## POPUIATION SOCIETIES

Is the pensions gender gap closing?

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Gender inequality received little mention in the $\square$ preparatory works for the Pensions Reform Act of 21 August 2003, and then more indirectly than otherwise, such as in the issue of dependency benefits. And yet there are wide gender gaps that raise many questions, like the forms they take, their scale, the reasons for them, and especially, how they are likely to change.

## Women get $44 \%$ less pension than men

The average monthly employment-related pension of female pensioners aged 65 and over was $€ 606$ in 2001, against $€ 1,372$ for males (table 1).

This gap of up to at least double narrows to $44 \%$ if other pension components-especially the surviving spouse's pension, which mainly benefits women-are added to the employmentderived rights. There are two main explanations for the employment-related pension gaps between men and women: shorter careers and lower earnings. In 2001, employment-related pensioners aged 65 and over had an average contribution record of 42.25 years for males and 29.75 years for females, including

[^0]dependent child time credit (table 2). Among these pensioners, only 4 in 10 females collected a full em-ployment-related pension-i.e., had the contribution record needed to claim a full pension-compared to 8 in 10 males.

Taking only those pensioners with a full contribution record, in order to isolate the pay gap effect on retirement pensions, the gender gap in employmentrelated pension rights still amounts to $35 \%$ in 2001.

There is a wider spread in women's than men's pensions: the aggregate pension interdecile ratios (1) are 4.3 for males and 7.0 for females due to a wider variation in non-contributory credited periods. In 2001, nearly four in ten women received under $€ 600$ a month, compared to one in ten men [1]. The low level of accrued benefits places many women on the

Table 1 - Age-sex-specific pension entitlements 2001 (average monthly amounts in euros)

|  | $65-69$ | $70-74$ | $75-79$ | $80-84$ | $85+$ | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Employment-related entitlements |  |  |  |  |  |  |
| Males | 1,393 | 1,374 | 1,373 | 1,392 | 1,187 | 1,372 |
| Females | 666 | 619 | 587 | 566 | 506 | 606 |
| ratio (F)/(M) | 0.48 | 0.45 | 0.43 | 0.41 | 0.43 | 0.44 |
| Total pension |  |  |  |  |  |  |
| Males | (employment-related plus derived entitlements: surviving spouse's pension. etc.) |  |  |  |  |  |
| Females | 1,466 | 1,456 | 1,464 | 1,488 | 1,287 | 1,455 |
| ratio (F)/(M) | 805 | 808 | 833 | 864 | 835 | 822 |
|  | 0.55 | 0.55 | 0.57 | 0.58 | 0.65 | 0.56 |

Scope: people aged 65 and over on employment-related pensions.
Note: total pension includes the basic old age pension.
Source: échantillon interrégimes de retraités (EIR) 2001, extract from [1].
minimum pension levels. In 2002, one in two female pensioners in the general scheme had their pensions raised to the minimum contributory pension level (2), compared to only $20 \%$ of males. Finally, while those on low pensions are not automatically entitled to the minimum old age pension ( $€ 557$ a month in 2001), which is means-tested on household income from all sources, females accounted for $62 \%$ of the 670,000 recipients in 2002.

Table 2 Age-sex-specific average contribution records (1) of employment-related pensioners, 2001 (in years)

|  | $65-69$ | $70-74$ | $75-84$ | $80-84$ | $85+$ | All |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Males | 41.50 | 42.00 | 43.00 | 44.00 | 41.00 | 42.25 |
| Females | 30.50 | 29.75 | 29.75 | 28.75 | 28.25 | 29.75 |

(1) Contribution record in employment plus "equivalent periods" (unemployment, early retirement, sickness, etc.) plus dependent child time credit.
Scope: people aged 65 and over on employment-related pensions. Source: Échantillon interrégimes de retraités (EIR) 2001, extract from [1].

## Inequalities extend beyond pension levels

Women take their benefits, i.e., draw their pensions, on average two years later than men, apart from female civil service employees who retire earlier (3). So, 1934 birth cohort females took their pensions at age 61.3 against 59.2 for males. This later retirement can be attributed to a high level of pension payouts at age 65 (4)—a third of 1934 birth cohort females-compared to under $4 \%$ of males, who mostly retired at age 60 (86\%) [2].

Age at pension payout may be higher, but average retirement age (calculated for individuals who have worked at least one year after age 49) is the same or slightly lower, thereby increasing the female non-work period before retirement.

Status in this period is also gender-differential. Over half of men and women do not move straight from employment into retirement [3]. But while more men take early retirement ( $32 \%$, against $21 \%$ of women), there is a higher level of female economic inactivity ( $19 \%$, against $9 \%$ male), half due to work incapacity, but also partly unemployment (18\% against 13\% for males).

But the inequality is reversed at age 60, when women's life expectancy in retirement is 6.3 years longer than that of males, 24.5 and 18.2 years

[^1]respectively in 2000, due to their lower mortality which more than amply offsets their later retirement.

## Pension gaps reflect labour market inequalities

Women's rising labour force participation is producing a gradual, cohort-specific closing of gender pension gaps (table 1). So, in 2001, female pensioners aged 65-69 had paid an average 9 quarters more contributions than those aged 85 and over, and the gender gap reduced by 7 quarters (table 2). One reason for the narrowing pension gaps is non-contributory measures (child dependency addition, minimum pension benefit, part-time contributory service credited as fulltime) which mostly benefit women.

There is a cohort-specific increase in the female labour force participation rate (except at the extreme ages) which now stands at about $80 \%$ at all ages between 25 and 50 (figure 1). Spells out of work at the median ages are growing fewer and shorter. There is a discernible wide behaviour differential between the 1940 and earlier birth cohorts, whose labour force participation rate declines significantly at childbearing ages, and the 1950 and later cohorts, where the decrease is much less pronounced. The gender-specific labour force participation differential is narrowing steadily, from 27 points in the early 1980s to just 13 points in 2002.

Also, not just pay, but women's status has changed. Their improved qualification levels and employment histories have pushed their average full-time pay up from $64 \%$ of the male rate in 1960 to $74 \%$ and $81 \%$ respectively in 1985 and 2001 (figure 2). Women are generally still found in lower-skilled jobs than men, with more frequent career interruptions, which has a negative impact on pay. And even at equal levels of skills and responsibilities, and within the same sector of activity, they earn 7\% less [4].

Figure 1 - Age-sex specific labour force participation rate for different cohorts


Figure 2 - Average female pay as a proportion of average male pay (\%)


Note: take-home pay; only full-time private and semi-public sector employees.
Source: DADS 1951-2001. INSEE.

## The gender pension gap is closing, but slowly

The slow rate at which pension gaps are currently closing is set to accelerate from 2010 as the 1950 and later birth cohorts with their higher participation rates reach pensionable age. Trend scenarios can be constructed using the Destinie model developed by INSEE [5]. This enables population changes (marriages, births, deaths) and economic trends (labour market, pay, pensions) to be simulated for a population of nearly 50,000 individuals approaching retirement age in the private sector, public sector or self-employment. The simulations incorporate the main provisions of the Act of 21 August 2003 (see box).

Assuming that the gender labour force participation rate gaps continue to close to an approximately 10 point differential by 2010, with the rate of part-time remaining constant at its late 1990s level, the non-
contributory credited periods of service for females would average 32.5 years for the 1965-1974 cohort against 29.3 years for the 1940-1944 cohort. This does not include dependent child time credit or the homemaker's old-age insurance credit (AVPF) (compulsory, free membership of the general old-age insurance scheme for those stopping work or reducing their working time to raise their family —means-tested on household resources).

The non-contributory credited periods of service for females (net of time credit additions) nevertheless remains below that of males, despite a considerable decrease in the latter from a rise in mean years of male schooling ( 42.1 years for the 1940-1944 cohort against 40.2 for the 1965-1974 cohort). The gender gap in non-contributory credited periods narrows if the child dependency and AVPF additions are factored in. Adding in these dependency benefits, which mainly benefit women, increases the non-contributory credited periods of service for females by an average $20 \%$, or approximately 6 years to an average 38.4 years for the last female cohort considered compared to 40.2 years for males.

## Main provisions of the Act of 21 August 2003 factored into the Destinie model

1. Q ualifying period of contributions to the civil service scheme raised from 37.5 years to 40 years by 2008; then, qualifying period for all employees raised from 40 years to 41 years 9 months between 2009 and 2020;
2. introduction of a penalty markdown (abatement of pension for a contribution record shorter than the qualifying period) and a bonus markup (increased pension for a contribution record longer than the qualifying period) in the civil service scheme; reduction of the existing penalty markdown and implementation of a bonus markup in the general scheme;
3. pensions become price- rather than wage-indexlinked;
4. a change in the rules governing the minimum guaranteed and contributory pensions (the minimum pension to which pension entitlements are increased if below a certain amount).

For more details on entitlement calculation and the provisions of the reform, see: http:// www.retraite.gouv.fr (government information site).

| Table 3-Age-specific ratio of average female and male pensions |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 65-69 | 70-74 | 75-79 | 80-84 | $85+$ |
| 2001 | Employment-related Total pension | $\begin{aligned} & 0.48 \\ & 0.55 \end{aligned}$ | $\begin{aligned} & 0.45 \\ & 0.55 \end{aligned}$ | $\begin{aligned} & 0.43 \\ & 0.57 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.41 \\ & 0.58 \end{aligned}$ | $\begin{aligned} & \hline 0.43 \\ & 0.65 \\ & \hline \end{aligned}$ |
| 2020 | Employment-related Total pension | $\begin{aligned} & 0.66 \\ & 0.70 \end{aligned}$ | $\begin{aligned} & 0.62 \\ & 0.68 \end{aligned}$ | $\begin{aligned} & 0.55 \\ & 0.64 \end{aligned}$ | $\begin{aligned} & 0.56 \\ & 0.69 \end{aligned}$ | $\begin{aligned} & \hline 0.45 \\ & 0.65 \end{aligned}$ |
| 2040 | Employment-related Total pension | $\begin{aligned} & \hline 0.71 \\ & 0.74 \end{aligned}$ | $\begin{aligned} & 0.71 \\ & 0.75 \end{aligned}$ | $\begin{aligned} & \hline 0.67 \\ & 0.72 \end{aligned}$ | $\begin{aligned} & 0.66 \\ & 0.75 \end{aligned}$ | $\begin{aligned} & \hline 0.62 \\ & 0.78 \end{aligned}$ |
| Source: Échantillon interrégimes de retraités (EIR) 2001 and Destinie model projections (2020 and 2040). |  |  |  |  |  |  |

This rise in non-contributory credited periods coupled to a modest closing of gender pay gaps (hypothesizing that the total pay gap stabilizes at $25 \%$ in 2040) should result in females aged 65-69 claiming employ-ment-related pensions $29 \%$ below those of males in 2040, as opposed to 50\% less in 2001 (table 3).

Cross-cohort pension taking ages should remain stable for females as longer working lives offset the rise in mean years of schooling, but increase for males. The gender retirement age gap would therefore reduce by approximately 1.5 years between the oldest (19401944) and most recent (1965-1974) cohorts.

## Potential curbs on the closing of equality gaps

The trend towards a closing of pension gaps in the simulation is slow-moving: by 2040, the retirement pensions of women aged 65-69 are predicted still to be $25 \%$ lower than those of males. Also, the generally rising female labour force participation rate masks other developments in women's employment that may significantly impact their pensions [6].

More women work in insecure jobs (training schemes, subsidized contracts, fixed-term contracts) and are at greater risk of unemployment, all of which affect the vesting of pension rights. Some subsidized contracts-like solidarity employment contracts-do not count towards occupational pension schemes. Likewise, while spells of unemployment on benefit allow "free" (non-contributed) quarters to be credited, the sequence of spells of unemployment may result in less well-paid years being included in the calculation of the reference pensionable wage.

But the growth of part-time work is what has most marked the trend in women's paid employment in the last 20 years. While the labour force participation rate of women aged 25-59 has risen 10 points since the mid1980s, almost three-quarters of that rise is due to growth in part-time employment. And much of this is involuntary part-time. In 2002, $83 \%$ of the 3.9 million part-time workers were female. $30 \%$ of the employed
time job on an annual wage at least equal to $40 \%$ of a full-time job at the guaranteed minimum wage (SMIC) rate, the period credited is the same as for a full-time job), the years worked part-time reduce the average annual wage used to calculate the basic pension, if they form part of the 25 best-earnings years. Also, they are included in full in the number of accrued pension points in occupational schemes. The impact is greater on developing careers and when part-time is worked in the run-up to retirement [7]. And the problem is that many women approaching retirement do work parttime: in 2002, $29 \%$ of women workers aged 50-59 against $5 \%$ of males.

Finally, while the various pension reforms (Balladur 1993; Fillon 2003) do not challenge the general trend towards a closing of the gender pension gaps, questions may nevertheless arise about the impact of a tightening-up of the rules on some-especially female-population groups vulnerable to insecurity at home and at work. Arguably, the reduction of average gender gaps may go in hand with a rise in be-tween-women disparities.

## REFERENCES

[1] Nicole CoËFFIC - "Les montants des retraites perçues en 2001", Études et résultats, no. 183, DREES, 2002
[2] Nicole Coëffic - "L'âge de liquidation de la génération 1934", Études et résultats, no. 237, DREES, 2003
[3] Carine Burricand and Nicole Roth - "Les parcours de fin de carrière des générations 1912-1941: l'impact du cadre institutionnel", Économie et Statistique, no. 335, 2000, p. 63-79
[4] Dominique Meurs and Sophie Ponthieux - "Emploi et salaires: les inégalités entre femmes et hommes en mars 1998", Premières synthèses, 99.08 - no. 32.2, INSEE, 1999
[5] José Bardaji, Béatrice Sédillot and Emmanuelle Walraet "Évaluation de trois réformes du régime général d'assurance vieillesse à l'aide du modèle de microsimulation Destinie", Working document INSEE, G2002/07, 2001, 38 p.
[6] Carole Bonnet and Christel Colin - "Les retraites des femmes: situation actuelle et perspective", Travail, Genre et Sociétés, no. 9, 2003, p. 226-233
[7] Christel Colin and Corinne Mette - "Impact des différents aléas de carrière sur les pensions de retraite: inactivité, chômage, travail à temps partiel", Retraite et Société, no. 40, 2002, p. 22-51


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[^1]:    (1) Ratio of pensions paid to the 10th and 90th pensioners of a hundred pensioners classed by decreasing pension amounts.
    (2) In the general scheme, the old age pension is paid at the full rate, which may not be less than a minimum level. Since 1 January 2004, this has been $€ 543$ a month for a claimant with a full insurance contribution record; otherwise the amount is reduced in proportion to the non-contributory credited years of service.
    (3) 1934 birth cohort females who have been members of the civil service scheme all their working lives retire on average at age 57.3 years. They account for $6.3 \%$ of female pensioners of their cohort.
    (4) In the general scheme, which covers private sector employees, a pension taken at age 65 is paid at the full rate even without a full contribution record. In 2001, $68 \%$ of female pensioners were entirely or mainly within the general scheme.

