

Brief

Prepared by the General Secretariat of the Council, under the direction of the President of the COR

The rationale: As part of the deliberation on the forthcoming pension reform, this paper reviews the three techniques for calculating entitlements in a pay-as-you-go pension system (annuities, points and notional accounts) and the possible transitions from one technique to another. The first part describes each of the techniques and shows their equivalence requirements. In the second part, the techniques are compared with respect to the various parameters to pilot a retirement scheme. Finally, the third part presents the different ways to switch to a new system as well as the technical and legal issues raised by such a transition.

I. Different ways of calculating pension entitlements on a pay-as-you-go basis

- **What is an annuity scheme?** In an annuity scheme (*document n° 2*), the pension entitlement is the result of three elements: the annuity rate (, the reference wage and the qualifying period of insurance. These schemes thus put forward a replacement income goal. In order to take into account the retirement duration, discounts and premiums can be applied in relation to a reference age, which in the French annuity schemes (including the general scheme) is linked to the contributory record qualifying for a full rate pension.
- **What is a points-based scheme?** In a points-based scheme (*document n° 3*), the contributions paid each year are converted into points by dividing them either by the purchase value of the point (AGIRC-ARRCO, for example) or by a reference wage (CNAVPL, for example). The pension entitlement is thus equal to the total points accumulated throughout the career multiplied by the service value of the point. Penalties and bonuses can also be applied in relation to a reference age. At AGIRC-ARRCO, penalties are applied with reference to the full rate of the general scheme but no bonuses.
- **What is a notional accounts system?** The notional accounts (*document n° 4*) are based on a principle of equality over generations between the discounted amounts of contributions and pensions. The discount rate is the growth rate of payroll, which is the return of a pay-as-you-go scheme with a stable contribution rate. Throughout his career, each affiliate earns rights in euros that match the sum of the contributions paid, revalued each year according to the payroll growth rate. At retirement, the accrued-to-date pension assets are converted into a stream of pension payments using a conversion coefficient based on life expectancy of the generation (penalties and bonuses are then implicit).
- **Are these techniques equivalent?** They can be, namely with a steady contribution rate. In this case, the evolution of life expectancy at retirement along generations must be integrated into the annuity rate of annuity schemes or in the return of points-based schemes (*document n° 5*). As a result, the extension of the qualifying insurance period for a full rate in annuity-based and points-based schemes in France is consistent with a lower conversion coefficient.

II. Comparing the different ways of calculating pay-as-you-go schemes entitlements

- **Which guarantees and flexibility in monitoring pension schemes?** Notional accounts schemes are the least flexible because of the binding rules ensuring no transfers between generations and therefore a long-term equilibrium of the scheme. Like notional accounts, points-based schemes (such as in AGIRC-ARRCO and excluding the call-up rate) tie the

rights to the contributions paid, but it is possible to monitor the purchase and service values of points. Annuity-based schemes are the most flexible as there are many levers to monitor; in particular, contribution rates can evolve without creating entitlements. Altogether, any gain in flexibility is paid back by a greater uncertainty about the results for the insured population and the scheme, which are then dependent on the decisions taken.

- **How is the contributive effort taken into account?** The points-based or notional accounts schemes consider the career as a whole as well as the contribution rate to measure the contributive effort, whereas the annuity schemes do not take into account the effort in terms of contribution rates (only in terms of contribution period and wages) and may only retain part of the career for the reference wage. The notion of the contribution period is central in annuities and can be ignored in points or in notional accounts. (*documents n° 6 et 7*).
- **How is the retirement age taken into account?** The points-based or notional accounts schemes can adjust the level of pension in relation to age by applying penalties or bonuses for early or postponed retirement. With notional accounts, considering age is inherent in the technique due to the conversion coefficient (*document n° 6*).
- **How are accrued rights and pensions payments revalued?** In an annuity scheme it is possible to revalue differently the accrued rights and the pension payments, even though this is not the case today (e.g. in the general scheme). In a points-based scheme, the revaluation of accrued rights and that of pension payments are linked via the service value of the point, but they could be totally disconnected. In notional account schemes, the revaluation rules are constrained by a return being equal to the payroll growth rate. As a result, accrued rights are revalued in principle like the payroll; pension payments can be revalued on a less favorable index but with higher drawdown at pension claiming as a counterpart (*document n° 6 et 7*).
- **What about solidarity?** The three schemes make it possible to integrate some solidarity mechanisms. With points and notional accounts, a right cannot in theory be given without payment of an equivalent contribution. It is quantifiable at the time of the triggering event and always contributes to increase the pension, which is not always the case in an annuity scheme. (*document n° 6*).

III. The transition problem

- **What are the different ways to switch?** There are several (*document n° 8*). In the case of an immediate switch between the old and the new scheme, all accrued rights under the old scheme are recalculated and converted into the new scheme; the old scheme is therefore closed. The progressive switching is meant to have the old and the new scheme coexist for a while, either by linking simultaneously the generations within the transition to both schemes or by linking them successively – the entitlements from the old schemes being fixed on the transition date.
- **What is their technical feasibility?** It depends on the ability to manage two schemes at the same time (in the case of a progressive transition) or on the ability to have the most complete career records (in the case of immediate or progressive transitions with simultaneous affiliation), which is not the case in France in 2018 (*documents n° 8 and 9*).
- **And what is the legal feasibility?** There are not particular hurdles with respect to legal feasibility when switching to a new scheme (*document n° 10*).