This article would have been easier in a continental European language than in English, because of the semantics. Therefore I will first try to give an English definition of a pension and of an annuity.

Hopefully there is a difference, otherwise you should not read any further. I limit myself to the Roman numerals I and II.

I. An Annuity

An annuity is a simple investment. Simple to actuaries anyway. In exchange for a capital sum regular annual repayments — including some (hidden) interest-compensation — are made. The repayment stops at an unpredictable time, depending on life of the annuitant or the lives of the annuitants. The period of repayment is thus uncertain to both parties in the annuity-contract.

II. A Pension

A pension is granted to an employee, as part of the remuneration for the efforts the employee delivers for his employer. The employee is usually completely dependent on his salary for his living. The pension provision is part of the whole remuneration, but usually nobody knows exactly how big this part is. This is because nobody knows what a pension costs. Ask 47 actuaries and you will get 47 different answers; presumably one is correct and 46 are not! The pension starts at some (more or less) defined retirement age and is paid during the rest of the pensioner’s life, and possibly that of his widow. The total package includes not only salary and pension rights, but there is also a complete range of social security like healthcare, sickness-pay, disability income etc. etc., provided under what we call social insurance. These provisions cover calamities, that cannot conveniently be borne by individuals. Even family allowances for big families are part of this security cover, at least in the Netherlands.

One could consider this the particular national context of social security. Each country has formed in this field its own definitions of how social protection should replace individual responsibility.

The pension is usually not regarded as a part of the social security, but in my opinion it ought to be at least to some extent. Naturally I will never advocate bringing occupational pensions into common social insurance because sooner or later this will mean a pay-as-you-go system) but, what I want to make clear is that a pension is more than an annuity.

Why is a pension more than an annuity?.

If the employee gets his salary he can do with it whatever he wants but usually it implies a basket of goods and services. At all salary-levels the employee considers his basket somewhat inadequate and would find a 10% higher level almost ideal.

In most pension schemes is an intended relationship between an employee’s final salary and his pension, taking into account what State benefits provide for him in the pension field.

In other words: the salary-basket of goods and services is replaced by a pension-basket of goods and services.

There are many ways to demonstrate that a pension-basket ought to be smaller than a salary-basket. In my opinion one of the main reasons is that the pensioner does not work anymore for his employer. It would be demotivating for an employee to find out that all his production is valueless if his pension-basket is the same (or even bigger!) than his salary-basket.

If we look on the other hand to the annuity: we do not find this relationship is shared except that the annuity and the pension stop at the same time. At least they have this one point in common.

Gross amounts/Net amounts, especially in the Netherlands

Having made our society extremely complicated, we as professionals know that for every rule there is an exception, no doubt for well-justified reasons. But how do we reconcile a payroll that has to be increased by 22% for the employers share of social insurance, and decreased by 18% for the employee’s contributions and 15% for taxes, to quote a typical example. This 122% of payroll is paid by the employer, whilst the employees receive only 67%.

As soon as an employee retires, his cover for social insurance stops, because this insurance is tied to employment. Also the contributions for this cover come to an end.

Thus if the gross pension of the retiree is e.g. 70% gross salary, the ratio between net income before and after retirement is 90% or more. In other words, the pension basket is, say, 90% of the salary basket in the Netherlands.

This “20% plus” is an interesting point if we take into account the foreseeable ageing of the population. Social insurance contributions will increase. This “20% plus” difference will therefore increase as well. The result will be, that the 70% gross pension will provide 100% or 110% net ratios unless we reduce the 70% to 60% or lower. This would not be a simple operation, but there is an alternative.

This would be to reduce the level of social insurance to the amount which can be provided in future from current contributions and rates would mean that this level of social insurance would drop gradually. This would have implications for occupational pensions, integrated with the social pensions, because they would automatically compensate for this lower level. In the Netherlands we see the first signs in this direction. Via complicated mechanisms of net minimum-wage, translated into gross State pensions, we saw in the middle of 1981 that salaries increased by 3% but benefits increased only by 0.3%! Who is paying the piper?

I am not against fully integrated pensions; I am an enthusiastic advocate for them, but I can see the disadvantages as well. The goal of a pension scheme must be to provide the retired employee with a reasonable pension-basket, taking into account the income from social insurance.

Therefore that goal has to be translated somehow from net ratios back into gross ratios. Gradually we therefore expect the adjustment of the (in the Netherlands pretty common) 70% scheme to lower levels, leaving the net ratio unaltered, which is what matters.

Having said this, I fully agree that the annuity character of a pension leads to limitations.

We come to a paradox in the pension field, highlighted by the answer to the following questions:

(a) Is a pension defined by its goal?
(b) Is a pension a (deferred) annuity, defined by its premium?

Our friends from the USA have found their answer affirmative to the second question since Erisa. But is this fundamentally correct? I would like to ask the International Association of Consulting Actuaries the following questions:

Whether or not:

(a) a pension promise is more than a promise of a (deferred) annuity?
(b) a pension must be defined or derived in relation to income either gross or net?
(c) is there a solution via (deferred) annuities for a pension problem?