even be the other way round: that a higher degree of sensitivity and care for short term health impairments helps prolonging lives because it prevents the emergence of more severe and long term defects. The relationship could also be mediated by cultural characteristics: if health is considered very precious this may foster both a higher sensitivity to short term impairments and invite early medical intervention that supports the prolongation of lives. Probably even on a micro-level there will exist a whole bundle of causal relationships that do not all work into the same direction - on a level of international comparisons still even more factors will intervene. It is therefore not necessarily a sign of lack of data reliability if these aspects of physical wellbeing vary quite independently.

If such considerations are valid for the indicators generally, what about sex differences? As far as long-term and short-term disability are concerned, sensitivity to either one should be part of sex role definitions - this alone might account for a certain degree of covariance. From table 30 one really can gain this impression: with the exception of Ireland the other countries fit into a slightly positive correlation: the higher the sex difference in short term disability, the higher also the sex difference in long term disability (upon closer scrutiny this does not appear an artefact just generated by different age structures).

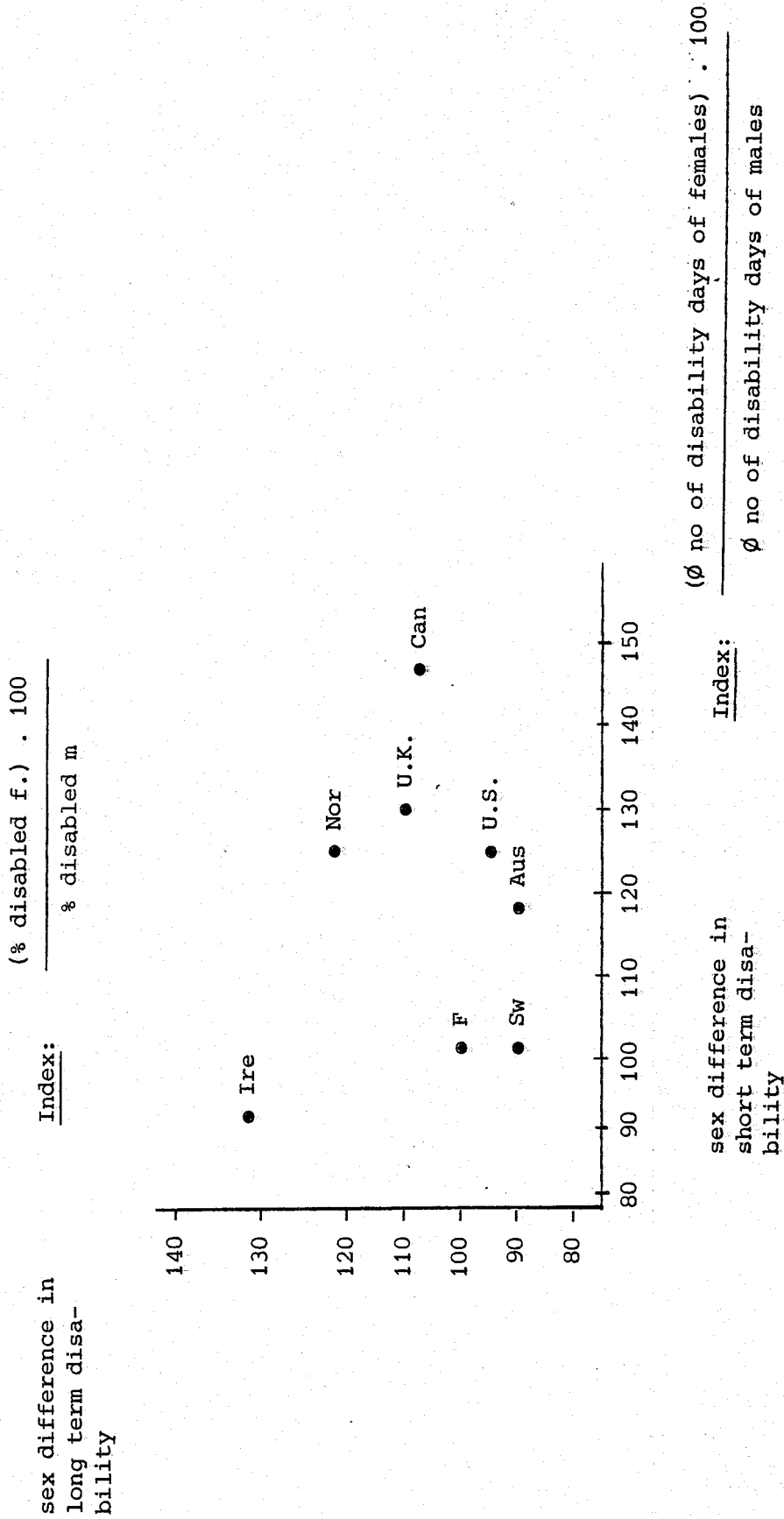
Table 29: Long-term disability by sex and age (medians¹⁾)



Source: SI-tables

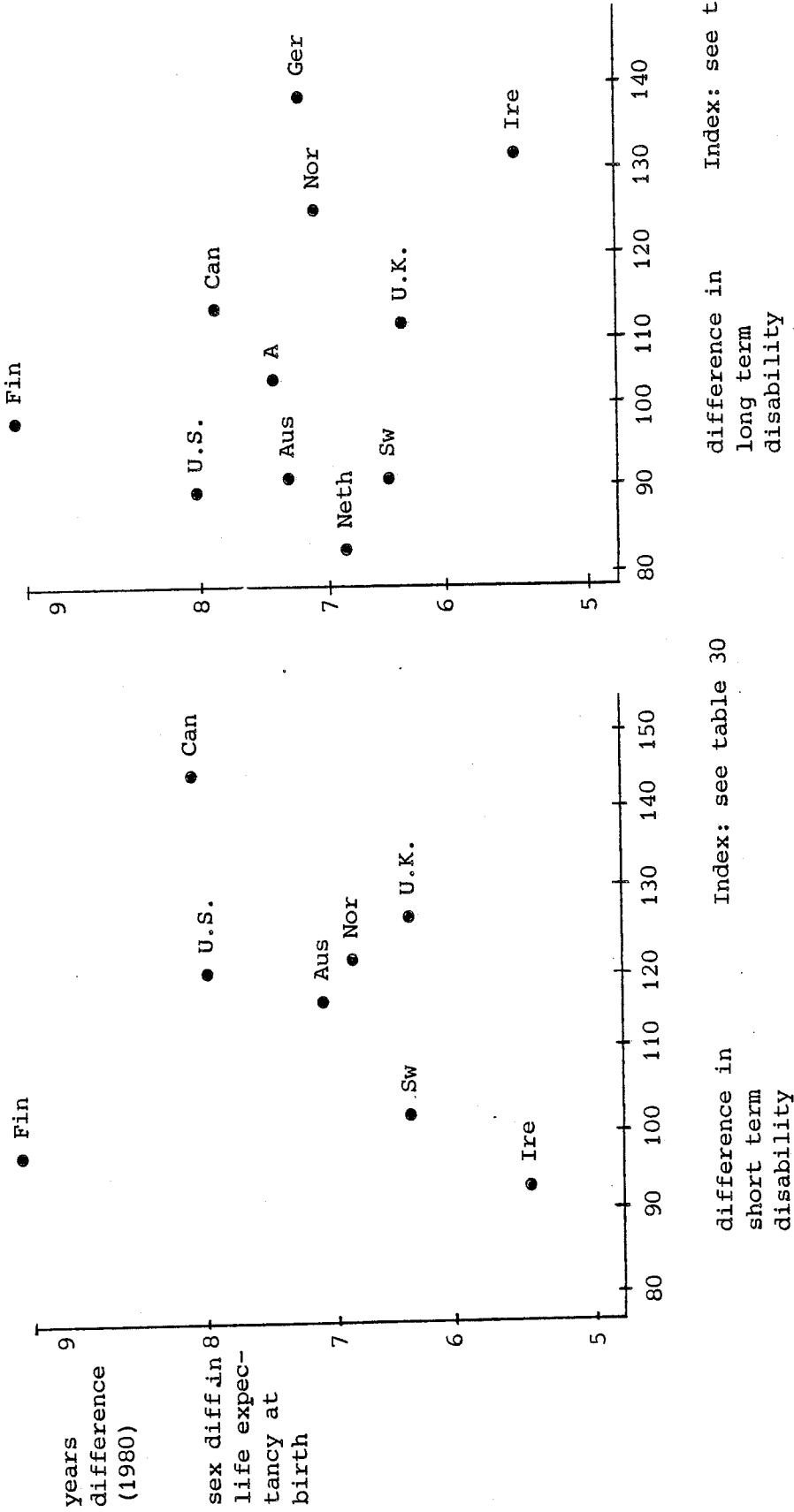
1) From the countries: Australia, Austria, Canada, Finland, Germany, Holland, Netherlands, Norway, Sweden, U.K., U.S.

Table 30: Sex differences in long term and short term disability (all ages)



Source: Social Indicator - reference tables

Table 31: Sex differences in life expectancy at birth (1980) and short term resp. long term disability



Source: SI-tables

The relationship between sex differences in both health indicators and life expectancy is quite another matter: life expectancy should not be expected to be connected to sex role definitions. If we look at table 31 there appears no relationship whatsoever between sex differences in life expectancy and sex differences in long term disability - may it just be for the fact that the longer female life, the higher the incidence of age-induced disablements. Short term disability, on the other hand, optically appears positively related to sex difference in life expectancy: the more female disability exceeds that of the males, the more their length of life does. This seeming paradox must not be all that paradoxical in the end, given the considerations above.

Taking into account the narrowness of the empirical basis and its lack of standardization, all these results are of little more than descriptive value - but they should stimulate future analysis.

III.3 Education

The level of formal education acquired by females in OECD-Countries is still below that of males. There does not exist one country where females exceed or equal males on all or even on several indicators of educational attainment. This is not only due to the traditional educational disadvantages of elder women, but also true for the younger age groups. As can be seen from table 32, females tend to stay in the educational system practically as long as males, on average; but they have a 10% higher chance not to receive any further schooling or vocational training after compulsory schooling (i.e. not to reach the ISCED level 2, as is characteristic of about half of the population in OECD-countries) and they have only 83% of the male chance to finish ISCED-level 3 (as about one third of the population does). The strongest degree of discrimination exists in the attainment of

Table 32: Sex differentials in educational experience
(year closest to 1980, all ages)

	average number of years in the educational system	% less than ISCED-Level 2 completed	% at least ISCED-Level 3 completed	% ISCED-Level 6x7 (university) completed
Canada	100	98	98	55
Denmark	90	n.a.	n.a.	n.a.
Finland	n.a.	n.a.	87	n.a.
France	95	121	71	33
Germany	n.a.	n.a.	62	38
Italy	n.a.	119	72	n.a.
Japan	94	109	110	59
Netherlands	n.a.	132	79	45
Norway	n.a.	n.a.	77	40
Sweden	96	109	91	71
United Kingdom	98	n.a.	n.a.	43
United States	98	94	99	76
<u>median</u>	96	109	83	45

Indexes: $\frac{\text{(indicator values of females)}}{\text{indicator values of males}} \cdot 100$

Table 33: Sex differentials in educational experience by age groups
(year closest to 1980)

	average number of years in the educational system	% less than ISCED-Level 2 completed	% at least ISCED-Level 3 completed	% ISCED-Level 6x7 (university) completed
age group 15 - 24	100	99	100	x
age group 25 - 44	96	105	89	62
age group 45 - 64	95	110	77	40
age group 65+	96	107	80	38
median age gradients	fem. 146	42	303	450
	male 141	42	257	250

(indicator value of age group 24-44 . 100)

Indexes:

indicator value of age group 65+

university degrees: here the chances of women are less than half of that of the males (See table 32).

On the other hand one can see by comparing males and females according to age groups (see table 33) that in the younger age groups sex differences on all indicators tend to be smaller. Another way to put this is to check how much additional education the younger age groups have gained compared to the elder people (table 33). Here one can see that in terms of years 25-44 year-old-males received 41% more schooling than their 65+year-old-elders; this is about the same for females (+ 46%); the proportion of persons receiving no education beyond compulsory schooling decreased by 42% for both sexes within this age span. For an education of ISCED level 3 or beyond, and particularly for university education, the gains of females between these two age cohorts were higher than those of males, but still could not, as we have seen above, compensate for the lower "starting level". But these trends imply a levelling out of sex differences in the middle and top floors of the educational hierarchy (where discrimination had in fact been worst but applied to a relatively small proportion of the population), but little change in the bottom floors,

What has been described so far on the basis of the medians of the countries supplying informations can be said to represent not only average, but quite universal trends. The only country that does not quite follow all the tendencies described is the U.S.: here it seems that the levelling out of sex differences has not advanced through the younger age groups.

This may be interpreted as a hint in the direction that the improvement of the educational chances of females will at best equal (as is almost the case in the US), but never exceed that of the males substantively.

III.4. The disposition over time

The amount of control over one's own time and the amount of control one may exert over other people's time for one's own purposes have always been focal concerns of distributional conflicts, and with a lot of reason: there exists hardly anything as equally distributed over humans by nature, and most attempts to lead a more pleasant, richer and freer life than others imply that one finds means and ways to make use of other peoples time, to exert control over their time directly or indirectly. Time may be looked upon as one of the most basic resources, and its control lies at the core of all sex and class structures. There are basically two modes of having one's time controlled: either by having a fixed amount of time at somebody else's disposition, or by having to fulfil certain tasks. These modes can be combined (such as: having to do at least a certain amount of tasks within a certain amount of time, e.g. piecework), and there exist mixed types (e.g. schoolwork of students). The first type corresponds to what was termed "contracted-time" and its most typical case is salaried work, the second type corresponds to "committed time", and its most typical case is housekeeping and childcare. The pleasant aspect of contracted time is that it normally has a definite beginning and a definite end of control, the unpleasant aspect is the narrow range of own disposition over the time in between; in the case of "committed time" the risk of extention, of beginning and end, has to be borne by oneself, whereas the range of disposition for the time in between is typically higher. Thus these two modes of external control over time are qualitatively different, but it still makes sense to group them under a common notion of "working time" in the sense of time used for managing daily life, production and reproduction, in a manner accessible to division of labor (as contrasted to "necessary time" that can only be used by oneself for ones own purposes).

Table 34: The distribution of total time of one week by categories of time use and sex

<u>total</u>	in % of time of one week			
<u>females</u>	necessary time	contracted time	committed time	free time
Finland	44	18	15	23
Japan	45	18	16	22
Norway	45	8	26	21
Netherlands	45	7	19	28
<u>average</u> ¹⁾	44.8	12.8	19.0	23.5
<u>males</u>				
Finland	44	23	8	25
Japan	45	31	1	24
Norway	44	22	10	22
Netherlands	46	18	6	31
<u>average</u>	44.8	23.5	6.2	25.5
Sex differences in "working-time" (f - m)				
	contracted	committed	both	
Finland	- 5	+ 7	+ 2	
Japan	- 13	+ 15	+ 2	
Norway	- 14	+ 16	+ 2	
Netherlands	- 11	+ 13	+ 2	
<u>average</u>	- 10.7	+ 12.8	+ 2.1	

1) The computation of medians is not reasonable in this case - they would not add up to 100%. Here: unweighted averages.

Continuation of Table 34:

in % of time of one week				
<u>ALL ACTIVE*</u>	necessary time	contracted time	committed time	free time
<u>females</u>				
Finland	43	22	16	19
France**	46	23	18	13
Japan	44	26	13	17
Norway	43	19	19	19
Netherlands	45	7	19	28
<u>average</u> ¹⁾	44.2	19.4	17.0	19.2
<u>males</u>				
Finland	43	27	8	22
France**	47	28	7	18
Japan	44	33	1	22
Norway	43	27	9	21
Netherlands	46	18	6	31
<u>average</u>	44.6	26.6	6.2	22.8

Sex differences in "working-time" (f - m)

	contracted	committed	both
Finland	- 5	+ 8	+ 3
France	- 5	+ 11	+ 6
Japan	- 7	+ 12	+ 7
Norway	- 8	+ 10	+ 2
Netherlands	- 11	+ 13	+ 2
<u>averages</u>	- 7.2	+ 10.8	+ 3.6

* in Finland & Norway: only employed active

** estimate; selfemployed & family workers in agriculture not included

1) The computation of medians is not reasonable in this case - they would not add up to 100%. What is presented here are unweighted averages

Table 34 reveals that something like 18% of the total is spent on "contracted", 13% on "committed" time. There is a sharp sex distinction in all countries: males have a much higher proportion of contracted, females of committed time. But the exchange is not symmetrical: if both forms of working time are put together, the female sum exceeds the male in all countries supplying data, by a margin of 2%. This sounds very little; but if you put it in terms of ordinary labor bargains it means a surplus of 3.5 hours of working time per week or 183 hours per year, which corresponds to a nice 3,7-week extra holiday (since male weekly working hours average 49.0 according to table 34).

The other asymmetry arises from the fact that the female load of committed time is hardly reduced when their contracted time goes up - as can be seen from the second part of table 34, active participation in the labor force for females mainly means reduction of free time. If we therefore calculate differences in working time for employed males and females in the above manner, we come up with a female surplus of 6 hours per week or 3.5 hours per year, which corresponds to 5.1 working weeks of an employed male.

Appendix

Table 1a: Demographic characteristics - Stages of Transition

	Number of births per 100 pop. (1975) ¹⁾		Percentage of the population				population growth 1960 - 1975 ³⁾	
	number	quartile	%	quartile	%	quartile ⁴⁾	%	quartile
Australia	1.69	2	27.1	2	8.9	1	34.0	1
Austria	1.25	4	24.4	2	12.9	3	6.7	4
Belgium	1.21	4	23.6	3	13.4	4	7.1	4
Canada	1.57	2	25.6	2	8.7	1	27.5	1
Denmark	1.42	3	21.5	4	14.1	4	10.5	3
Finland	1.42	3	21.3	4	11.2	3	6.3	4
France	1.41	3	23.9	3	13.5	4	15.4	2
Germany	0.97	4	20.3	4	15.0	4	11.2	3
Greece	1.57	2	24.9	2	11.2	2	8.6	3
Iceland	2.02	1	32.6	1	8.9	1	23.9	1
Ireland	2.14	1	31.3	1	11.1	2	10.3	3
Italy	1.51	2	23.2	3	10.7	2	11.2	3
Japan	1.72	2	24.3	3	7.9	1	18.5	1
Luxenburg	1.11	4	22.0	4	12.6	3	14.0	2
Netherlands	1.30	3	21.9	4	11.5	3	19.0	1
New Zealand	1.85	1	29.5	1	9.0	1	29.9	1
Norway	1.40	3	24.5	2	12.9	3	11.8	2
Portugal	1.91	1	28.8	1	9.3	2	3.8	4
Spain	1.87	1	28.0	1	9.5	2	17.6	2
Sweden	1.27	3	20.7	4	15.1	4	9.5	3
Switzerland	1.23	4	23.4	3	11.4	3	17.0	2
Turkey	3.47	1	41.8	1	4.4	1	45.1	1
United Kingdom	1.25	4	24.1	3	13.2	4	6.6	4
United States	1.47	2	28.3	1	9.8	2	18.2	1
Yugoslavia	1.83	1	26.9	2	7.9	1	15.5	2
<u>median</u>	1.47		24.4		11.2		11.8	

1) Source: Demographic Trends 1950 - 1990, p. 87

2) Source: Urban Statistics in OECD-Countries, Final Report UP(81)5, p. 20

3) Source: Demographic Trends 1950 - 1990, p. 16

4) quartiles from lowest to highest values

Appendix Table 2a
Mortality rates ¹⁾ computed from life expectancies 1960 and 1980 ²⁾

	age span	females		males		relative mortality rates females/males	
		1960	1980	1960	1980	1960	1980
AUSTRALIA	0-1	1.7	1.0	2.3	1.3	75	81
	1-20	1.2	0.7	1.7	1.1	73	64
	20-40	1.7	1.2	3.3	3.2	51	38
	40-60	8.8	6.6	14.5	12.1	61	54
AUSTRIA	0-1	3.2	1.3	4.1	1.7	79	76
	1-20	1.2	0.7	2.0	1.3	61	56
	20-40	2.2	1.4	4.4	3.5	50	41
	40-60	8.7	6.9	15.5	14.8	56	47
BELGIUM	0-1	2.7	1.4	3.5	1.9	77	78
	1-20	0.9	0.6	1.5	1.3	61	46
	20-40	1.7	1.5	3.4	2.9	51	52
	40-60	8.4	7.7	15.7	13.7	53	56
CANADA	0-1	2.4	1.2	3.0	1.6	80	76
	1-20	1.1	0.9	1.8	1.6	59	54
	20-40	1.7	1.6	3.3	3.5	52	46
	40-60	8.4	7.5	14.3	13.7	59	55
DENMARK	0-1	1.9	0.8	3)	1.0	3)	80
	1-20	0.8	0.7	1.3	1.1	60	66
	20-40	1.5	1.2	2.5	2.5	60	49
	40-60	8.2	8.0	11.0	11.7	75	68
FINLAND	0-1	1.9	0.6	2.4	0.9	79	74
	1-20	0.9	0.6	1.7	1.0	54	58
	20-40	2.0	1.2	4.5	3.6	44	34
	40-60	8.7	5.8	19.2	17.2	45	34
FRANCE	0-1	2.0	0.9	2.6	1.1	76	78
	1-20	1.1	0.6	1.5	1.3	71	44
	20-40	1.9	1.6	3.6	3.5	53	46
	40-60	8.4	6.5	15.6	14.7	54	44
GERMANY	0-1	3.0	1.2	3.8	1.6	79	75
	1-20	1.1	0.6	1.8	1.1	53	52
	20-40	2.2	1.6	3.8	3.3	57	50
	40-60	8.2	6.8	13.8	13.3	59	52
GREECE	0-1	3.3	2.2	4.1	2.7	80	80
	1-20	2.2	0.7	2.0	1.1	110	67
	20-40	1.7	1.2	2.4	2.4	69	51
	40-60	6.6	5.4	10.1	9.4	65	58
ICELAND	0-1	0.9	0.5	1.6	1.1	57	46
	1-20	2.3	0.3	1.6	1.4	145	20
	20-40	1.7	1.0	2.8	2.6	59	38
	40-60	7.9	5.7	11.9	10.2	67	56
IRELAND	0-1	2.6	1.5	3.3	2.0	79	73
	1-20	1.1	0.6	1.5	1.2	74	53
	20-40	2.2	1.5	2.6	2.8	86	53
	40-60	10.2	8.6	13.3	13.2	77	65
ITALY	0-1	3.9	1.4	4.9	1.8	80	78
	1-20	1.7	0.6	2.0	1.1	85	52
	20-40	1.9	1.2	3.3	2.3	59	53
	40-60	7.9	5.8	13.6	12.5	58	46
JAPAN	0-1	2.6	0.6	3.3	0.8	81	78
	1-20	2.1	0.6	2.7	1.1	76	53
	20-40	3.3	1.2	4.6	2.0	72	60
	40-60	10.4	5.2	15.2	9.8	68	54
LUXEMBOURG	0-1	3.6	1.2	4.0	1.3	92	91
	1-20	0.5	0.9	2.7	1.5	17	60
	20-40	2.0	2.0	3.1	3.6	63	29
	40-60	8.8	1.1	16.2	15.1	54	60
NETHERLANDS	0-1	1.4	0.8	1.8	1.0	81	79
	1-20	0.9	0.6	1.4	1.1	63	52
	20-40	1.3	1.0	2.2	1.8	56	55
	40-60	7.0	6.1	10.8	10.2	65	60
NEW ZEALAND	0-1	2.0	1.0	2.6	1.6	78	67
	1-20	1.1	0.9	1.5	1.5	72	61
	20-40	1.9	1.4	3.0	3.2	63	44
	40-60	8.5	8.7	13.7	13.2	62	66
NORWAY	0-1	1.6	0.8	2.1	1.1	76	69
	1-20	0.9	0.4	1.6	1.0	57	45
	20-40	1.2	1.0	2.7	2.5	47	40
	40-60	6.0	5.3	10.4	10.8	58	49
PORTUGAL	0-1	7.2	4.0	8.4	4.4	86	90
	1-20	3.9	0.9	4.5	2.4	86	38
	20-40	2.8	1.7	4.5	4.3	62	35
	40-60	8.4	7.5	15.4	16.0	54	47
SPAIN	0-1	3.1	1.7	4.0	2.0	78	86
	1-20	1.7	0.7	2.0	1.3	86	57
	20-40	2.1	1.4	3.5	2.7	62	52
	40-60	8.3	6.2	12.8	12.2	65	51
SWEDEN	0-1	1.3	0.6	1.8	0.8	73	77
	1-20	0.9	0.6	1.3	0.8	71	73
	20-40	1.5	1.2	2.7	2.7	35	45
	40-60	7.1	5.9	9.9	10.8	72	55
SWITZERLAND	0-1	1.7	0.6	2.4	1.0	71	66
	1-20	1.1	0.7	1.6	1.1	65	65
	20-40	1.5	1.2	3.5	2.9	43	41
	40-60	7.6	5.8	12.6	10.4	60	56
UNITED KINGDOM	0-1	2.0	1.0	2.4	1.4	82	74
	1-20	0.8	0.6	1.3	1.0	57	61
	20-40	1.5	1.2	2.6	2.1	57	59
	40-60	8.2	7.5	13.4	12.4	61	61
UNITED STATES	0-1	2.3	1.3	2.9	1.6	78	81
	1-20	1.1	0.7	1.7	1.3	64	56
	20-40	2.1	1.8	3.9	4.2	55	43
	40-60	9.8	8.0	17.3	14.3	55	56
YUGOSLAVIA	0-1	8.4	3.2	9.2	3.6	91	89
	1-20	4.1	1.1	4.0	1.3	103	80
	20-40	3.3	1.5	3.8	3.5	88	42
	40-60	10.4	7.9	14.1	14.6	74	54

2a continued

Unweighted averages by stage of demographic transition 4)

STAGE I & II	0-1	3.8	1.6	4.6	2.2	83	69
	1-20	2.2	0.7	2.5	1.3	88	57
	20-40	2.2	1.2	3.2	3.0	66	42
	40-60	9.0	6.8	13.5	12.1	66	56
"THRIFTY"	0-1	2.1	1.0	2.6	1.3	83	81
	1-20	0.9	0.6	1.7	1.1	56	52
	20-40	1.7	1.4	3.3	3.0	52	47
	40-60	8.2	7.0	13.8	13.1	60	53
all countries	0-1	2.8	1.3	3.3	1.7	86	76
	1-20	1.4	0.6	2.0	1.1	70	52
	20-40	1.9	1.4	3.3	3.2	59	44
	40-60	8.6	6.7	13.7	12.6	63	53

Footnotes to Appendix table 2a

- 1) Given an interval a ... b having the length $d = b - a$ and life expectancy at point b is L_b , life expectancy at point a can be estimated by

$$(1) L_a = d/2 \text{ if the person is dying within the interval}$$

and by (2) $L_a = d + L_b$ if the person is surviving the interval

Combining (1) and (2) life expectancy at point a is estimated by

$$(3) L_a = d/2 + (d/2 + L_b) \cdot p$$

where p is the probability of survival.

Solving this equation (3) for p we get an estimate for survival probability, given L_a , L_b and d are known:

$$(4) p = \frac{(L_a - d/2)}{(L_b + d/2)}$$

Mortality within the interval then is $q = 1 - p$

$$(5) q = 1 - \frac{(L_a - d/2)}{(L_b + d/2)}$$

Remark: Admitting that estimate (1) might be incorrect and all deaths within the interval might occur at the very beginning a or at the very end b, limits for p can be given by $p_a = L_a / (L_b + d)$

$$\text{and } p_b = (L_a - d) / L_b$$

For the intervals estimated here this consideration is partially irrelevant - the range of variation would be very small and the possible skew the same for most of the countries.

- 2) For countries not supplying precise data for 1980, 1975-values were utilized.
- 3) Mistake in primary data for life expectancy at birth 1960 prohibits computation
- 4) For grouping of countries see table 1

Appendix

Mortality of females in main reproduction period (life span 20-30 years) by stage of demographic transition

	mortality rates of females age 20 - 40		
	<u>1960</u>	<u>1980</u>	<u>diff.</u>
<u>stage I</u>			
Iceland ¹⁾	1.7	1.0	-0.7
New Zealand	1.9	1.4	-0.5
Spain	2.1	1.4	-0.7
Yugoslavia	3.3	1.5	-1.8
<u>stage II</u>			
Greece ¹⁾	1.7	1.2	-0.5
Ireland	2.2	1.5	-0.7
Italy	1.9	1.2	-0.5
Japan	3.3	1.2	-2.1
Portugal	2.8	1.7	-1.1
<u>thrifty</u>			
Austria	2.2	1.4	-0.8
Belgium	1.7	1.5	-0.2
Denmark	1.5	1.2	-0.3
Finland	2.0	1.2	-0.8
Germany	2.2	1.6	-0.6
Norway	1.2	1.0	-0.2
Luxembourg	2.0	1.1	-0.9
Sweden	1.5	1.2	-0.3
United Kingdom	1.5	1.2	-0.3
<u>B I</u>			
Australia	1.7	1.2	-0.5
Canada	1.7	1.6	-0.1
U.S.	2.1	1.8	-0.3
<u>B II</u>			
Netherlands	1.3	1.0	-0.3
France	1.9	1.6	-0.3
Switzerland	1.5	1.2	-0.3

1) extremely high mortality of girls 1-20 (1960)

Summary

This report is based upon international data collected over several years by OECD within the framework of its pretentious "Social Indicator Programme". In her function as consultant to OECD the author aims at two objectives: to demonstrate methodologically, how international data on social structures and selected social indicators can be presented on a disaggregated level, thus transcending the all too common countrywise succession of global statistics. The danger of getting drowned in multivariate tables of an almost infinite number of cells was an alternative to be avoided.

The other objective was to identify central structures and historical processes on an international level. The findings are quite meaningful: Whereas during the decade 1960-1970 all or most OECD-countries show common developmental patterns well described in theories of modernization (such as: transition towards a "thrifty" mode of demografic reproduction, extension of nuclear family living, urbanization, reduction of self-employment, family labor and housewives in favor of employed labor, "tertiarization" of economy and increase of white collar work...), much of this homogeneity in the direction of social change is lost during the decade 1970-1980: various new patterns emerge.

In some countries nuclear family living is partly substituted by single living or new forms of multiperson-households; urbanization is accompanied by some signs of re-ruralization; self-employment and family labor do not decrease any more or not at the previous rates, the processes of "tertiarization" and white-collar-labor have much slowed down their pace. These changes occur in several OECD-countries and are not clearly related to the respective starting-levels - thus it may be claimed that common developmental patterns have lost some of their grip over international social reality.

At the same time basic changes in the division of labor between the sexes continue to take place resp. bear their structural consequences: female life expectancy increasingly exceeds that

of males in those countries where child bearing has been reduced in number, housewives continue to enter employment on the basis of a seemingly improved education - despite the fact that the overall work load of females exceeds that of males substantively, as is demonstrated by international time-budget data.