



Comparative Research on Household Panel Studies

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Pattern of Retirement and Exiting Out of Work

Some very first empirical results from a cross-national comparison which in its first stage integrates data from Germany (SOEP), Luxembourg (PSELL) and USA (PSID).

by

**Günther Schmaus
Gaston Schaber**

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Comparative Research on Household Panel Studies

This series presents the results of research projects based on the analysis of one or more household panel studies. Papers will cover the wide range of substantive topics and investigations of the particular problems of comparative research.

The series will contain, among other papers, the results of all of the work being carried out as part of the Panel Comparability (PACO) project, which was funded by the European Commission under the Human Capital and Mobility Programme (1993-1996). PACO aims to develop instruments for analyzing, programming and stimulating socio-economic policies, and for comparative research on policy issues such as labour force participation, income distribution, unpaid work, poverty, household composition change, and problems of the elderly.

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For more information about this series, or to submit papers for inclusion, contact:

CEPS/INSTEAD
Anc. Bât. administratif ARBED
Rue E. Mark, Boîte postale 48
L- 4501 Differdange
Tel: +352 58 58 55-555
Fax: +352 58 55 88

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The empirical analysis explores early retirement as a particularly important event in the life-course, with potential effects not only on the aging individual but also on his/her immediate and extended family.

The first part describes the 'Early Retirement Plans' existing in Germany, USA and Luxembourg.

The empirical analysis will be based on the PACO database. We will use integrated panel data for households and individuals from Germany, Luxembourg and USA for analysing the exit from labour market and the entry into old age pension.

1. Introduction

Over the last years increasing attention is given to the elderly and the elderly workers from policy makers and researchers. One reason for this higher attention is the permanent existence of high unemployment in many countries. Early retirement schemes have been used (a) to encourage employed workers to retire early in favor of young employees (b) to guarantee unemployed individuals permanent and higher benefits while being pre-retired instead of being unemployed. Disability pensions were not explicitly designed to induce early retirement but has been increasingly used to encourage early retirement by broadening the definition of disability (c).

Initially early retirement programs were formulated to achieve social goals. But in former years early retirement was also supported by state programs in order to avoid too much unemployment. Experience with early retirement in the last few years showed that early retirement is an expensive program for any old age pension system. Nowadays, the policy has changed (e.g. in Germany) and we find a tendency to force the people not to retire early because of financial problems of social security insurance, which are the consequence of a growing number of pensioners. In the US there are plans to raise the official retirement age to age 66 by year 2009 and to 67 by 2027 (Barbara Hanrieder p 237). This is opposite to the current reactions of private enterprises. Many countries in Europe are affected by structural changes and experience a severe recession. As a consequence private enterprises offer pre-retirement plans for their elderly workers and/or abandon preferably elderly workers in favor of young workers.

2. Definitions and Plan of the Analysis

In our analysis, we explore the retirement process for elderly workers. Retirement has two dimensions: a) Exit from labour market and/or b) Receipt of first social security.

a) Exit from labour market

We define retirement (exit from labour market) as all cases in which a formerly active switch his labour force status 'employed' into the status 'non active' and remain non active in the following years. This definition captures most of retirement cases. Excluded are only cases where people receive pre-retirement pensions, while still working (on a reduced basis) and declare themselves not as retired but as working.

In order to get empirical results out of panel data we define a cohort of active individuals in the age group 50+ years. We follow the cohort for 4 years (5 years of panel data) and can identify the individuals which retire in that period. For these individuals we know when they have exited from labour market and their characteristics (individual and household variables).

b) Receipt of first social security

Social Security payments are (narrowly) defined as pensions from the state pension system. Social security payments include only Old Age Pensions and Widows Pensions and excludes occupational pensions or other social transfers such as social assistance and unemployment incomes.

As above we define a cohort of active and non active individuals in the age group 50 to 66 years, who are not receiving social security payments. We follow the cohort for four years and can so distinguish between individuals receiving social security for the first time and those without.

c) Retirement types

Very Early Retirement: Exit from labour market within age 51 to 59.

Early Retirement: Exit from labour market within age 51 to 64.

Normal Retirement: Exit from labour market with age 65 or 66

Deferred Retirement: Exit from Labour market with 67+

Similar types are used for the first receipt of social security payments. Deferred payments are defined as those social security benefits which are paid within age 66 to 70.

d) Reference period

Germany and Luxembourg: 1985-1989

USA: 1983-1987

e) Sample sizes of the cohorts used

The sample sizes of both cohorts are relatively small. There are several reasons for it:

(a) The underlying Household panel studies are relatively small (5000-6000 households in Germany and the US, 2000 households for Luxembourg).

(b) The cohorts are very narrowly defined (by age and by labour force status and/or by social security status).

- (c) We analyze only individuals who have valid information for five years and ignore other individuals.

In near future more waves of panel data will be integrated into the database and can be used for the analysis. Each additional wave will allow us to analyze more cases of transitions into retirement.

Table 1: Sample size of age cohort of active individuals in start period (t1)

| Age cohort 50+ of active individuals in start period t1 | No. of cases in start period t1 | No. of cases with exit from work in t2-t5 |
|---|---------------------------------|---|
| Germany | 949 | 280 |
| Luxembourg | 272 | 128 |
| USA | 1165 | 316 |

Table 2: Sample size of age cohort of individuals without social security payments in start period (t1)

| Age cohort 50-66 of individuals without social security payments in period t1 | No. of cases in start period t1 | No. of cases with first payment of social security in t2-t5 |
|---|---------------------------------|---|
| Germany | 1169 | 366 |
| Luxembourg | 566 | 175 |
| USA | 1224 | 347 |

3. PACO Database

This study about retirement is a very first attempt to simultaneously use three longitudinal studies in an integrated database for comparative analysis. Use is made of data from the Panel Comparability Project (PACO); more specifically, integrated data on households and individuals from the German (SOEP), Luxembourg (PSELL) and US (PSID) panel studies are used.

The first version of PACO Database was created in 1991-1993 by CEPS/INSTEAD in partnership with DIW Berlin. To enlarge the database and to enable European researchers to do truly comparable cross-national comparisons the PACO network was created. The network comprises six partner institutes from

France, Germany, Ireland, Luxembourg, Spain and UK. The network is currently partly supported by the EC Human Capital and Mobility Programme and has associate partners in Belgium and the United States. As an extension to this network it is planned to harmonize socio-economic data from Central and Eastern countries and to integrate them also into the PACO Database (East/West Network).

The database is under continuous development. In addition to existing datasets from Germany, Luxembourg and the US currently harmonized panel data from Britain and France (Lorraine) are created and loaded into PACO. In further steps it is planned to integrate panel data from Belgium, Czech Republic, Hungary, Poland, Sweden and other new created panel studies.

This integrated database allows the analyst not only to look at national characteristics of retirement behavior but also to perform truly cross-national research on other topics as labour force participation, income distribution, household formation and dissolution, poverty among others.

The wealth of information of these panels, both on households and on persons, gives the analyst the possibility of taking into consideration not only variables relating to the individuals but also those relating to his/her partner and to household background - and to do this in a cross-sectional as well in a longitudinal manner.

The most important advantage of longitudinal surveys as compared to a time series of cross-sections, is the fact that they supply a better tool for the analysis of economic or social changes whenever the focus is on the duration of certain states or spells, such as periods of unemployment or poverty, for example.

4. Description of Early Retirement Plans

The regulations of the public old age systems concerning early retirement and deferred retirement differ in Germany, Luxembourg and in the US. It is plausible to assume that some of the elderly workers retire early when they reach the age at which they become eligible for state pension. For a correct understanding of the empirical results we are using for our analysis of retirement patterns, we have to study the rules for retirement in the old age pension systems under scrutiny. We will concentrate here mostly on public retirement plans.

4.1 Public Pension Systems

Information is given about the following items:

- Legal retirement age
- Minimum period of membership for normal pension
- Earnings rules for normal pensions
- Early Pension Regulations
- Reduction of pensions for early retirement
- Earnings rules for early retirement

- Maximum age for deferment of pensions
- Supplement for deferred pensions

4.1.1 Normal Retirement Pensions

The legal retirement age of 65 years is the same for all three countries. But the minimum period of membership requested for normal pension is different. The german system requires 5 years of insurance, the american and the luxembourgish system ask for 10 years. Recipients of normal pensions in Germany and Luxembourg may have additional incomes (from employment) without any restrictions. In the american system the normal pension is reduced if the pensioner receives income above a certain level.

| Table 3: Legal Retirement Age | |
|-------------------------------|----------|
| Germany | 65 years |
| Luxembourg | 65 years |
| USA | 65 years |

| Table 4: Minimum Period of membership for Normal Pension | |
|--|-----------------------|
| Germany | 5 years of insurance |
| Luxembourg | 10 years of insurance |
| USA | 10 years of insurance |

| Table 5: Earnings rules for normal pensions | |
|---|--|
| Germany | no restrictions related to other income |
| Luxembourg | no restrictions related to other income |
| USA | age 65-70: earnings must be lower than 7800 \$ per year, otherwise the pension is reduced (1981) |

4.1.2 Early Retirement Pensions

The regulations for early retirement are quite different in the three old age systems. Differences we find in the number of years of insurance and the minimum ages and in the reduction of pensions.

In Germany male and female elderly are eligible for early pension at the age of 63, normally. Only women and special groups (e.g. unemployed) may retire earlier, i.e. at 60 years. In Luxembourg the ordinary pre-retirement age is 60 years. Under certain conditions elderly are entitled to retire at the age of 57. In the US the age for pre-retirement is uniformly 62 years.

The number of years of insurance which are necessary to be entitled for early retirement differs widely between the national systems. In the american system only 10 years of insurance are requested for pre-retirement; in the luxembourgish system 40 years of insurance; and in the german system typically 35 years.

The most generous regulation corresponding the amount of the early pension are found in Luxembourg, where the pension is not reduced. The highest reduction is found in the US (age 62: -20 %) and a much lower one in Germany (age 63: - 4.4 %).

In all three systems early retirees are allowed to receive only small amounts of income from employment. The income ceilings defined indicate that only marginal employment (less than half-time jobs) are compatible with early pensions. This means that elderly worker must quit their normal jobs in order to be eligible for early retirement pensions.

Table 6: Early Pension Regulations

| | |
|------------|---|
| Germany | age 63: men and women with 35 years of insurance age 60: unemployed with 15 years of insurance age 60: women with 15 years of insurance and compulsory insured for at least ten years after the age of 40 |
| Luxembourg | age 60: men and women with 40 years of insurance (effective or assimilated) age 57: men and women with 40 years of insurance (effective) |
| USA | age 62: men and women with 10 years of insurance |

Table 7: Reduction of pensions for early retirement

| | |
|------------|--|
| Germany | age 63: - 4.4 % age 60: - 11,0 % |
| Luxembourg | age 60: no reduction age 57: no reduction |
| USA | age 62: - 20,0 % |

Table 8: Earnings rules for early retirement

| | |
|------------|--|
| Germany | earnings must be lower than 500 DM by month otherwise the pension is canceled (1991) |
| Luxembourg | earnings must be lower than 11000 Flux by month, otherwise the pension is reduced (1991) |
| USA | earnings must be lower than 5760 \$ per year, otherwise the pension is reduced (1981) |

4.1.2 Deferment of Pensions

All three systems allow to defer the payment of the normal pensions. In Luxembourg and Germany the deferment is possible until the maximum age of 68, in the US the maximum age is 70 years. In the case of deferment, a supplement is paid. The regulation in the US (until 1986) is not so advantageous as the rules for Germany and Luxembourg; in Luxembourg the largest supplement is paid.

Table 9: Maximum age for deferment of pensions

| | |
|------------|----------|
| Germany | 68 years |
| Luxembourg | 68 years |
| USA | 70 years |

Table 10: Supplement for deferred pensions

| | |
|------------|--|
| Germany | 6 % by year |
| Luxembourg | 9,3 % by year (1993) |
| USA | till 1986: 3 % by year from 1986: 8 % by year |

4.1.3 Preliminary Conclusion

The legislation of all three countries allows for early retirement before the legal pension age. In the US individuals may get early retirement at the age of 62; in Germany with 60 years and in Luxembourg with 57. Early retiring individuals in the US experience a more severe reduction of their pensions than in Germany, whereas early retirees in Luxembourg will receive their full old age pensions. One could expect from the analysis of these regulations that early retirement is more supported in Luxembourg than in Germany and in the US. The following part of this paper explores - by analyzing panel data - if this conclusion is correct.

4.2 Private Early Retirements Plans

Germany: Some large private companies (Automobile industry, Steel industry, Chemical industry) have their own programs which allow for early retirement at the age of 58. The resulting pensions are more generous than in the state system; participants in these programs receive, according to the varying plans, between 65 and 95 % of their former salary.

Luxembourg: There is a special program called 'La pré-retraite' for employees who have lost their jobs and who are not entitled to benefit from the normal retirement program because of insufficient number of years of insurance. Such employees receive at the age of 57 a special pre-retirement pension which varies from 75 % to 85 % of the last salary.

USA: There are some sectors (e.g. Steel industry), and some big companies with pre-retirement plans which allow to retire at a minimum age of 55 years. In addition to this, other private pension plans and Public employee plans enable another part of the employees to cease their activity also at 55 years.

Summarizing we can say that apart from early retirement plans within the official old age pension system there are some additional (private) pre-retirement plans which allow to retire earlier than within the state system and with better conditions in relation to former salary.

5. Development of labour force participation in history

Table 11 indicates the orders of magnitude of changes in the labour force participation rates for older workers between 1970 and 1984. From this table we can see that the male labour participation has dropped in all countries. In the age bracket 55-59 years the male rate declined in Germany and in the US from 89 % to 80 %, in Luxembourg from 79 % to 55 %; in the age bracket 60-64 years, the rate declined in Germany from 75 % to 35 %, from 45 % to 19 % in Luxembourg and in the US from 75 % to 56 %. This development is opposite to that for females with age 55-59. In Germany the employment rate for females with age (55-

59) increases from 37 % to 40 %, in the US from 49 % to 50 %, the rate stays constant with 19 % in Luxembourg. For females in the age bracket 60-64 years, we find a decrease from 22 % to 12 % for Germany, a decrease from 12 % to 9 % in Luxembourg and a decrease from 36 % to 33 % for the US.

This development of labour force rates can be (partly) explained by the increasing importance of pre-retirement. In a later table, where the percentage of beneficiaries of early retirement plans is given (Table 21), we will see that this explanation is correct.

Table 11: Labour Force Participation by age and sex for Germany, Luxembourg and the US, 1970-1984

| Country | Sex | Age group | 1970 | 1975 | 1980 | 1984 |
|------------------|--------|-------------|------|------|------|------|
| Germany | male | 55-59 years | 89.2 | 85.7 | 82.3 | 80.1 |
| | male | 60-64 years | 74.7 | 58.3 | 44.2 | 35.2 |
| | female | 55-59 years | 37.2 | 38.4 | 38.7 | 40.2 |
| | female | 60-64 years | 22.5 | 16.4 | 13.0 | 11.8 |
| Lux ³ | male | 55-59 years | 79.3 | - | 53.2 | 55.1 |
| | male | 60-64 years | 45.5 | - | 26.5 | 18.9 |
| | female | 55-59 years | 18.6 | - | 18.0 | 19.7 |
| | female | 60-64 years | 12.0 | - | 10.5 | 9.3 |
| USA | male | 55-59 years | 89.5 | 84.4 | 81.9 | 80.2 |
| | male | 60-64 years | 75.0 | 65.7 | 61.0 | 56.1 |
| | female | 55-59 years | 49.0 | 47.9 | 48.6 | 49.8 |
| | female | 60-64 years | 36.1 | 33.3 | 33.3 | 33.4 |

Source:

a) Germany and USA: The secretariat of the Economic Commission for Europe

b) Luxembourg: STATEC, Census 1970, 1981, 1990

6. Exit from labour market

6.1 Description of exits from labour market

Table 12 shows the percentages of exits by country. We differentiate here three classes. Exit from labour within the age bracket '51-64' is called early retirement; within age bracket '65-66' normal retirement, and with ages '67+' deferred retirement. We learn from this table that early retirement is more frequent in Germany (85 %) and Luxembourg (89 %) than in the USA (54 %). Even this lower percentage for USA is

³ Figures for Luxembourg are given for 1981 (1980) and for 1990 (1984).

astonishing: more than half of all elderly economically active in the US retire before the official retirement age. The table also indicates that deferment of retirement in the US (26 %) is much more important than in Germany (9 %) and in Luxemburg (4%).

Table 12: Percentage of elderly workers retiring by retirement type

| Retirement type | Germany | Luxemb. | USA |
|---------------------|---------|---------|-------|
| Early retirement | 85 % | 89 % | 54 % |
| Normal retirement | 6 % | 7 % | 20 % |
| Deferred retirement | 9 % | 4 % | 26 % |
| Total | 100 % | 100 % | 100 % |

In the next step we analyze early retirement in more detail. The average age for early retirement in Luxemburg is 58 years, two years lower than those for Germany (60) and the US (60) (see Table 13). In comparison to the official retirement age of the state pension systems (65 years), we see that early retirees exit from the labour market on average 5 years sooner in Germany and in the US, but 7 years earlier in Luxembourg.

The results from Table 13 and Table 12 tell us that early retirement is more frequent in Luxembourg than in Germany. For average age of early retirement there is no difference between Germany and the US; but the frequency of early retirement is in Germany much higher than in the US.

Table 13: Average retirement age of early retirees

| Average retirement age of early retirees | Germany | Luxemb. | USA |
|--|---------|---------|------|
| in years | 60.2 | 58.2 | 60.0 |

Table 14 gives us some additional information by age brackets. The majority of elderly workers in Luxembourg retire at ages under 59 years, whereas the majority of all elderly in Germany and in the US retire at 60+. But we also see that 41 % in the US and 33 % in Germany retire before the age of 60. From the official regulations of the state pension systems (see above) we know that the state systems in Germany and in the US do not allow to receive a pension before the age of 60 years. For Luxembourg we find 31 % of elderly workers retiring before the age of 57 and earlier than the earliest possible date for social security payments.

A significant number of early retirees presumably exit from the labour market in spite of the fact that they do not receive a pension at that time. Exit from labour market in relation to first reception of social security is studied in a later part of the paper.

Table 14: Percentage of early retiring elderly workers by retirement age brackets

| Retirement age | Germany | Luxemb. | USA |
|----------------|---------|---------|-------|
| 51 - 56 | 11 % | 31 % | 18 % |
| 57 - 59 | 22 % | 32 % | 23 % |
| 60 - 61 | 35 % | 18 % | 14 % |
| 62 - 64 | 32 % | 19 % | 45 % |
| Total | 100 % | 100 % | 100 % |

6.2 Variables which could explain very early retirement

We have recorded in Table 12 the percentages of elderly workers who retire early. In the present chapter we will look at the factors which might explain the decision for very early retirement.

Very early retirement is here defined as retirement between ages 51 and 59. For this reason we will compare characteristics of very early retiring and of not very early retiring elderly worker. The differences found will give us some indications about the variables which could best explain very early retirement patterns.

Starting point of our analysis will be the percentage of individuals who retire very early within a reference period of four years (using panel data from five waves).

Table 15: Percentage of very early retiring elderly workers

| Germany | Luxembourg | USA |
|---------|------------|------|
| 28 % | 56 % | 22 % |

Table 15 gives us the figures about this cohort. We see that early retirement is most frequent in Luxembourg and least frequent in the US.

In the next step we look for groups in this age cohort which show percentages being lower or higher than for the total group: groups with lower percentages of course retire less often than the average elderly, groups with higher percentages retire more often than the average elderly.

a) Sex/Marriage Status

Table 16: Percentage of very early retiring elderly workers by gender

| Sex Marriage Status | Germany | Luxemb. | USA |
|---------------------|---------|---------|------|
| Male | 26 % | 59 % | 20 % |
| Male married | 24 % | 58 % | 19 % |
| Female | 32 % | 47 % | 24 % |
| Female married | 46 % | 42 % | 33 % |
| Total | 28 % | 56 % | 22 % |

In Germany and in the US very early retirement (Table 16), is more frequent with women than with men. In Luxembourg it is the reverse. Differentiating further for marriage status we see that married women in the US and in Germany retire more often very early than the non-married women. For men we find no great difference between married and non-married individuals. The sample size is too small for looking into other family status characteristics (bachelor, divorced, widow). It is not possible to give more detailed information in this respect.

b) Relationship to Head

Table 17: Percentage of very early retiring elderly workers by relationship to head

| Relationship to Head | Germany | Luxemb. | USA |
|----------------------|---------|---------|------|
| Male Head | 26 % | 59 % | 20 % |
| Female Head | 7 % | 52 % | 12 % |
| Spouse | 49 % | 43 % | 34 % |
| Total | 28 % | 56 % | 22 % |

Heads of households in Germany and in the US do not as often retire early than do spouses. Interesting is also the fact that in all three countries male heads do retire early more often than female heads do.

c) Employment status

Table 18: Percentage of very early retiring elderly workers by employment status

| Employment Status | Germany | Luxemb. | USA |
|--------------------|---------|---------|------|
| Full time | 26 % | 62 % | 21 % |
| Part time/marginal | 36 % | (9 %) | 24 % |
| Total | 28 % | 56 % | 22 % |

Table 18 indicates that in Germany and in the US elderly who are working on a part time or marginal basis retire more often at an early age than full time workers do. This relation is very strong for Germany, but very weak for the US. The results for Luxembourg are not reliable because of the small sample size of the cohort for this country.

d) Family Structures

Individuals living in larger households retire more often very early than individuals from smaller households (Table 19). When we take into account the number of children in the household, we find that individuals who exit early from the labour market live on average in households with more children than elderly workers who do not retire early. These two results show that household structures matter in determining retirement patterns.

Table 19: Average No. of persons and children by retirement status

| | Germany | Luxemb. | USA |
|--------------------------|---------|---------|------|
| Average no. of persons: | 2.38 | 2.77 | 2.38 |
| non early retiring | 2.25 | 2.66 | 2.32 |
| early retiring | 2.72 | 2.86 | 2.61 |
| Average no. of children: | 0.10 | 0.22 | 0.14 |
| non early retiring | 0.05 | 0.15 | 0.11 |
| early retiring | 0.20 | 0.29 | 0.24 |

e) Income Structures

Table 20: Average individual factor income, household net income and equivalent income by retirement status

| Income Measure | Germany ⁴ | Luxemb. ⁵ | USA ⁶ |
|-------------------------------------|----------------------|----------------------|------------------|
| Average individual Factor income | 2235 | 45709 | 17185 |
| non early retiring | 2170 | 48753 | 17429 |
| early retiring | 2401 | 43370 | 16320 |
| Average household Net income | 3215 | 78123 | 30417 |
| non early retiring | 3049 | 82805 | 29354 |
| early retiring | 3641 | 74526 | 34169 |
| Average household equivalent income | 1957 | 42619 | 18506 |
| non early retiring | 1928 | 46739 | 18062 |
| early retiring | 2032 | 39453 | 20072 |

The incomes of very early retiring elderly differ significantly from the incomes of non early retiring elderly (Table 20).

For factor incomes we find that the income of early retiring elderly in Luxembourg and in the US are smaller than the factor incomes of non retiring elderly. For Germany we find the opposite. In Germany the incomes of early retiring individuals are higher than those of the individuals still working.

The situation changes when we analyze the (unweighted) household net incomes. As the figures indicate the very early retirees in Germany and in the US live in households with on the average higher incomes than the non retirees. This is the opposite of the situation in Luxembourg. There the early retirees live this more often in households with lower household incomes.

In the last row of Table 20 we have calculated equivalent net incomes at the household level to compensate for different household structures. For the group of the Elderly the income situation does not change much. The early retiring individuals in Germany and in the US live in households with a better income situation than the households with no early retiree. The opposite is true for early retirement in Luxembourg.

⁴ Monthly income in DM

⁵ Monthly incomes in FLUX.

⁶ Yearly income in US \$.

In conclusion we may say for the US and Germany that very early retirement is found more often in households with an (income) welfare situation better than average. Corresponding to the income indicators very early retirement is more often found in households with income lower than the average.

7. Entry into old age pension

7.1 Development of early retirement in history

The table 21 provides data on the size of different government programmes for pre-retirement. We can learn from this table that in Germany the percentage of labour force in pre-retirement has increased from 18 % in 1975 to almost 28 % in 1984, whereas the corresponding percentage for the US increased from 18 % to 23 % only. This table confirms, that early retirement in Germany is more frequent than in the US. Furthermore we can see that in Germany also the percentage of individuals with disability pensions increased from 6 % in 1975 to 9 % in 1984; for the US we find a small reduction from 4 % to 3 % in disability pensions.

Table 21: Beneficiaries of selected early retirement and disability pensions, 1970-1985 (Per cent of total labour force in age group)

| Country | Age | Program | 1970 | 1975 | 1980 | 1984 |
|---------|-------|------------------|------|------|------|------|
| Germany | 55-64 | Early retirement | - | 18.3 | 23.8 | 27.6 |
| | | Disability | - | 6.4 | 7.5 | 8.7 |
| USA | 60-64 | Early retirement | 14.1 | 18.3 | 19.9 | 23.2 |
| | | Disability | 3.1 | 4.5 | 4.3 | 3.3 |

Source: The secretariat of the Economic Commission for Europe

7.2 First payment of social security

Table 22: Percentage of elderly with age 50-70 receiving first time social security

| Payment | Germany | Luxemb. | USA |
|------------------|---------|---------|-------|
| Early payment | 70 % | 68 % | 70 % |
| Normal payment | 23 % | 18 % | 23 % |
| Deferred payment | 7 % | 14 % | 7 % |
| Total | 100 % | 100 % | 100 % |

New recipients of social security payments are typically younger than 65 years. Table 22 indicates that 68-70 % of all new payments of social security are paid in the three countries to individuals younger than 65 years (Table 22).

Only 18 to 23 % of first payments of social security are made to individuals with ages 65 and 66. Deferred payments are paid with less frequently (7% to 14 %).

Table 23: Average pension age for elderly who receive first time social security before age 65

| Average retirement Pension age | Germany | Luxemb. | USA |
|--------------------------------|---------|---------|------|
| in years | 60.1 | 58.8 | 61.7 |

Table 23 shows that the average age at which first time social security paid is highest in the US (61.7), which is three years higher than in Luxembourg and 1.6 years higher than in Germany. This result is consistent with table 12 which indicates that early retirement is less often found in the USA than in the two other countries. A comparison of this table with Table 13 shows that for two countries (Luxembourg, US) the average pension age is higher than the average retirement age; e.g. Luxembourg has an average retirement age of 58.2 years, but an average pension age of 58.8 years. The difference between retirement age and pension age is in Luxembourg with 0.6 years smaller than in the US. For the US we find a difference of 1.7 years between retirement and first payment of social security. For Germany we do not find any significant difference between retirement and pension age.

Table 24: Percentage of elderly workers receiving first time social security before age 65 by pension age groups

| Retirement age | Germany | Luxemb. | USA |
|----------------|---------|---------|-------|
| 51 - 56 | 14 % | 13 % | 3 % |
| 57 - 59 | 14 % | 27 % | 4 % |
| 60 - 61 | 44 % | 28 % | 11 % |
| 62 - 64 | 28 % | 32 % | 82 % |
| Total | 100 % | 100 % | 100 % |

Table 24 gives us some more information about the early pensioning process. First we see that some pensions are paid very early. The pensions first paid in the age range 51-59 must be, for Germany and the US, disability and widow/er pensions, since the earliest possible start date for normal pensions is 60 years or older for both countries. In Luxembourg, the earliest age for early retirement pensions is 57 years. Corresponding to this legislation we find for Luxembourg with 27 % more pensions in the age bracket (57-59) than in the other two countries. In the next age bracket (60-61) we find the highest percentage for Germany and a much lower percentage for the US. The explanation for this fact can be found in the pre-retirement rules. In Germany members of the old age pension system can receive their pension at the earliest age of 60 years, in USA the age is 62 years. The majority of all pre-retirement pensions is paid in the USA in the age bracket (62-64); this is also the age range for normal pre-retirement pension in this country. Summarizing we can say that the results of Table 24 are congruous with the legal legislation in all three countries. Possibilities of pre-retirement are actually used in all three countries and can explain the differences in the pension-retirement pattern for the three countries.

The interpretation of the tables 22-24 creates problems if the results should be interpreted in the perspective of early retirement.

Exit from labour market and first payment of social security happen in many cases at the same age, but not necessarily.

Here we can differentiate the following situations:

- a) exit from labour market combined with first payment of social security
- b) exit from labour market without payment of social security

7.3 Early retirement and reciepience of social security benefits

Only one part of early retirees receive social security benefits when they stop working. These individuals retire without any pension eligibility. This can be explained by different factors. One factor could be that married women drop out of the labour force long before eligibility for social security benefits and their departure from labour market coincides with their husbands retirement decision. The decision to retire early is also based on factors such as health and desire to retire. Other early retirees may have simply lost their jobs.

Table 25: Percentage of elderly retiring completely with social security payments

| Germany | Luxemb. | USA |
|---------|---------|------|
| 58 % | 58 % | 44 % |

We see from Table 25 that 44 % in the US, and 58 % in Germany and in Luxembourg receive social security when they exit from the labour market. One could assume that individuals with immediate access to social security retire more often than those without. The other group of early retiring individuals - those not immediately receiving social security - are not (yet) entitled to old age pensions and/or do not receive any disability or widow pensions. Another reason for not receiving social security could be the decision to (voluntary) deferment of social security payments.

Table 26: Average retirement age by retirement status for early retiring elderly

| Retirement status | Germany | Luxemb. | USA |
|-------------------------|---------|---------|------|
| With social security | 60.7 | 59.2 | 61.7 |
| Without social security | 59.3 | 56.6 | 58.7 |
| Total | 60.2 | 58.1 | 60.0 |

Table 26 gives us the average retirement ages for early retiring elderly with and without any social security payments. From this table - because the average retirement for retirees without social security is lower than for those with social security payments - we see that the younger retirees do not so often receive social security as the older retirees do.

In the tables above we studied exit from labour market and receiving social security payments. But there are two more entries into social security payments. (1) Economic active individuals must not stop their employment completely in order to receive social security. Therefore we find a group of individuals who still work and at the same time receive social security. (2) Another entry into social security payments is that of individuals who are already retired and have now reached the appropriate age for pensions. It may be that they receive a pension because they have personal entitlement; another case could be that they receive widow/widower pensions without having personal entitlement.

Table 27 indicates that in Germany (42%) and USA (45%) the most often used entry into pension is a direct link from exit from labour market into first time pensions. But in Luxembourg 51% of all new pensions are received by individuals who are not active economically.

In the US, 28 % of all cases with new payments are individuals who have not stopped their economic activity. The corresponding percentages are lower in Germany (17 %) and Luxembourg (7%). Presumably one part of the US actives do not retire completely when they receive first their pension, but reduce only their working hours. Such a modus could explain why the pre-retirement rate is so low for the US in comparison to Luxembourg and Germany (see Table 12).

Table 27: Percentage of elderly with age 51-70 receiving first time social security by Type of Recipient

| Type of New Recipient | Germany | Luxemburg | USA |
|-------------------------------------|---------|-----------|-------|
| Working and Pension | 17 % | 7 % | 28 % |
| Exit from labour market and Pension | 45 % | 42 % | 39 % |
| Retired and Pension | 38 % | 51 % | 33 % |
| Total | 100 % | 100 % | 100 % |

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