

# Policy Brief: Inequalities in living standards across ages in France

## Executive summary

This research quantifies the inequalities in living standards across ages in France. The standard of living of individuals is evaluated using individualized disposable income and private consumption. Results based on econometric models reveal that for the whole population, disposable income by age increases sharply (+43.7%) from ages 27 to 47, then levels out until 62 and finally rises moderately (+27.9%) until age 82. Furthermore, living standards are decomposed by educational attainment. The picture is very different for individuals without higher education: the increase in disposable income from ages 27 to 47 is much lower -it amounts to 23.9%- and a significant decline is observed around the retirement age. Disposable income for those without higher education is 11% lower at age 62 compared to age 47.

## Better education, increasing standards of living

The age dependency ratio in France has continuously increased since the mid 1980's. The ratio of dependents (people younger than 15 or older than 64) to the working-age population (those ages 15-64), is now above 60% against 50% in 1986. This change in the demographic structure is often seen as a potential threat for intergenerational equity as the numerous cohorts who were born after the Second World War require large inflows of public transfers to finance their pensions and health care. D'Albis and Badji (2017), however, showed that there was no decline in standard of living across generations in France and, in particular, that the baby-boom cohorts did not enjoy a more favorable position than the cohorts that followed them.

In d'Albis and Badji (2017), we continue the analysis of inequalities across ages in France by adding an important dimension –education– which tremendously increased across cohorts over the period. Due to sample size limitations, we provide a rough evaluation of educational attainment per cohort by simply identifying individuals who have not completed their secondary education. In the French educational system, at the end of the secondary system, students pass a national exam, named Baccalauréat, which permits to obtain a diploma that generally gives access to university studies. The evolution of the share of Baccalauréat graduates within cohorts has skyrocketed from around 10% in the 1960's against nearly 80% today. It reveals a tremendous increase in the possibility to access higher education in France, which translates in the proportion of university students (Duru-Bellat and Kieffer 2008). By comparing, across cohorts, persons with and without a Baccalauréat, we are thus able to provide a statement with a control for the increase in qualifications. This is also meaningful as intergenerational comparisons made by everyone may implicitly assume a stable qualification structure.

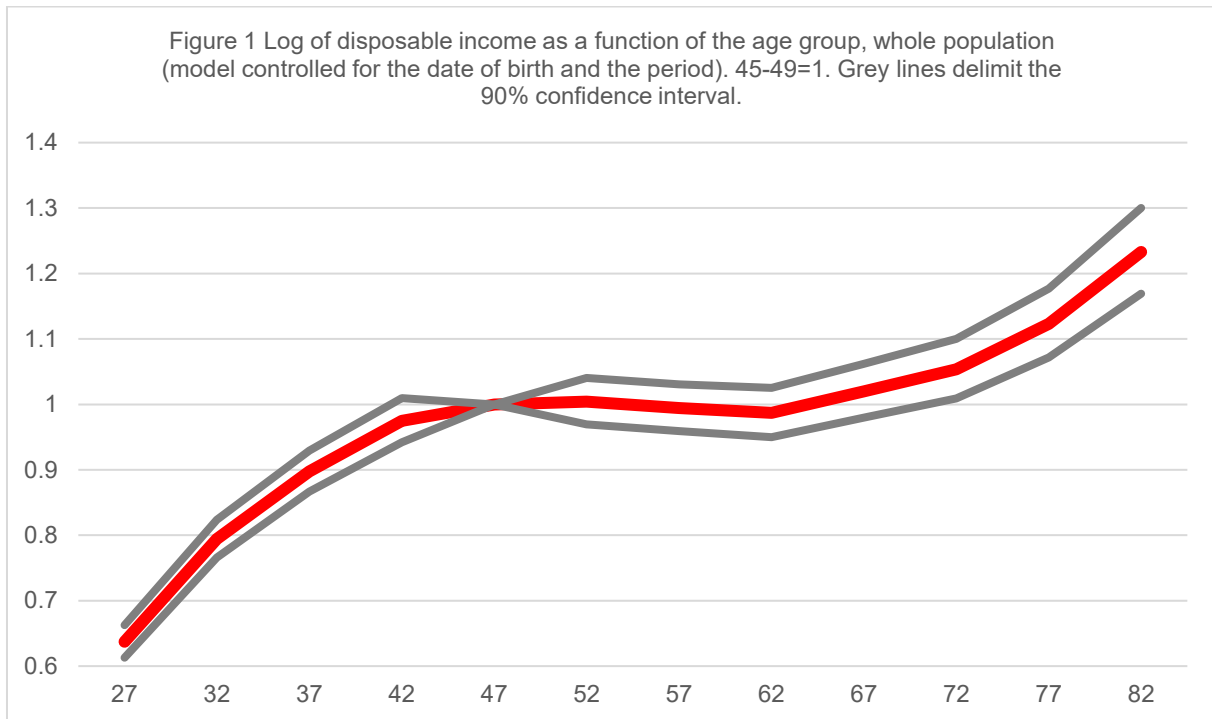
## Standards of Living in French Expenditure Surveys

We use the French Household Expenditure surveys (Budget de famille) conducted in 1979, 1984, 1989, 1995, 2000, 2005 and 2010 by the French National Statistical Institute. These surveys were carried out among over 10,000 households with the aim of reconstituting all household accounts by gathering information on their income and expenditure. It is worth noting that, in the survey, a household refers to a group of people who ordinarily share a dwelling and have a shared budget.

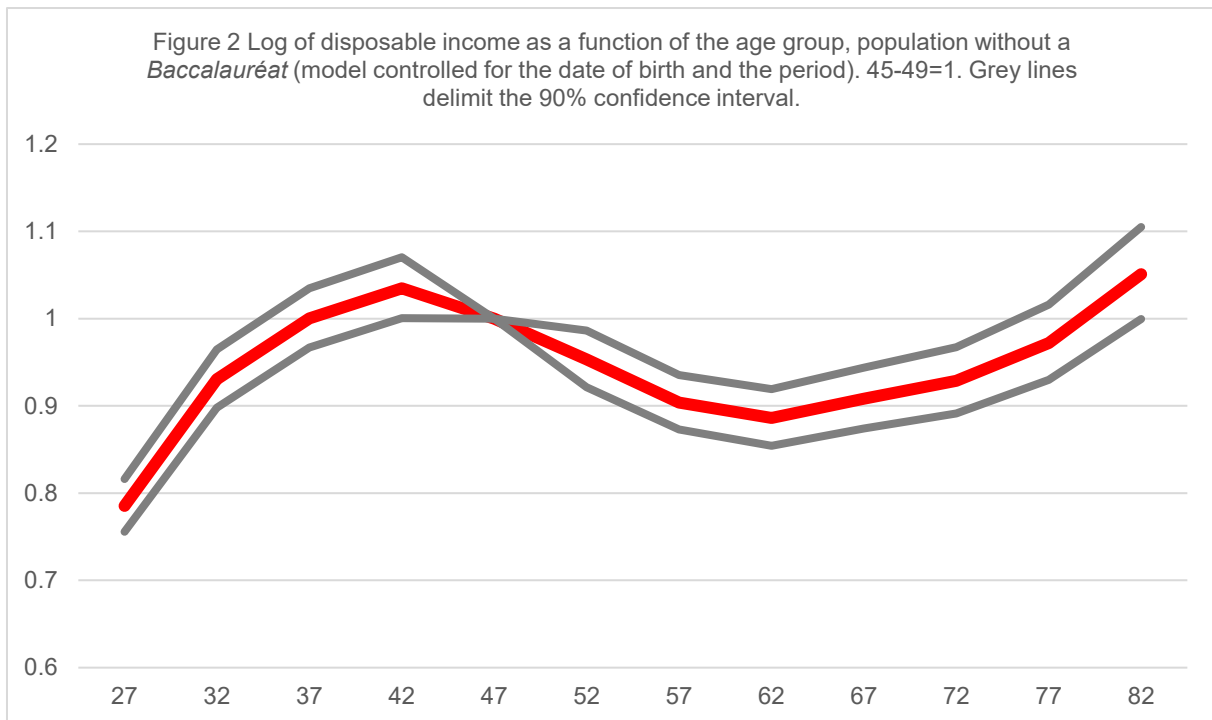
Standard of living are evaluated with the help of two main variables. First, disposable income is used, which is defined as the income after deduction of taxes and social security contributions. It includes: (i) working income: salaries, self-employed income, etc.; (ii) income from household wealth: dividends, interest, rent, etc. to which we add the imputed rents; (iii) social security benefits, including pensions and unemployment benefits; (iv) current transfers, particularly insurance indemnities minus premiums and transfers between households. Second, we use private consumption at the individual level. This is the sum of the 12 consumption items given by the Classification of Individual Consumption by Purpose. It excludes taxes, major maintenance work and loan repayments, but includes imputed rent.

## Results

The Figures below represent the disposable income and private consumption as functions of age, everything else equal. Figure 1 and 3 consider the whole population whereas Figures 2 and 4 consider the persons without a Baccalauréat. The results are expressed as a deviation from a reference age group, 45-49-year-olds. Grey lines delimit the confidence interval at the 5% level.



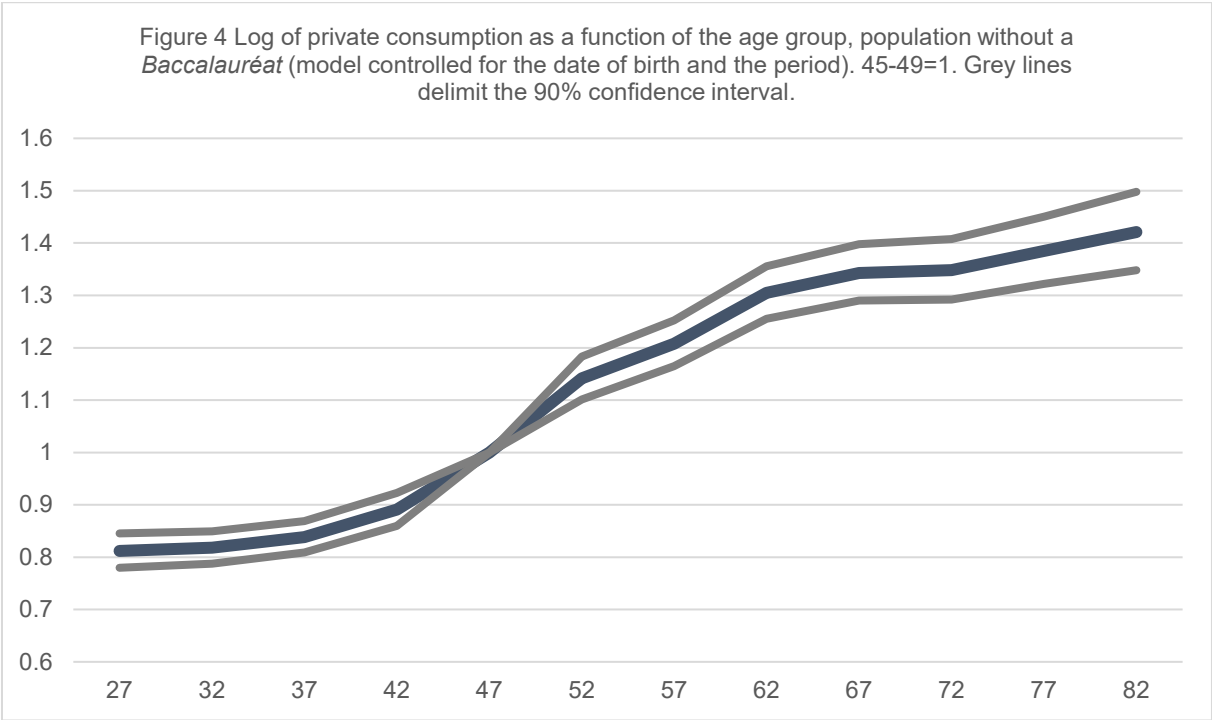
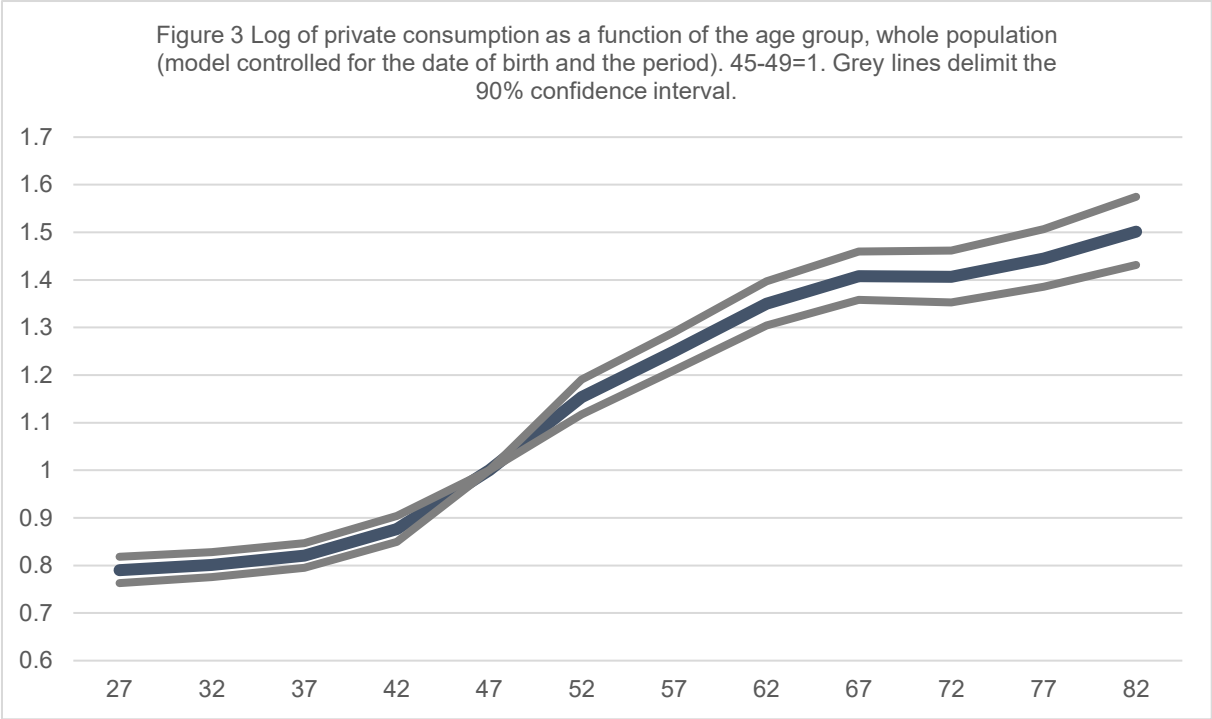
Taking the population as a whole (Figure 1), disposable income by age increases sharply (+43.7%) from ages 27 to 47, then levels out until 62 and finally rises moderately (+27.9%) until age 82. One possible explanation of the rise in income after age 62 may be a composition effect similar to the one described in the literature on the missing poor in poverty statistics. Since longevity correlates with income, the proportion of low-income people declines as one moves from one higher age group to the next.



However, when we consider only the persons without a *Baccalauréat* (Figure 2), we still observe an increase after age 62. It is actually the decomposition by sex that allows to understand the rise at late age. After age 47, disposable income tends to flatten for men, whereas it increases for women. This could be explained by the fact that women have lower labour income that are typically earned at middle-age and are more likely to survive their husband, which mechanically increases the income that is shared at old-age such as capital income. Then, the increase in disposable income after age 62 can be understood by a gender composition effect.

Importantly, Figures 1 and 2 reveal strong differences across education groups. For persons with a *Baccalauréat*, the increase in disposable income from ages 27 to 47 is much lower -it amounts to 23.9%- and a significant decline is observed around the retirement age. The fall reaches 11% at age 62 compared to age 47. The general picture is that income is much flatter with age for persons without a *Baccalauréat* than for the rest of the population.

Those differences do not translate to consumption profiles which are remarkably similar across education groups (Figures 3 and 4).



There is a significant increase in consumption over the life-cycle which reaches +23.4% from ages 27 to 47 and +50.4% from ages 47 to 67 for the whole population and, respectively +20.7% and +40.9% for the group without a *Baccalauréat*. It is interesting to highlight that those findings are consistent with the traditional life-cycle theory which argues that income does not influence the slope of the consumption profile but only its level.

## Discussion

We first remark that there can be inequality between age groups without any generation losing out. For the whole population, disposable income and private consumption by age do not slope down. This implies that a person of a given age has on average a standard of living higher than or equal to that of a younger person, after controlling for cohort and period effects. But the fact that the young are less rich than their current seniors does not mean that they lose out: in all our estimates, their standard of living is always higher than or equal to that of those of previous generations at the same age. D'Albis and Badji (2017) show that all generations benefited from economic growth. Although the growth in real per capita GDP was less vigorous than during the thirty years that followed the Second World War, it was still 50% over the period considered (1979-2010). If we assume that equity between generations is ensured as long as their standard of living does not deteriorate, we may conclude that the relative position of the French cohorts born from 1901 to 1979 has been equitable.

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## References

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