Statistics in focus

POPULATION AND SOCIAL CONDITIONS

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Pensions in Europe 2002: expenditure and beneficiaries

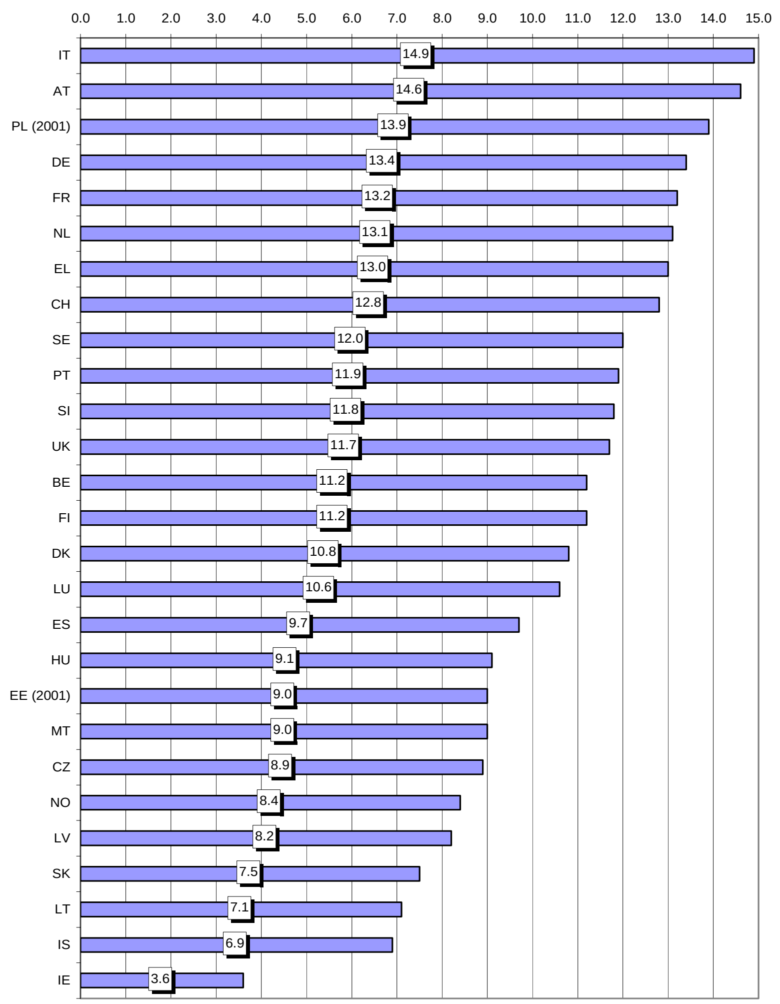
In 2002 (compared to 2001) pension expenditure in the EU-15 remained constant at 12.6% of GDP. Since 1993 this ratio has slightly decreased, although changes vary significantly across the Member States. The strongest increase in this ratio since 1993 was recorded for Portugal (and outside the EU for Iceland and Switzerland) and the largest decrease for Ireland and Finland. In 2002 the highest expenditure on pensions was found in Italy (14.9% of GDP), where pensions represent nearly 60% of all social benefits.

Old-age pensions continued to increase their already predominant share within total pensions and accounted for 76% of all pensions in EU-15 in 2002. At the same time the share of each of the other pension categories (disability, survivors' and early retirement pensions) decreased.

In Italy expenditure on pensions amounted to 14.9% of GDP, the highest ratio in Europe, followed by Austria, Poland, Germany and France (figure 1). Conversely, Ireland allocated only 3.6%[1] of its GDP to expenditure on pensions.

Figure 1:

Pension expenditure 2002 (as % of GDP)



[1] *The value of pension expenditure to GDP for Ireland is underestimated as data on occupational pension schemes for private-sector employees with constituted reserves are not available.*

In Slovakia, Lithuania and Iceland, the ratio of pension expenditure to GDP was also relatively low (less than 8%).

Between 1993 and 2002, expenditure on pensions in the EU-15 decreased by 0.3 percentage points of GDP from 12.9% to 12.6% (table 1).

Table 1: Pension expenditure as percentage of GDP

	1993	1995	1997	1999	2001	2002p
EU-25	**:**	**:**	**:**	**:**	**12.5**	**:**
EU-15	**12.9**	**12.8**	**12.9**	**12.7**	**12.6**	**12.6**
BE	13.0	12.1	11.8	11.5	11.3	11.2
CZ	:	7.3	8.5	8.8	8.7	8.9
DK	10.1	11.5	11.2	10.9	10.7	10.8
DE	12.5	12.8	13.0	13.0	13.2	13.4
EE	:	:	:	:	6.3	:
EL	11.3	11.2	11.7	12.6	13.2	13.0
ES	10.3	10.3	10.3	9.9	9.7	9.7
FR	13.4	13.5	13.7	13.5	13.2	13.2
IE	5.6	5.1	4.3	3.8	3.7	3.6
IT	14.9	14.5	15.3	15.1	14.7	14.9
LV	:	:	:	:	8.6	8.2
LT	:	:	:	:	7.3	7.1
LU	12.5	12.7	12.0	10.7	10.1	10.6
HU	:	:	:	9.1	8.9	9.1
MT	:	:	:	8.4	8.9	9.0
NL	15.0	14.1	13.7	13.2	12.9	13.1
AT	14.1	14.3	14.5	14.4	14.5	14.6
PL	:	:	:	:	13.9	:
PT	9.6	10.2	10.4	10.7	11.5	11.9
SI	:	:	11.3	11.4	11.6	11.8
SK	:	7.4	7.3	7.5	7.5	7.5
FI	13.8	12.8	12.0	11.3	10.9	11.2
SE	13.8	12.8	12.5	12.1	11.7	12.0
UK	12.2	11.9	12.0	11.6	11.8	11.7
IS	5.5	5.7	5.8	6.1	6.4	6.9
NO	8.8	8.5	8	8.7	7.8	8.4
CH	10.5	11.1	11.8	12.3	12.7	12.8

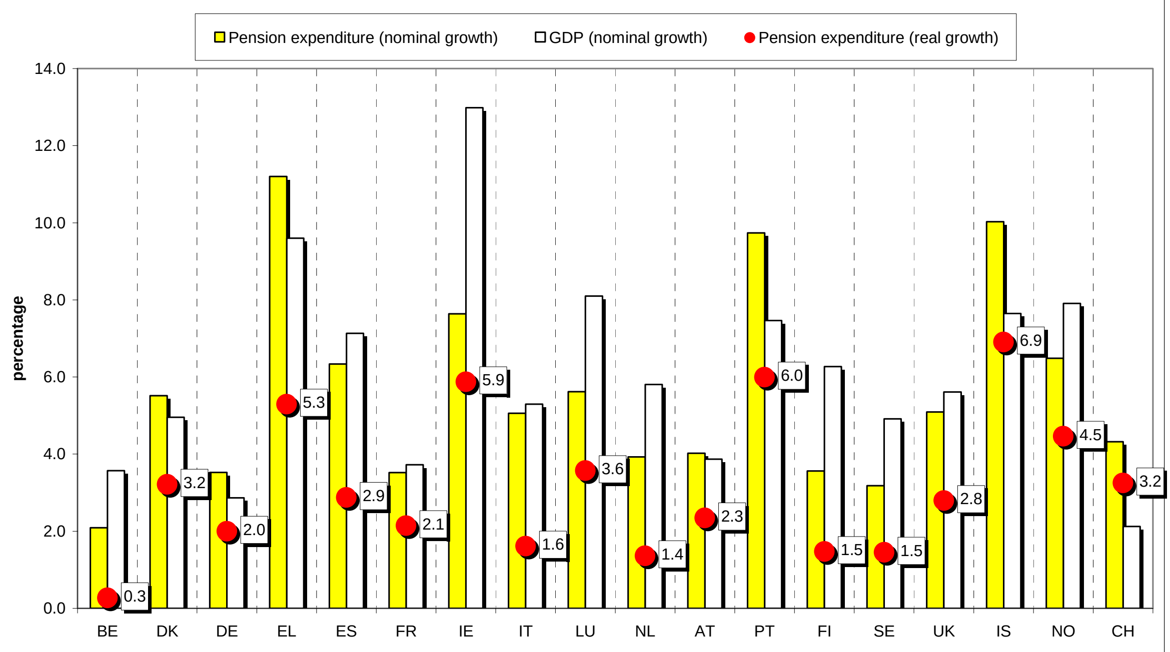
Figure 2 contains explanatory information. Its first aim is to explain the development of the indicator 'pension expenditure as a percentage of GDP' from table 1. Therefore the nominal growth rates for pension expenditure and GDP between 1993 and 2002 are compared. In addition, figure 2 reports on the development of pension expenditure in real terms, i.e. the nominal growth of pension expenditure has been adjusted by the growth of consumer prices (inflation).

Economic development, age structure of population and pension reforms determine the development of pension expenditure

The level of pension expenditure as a percentage of GDP differs from country to country, but the development of pension expenditure is always partially determined by the economic development (measured as GDP) as a result of regular pension revaluations (often coupled to wages or inflation). Hence, changes in the share of pension expenditure to GDP could be evidence for a changing age structure of the population (changing number of beneficiaries) or an impact of changes in the pension system (pension reforms). However, these effects may have contrary impacts, i.e. for many countries the share of pension expenditure to GDP remained fairly constant. This observation is true for France, Denmark, Spain, Italy, Austria and the UK.

Germany and Switzerland experienced a continuously increasing share of pension expenditure to GDP mainly due to the lowest GDP growth (in nominal and in real terms) of all observed countries between 1993 and 2002 (see figure 2). In Switzerland the developed system of occupational pension funds also contributed to the increase.

Figure 2: Average annual growth rates of pension expenditure and GDP between 1993 and 2002



In Portugal, Greece and Iceland the ratio of pension expenditure to GDP also increased significantly, because these three countries showed the highest growth in pension expenditure in real terms (together with Ireland). In Greece this can be largely explained by the fact that Greece had the fastest ageing population in the EU-15 between 1993 and 2002 resulting in an increased number of pension beneficiaries. In Portugal pension reforms (extended eligibility, increased level of minimum pensions) contributed to a broadening of the state pension system in this period. Iceland's old age pension system is supposed to provide above average income replacement compared to the other European countries, but the level of pension expenditure to GDP is still the lowest in Europe together with Ireland.

Some of the countries that show a significant decrease in the share of pension expenditure to GDP benefited from economic development: Ireland, Luxembourg and Norway (highest growth of GDP in real terms between 1993 and 2002). The other countries that had a significantly decreasing share are Finland, Sweden, the Netherlands and Belgium. These countries had the lowest growth rates of pension expenditure in real terms (1.5%, 1.5%, 1.4% and 0.3%) In Sweden this can be attributed to a declining share of the population aged 65 and older relative to the total population between 19993 and 2002, whereas in Belgium the amount of pensions paid in the event of early retirement, disability and to survivors in real terms remained almost constant. This was in the first instance a result of the pension revaluation, which is linked to prices and partly also to the pension reform in 1997. In the Netherlands, constant pension reforms (mainly survivors' and disability pensions) again led to the decreasing share. Nevertheless, these effects are no longer true since 2001. Finally, in Finland (apart from a high growth of GDP in real terms) the indexation procedure for the revaluation of the earning-related pensions (50% of earnings inflation and 50% of price inflation) contributed to the relatively low growth of pension expenditure in real terms.

Pensions account for a major share of social benefits

In addition to the analysis of pension expenditure with regard to economic development, it is also necessary to comment upon the importance of pensions in the field of social protection.

First of all, pensions are the dominant expenditure item of social protection in all countries (table 2) apart from Norway, Iceland and Ireland, which spent more on sickness and health care than on pensions. The share of pensions as a percentage of social benefits is the highest in Latvia and Italy, which allocated around 60% of their social protection benefits to the pensions in 2002, and in Poland, where the share of pensions to social benefits was 65% in 2001.

The EU-15 average share in 2002 was 47.1%, which is one percentage point lower than 1999, i.e. since 1999 pension expenditures grew less than the overall value of the other types of social protection benefits (sickness/health care, family/child allowances, unemployment assistance, housing and disability benefits, social assistance, etc.). However, in 1993 the share of pensions to social benefits had been only 46.9%. The value for the EU-25 in 2001, at 47.9%, was slightly higher compared than the 47.6% for the EU-15.

The change of the ratio in the EU-15 represents an average development and is therefore less volatile compared to the indicator for each Member States. Between 1993 and 2002 only in Germany, France, Austria, the Netherlands and the UK did the ratio remain relatively constant. Greece and Spain on the other hand saw a significant growth in the share (close to 10 percentage points), whereas the decrease was the highest for Ireland and Luxembourg.

Table 2:
Expenditure on pensions as % of total social benefits

	1993	1995	1997	1999	2001	2002p
EU-25	**:**	**:**	**:**	**:**	**47.9**	**:**
EU-15	**46.9**	**47.4**	**48.1**	**48.1**	**47.6**	**47.1**
BE	47.5	43.5	45.4	44.3	43.5	42.7
CZ	:	43.4	46.8	46.2	45.7	44.8
DK	32.6	36.6	37.7	37.3	37.4	37.3
DE	45.4	44.2	45.7	45.4	45.9	45.7
EE	:	:	:	:	44.7	:
EL	41.9	46.2	47.3	49.0	50.3	50.3
ES	39.5	47.3	49.8	49.9	49.6	49.1
FR	46.4	46.3	47.1	47.1	46.5	45.3
IE	29.6	29.0	26.0	27.2	25.6	23.7
IT	56.3	67.0	61.9	62.1	59.9	59.5
LV	:	:	:	:	61.9	61.7
LT	:	:	:	:	50.9	:
LU	55.6	53.0	54.9	50.8	48.3	47.6
HU	:	:	:	44.8	45.8	44.7
MT	:	:	:	49.4	52.0	51.4
NL	48.3	45.9	49.7	50.4	50.1	48.9
AT	51.1	49.0	52.1	51.2	52.0	51.6
PL	:	:	:	:	65.0	:
PT	48.7	49.6	54.7	53.9	54.4	52.1
SI	:	:	46.5	46.5	46.8	47.5
SK	:	40.6	38.5	38.6	40.2	40.2
FI	46.3	39.9	41.8	43.1	43.8	44.0
SE	36.5	37.5	38.6	38.8	38.7	38.3
UK	44.1	44.2	45.4	45.6	44.5	44.1
IS	30.1	30.8	31.4	31.7	32.0	31.6
NO	31.9	32.4	32.4	32.9	31.0	32.8
CH	46.4	47.4	46.6	48.7	49.7	48.9

Old-age pensions dominate the pension benefits

Data on pension expenditure are not only collected as a total value, but classified into different pension categories (table 3).

Table 3: Breakdown of expenditure on pensions in 2002 (as % of total pension expenditure)

	Old Age pensions	Survivors' pensions	early retirement: Disability pensions	early retirement: anticipated and for labour market reasons
EU-25	76.2	9.4	9.6	4.8
EUR-15	76.0	9.8	9.6	4.6
BE	65.3	20.0	10.7	4.0
CZ	74.6	1.3	14.5	9.6
DK	63.5	0.0	15.8	20.7
DE	79.8	2.9	7.9	9.4
EE (2001)	85.4	3.1	8.8	2.6
EL	64.6	6.5	6.5	22.5
ES	76.4	5.8	12.3	5.4
FR	78.0	13.9	6.3	1.8
IE	44.7	21.9	18.6	14.8
IT	76.3	17.5	5.5	0.6
LV	82.3	3.6	12.0	2.2
LT	83.4	2.6	11.2	2.8
LU	41.8	23.0	19.6	15.7
HU	75.0	3.1	14.5	7.4
MT	68.4	19.4	9.6	2.6
NL	62.3	11.3	21.2	5.3
AT	64.1	17.2	10.7	8.0
PL (2001)	61.3	5.7	17.7	15.3
PT	66.5	11.9	19.3	2.3
SI	66.0	2.9	9.0	22.0
SK	85.3	2.2	12.1	0.3
FI	60.4	8.5	20.2	10.8
SE	74.3	5.5	20.1	0.2
UK	81.4	7.8	10.8	0.0
IS	63.9	8.9	27.2	0.0
NO	63.9	4.2	31.5	0.5
CH	72.6	9.3	18.0	0.0

In 2002, expenditure on **old-age pensions** topped the list of pension expenditure in every country. This is particularly true in the three Baltic Countries, the Slovakia and the United Kingdom, where more than 80% of pensions are of this kind. Ireland and Luxembourg, on the other hand, recorded values below 50%. On average, old-age pensions represented 76.2% of total pension benefits in the EU-25.

Survivors' pensions are highest in Belgium, Ireland, Italy, Luxembourg, Malta and Austria at around 20%. Denmark, on the other hand, spends practically nothing on this. On average, survivors' pensions accounted for 9.4% of the EU-25 total.

Disability pensions (including early-retirement benefits for reasons of reduced capacity to work) accounted for 9.6% of total pensions expenditure in the EU-25 in 2002. They are very high in the Netherlands, Portugal, Finland, Luxembourg and Sweden (approximately 20% of the total), as well as in Iceland and Norway. By contrast, Greece, France and Italy spend less than 7% of their total pension expenditure on this heading. The various rules on benefits linked to disability are one explanation for these figures.

There are also considerable differences between Member States with regard to other **early retirement pensions**, which are anticipated old-age pensions, partial old-age pensions and early-retirement benefits for labour market reasons. In comparison with an EU-25 average of 4.8% in 2002, countries such as Denmark, Greece and Slovenia spend over 20% of the total for early retirement, mainly anticipated old-age pensions. Some other countries (Ireland, Luxembourg and Poland) spend significant amounts (around 15%). In contrast, the United Kingdom and, outside the EU-25, Iceland and Switzerland do not allocate any funds to this benefit.

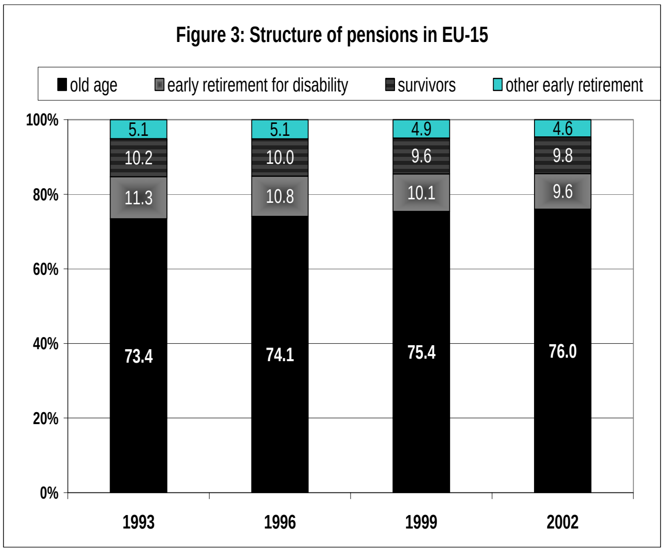
Data on categories of pension

Benefits paid to beneficiaries who have reached a defined legal or standard retirement age should be reported under old-age pensions. In some countries a consistent application of this rule is not always possible:

- In **Ireland**, **Portugal, Norway** and **Switzerland** (partly), disability pensions include those paid to beneficiaries over the statutory retirement age.
- In **Belgium**, **France**, **Ireland**, **Italy**, **Luxembourg** (partly), **Austria**, **Portugal**, **Finland, Malta** (partly) and **Switzerland** (partly), survivors' pensions include those paid to beneficiaries over the statutory retirement age.
- In **Italy** and **Finland** (partly), old-age pensions include anticipated old-age pensions.
- In **Portugal**, for the period 1999-2002, certain values for early retirement benefits for labour market reasons are not available.

Old-age pensions increased their share continuously since 1993

Old-age pensions grew significantly more in the EU-15 between 1993 and 2002 than any other pension category. Compared to the total expenditure on pensions, which grew by 4.5% in nominal terms per annum, old age pensions grew by 4.8% per annum in nominal terms. The other pension categories had a nominal annual growth less than the total expenditure on pensions (4.1% for survivors' pensions, 2.7% for disability pensions 3.4% for early retirement). The different trends for the various components resulted in a higher percentage share for old-age pensions by 2.6 percentage points, rising from 73.4% in 1993 to 76.0% in 2002 (Figure 3). Consequently, the other three pension categories all lost share: 1.7 points loss for disability pensions, 0.4 points for survivors' pensions and 0.5 points for early retirement pensions.



The same trend as for EU-15 (old-age pensions increased their importance compared to the other pension categories) is observed for all Member States in the EU-15, except for Ireland (Figure 4). Data for Luxembourg are not included as data for pension categories in 1993 could no longer be revised.

The highest increase of the share (importance) of **old-age pensions** between 1993 and 2002 is found in the Netherlands and Portugal. In these Member States growth rates of old-age pensions were significantly higher than the growth rate for the total expenditure on pensions.

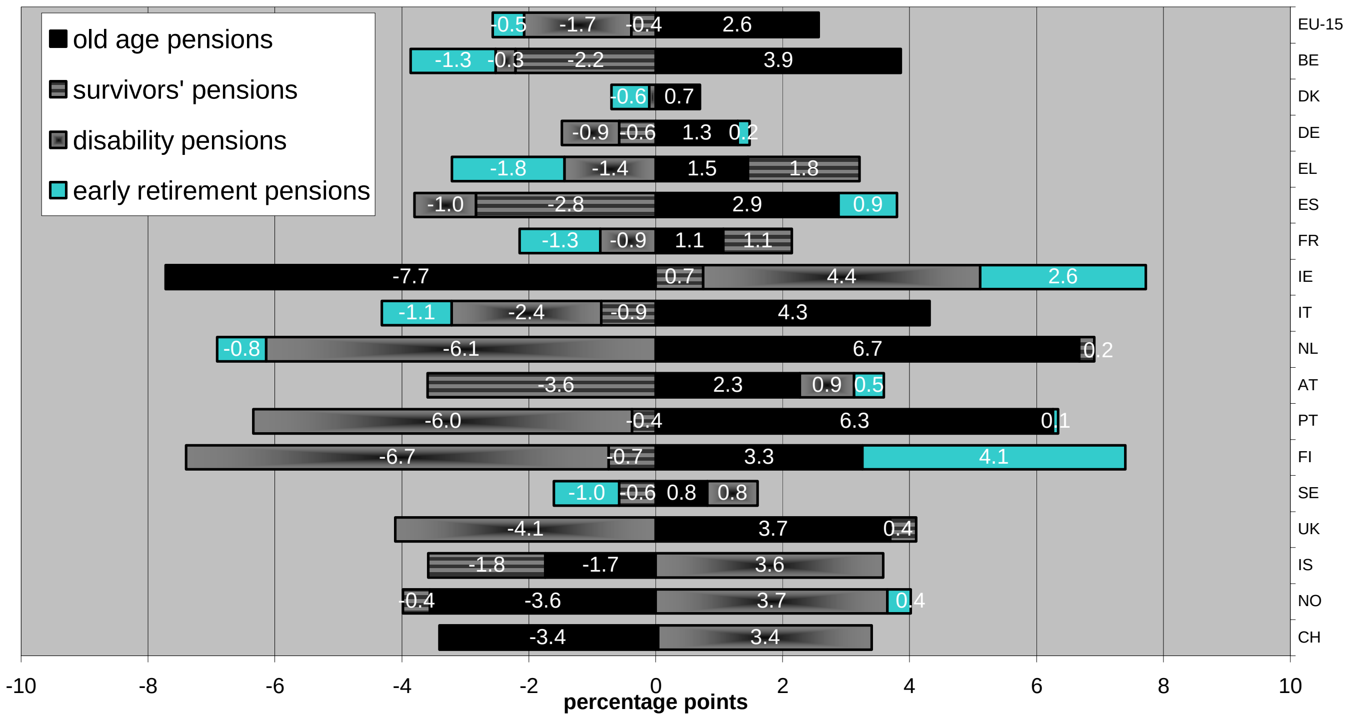
The importance of **survivors' pensions** decreased in nearly all Member States of the EU-15 (especially in Spain, Belgium and Austria) with some exceptions, notably Greece and France.

The share of **disability pensions** decreased in all Member States of the EU-15 between 1993 and 2002, exceptions are Austria, Sweden and Ireland. This is a result of regulatory measures taken by several Member States. A significant decrease in disability pensions was recorded for the Netherlands, Portugal, Finland and the UK. In the Netherlands, for example, the conditions to qualify for a disability pension became much stricter in the mid 1990s.

Between 1993 and 2002 the share of **early retirement pensions** (apart from disability) increased significantly for Finland and Ireland and very slightly for Spain, Austria, Germany and Portugal. Part of this increase is due to the fact that, up until 1997, early retirement schemes were the instrument of choice for certain countries in combating the problems of long-term unemployment. Over the longer term, however, it can be seen that there has been a fall in these benefits in most Member States, such as in Italy, as regards for labour-market reasons. Beside Italy, Sweden and Belgium, with a fall in expenditure in nominal terms, the share of early retirement pensions decreased also significantly in Greece and France.

For the **three countries outside the EU-15** (Iceland, Norway and Switzerland) the trend was completely different to the EU-15. Old-age pensions and survivors' pensions lost in importance, whereas the share of disability pensions increased significantly.

Figure 4: Change in the share of pension categories between 1993 and 2002 (in percentage points)



Pension beneficiaries

Data on the number of pension beneficiaries are currently available for the period 2000 to 2002. Stock data (mostly for the 31st December) separated into men and women were collected on the basis of common rules to eliminate double counting at all stages and data about the pension recipients are collected for the same seven pension categories that are used to collect data on pension expenditures.

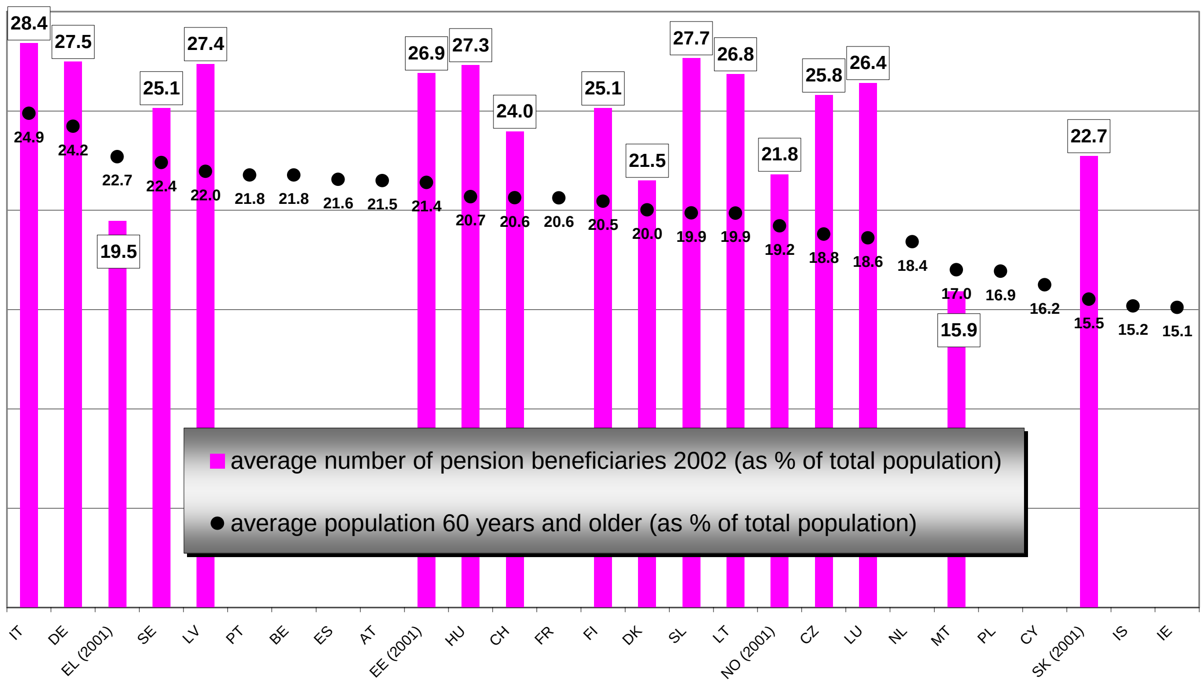
Unfortunately, as long as long time series are missing, meaningful analyses of trends in the number of pension beneficiaries are not feasible. In this case population data is the starting point for this analysis of the data on pension beneficiaries. Figure 5 compares the different national situations concerning the total number of pensioners (without double counting) with the population size. Data on the share of population aged 60 years and older are used as a reference.

The value for the number of total pensioners is determined by many factors not only the age structure of population. At least for the 'oldest' population, which can be found in Italy, the highest number of total pensioners is recorded (28.4% of the population). As a general statement, it can be said that all over Europe around one fourth of the population receives a transfer in the form of a periodic pension benefit.

In the Nordic countries (Denmark, Finland, Sweden, Norway and Iceland) the average exit age is supposed to be slightly higher compared to the other European countries, where data are available. This has an influence on the number of pension beneficiaries. The total number of pension beneficiaries exceeds the population aged 60 years and older only slightly. In contrast, in Slovakia we probably find one of the lowest average retirement ages in the EU-25 and the number of pension beneficiaries exceeds the population 60+ by nearly 50%. Greece, which has the lowest ratio of total pensioners compared to the population 60+ is a particular case, because a significant number of people receive pensions from outside the country and not from the Greek pension system. The other country where the number of pension beneficiaries does not exceed the size of the population 60+ is Malta, reflecting the fact that female participation in the labour force in Malta is a relatively recent phenomenon. In Malta the number of male beneficiaries far exceeds the number of females, and survivors amount to over 20% of all pension beneficiaries. On the other hand, the ratio of pension beneficiaries as a percentage of the population could be slightly misleading for Luxembourg as a significant amount of pensions are paid to persons living outside the country (former commuters).

Eventually, comprehensive comparisons of data on beneficiaries need to be complemented by information about the average pension amounts received by the beneficiaries. Indeed, these average amounts mainly depend on the type of the pension benefit (pension categories). On the basis of data already available there is evidence to suggest that an average survivors' pension is generally lower than an average old age pension, whereas the highest average amounts are paid in the event of early retirement and disability.

Figure 5: Pension beneficiaries 2002



➢ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

Source: Eurostat-ESSPROS

Methods and concepts:
The expenditure on pensions presented in this publication is calculated according to the methodology of the European System of Integrated Social Protection Statistics, "ESSPROS Manual 1996". Definition of social protection in the ESSPROS Manual: "Social protection encompasses interventions from public or private bodies intended to relieve households and individuals of the burden of a defined set of risks or needs, provided that there is neither a simultaneous reciprocal nor an individual arrangement involved. The list of risks or needs that may give rise to social protection is fixed by convention as follows: sickness/health care, disability, old-age, survivors, family/children, unemployment, housing and social exclusion not elsewhere classified."

The ESSPROS methodology comprises public and private schemes. Private pension arrangements are part of social protection in ESSPROS, if they are mandatory for the protected persons or if they fulfil the criteria of social solidarity, i.e. if the contracts are not based on the individual risk-profiles of the protected persons (see ESSPROS Manual 1996).

The ESSPROS methodology distinguishes between cash benefits and benefits in kind. Cash benefits may be periodic or lump sum. The "pensions" aggregate comprises only part of periodic cash benefits under the disability, old-age, survivors and unemployment functions. It is defined in this publication as the sum of the following means-tested or non-means-tested social benefits (followed by the function to which the category belongs):
1) Disability pension (disability function)
2) Early-retirement benefit due to reduced capacity to work (disability function)
3) Old-age pension (old-age function)
4) Anticipated old-age pension (old-age function)
5) Partial pension (old-age function)
6) Survivors' pension (survivors' function)
7) Early-retirement benefit for labour market reasons (unemployment function).

A comparable distinction between the seven pension categories is based on the concept of a defined legal or standard retirement age for each scheme that provides pension benefits. Pension benefits paid to beneficiaries that have reached this defined legal or standard retirement age need to be recorded under the category old age pension. Due to the complexity of the national pensions systems it is not always possible to indicate a national wide standard retirement age.

Under ESSPROS, pension expenditures are recorded gross, i.e. without deduction of tax or other compulsory contributions payable by beneficiaries on benefits. Remarkable differences between gross data and data excluding tax and other compulsory contributions payable by beneficiaries (net data) do exist predominantly in the Nordic Countries, where pensions are treated as taxable income. First results for the ESSPROS-module “net benefits” show that e.g. in Denmark net spending in 2000 for pensions accounted for approximately 72.5% of the related gross data.
On the other hand, pension expenditures do not include the social contributions paid by pension schemes on behalf of their pensioners to other social-protection schemes (such as health schemes). ESSPROS records such payments under the heading of "re-routed social contributions".
The value of the "pensions" aggregate has been calculated for all countries according to the above definition, regardless of differences between countries in the institutional organisation of social-protection schemes.

Remarks:
Italy: the value of the "pensions" aggregate excludes the lump-sum benefits "liquidazioni in capitale" and "liquidazioni per fine rapporto di lavoro", equivalent to some 1.4 % of GDP in 2002.
Ireland: The value of pension expenditure to GDP is underestimated as data on occupational pension schemes for private-sector employees with constituted reserves are not available
United Kingdom: the value of the "pensions" aggregate excludes lump-sum benefits payable on retirement (approximately 0.8 % of GDP in 2002).
Switzerland: Other expenditure on pensions is recorded under "other lump-sum cash benefits" in the disability, old age and survivors' functions (2.1 % of GDP in 2002).

Abbreviations:
The area (EU-15) includes Belgium (BE), Germany (DE), Greece (EL), Spain (ES), France (FR), Ireland (IE), Italy (IT), Luxembourg (LU), the Netherlands (NL), Austria (AT), Portugal (PT) Denmark (DK), Sweden (SE), the United Kingdom (UK) and Finland (FI).
The European Union (EU-25) includes the countries of EU-15 plus Czech Republic (CZ), Cyprus (CY), Estonia (EE), Latvia (LV), Lithuania (LT), Hungary (HU), Malta (MT), Poland (PL), Slovak Republic (SK), Slovenia (SL).
IS=Iceland, NO=Norway, CH=Switzerland

Comments on the data: The 2001 data for BE, CZ, EE, ES, FR, IE, IT, LV and PL are provisional.

Eurostat publications:
Methodology: “ESSPROS Manual 1996”, 1996.
Data: “European Social Statistics: Social protection 1994-2002”
Statistic in Focus: “Social Protection in the European Union”

Further information:

Reference publications

Title	*European Social Statistics: Social Protection 1994-2002* (PDF only) available for downloading at EUROSTAT Website/Population and social conditions/Publications
Catalogue No	KS-DC-05-001-EN-N

Databases

EUROSTAT Website/Population and social conditions/Living conditions and welfare/Social protection/Social protection expenditure/Pensions

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