CONSEIL D'ORIENTATION DES RETRAITES
Plenary session October 14, 2021 at 10:00
"Life-cycle redistributive effects of the pension system"

Brief

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

Summary: The French law sets an equity objective for its pension system. It is therefore necessary to analyse the wealth transfers between individuals organised by the pension system. These transfers of wealth over the life cycle can be understood by a synthetic indicator: the internal rate of return. This dossier proposes to evaluate it on several typical careers in order to illustrate these transfers according to the level of earnings, gender, marital and family status, career completion and retirement age.

I. Measuring the redistribution of the pension system within a generation implies taking into account both the total contributions paid and the benefits received over the life cycle

- **What indicators should be used to measure the redistribution of a pension system?** The insured receive pensions in return for paying contributions during their working life. To measure the redistribution of the pension system over the life cycle, the indicator used in this paper is the internal rate of return (IRR), which is the interest rate that equalises the contributions paid and the pensions received. A difference in IRR between two typical individuals means that the pension system transfers wealth over the life cycle between these two individuals; the system is redistributive if it offers a better return - and therefore a higher IRR - to poorest individuals *(document no. 2)*.
- **Is the reduction of inequalities enough to conclude that a system is redistributive?** No. Reduction of inequalities (i.e. a higher replacement rate for lower-income individuals) and redistribution are linked, but a pension system can reduce inequalities without being redistributive over the life cycle if low-income individuals have a shorter retirement period or a higher contributory effort *(document no. 2)*.
- **What method is used in this case?** *(documents no. 3 and 4)* The analysis is based on case studies of the 2000 generation, in order to measure the impact of each arrangement (calculation rules, taxation) or of individual characteristics (gender, life expectancy, etc.).

II. The pension system is globally redistributive: it offers a better return to low-income earners

- **Which typical cases are compared and what are their IRR differences?** *(documents no. 3 and 5)* Three typical cases are studied: an executive working from 23 to 66 years old (dying at 93.3 years old), a non-executive working from 21 to 64 years old (dying at 91.1 years old) and a worker earning the minimum wage from 19 to 62 years old (dying at 90.0 years old). Their respective IRRs are 0.7%, 1.6% and 4.0%: the system is therefore very redistributive for complete careers, and offers a better return for this type of career when the salary level is lower.
- **Why does an employee at the SMIC have a better return?** *(document no. 5)* The contribution exemptions on low wages explain a very large part of the redistribution in favour of the employee at the minimum wage. Assuming complete careers, differences in life expectancy have a small effect - partly offset by differences in the age at which people enter the labour market and therefore retire. The CSG differential on pensions has a redistributive impact, but limited.
- **Why does the executive have a lower return than the non-executive?** The return on contributions is significantly lower in AGIRC-ARRCO than in the general scheme, mainly because AGIRC-ARRCO has a projected surplus and the general scheme has a deficit *(document no. 5)*. Therefore, the system offers a lower return to individuals whose share of the pension received in the supplementary scheme is significant - i.e. high-income executives.

III. Solidarity arrangements improve returns for people who have been unemployed

- **How does a full career compare with a career interrupted by unemployment?** The return is 0.3 points higher for a non-executive who has experienced 5 years of unemployment spread over his or her working life, compared to the same non-executive with a complete career of 43 years. A redistribution is therefore taking place in favour of unemployed people receiving benefits *(document no. 7).*
- **Why this better return?** This better return comes from the solidarity mechanisms (free points and assimilated insurance periods) compensating for breaks in activity due to unemployment *(document no. 7)*.

IV. Incomplete careers are penalised

- **What is the situation for incomplete careers?** People with incomplete careers whose career breaks are not covered by solidarity arrangements have a lower IRR than their complete-career counterparts and in this sense, the pension system is anti-redistributive *(document no. 7)*.

V. The pension system offers a better return for women than for men

- **What are the differences in IRR between women and men**? Two typical non-executive cases are compared in order to take into account the differences in wage, career dynamics and life expectancy between women and men *(document no. 8).* Without children, the return is higher for women, by 0.16 points.
- **What mechanisms underlie this redistribution**? On the one hand, contribution reductions, differences in life expectancy and the indexation of accrued rights to prices favor women. These effects are partly offset by the calculation of the basic pension over the best 25 years, which penalises them *(document no. 8*).
- **What impact do family entitlements have?** Bonuses on insurance record and the AVPF arrangement (special allowance for parents of young children who temporarily exit labour force) significantly improve returns for women *(document no. 8*).
- **What about marital entitlements?** Survivor benefits induces a redistribution from unmarried people to married couples. The IRR of the latter is higher by 0.1 point, due to a better return for married women (+0.2 points) *(document no. 9).*

VI. The pension system provides strong incentives to reach the full rate, but less financial incentive to postpone retirement beyond that point

- **Are the incentives to postpone retirement the same before and after the full rate?** *(document no. 10)* Under the general scheme, the pension gain by extending the activity is lower after the full rate because the prorating coefficient is capped at 1. At AGIRC-ARRCO, it is also lower beyond the full rate, this time in the absence of a lifetime bonus (permanent *surcote).* As a result, the IRR is at its highest when the full rate is reached and then decreases - individuals who postpone their retirement beyond that point have a lower return on contributions.
- **What is the impact of the long career arrangement?** *(document no. 11)* The early retirement arrangement for long careers allows those who started their career early to leave at 60 and to maximise their return compared to retiring at 62, in particular because the bonus on pension *(surcote)* can only be received after 62 in the basic scheme.