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The Pension Income of the Elderly: A Comparison between Belgium and the Netherlands

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Luxembourg Income Study Working Paper Series

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The Pension Income of the Elderly:
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The pension income of the elderly: a comparison between Belgium
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The pension income of the elderly: a comparison between Belgium and the Netherlands.

1. Introduction.

Contrary to the Belgian pension system where there are numerous specific rules and regulations, the pension system in the Netherlands is characterized by the fact that there are very few -general- laws. It is for this reason that van Yperen refers to it as a 'pension situation' rather than a 'pension system' (Bouckaert, 1988, note 1, p. 111). In this article, the Dutch and Belgian pension system, their similarities and differences will be described.

Pension income is not the only source of income for the elderly, though it is by far the most important (Boehlé et. al., 1994). Other income sources such as disability benefits, welfare payments and such play a significant role as well. Nevertheless, these sources of income fall outside the scope of this study, since it is our goal to concentrate on the pension systems of both countries.

This article starts by discussing the two (semi-collective) layers of the pension system in the Netherlands separately. Then, the Belgian pension system will be discussed. Apart from the cost of the pension system (which will only be discussed very briefly), comparison of the pension systems requires the comparison of the results of both systems i.e. the pension-income distribution in both countries. This will be done using the data of the Luxemburg Income study or LIS. Lastly, new developments in the pension policy will be discussed.

1. The Dutch pension system.

The general outlook of the Dutch pension system links up to the general structure of the Dutch system of social security as a whole, and consists of three layers of which the two first are (semi-) collective and relevant in this context. The first layer consists of the General Old Age Act (Algemene Ouderdomswet, AOW) of 1957 and the General Act for Surviving Relatives (Algemene Nabestaandenwet, Anw). The latter replaces from 1 July 1996 onward, the General Widows and Orphans Act (Algemene Weduwen en Wezenwet, AWW) of 1959. These regulations provide a minimal pension benefit, of which the amount is lump-sum and politically determined. The second layer of the pension system in the Netherlands consist of a wide range of additional pension regulations offered by pension funds to (former) employees. These regulations are complementary to the AOW. The third layer, which will not be discussed further, consists of the full range of voluntary and individual life-insurances, savings accounts and other sources of old-age income protection.

2.1. The first layer: the AOW and the AWW/Anw.

The AOW provides every individual who lived in the Netherlands between the age of 15 and 65 with a pension benefit. The level of this benefit is a certain politically determined fraction of the net minimum wage, depending on the marital status of the beneficiary. The pension benefit is thus independent of the past labour income or contributions of the beneficiary. For every of the four categories presented below, the gross benefit per month (dd. 1-1-1997) is included.

- a) Unmarried individuals older than 65 without children: they are entitled to an AOW benefit of 70% of the net minimum wage (1627.8 guilder or \$797.04¹). Note that cohabiting individuals are treated as being married from 1-1-1987 onward (van Yperen, in Bouckaert, 1988, p. 116).
- b) Unmarried individuals with children under 18: they receive 90% of the net minimum wage (2035.36 guilder or \$996.60).
- c) Married (or cohabiting) couples of which both partners are older than 65: both partners are entitled to 50% of the net minimum wage (1130.96 guilder or \$553.78).
- d) Married (or cohabiting) individuals older than 65 of which the partner is younger than 65: they are entitled to 50% of the net minimum wage as well, with a surplus benefit of maximum 50% depending on the income of the younger partner.

The AOW is financed by contributions which are paid over the income between the tax-free income floor and the first tax-bracket. The income that forms the basis of the contribution is thus limited not only upwards, but also downwards and was at most 45325 guilder or \$22193 per year in 1996. The AOW contribution rate was equal to 15.4%. The AOW is financed by a Pay As You Go (PAYG) system. This means that the sum of contributions paid by the active population in a year is in the same year paid out to the beneficiaries. In other words, there is full intergenerational redistribution of income. Moreover, since the contributions are (to a certain extent) dependent on income, whereas the contributions are not, the system is intragenerational redistributive as well.

As said, from 1 July 1996 onward, the General Act for Surviving Relatives (Algemene NabestaandenWet or Anw) replaced the AWW. Both will be discussed below, starting with the AWW. However, as far as the levels of benefits are concerned, we will limit ourselves to the Anw. The benefits will be expressed in guilders per month

All women who were younger than 65 and married to someone who deceased were eligible to an AWW-pension benefit. Of course, the partner should have met the same demands as for the AOW, being that he lived or had been living in the Netherlands. From 1988 onward, widowers became eligible too. Three types of benefits were distinguished:

- a) One could be eligible to an AWW pension benefit until reaching the age of 65. Apart from the requirements given above, one had to meet at least one out of five requirements. One should either be older than 40, or one should be older than 35 and have a child below

¹ Exchange rate dd. 1-09-1997: \$1=2.0423 fl. and 1 bfr=0.054545 fl.

18, or one should be pregnant, or one should be disabled for at least 45%. Divorced partners were eligible too, at least if they did not remarry.

b) If one did not meet either of the above demands, one became eligible to a temporary benefit for a period between 6 and 19 months, depending on the age of the beneficiary.

c) Full orphans younger than 16 (or 27, if they were going to school), became eligible to an Orphans benefit of which the exact benefit was age-dependent.

The AWW was financed by a markup the AOW-premium percentage: in 1996, the AWW premium was 1.6% on the same limited income as which forms the basis of the AOW contribution payments.

As said before, last year, the Anw replaced by the AWW. The most important differences between both are that the Anw is means-tested, that beneficiaries must be born before 1950² and that cohabiting partners are now eligible too. So, if one's partner deceases and one meets the requirements, one becomes eligible to an Anw-pension benefit equal to 70% of the net minimum wage (1932.65 guilder or \$946.31 on 1-1-1997), which is increased with 20% if one is financially responsible for at least one child younger than 18. All other sources of labour income or income-replacing social security benefit (for instance, disability pension income), cause the Anw-pension benefit to be lowered. Apart from the lowering of the maximum age from 26 to 21 for 'new' orphans, The Orphans' pension benefit was not fundamentally changed. The pension benefit is at least 618.45 guilder or \$302.82 for an orphan younger than 10 years and at most 1236.89 guilder or \$605.64 for orphans between 16 and 21 (or 27).

Like the AOW, both the AWW and the Anw are financed through a PAYG-scheme. The Social Security Bank (Sociale VerzekeringsBank, SVB) organizes the AOW and Anw. In 1995, about 33 billion guilders AOW pension benefit, being about 16,16 billion \$ or 5.1% GNP was paid out to about 2.2 billion beneficiaries. The total AWW pension benefit was 4.7 billion guilders, which is about 2.3 billion \$ or 0.74% GNP, which was paid out to about 200.000 beneficiaries (CBS).

2.1. The second layer: the additional compulsory pensions.

The second layer of the Dutch pension system consists of a wide variety of pension schemes. Pension funds offer these schemes to employees working in certain firms or - industries. Two laws form the basis of this layer; the 'Pension and SavingsLaw' (Pensioen- en SpaarfondsenWet, PSW) of 1952 is the most important of the two. It offers employers- and employees organisation the possibility to establish a pension fund on the firm or industry level and describes rather vaguely the demands such a pension scheme must meet. The most recent alterations of the PSW concern the reduction of the loss of

² Indeed, this restriction makes the Anw a temporary measure, in the sense that the group of potential beneficiaries will become smaller over time.

pension rights for individuals who change jobs, the 'pension-gap', and the imposition of equality between the sexes. The second law is the 'Law on the compulsory participation in an Industry Pension Fund' (Wet betreffende verplichte deelneming in een BedrijfsPensioenFonds, BPF) of 1949. This law makes it possible for the minister of Social Affairs to make participation in a pension fund compulsory for all employees in the firm or industry.

It is remarkable that neither of both laws describe how high the pension benefit should be. Nevertheless, the pension funds have committed themselves to provide every beneficiary a pension benefit equal to 70% of the wage-base, given a career of 40 years and taking the AOW-benefit level into account. This wage base is either the final wage or the average wage.

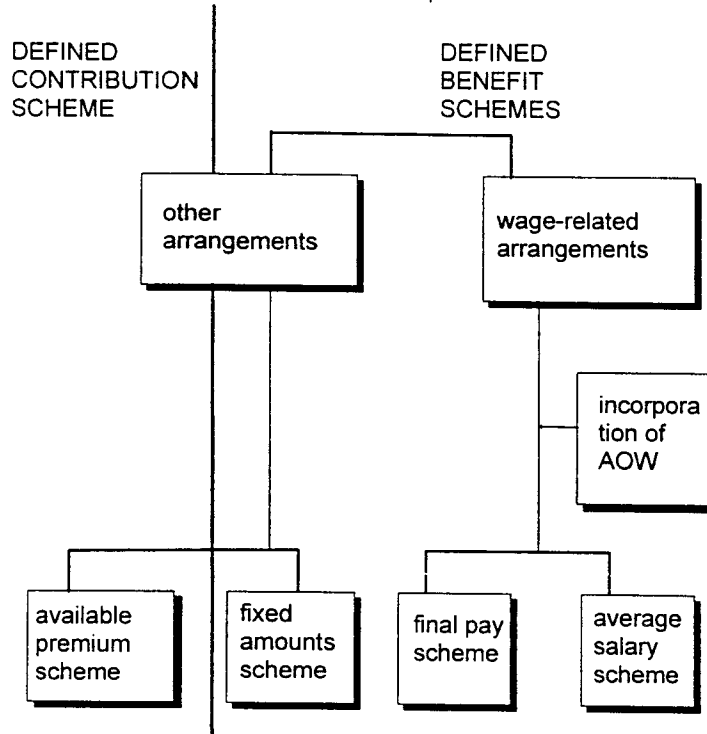
As said before, pension funds, operating on various organisational levels, offer a wide range of additional pension schemes. Pension funds can be according to what level it operates and according to what pension scheme it offers. Let us start by classifying the pension funds to the level on which they operate.

First of all, firm pension funds are pension funds operating for large firms such as Shell, Philips and Akzo. At the end of 1994, about 842 pension funds or almost 90% of the total number of pension funds are firm pension funds. The second category consists of industry pension funds, which -as the name reveals- are pension funds operating on the industry level. In 1994, there were 77 industry pension funds. Clearly, the firm pension funds outnumber the industry pension, but the latter generally are much larger than the former³. The third category of pension funds consists of the pension funds for professional groups such as lawyers, medical specialists and so forth. The fourth and last category are the other pension funds, which are not subjected to the PSW. This group consists of pension funds for very specific groups (for instance, soldiers who fought in Indonesia). Before its privatisation in 1995, it also included the huge pension fund for civil servants in the Netherlands, the 'Algemeen Burgerlijk Pensioenfonds' or ABP.

The second possible classification, is according to the pension schemes offered by the pension funds. This classification is represented in figure 1.

³ At the end of 1994, the average number of active and contributing participants was 866 for firm pension funds and 30839 for industry pension funds.

figure 1: classification to pension scheme.



based on: Petersen, 1990,p.60

The first distinction which can be made is between pension schemes where the old-age- and survivors pension benefit are in some way related to the wage the individual earned, and to pension schemes where this is not the case. Wage-related pension schemes can be subdivided in final wage schemes and average-wage schemes. In final wage schemes, the pension benefit is related to the wage the individual earned in the last (couple of) years of his or hers career. In average-wage schemes, the pension benefit is related to the average wage the individual earned over the full career-length. Remember that individuals are entitled to a gross pension benefit equal to 70% of the wage-base, given a career of 40 years. This means that one becomes eligible to $(70/40) \times 100 = 1.75\%$ extra pension benefit per year that one contributes to the pension fund. Generally, the pension benefit is derived by multiplying the wage-base (the final or average wage corrected for the AOW) with 70% times the 'pension quotient', being the length of the career in years, divided by 40.

The second category are the pension schemes where the pension benefit is not related to the wage. A subdivision can be made in, at the one hand, fixed amount systems and, on the other hand, the available premium. In fixed amount systems, the (current or future) pension benefit is a fixed absolute amount of money and the contribution rate is set such a level to cover this fixed pension claim. In available premium systems, the pension benefit is a direct function of earlier contribution payments.

In the Anglo-Saxon literature, another classification is often used as well: the defined benefit schemes are those schemes where the (future) benefit is determined and used to derive the current contribution payments. The final-wage schemes, average-wage schemes and the fixed amount system all fall in this category. Opposed to this, in the

defined contribution schemes the contributions determine the (future) pension benefit, and not the other way around. Only the available premium systems fall in this category.

So, we now have classified pension funds according to the level on which they operate and according to the pension scheme they offer. An obvious question then concerns the combination of both classifications: what type of pension fund generally offers what type of pension scheme? What combination of pension fund and pension scheme is the most popular in terms of numbers of active participants? To answer these and other questions, we look at table 1.

Table 1: classification of pension funds and active participants to operating level and pension scheme⁴.

| | firm pension- fund | | industry- pension fund | | pension fund for prof. group | | other pension funds | | row total | |
|-----------------|-----------------------|--------|---------------------------|--------|---------------------------------|--------|------------------------|--------|-----------|---------|
| | % fund. | % act. | % fund. | % act. | % fund. | % act. | % fund. | % act. | fund. | act. |
| final wage s. | 68,38 | 15,87 | 2,45 | 34,91 | 0 | 0 | 0,21 | 24,9 | 667 | 3039821 |
| average wage s. | 10,32 | 2,09 | 4,26 | 20,13 | 0 | 0 | 0 | 0 | 137 | 892671 |
| available pr. | 2,87 | 0,04 | 1,28 | 0,92 | 0,53 | 0,63 | 0,11 | 0,06 | 45 | 66040 |
| fixed amount s. | 0,72 | 0,02 | 0,21 | 0 | 0,64 | 0,3 | 0 | 0 | 14 | 12563 |
| other | 7,36 | 0,13 | 0 | 0 | 0 | 0 | 0,64 | 0,03 | 75 | 6200 |
| total % | 89,65 | 18,15 | 8,2 | 55,04 | 1,17 | 0,93 | 0,78 | 24,99 | | |

⁴ Own calculations, based on data end 1994. from: de Verzekeringskamer, 1995, table 3.2.3.2. The data is not including savings funds The sum of the one-but-last column (the total no of funds) is 938. The difference with the historical no of funds (984) is due to rounding errors. 'Other' systems are a combination of the first four systems. The total number of active participants is 4.017.289.

The uneven columns of table 1 show which percentage of a certain category (top row) of pension funds offers which pension scheme (first column). For instance, 10.32% of the pension funds are a firm pension fund (first column) which offers an average-wage pension scheme (second row). The last row shows the relative sizes of the different categories of pension funds. For instance, 89.65% of the pension funds are a firm pension fund. The even columns express relative number of active participants for the same combinations of categories. For example, 34.91% of the active participants are participating in an industry-wide pension fund offering a final wage system.

It can be seen from Table 1 that almost 70% of the pension funds are firm pension funds offering a final wage system. In terms of the number of pension funds, this combination is clearly the most popular. However, when we look at the relative number of active participants, the picture changes. Only 15.87% of the active participants is enrolled in a firm pension fund with a final wage scheme. By contrast, no less than 34.91% of the active participants participates in an industry-wide pension fund that offers a final-wage scheme. An explanation for this difference is that the industry-wide pension funds, even though less numerous, are much larger than firm pension funds in terms of number of active participants. In fact, in 1994, the average number of active participants was 866 for firm pension funds. For industry pension funds, it was no less than 30839. Another remarkable thing is that almost one quarter of the active participants is enrolled in a pension fund in the category 'other pension funds with a final-wage scheme'. The reason for this is that this category consists of one pension fund, namely the pension fund for civil servants, the ABP. This fund has about 900,000 active participants and a capital reserve of about 190 billion guilders or about 93 billion US\$, making it one of the largest pension fund in the world. Furthermore, no less than 75.86% of the active participants faces a future pension benefit which is based on the final wage. As a contrast, only about 22% of the active participants expect a pension benefit based on the average wage. The pension schemes which are unrelated to the wage (the available premium system and the fixed-amount system) are especially common for participants in pension funds for professional groups, which is about 3.25% of the active population.

In the next paragraph, the Belgian pension system will be explained. Next, the pension-income position of the elderly in both countries will be compared, using data of the LIS.

1. The Belgian Pension system.

In order to simplify the comparison of the pension systems of both countries, layers are distinguished in the Belgian pension system as well, though this is less straightforward than in the Dutch case. The first layer of the Belgian pension system is by far the most important -as will be shown empirically in the next paragraph. This is why it will get (by far) the most attention. This first layer consists of three separate old-age and survivors pension schemes for employees, self-employed individuals and civil servants. The pension schemes for these groups will now be explained in such a way that the similarities with the Dutch pension scheme are emphasized. As in the Dutch case, the pension benefit is calculated by multiplying a pension quotient with a wage-base, which is a function of the wage the individual earned while working. Again, the pension quotient reflects the length of the career i.e. the number of years the individual received a wage or a labour-related social security benefit. The pension outcome as described above is bound to a certain maximum and minimum. The reason for this is, on the one hand, to prevent excessive pension benefits, for instance as a result of large wage increases at the end of one's career. On the other hand, the minimal pension protects people with a past career of a certain minimal length (until recently at least two-thirds of a full career, which has recently been reduced to 15 years, at least for employees and self-employees), but a very low past labour income who would otherwise end up with a pension benefit which is below the sustainable minimum⁵. A last general characteristic is that the retirement age for males is generally 65, whereas until recently it was 60 for women, though exceptions are possible, especially for civil servants.

3.1. employees.

The pension scheme for employees is basically an average wage scheme. The pension benefit is derived by multiplying the average wage by the relative length of the career, expressed in 45th for males and (still) 40th for females. Again, this wage-base is indexed and bound not only to a minimum, but also to a maximum- The 'individual pension benefit' is 60% of the resulting amount, whereas the 'family pension benefit' amounts to 75%. An unmarried individual is entitled to the individual pension benefit; a married individual can choose between the two. However, if he or she chooses the higher family pension benefit, the partner of the individual loses his or hers individual pension claim. Thus, for a couple, it is only profitable to choose the family pension benefit if the partner of the beneficiary had earned less than 15% (75%-60%) of the income of the beneficiary.

⁵ The maximal pension benefit differ for men and women; averages are given. Under the assumption of a full career, the maximum and minimum pension benefit are 63257 bfr. and 34709 bfr. for families, and 50606 bfr. and 27775 bfr. for singles. (figures per month and of 1996; Sociaal Zakboekje, table 3.6 p. 304). In the case of a shorter career (of at least a certain minimum which will be discussed in the main text), the figures are adjusted *pro rata temporis*.

The survivors' pension benefit -to which men are eligible as well, since 1984- is equal to the (current or future) individual pension benefit of the deceased partner, or -which is the same- 80% of the family pension benefit. If the deceased was below the retirement age, the denominator of the career-ratio is equal to the difference between 20 and the year of death of the individual.

Like the Dutch AWW, but unlike the Anw, the benefit is not means-tested. One becomes eligible to this benefit if one is a widow or (since 1984) a widower, of course, and if one meets one of four demands, which closely resemble the requirements for the Dutch AWW or the Anw. To make the comparison more easy, the corresponding Dutch requirement is added between brackets. The most important condition for a Belgian survivors pension benefit is that one must be at least 45 years old (40 for the AWW, 47 in 1997 for the Anw). Other conditions are 1) that the individual is disabled for at least 66% (45%), or that one has a child (idem). Contrary to the Netherlands, one does not have to meet the above demands if the deceased did work as a coalminer for at least 20 years. As opposed to the Netherlands, the length of the marriage is subject to a minimum (of one year) as well, at least if there is no child born or if the cause of death is not related to work.

The Belgian survivors pension benefit does not end when the surviving partner reaches the retirement age, as opposed to the Dutch AWW and Anw. However, the sum of the survivors and old-age pension benefit is limited to 110% of the survivors pension benefit which the surviving partner would have been eligible to if the deceased partner would have reached a full career. Lastly, if the surviving partner is not 45 at the time of death of the insured, or if the surviving partner remarries, the survivors pension benefit is no longer unlimited in time, but becomes limited to one year.

3.1. Self-employed.

The pension system for the self-employed is to a certain extent similar to the pension system for employees. Again, the individual- or family pension benefit is a function of the wage-base, the length of the career (expressed in 45th and 40th) and a certain fraction (about .61 in 1996), reflecting the fact that the self-employed pay only 61% of the contribution which are made to the employees-pension scheme (since no employers pension contribution is paid).

For self-employed who retired before 1984, the wage-base was based on lump-sum amounts of money -and so were the contributions. From that year on, the 3-year lagged profits (bedrijfsinkomsten) were used instead. The survivors pension benefit is the same as in the case of employees -with this difference that the pension-base is of course not based on wages but profits.

3.1. Civil servants.

Compared to the pension system for employees and self-employed, the pension system for civil servants is rather generous. Four characteristics cause this generosity. First of all, the pension benefit is not based on the average wage over the whole career, as is the case for employees, but instead on the average wage of only the last 5 years of the civil servants' career. Of course, the latter can be expected to be higher than the former, especially since this income is increased if the beneficiary has educational grades. Secondly, the pension benefit of current beneficiaries is firmly linked to the full development of the wages of civil servants (the so-called 'automatic perequation'), thus including the 'incidental' component. The pension benefits of the employees and self-employed are, usually with a delay of a couple of years, linked to the wage-index. Thirdly, no difference is made between 'individual' or 'family' pension benefit: the pension benefit of the civil servant is 75% of the wage base -like the family pension for employees- with the career length is expressed in 45th⁶. The fourth general characteristic is that there numerous exceptions for specific groups of civil servants, mostly concerning a (lower) retirement age or a different (lower) denominator of the career-ratio (so that it takes less years to get the same pension level). For instance, professional soldiers in the Belgian Air Force retire at the age of 45, whereas the pension ratio of state-university professors is expressed in 22.5th⁷ so that they build up their pension benefit at double speed, relative to common employees. A last general remark is that the career length which is minimally required to increase the pension benefit to the minimum level, is 20 years. As opposed to this, the minimal career-length for employees and self-employees was until recently 35 years; currently -since the introduction of the 'minimal annual benefit- it is 15 years.

As far as the survivors pension benefit is concerned, as opposed to what was the case for the employees, the survivors pension benefit is not equal to the individual pension benefit. For employees, both the individual old-age pension benefit and the survivors pension benefits are equal to 60% of the wage-base, times the career length expressed in 45th. For civil servants, the old-age pension benefit is equal to 75% of the wage-base, times the career length expressed in 45th. The survivor's pension benefit, however, is equal to 60% of the wage-base, times the career length expressed in 45th⁸.

To recapitulate: the Dutch pension system consists of two layers: the first layer is the AOW and AWW/Anw, which provides everyone who is entitled with a fixed minimum pension benefit. The second layer consists of the various additional pension schemes (of

⁶ Actually, it is 100% of the wage-base times the career in 60th, which is mathematically equivalent, since $.75/45 = 60$.

⁷ This shows the advantage of expressing the pension ratio in 60th, since the equivalent of 75% times the career length expressed in 22.5th is simply expressing the career length in 30th times 100%

⁸ Or 80% of the wage-base times the career length in 60th.

which the vast majority are based on the final- and average wage). The first layer of the Belgian pension system provides its beneficiaries with a pension benefit related to either the final or the average wage. The second layer consists of semi-collective pension schemes, organized by pension funds on the firm level. However, contrary to the Netherlands, this second layer is very small and does not provide a significant part of the income of pensioners in Belgium - as will be shown in the next paragraph.

Lastly, a remark on the Belgian pension system must be made: the Dutch AOW is independent on the past labour history -and thus covers those who never worked as well. This is not the case in Belgium, where the first layer of the Belgian pension system excludes those who never worked. Thus, the question rises if this group is in any way protected in Belgium. The answer is 'yes'. In order to prevent those who never worked (for instance, divorced homemakers), to end up without any pension income at all, a means-tested 'guaranteed minimum' is provided by the government to every inhabitant of Belgium who is older than the retirement age and who has no income. This guaranteed income is 26,750 bfr. or \$714.45 per month for a married individual and 20,833 bfr. or \$556.4 per month for an unmarried individual. So, the pension income of those who have a pension claim is subject to a certain minimum (to a certain extent depending on the career length) but the pension income of those without a claim too, though this latter minimum is lower.

Before closing this part of the text where the Belgian pension system was presented and compared with the Dutch pension system, let us glance at the income-side of the pension systems in both countries. In the Netherlands About 15.5 billion guilder, 7.59 billion \$ or 2.5% GNP contributions were paid to the pension funds in 1994. In the same year, additional pension benefits amounted to almost 21 billion guilder, 10.28 billion \$ or 3.4% GNP. Combining this with the AOW- and AWW figures, which were presented earlier, we see that the pension benefits paid out by the first two collective and semi-collective layers of the Dutch pension scheme amounted to 9.25% of GNP. For Belgium, the equivalent figure for 1995 was 9.5% of GNP⁹. The (first-layer) pensions in Belgium are financed through a PAYG-system, which means that the annual contributions should be equal to the annual benefits. However, the contributions are less clear, since a part of the benefits (especially for civil servants) are financed through tax receipts.

In the Netherlands, the AOW and AWW/Anw are financed through PAYG as well. However, the additional pensions are financed by Capital Funding (CF). Consequently, the benefits from -and contributions to- the additional pension system do not necessarily cancel out in a year. The fact that the 1994-contributions to the pension funds were higher than the benefits paid out by the pension funds (2.5 vs. 3.4% GNP) is therefore caused by the fact that there will be more elderly in the future (who are now still active and saving for their pension) than there are elderly today (which receive a pension benefit).

⁹ Netherlands: Verzekeringskamer, 1996, p. 27 and CBS, Kerncijfers/National Accounts 1994.

Belgium: Pestieau et al., table 2 corrected for the 1995-difference between GNP and GDP; see National Accounts Belgium 1995.

This concludes the presentation of the Dutch and Belgian pension system; in the next paragraph, the income position of the elderly in both countries will be compared. Next, recent developments in the Dutch pension system will be described, this as an illustration of how policy makers deal with the future pitfalls which pension systems face.

4. An empirical comparison using the LIS data.

In this paragraph, the pension systems of both countries will be compared in terms of their gross pension outcome¹⁰. This will be done as follows: for both countries, the group of elderly will be separated and subdivided according to marital status. Then, the income distributions of the elderly in the various groups -and as a whole- will be compared not only across countries but also between groups.

The elderly are selected such that only those older than 65 are included. The reason for this is that we are interested in the income position of the *elderly*, not of those receiving a pension benefit. In both countries, all individuals older than the retirement age receive a pension benefit, but the inverse is not the case. In Belgium, only 75% of those receiving a pension benefit are older than the retirement age. In the Netherlands, this number is higher, namely 80%. The reason for this difference can first of all be found in the fact that more Belgians have the choice to retire early. Secondly, as said before, there are a number of exceptions to the rule that the retirement age in Belgium is 65.

Having focussed on the sample of elderly, the next step is then to subdivide the group of elderly according to marital status. The distinguished groups are: single males (either divorced or never married), single females (*idem*), widowers, widows and, lastly, married couples. The relative sizes of the different groups for both countries are the following:

Table 2: marital status of the elderly (weighted, in % of the sample).

| category | Belgium | the Netherlands |
|-----------------------------------|---------|-----------------|
| single male | 4.4 | 5.8 |
| single female | 5.4 | 8.0 |
| widower | 9.0 | 11.7 |
| widow | 34.3 | 18.3 |
| married couple | 46.8 | 56.3 |
| total sample size (unweighted) | 877 | 635 |

In both countries, most older individuals are married, which is hardly surprising. On the second place, we find widows. This is not very surprising either, since it is well known

¹⁰ The Belgian data set is of 1992 and the Dutch data set is of 1991. Both sets contain data on the household level. All non-individual numbers are weighted and all income figures are standardized. The standardisation values are 1 for the family head, .5 for the spouse and other family members older than 18, and .3 for children younger than 18. Two outliers were removed from the Belgian data set.

that the mortality rate is higher for males than females. What is somewhat surprising though, is that this percentage is considerably higher in Belgium than in the Netherlands. This could be due to a higher mortality rate among males in Belgium, a different age structure or a greater tendency among Dutch widows to remarry, compared to their Belgian sisters. Another possible explanation is that a certain fraction of Dutch widows do not consider themselves as such, maybe because they do not receive an AWW benefit anymore, but as single women instead. This would also explain the high percentage of single women in the Netherlands, as compared to Belgium.

Now, the group of elderly has been distinguished and subdivided by marital status. Let us turn back to the pension systems themselves. Earlier, it was claimed that the second level of the Belgian pension system was considerably less popular than in the Netherlands, in the sense that relatively less individuals receive an additional pension benefit on top of their social pension benefit. Table 3 shows that this is indeed the case:

table 3: cross-table of recipients of a social and/or additional pension benefit (% of the sample).

| | Belgium additional pension | | the Netherlands additional pension | |
|----------------|-------------------------------|------|---------------------------------------|------|
| social pension | No | Yes | No | Yes |
| No | 2.52 | 0 | 1.09 | 0.5 |
| Yes | 96.22 | 1.26 | 19.73 | 78.6 |

The percentage of individuals who do not receive any pension benefit at all, is very small though higher in Belgium (2.52%) than in the Netherlands (1.09%). There is some suspicion of these figures, especially in the Belgian case. The reason is that every retired inhabitant is eligible to the so-called Guaranteed Income Elderly (Gewaarbord Inkomen Bejaarden, GIB), a minimal benefit for those who do not have a sufficient pension of their own. Apparently, some elderly have not taken this benefit into account when answering the question whether or not they were pension-beneficiaries. The percentage of individuals who do not receive a social pension but only an additional pension is zero in Belgium and 0.5% in the Netherlands¹¹. What is more interesting, though, is the percentage of those who receive a pension benefit only from the first level, or from both levels of the pension scheme. Indeed, 96% of the Belgian elderly receive only a pension benefit from social security (the first level of the pension system). Only 1.26% of the sample receive a pension benefit from a pension fund on top of their state pension. Again, some suspicion is in order: according to Neyt (Neyt,1993), and based on fiscal data, about 10% of the Belgian elderly received an additional pension benefit in 1991. It therefore

¹¹ Actually, this is the weighted effect of only three respondents in a sample of 635, so it could very well be caused by response- or typing errors.

seems that Belgian respondents in our dataset mistakenly claim not to receive an additional pension benefit, or a pension benefit at all. Anyway, compared to the percentage of individuals who receive an additional pension benefit in Belgium, the reverse situation is the case in the Netherlands. Almost 80% of the sample receive AOW/AWW and an additional pension benefit. About 20% of the sample receive only AOW/AWW¹².

Given the grouping of the elderly according to marital status, we are now ready to consider the gross pension income of the various groups of elderly. The between-group differences (within countries) and the between-country differences can be disentangled. At first, it is of interest to look at the pension income of the various categories of elderly, without looking at the differences between countries. This can be done by looking at the pension income of the different groups, expressed in the local currency, as is done in table 4. Table 5 will give us a closer look at the actual distributions of the pension income of the elderly. Finally, in table 6, the pension income of both countries will be considered relative to each other. For this, the pension income should be expressed in a common currency, in this case being the US dollars. But, let us concentrate on table 4 first.

Table 4: Mean and median gross pension income of the elderly; local currency, per month.

| | category | sam ple | unit [†] social pension inc. | | unit total pension inc. | | (5)/(6) |
|----------|------------|------------|---------------------------------------|----------|-------------------------|----------|---------|
| | | | mean | median | mean | median | |
| Belgium | sing. male | 38 | 37783.93 | 31166.67 | 37783.93 | 31166.67 | 121.23% |
| | sing. fem. | 41 | 24051.94 | 20200.00 | 24327.76 | 20553 | 118.37% |
| | widower | 72 | 29899.15 | 26000.00 | 29899.15 | 26000 | 115% |
| | widow | 252 | 26455.32 | 25288.5 | 26544.12 | 25288.5 | 104.97% |
| | couple | 430 | 40955.87 | 37578.77 | 41148.86 | 37828.77 | 108.78% |
| Netherl. | sing. male | 32 | 1348.18 | 1386.67 | 2256.52 | 1820.86 | 123.93% |
| | sing. fem. | 37 | 1302.02 | 1386.25 | 2413.36 | 2117.5 | 113.97% |
| | widower | 70 | 1305.29 | 1386.25 | 2595.74 | 1629.96 | 159.25% |

¹² This 20% is confirmed by Boehlé (Boehlé et. al., 1994, p. 295). However, the fact that these households do not have an additional pension benefit, does not necessary mean that the AOW/AWW is the only income which these households have: according to Boehlé et. al., in 1991 only 2.15% (or 43.000 households) did not have any additional income (such as real estate, housing grants and so forth).

| | | | | | | |
|--------|-----|---------|---------|---------|---------|---------|
| widow | 89 | 1375.35 | 1386.25 | 1832.98 | 1533.25 | 119.55% |
| couple | 407 | 1739.35 | 1934.67 | 3179.56 | 2478.5 | 128.29% |

[†] unit is either an individual or a married couple.

In table 4, the mean and median unit social pension income and total pension income are given for both Belgium and the Netherlands. The total pension income is the sum of the social pension income (the first layer of the pension system) and the additional pension income (the second layer). The reason why both the mean and the median are presented is that their difference learns us something about the underlying distribution of gross pension income in both countries. In the last column, the mean total pension income is expressed as a percentage of the median.

Let us start by looking at the distribution of the gross pension income in Belgium: first of all, the fact that the second level of the pension system (where individuals participate in additional pension schemes organised by pension funds) is not very developed (as shown in table 3) is confirmed by the very small difference between the mean social pension income and the mean total pension income. Secondly, for all groups, the percentages in the 8th column show that the mean pension income is higher than the median income, suggesting that the income distribution is not symmetric, but skewed to the right. So, a relatively small number of Belgian pensioners have a very high pension income, causing the mean to shift upwards relative to the median. As said, the direction of this effect is the same for all groups in Belgium, so a more detailed discussion of the form of the distribution will be based on data for all groups taken together.

Thirdly, when looking at the between-group pension income, it is striking that males generally have a higher pension income than females: for singles, this difference is no less than 13731.99 bfr. (\$366.75) and for surviving partners, this difference is 3443.83 bfr (\$115.77). Most likely, the causes of this difference should be found in the past labour history of these men and women: not only did men generally earn more than women, *ceteris paribus*, but women generally had a shorter career as well, since marriage or becoming a mother were quite often a reason for a married woman to quit her job and step out of the labour market. The fact that this difference is smaller for surviving partners than for unmarried individuals can be explained by the fact that the pension income of a widow is based on the income of her late husband, whereas the pension income of a single woman is based on her own (generally lower) past income. The fact that the pension income of a married couple is higher than that of singles, can easily be explained by the fact that either both partners choose to get an individual pension income, which are then added, or that one of the partners receive a family pension benefit, which is 75% instead of 60% of the wage-base. One should however realize that if the average pension income of a couple is divided by 2, the 'individual' pension income turns out to be significantly below the pension income of the other groups. The reason again is that not all married couples choose to add up their individual pension benefits, but opt for one family pension benefit instead.

Next, let us consider the gross pension income of the elderly in the Netherlands. Three things immediately catch the eye. First of all, the figures for the unit social pension

income deviate much less between categories than was the case in Belgium. The reason for this is that the benefit provided by the Dutch General Old Age act (AOW) is a fixed amount of money, only depending on marital status of the beneficiary and independent of earlier contribution payments of the recipient. Moreover, the benefit paid to single individuals (by the AOW) and surviving partners (by the General Widows and Orphans act or AWW) is the same, namely 70% of the net minimum wage.

The second remarkable thing is that the difference between unit social pension income (AOW and AWW) and unit total pension income is much larger than in Belgium, reflecting the importance of the second layer of the Dutch pension system for the pension income of the elderly. The mean additional pension income accounts for about 25 to 50% of the total pension income of the Dutch elderly. By contrast, the equivalent figures are 0 to 1.1% for elderly in Belgium.

The third conspicuous thing concerns the difference between the mean and median gross pension income of the various groups. When we look at the pension income coming from the first layer of the pension scheme, the median is somewhat higher than the mean -though the difference is not very important- suggesting an income distribution which is somewhat skewed to the left. To understand this, remember that the level of the AOW benefit depends on whether or not one has been living in the Netherlands while being between 15 and 65 years of age; for every year one lived abroad, one loses 2% of the full pension benefit, at least for the AOW. These individuals who receive a smaller pension benefit cause the mean to shift downward, relative to the median, even though this shift is limited.

Let us compare these results with the actual individual politically determined benefits paid out in 1992 (Kleine Gids, 1992, p. 89-99): the median benefit for single males and females (about 1386 guilders or \$678 per month) is very close to the actual benefit level, which was 1396 guilders or \$683 per month. The same goes for the AOW-benefit of married couples; according to table 4, this is 1934 guilders or \$947 per month. The historical value is 1936 guilders \$948 per month. The 'fit' of the AWW-income is less fabulous, unfortunately: according to table 4, both widowers and widows receive 1386 guilders or \$678 per month. The historical value is considerably higher, namely 1744 guilders or \$854 per month. The difference is of course caused by those who do not meet the requirements for a permanent AWW-pension benefit and whose benefit-period for the temporary AWW-benefit has expired. These individuals -though being a widow or a widower- receive nothing at all. Consequently, the median turns out lower than would have been if this group were rather small.

The fourth notable point which can be made, is that this situation changes drastically when considering the unit total pension benefit: the last column of table 4 shows that the mean total pension benefit is between 14% and 60% higher than the median. Apparently, a small number of individuals receive a (very) high additional pension benefit, as opposed to the majority who receive a small additional pension benefit. This is confirmed by several studies, for instance by Boehlé et. al. (Boehlé et. al., ESB, 27-4-1994) and Bos (Bos, CBS, 1995).

A last remark is that the comparison of the gross pension benefit of single males and females shows a puzzling thing, namely that -according to the LIS data- the pension

benefit of the latter is larger than that of the former, which is against common thought. Unfortunately, no explanation could be found. The same thing is the case for the survivors pension income from the first layer (AWW) as well. A possible explanation could be that widows more often meet the demands for an AWW- pension benefit than widowers, for instance because the latter group cannot become pregnant or because their wife came to decease before 1988.

Before turning to the between-country comparison of the income figures expressed in dollars, let us dwell upon the income distribution a bit longer, since this could either confirm or contradict the conclusions which were based upon simply considering the difference between the mean and the median of the pension benefit. In this paragraph, we will very briefly discuss three key-figures which enables us to compare the actual distribution, rather than just the mean or the median of the pension income in both countries. In table 5, the standard error (expressed in US\$), skewness and kurtosis for both the social and the total pension income are presented:

table 5: standard error, skewness and curtosis of the pension income.

| | type pension | standard error | skewness | kurtosis |
|----------|---------------------|-----------------------|-----------------|-----------------|
| Belgium | social pens. | 770.93 | 0.972 | 0.919 |
| | total pens. | 775.65 | 0.973 | 0.907 |
| Netherl. | social pens. | 256.34 | -0.153 | 7.06 |
| | total pens. | 1139.95 | 6.86 | 84.75 |

As could be expected, the key figures for the social pension income and total pension income are quite alike for Belgium, whereas they differ very much for the Netherlands. The distribution of pension income in Belgium is slightly skewed to the right and weakly leptokurtic, but nothing serious and one could even start to wonder whether or not this distribution resembles a normal distribution. The skewness of the distribution gives reason to believe that the minimum pension is somewhat more restrictive than the benefit ceiling in terms of the number of individuals who actually see their 'real' pension benefit altered by one of the two limits and to what extent this alteration goes. The fact that the distribution is leptokurtic gives way to the suspicion that the few positive and negative observations at the tails of the distribution at the are that far away from the mean that they could be caused by implausible answers or typing errors in the survey, since they are contradictory to the existence of a minimum and maximum pension benefit.

The distribution of social pension income in the Netherlands is very small in the sense that it has a small standard error and a high kurtosis. This is the result of the fact that the benefit level is an absolute income-independent value. The small skewness to the left was explained earlier and will therefore not be discussed again. This overall view changes drastically, however, when we look at the distribution of total pension income in

the Netherlands. The standard error, skewness and kurtosis all increase very significantly and the distribution now becomes very skewed to the right. Again, this gives way to the suspicion that the vast majority of the individuals receive a total pension benefit close to the level of the social pension benefit (which means that the additional pension benefit is small), and that a small number of individuals receive extremely high additional pensions.

A last question which is to be answered, is whether or not the distribution of the total pension income resembles a normal distribution. In the case of the Netherlands, there is no real need to calculate a test statistic since the answer will be 'no' for sure. However, what about the distribution of pension income in Belgium? The key figures presented above are partial and thus do not directly and clearly provide an answer to the hypothesis of normality. Since the sample size was too high to make the Shapiro-Wilk statistic reliable, but too low to be able to derive a Kolmogorov test, an intuitive more appealing application of the Goodness-of-Fit-test or χ^2 -test was used. The principle of this test is the following: divide the continuous income variable into k classes¹³, thereby making it discrete. Then, for the same classes and given the sample size, derive how much observations one should find in every class, under the assumption of an underlying normal distribution. Next, use the χ^2 -statistic by confronting the observed and expected number of observations in every class and compare this with its critical value, given $(k-3)$ degrees of freedom¹⁴. However, since the number of expected observations was asymptotically zero at the tails of the distribution, the χ^2 -statistic is replaced by the Fisher's Exact test (Blalock, 1972, p. 287). The resulting test statistic is 344.24 for Belgium and no less than 1306.67 for the Netherlands¹⁵. Hence, the null-hypothesis of a normal distribution should be rejected for both countries.

Next and finally, the pension outcomes must be compared between both countries. It is obvious that the mean income positions of the elderly in Belgium and the Netherlands can not be compared by simply comparing the first layer, the social pension benefit, since their role differ considerably. The Belgian social pension system is supposed to provide a pension benefit, meant to keep the difference between the pre- and post retirement income as small as possible, whereas the Dutch social pension system

¹³ This was done using the rule of Sturges: class size = $1+3.23*\log(N)$ where N is the sample size.

¹⁴ Remember that the mean and standard error of the distribution are estimated as well. So, the degrees of freedom have to be adjusted for these two elements of uncertainty. The author would like to thank Peter Thijssen for his suggestion to use the χ^2 -test.

¹⁵ In a way, these test statistics are somewhat arbitrary. For the extreme values of the distribution, the expected cell frequencies were zero, which would break down the calculations since this variable forms the denominator of the test statistic. So, the expected cell frequency was assumed to be at least equal to 0.01. Thus, the value of the test statistic became a function of the minimum value of the expected cell frequency. However, the conclusion remained the same for the whole range of acceptable values of this minimum.

clearly aims at providing a minimum for all inhabitants in the Netherlands. Thus, the Belgian guaranteed minimum income (which was presented in the third paragraph) is below the Dutch social pension benefit provided by the AOW/AWW, but the comparison of both social pension benefits (the first layer) shows that the Belgian pension benefit is higher than the AOW/AWW pension benefit, as could be expected. Of course, this difference is to a certain extent compensated or maybe even more than compensated by the fact that the total pension in the Netherlands is more likely to be the sum of both the AOW/AWW pension benefit and the additional pension benefit. In fact, one can even argue that the pension outcome of the Dutch pension system is necessarily higher than that of the the Belgian pension system. This thesis can be underpinned by three arguments.

First of all, remember that in Belgium, civil servants receive a pension benefit based on the final wage. Employees and self-employed receive a pension benefit based on the average wage. In practice, this means that about 78% and 22% of the Belgian population can expect a future pension based on the average wage, respectively the final wage¹⁶. In the Netherlands, as said in the first paragraph, these figures are about the inverse, namely 22% and 75%, respectively. Thus, compared to the situation in Belgium, much more Dutch individuals receive - or expect to receive - a pension based on the (higher) final wage.

Secondly, the maximal career length, after which one is entitled to a full pension benefit, is 40 years in the Netherlands, whereas it is 45 years in Belgium, at least for males. In other words, it takes longer to reach the full pension benefit in Belgium than in the Netherlands. If we inverse this line of reasoning, *ceteris paribus*, this means that a smaller proportion of the Belgian population will reach the full pension benefit, as compared to the Netherlands.

Thirdly, even if we ignore the above difference by assuming that both groups reach the full pension benefit, the Dutch pension benefit will be 70% of the wage-base, whereas it will only be 60% for individuals in Belgium. Of course, the family pension benefit (75%) is higher, but this pension benefit accounts for two individuals, instead of one.

Thus, *a priori*, we could expect to be the total pension income from the (semi-) collective layers of the pension system to be higher in the Netherlands than in Belgium. This is confirmed by table 6, were the pension income is expressed in dollars.

Table 6: mean and social and total pension income expressed in US\$, gross figures, per month.

| category | Belgium | | the Netherlands | |
|----------|----------------|---------------|-----------------|---------------|
| | social pension | total pension | social pension | total pension |
| | | | | |

¹⁶ NIS, table 2.A.1, p. 58.

| | | | | |
|----------------|---------|---------|---------|---------|
| single male | 1008.49 | 1008.49 | 659.55 | 1103.92 |
| single female | 641.97 | 649.33 | 636.96 | 1180.65 |
| widower | 798.04 | 798.04 | 638.56 | 1269.87 |
| widow | 706.12 | 708.49 | 672.84 | 896.72 |
| married couple | 1093.15 | 1098.30 | 850.912 | 1555.48 |

When comparing the total pension income of the elderly of both countries (which was the thing we set out to do in the first place), it is clear that the mean total pension income of the elderly in the Netherlands is between 10% and 82% (and on average 44%) higher than the pension income of the Belgian elderly. Moreover, again, the additional pension benefits are considerably higher in the Netherlands, since these benefits more than neutralize the fact that the first-layer pension benefit is on average about 22% percent higher in Belgium than in the Netherlands. Thus, on average, the pension benefit is considerably higher in the Netherlands than in Belgium.

This being true, the conclusions drawn from this comparison of mean incomes should be shaded by two observations. First of all, those dutch elderly who did work but never earned enough to build up an additional pension benefit, clearly would have been better off if they would have lived in Belgium. Moreover, given the fact that the pension income is much more unequally distributed in the Netherlands than in Belgium, the question rises whether or not the conclusion drawn on table 6 will still hold when the medians instead of the means are considered. These numbers will not be presented (they can easily be derived from table 4), but the between-country differences between the medians are considerably smaller. For the first-layer, the Belgian median pension benefit is only 1% higher, and for the total pension benefit, the average difference between the mean pension benefit in the Netherlands and Belgium (which was 44%) reduces to 28% when the medians are considered. Clearly, considering the medians instead of the means reduces the difference between the countries in terms of the pension income the elderly receive. The reason is that, for both layers, the country with the highest pension benefit also has the more unequal (and more skewed to the right) distribution of the pension benefit.

In this fourth paragraph, the pension income of the elderly in Belgium and the Netherlands have been analyzed and compared. The most important conclusions are to be drawn now. First of all, it was said before that -contrary to Belgium- the second layer of semi-collective additional pension schemes offered by pension funds is very important in the Netherlands. Not only does a majority of the elderly in the Netherlands receive an additional pension benefit, but it does also provide a significant fraction of the total pension income of the elderly. Taking the pension income from both layers together, the mean pension income of the elderly in the Netherlands is on average 44% higher than in Belgium. However, it is also much more unequally distributed: those elderly in the Netherlands who only receive a pension income from the first layer (the AOW and AWW/Anw), which is still a significant minority (about 20%), on average receive less than the elderly in Belgium. This is confirmed by the fact that the average difference of

the median total pension income is considerably lower, namely 28%, thus showing that the higher average pension income is to a certain extent due to a minority of Dutch elderly who receive a very high pension income.

In the following paragraphs, recent developments in the Dutch and Belgian pension policy will be described. In order to keep things simple, we will not discuss the developments concerning the survivors pension schemes.

1. Recent developments in Dutch pension-politics: an illustration.

‘The old-age protection is in jeopardy, and nobody twigs it’, was the headline of a recent article in the magazine *HP/de Tijd*¹⁷. Even though this seems somewhat exaggerated, it certainly is true that there are important changes in the Dutch pension-landscape. Likewise it is true that the public does not seem to be much interested in this subject, though this is changing rapidly, due to the increasing attention of the media. In this part of the text, an effort will be made to describe the discussion on the pension system in the Netherlands, the problems it faces and the decisions taken to overcome these problems.

The discussion on the AOW (and the AWW/Anw, for that matter) is part of a total re-examination of the Dutch system of social security. The discussion was triggered by some politicians and economists, warning that the future demographic changes (the ‘greying’ of the Dutch society) could eventually jeopardize the pension system. Gradually, the idea that policy makers should anticipate to these potentially very serious financing problems, took form, especially since the coalition partners (the parties who were on power) agreed on that the linkage of the AOW-pension benefit with the course of wages should be restored, since the real value of this benefit had been eroded strongly during the eighties. Eventually, things boiled down to a number of propositions, which will be presented now.

First of all, the figures of the Social Security Bank (who organizes the AOW and AWW/Anw) showed clearly that the income of the elderly is not significantly lower than that of the active population, though it is much more unequally distributed (Boehlé et.al., 1994). This inspired the socialist parties in office (the PVDA and D66) to propose that rich elderly should pay AOW-contribution as well, thus (partly) supporting the less fortunate elderly. This led to heavy protests by the representatives of the elderly, of course, and a politically less dangerous variant was soon developed: the AOW-contribution rate would remain on the current 1997-level (15,5%) and the difference between this and the funds required to pay the AOW-benefits in the future, would come from general tax-receipts. This way, the extra burden of the AOW would be carried by the whole population, including the rich elderly. In the first half of July of 1996, this proposition was accepted by the coalition partners.

The second proposition -coming from the liberal party, the VVD, which was the third party in office- was that the retirement age should gradually be increased to 76

¹⁷ *HP/de Tijd*, 21-2-1997.

years. The VVD argued that this proposition would put the Netherlands in line with other countries, such as the U.S. This proposition was supported by the Central Planning Agency and the employers-organisations. Nevertheless, this proposition was rejected.

A third proposition -again from the socialist PVDA- concerned the establishment of a so-called 'fluctuation-fund' (literally translated from 'schommelfonds'): the whole idea was that the government should reserve a certain amount of its funds today to cover for the AOW-costs of tomorrow. Indeed, this implies that a part of the AOW would be financed through Capital Funding instead of Pay-As-You-Go. In November 1996, the coalition accepted this proposition and decided it would invest between 1 and 1.5 billion guilder (between about 489 and 734 million dollar) per year in government bonds, as a buffer for the future cost of the AOW. This, however, was considerably below the amounts of money the Central Planning Agency had advised to the government. Thus, as this is written down, there is increasing pressure on the coalition to increase the annual contribution to the fluctuation-fund.

The government did always stress that the system of additional pensions was in the hands of the employers- and employees-organisations, and that its possibilities (and intentions) to interfere were limited. Nevertheless, it advocated the average-wage system as opposed to the final wage system from the beginning of the nineties onward. The reason for this is not only the cost-reducing effect (Dekkers, et.al., 1995), but also that - compared to the final wage-system- the relation between contributions and benefits would be strengthened as they are both a function of the same average wage. Not only would this make the pension benefit for future generation less dependent on current interest receipts, but it would also decrease perverse income redistribution (since lower-income workers generally have a flatter career, in terms of earnings). This advocacy has been accompanied by fiscal measures in favour of the average-wage system. For instance, the possible future pension-income loss due to the shift to an average-wage was prevented by allowing the annual pension upbuilding to be increased from 1.75 to 2% per year. This way, a pension benefit equal to 80% of the average wage could be established after a career of 40 years. Moreover, according to the secretary of state of Social Affairs, the main reason for the introduction of this fiscal measure was to facilitate the participation in capital funding-financed early retirement schemes (Telegraaf, 2-9-1996). Very recently, the secretary of state shaded the efforts of his predecessors somewhat, by saying that the shift towards an average-wage scheme should not be considered a 'dogma', which would be imposed by the government (Staatscourant, 14-05-1997, no 89).

A second way in which the government indirectly influences the system of additional pensions is by its efforts to increase competitiveness between pension funds. This is done by broadening the definition of a 'pension', thus allowing pension fund to enter the insurance market and increasing the possibilities for individuals to enter private pension-insurance schemes.

A last measure concerning the additional compulsory pension system concerns only the civil servants, though this measure 'radiates' to the pension system as a whole. In May of 1996, the minister of internal affairs reached an agreement with the civil

servants' representatives to replace the Early Retirement Scheme (Vervroegde Uittredingsregeling, VUT) by a system of Flexible Retirement (Flexibel Pensioen en Uittreding, FPU). This FPU offers civil servants the free choice to retire early between 55 and 65, taking a certain reduction of their pension benefit into account. Moreover, it offers a choice between either an additional survivors pension benefit or a higher old-age pension benefit. Lastly, as opposed to the VUT, this FPU is financed by capital funding.

Lastly, as far as general measures on the implementation of average wage schemes instead of final wage schemes are concerned, any concrete action should not be expected before the year 2000 (persbericht Staatscourant, 3-2-1997, no 23).

1. Recent developments in the Belgian pension system.

Like in the Netherlands, the notion that the pension system could be facing rough times, dawned only slowly. During the last elections, pensions were one of the hot issues. The Flemish liberal party (VLD) advocated partial introduction of capital funding in the financing of the collective pensions (the first layer); this to make the system more resistant against demographic ageing. However, the coalition partners, the Christian parties (the Flemish CVP and the Walloon PSC) and the socialist parties (the Flemish SP and the Walloon PS) opposed to this, saying that this introduction would imply that the current active population would have to pay a higher contribution rate, since they should provide the pension benefit for the current pensioners and in the same time save for their own future pension. Nevertheless, these parties did realize that modifications of the collective pension system -though not as profoundly as shifting to a capital funding system¹⁸- were inevitable. This way, the government could as well make the pension system more able to deal with the changes on the labour market (for instance, flexibilisation, part-time jobs and so forth) and to equalize the juridical status of men and women in the pension system, and -of course- to increase the financial robustness of the system in the light of future demographic changes. (Federal Information Service Belgium (3), p. 6). However - and this was the last requirement- the pension rights of the current retirees should not be touched (Dehaene, 1995, p. 93, SP-nieuws, 7-10-1996). Contrary to the Netherlands, where most measures were taken on the financing side of the system, the Belgian policy makers emphasize reform on the benefit-side of the pension system.

Last year, the pension systems for the employees and self-employed were modified. Due to enormous political pressure, the civil servants pension system remained untouched, but this situation is likely to change in the near future. The most important changes in the pension schemes for employees and - self-employed will be described. This paragraph is based upon press-releases of the federal government, of articles in newspapers and 'the Royal decision dd. 17-01-1997 to execute the law dd. 26-

¹⁸ This does not imply that there is opposition to the Capital funding system *per se*: there seems to be general agreement upon the necessary extension of the second layer, the system of additional pensions (see, for instance, Dehaene, 1995, p. 93).

07-1996 on the modernisation of the system of social security' as was published in the statue-book.

As said, one of the goals was to eliminate the differences between the sexes in relation to the pension system. This is achieved by a gradual increase of the retirement age for women from 60 to 65 - the retirement age for men. In the same time, the career length -which was expressed in 40th- will gradually become expressed in 45th. This whole operation takes 13 years, starting in 1997. Moreover, the minimal age for women to become eligible to an early retirement scheme will be increased from 55 to -again- that of the men: 60 years. Moreover, for both men and women, the minimal career length for an early retirement benefit increases gradually (over 9 years) from 20 to 35 years. Another important measure -intended to increase the capability of the pension scheme to deal with part-time workers, of which the majority are women- was the introduction of a so-called 'minimal annual right'. If one has a career of more than 15 years and if one does work more than half-time, one builds up an extra minimal future pension benefit per year, which is a function of the minimal wage of an 21-year old. Another compensating measure is that individuals who stop working in order to raise a child or as a part of a 'labour redistribution program', get additional 'pension-years'. Another measure which must be brought forward is that the correction factor -which was used to increase somewhat the generally very low pension rights built up in the period between 1955 and 1974 and which was 1.032 in 1997- will be abolished gradually over a 9-year period. As a (limited) compensation for the above measures, the government decided to link the 'pension-ceiling' (the maximal wage which is included in the wage-base) to the wage-index, instead of the price-index.

The measures taken in the system of pensions for self-employed generally are the same as presented in the above section. However, some additional measures were taken, of which the most aim to provide some sort of compensation to female self-employees. One important measure is the following: the pensions for self-employed are referred to as 'proportional' which implies that the pensions are decreased with a certain factor, to compensate for the fact that self-employed contribute only about 60% of the employees' contributions. For future pensions, this fraction will be replaced by 57% and (for incomes above a certain limit and below the indexed 'ceiling') only 47%. Thus, by introducing a lower factor for higher pension-incomes, the pension system for self-employed becomes progressive (to a limited extent, at least).

The pension system for civil servants is the most generous and causes the most concern among economists and politicians. However -due to intense protests of the civil servants- no decisions have been taken sofar. However, the federal minister for pensions, mr. M. Colla, has announced a modification before the end of 1998¹⁹ as he had done for the end of 1997²⁰. However, as an attempt to prevent new demonstrations, the minister of

¹⁹ Lecture held at the Symposium 'De Wettelijke pensioenregeling: een haalbare uitdaging' organized by the Belgian Federal Planning Agency, Brussels, 2-12-1997.

²⁰ BRTN-radionieuws Actueel 13u, 7-10-1996, de Morgen, 8-10-1997, internet-archief SP.

internal affairs, mr. J. vande Lanotte, has already announced that the pension rights of current retirees will remain unchanged -as was the case for employees and self-employed²¹. What possible measures are currently considered? First of all, there had been heavy dispute about whether or not the 'automatic perequation', linking the current- and future pensions to the wages, should be abolished. Recently, again in order to prevent severe actions from the unions, it turned out that the government will not abolish the automatic perequation, but it will be limited to 1% per year. The length of the career - which was expressed in 60th, will become expressed in 64th. However, in order to stimulate participation of older workers, bonus-percentages will be given to those who remain working after the age of 60. The labour market effects of this measure will be dampened by a new system of early outgoing (which is something different from early retirement, since these individuals will become unemployed), for civil servants older than 57 year and for at most 5 years²².

Lastly, two measures intended to increase the service to contributors and beneficiaries were taken: an information-service for the pension-administrations of the employees, self-employed and civil servants will be erected juridically (actually, it existed from 1995 on), and a Parliamentary Commissioner will be appointed.

1 Conclusion.

In this study, the pension benefits which the elderly receive have been compared between the Belgium and the Netherlands. The study begins with a birds-eye view on the respectively pension systems of both countries. The system of additional pensions, provided by pension funds, is clearly more developed in the Netherlands as compared to Belgium, this to correct for the lower (and fixed) benefit provided by the state-wide pension benefit. In Belgium, the state-wide pension scheme provides an average-wage pension benefit to former employees and self-employed, and a final-wage pension benefit to former civil servants.

Next, the benefits actually paid out are considered. The pension income provided by the first layer of the pension system is higher in Belgium than in the Netherlands, but the mean total pension income is higher in the Netherlands than in Belgium, since the second layer of the pension system is much more developed in the Netherlands than in Belgium, both in terms of percentage of participants as in benefits paid out. One should however take into account that the distribution of total pension-income is much more unequal in the Netherlands than in Belgium, again caused by the distribution of the additional pension income.

The last part of this study was dedicated to describe recent developments in the pension systems of both countries. The motivation for reforms differ between both countries: in the Dutch case, it was concern on the future demographic changes, whereas

²¹ Het Laatste Nieuws, 7-10-1996, in: internet-archieff SP.

²² de Standaard, 16-06-1997.

it was merely to decrease gender-differences and to improve the flexibility of the system in the Belgian case. In the Netherlands, the measures were mostly taken at the income-side (at least for the AOW): the erection of a fluctuation fund, the financing of the AOW from general tax-receipts (thus including the rich elderly in the group of contributors), are the most important measures. Moreover, the AWW was replaced by the more restrictive Anw, which is expected to be abolished over time, as the group of potential beneficiaries will decrease. On the additional pensions, the advocacy of the average-wage system was the most important. In Belgium, the measures concentrated and concentrate on the benefit-side of the first layer of the pension system.

The pension-landscapes in both countries are clearly in motion, and it is interesting to notice that two contiguous countries can in such different ways attempt to provide their elderly with an income, and in such different ways react to roughly the same changes of the demographic and economic circumstances. Highlighting these differences in more or less equal circumstances and given equal goals is something this study intended to do.

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