# Is the French tax-benefit system really redistributive?

By <a href="Henri Sterdyniak">Henri Sterdyniak</a> [1]

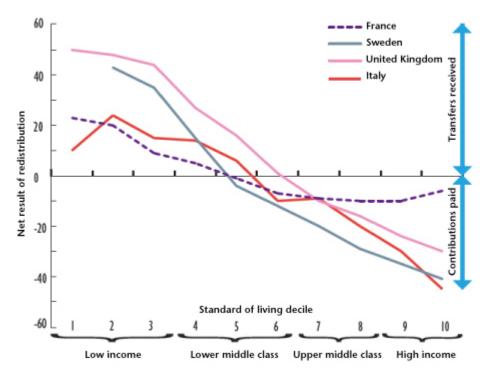
France has set up benefits such as RSA income support, PPE inwork negative income tax, CMU universal health care, the minimum pension, housing allowances, and exemptions from social security contributions for low-wage workers. From the other side, it has a tax on large fortunes; social insurance and family contributions apply to the entire wage; and capital income is hit by social security contributions and subject to income tax. France's wealthy are complaining that taxation is confiscatory, and a few are choosing to become tax exiles.

Despite this, some people argue that the French tax-benefit (or socio-fiscal) system is not very redistributive. This view was recently lent support by a study by Landais, Saez and Piketty: the French tax system is not very progressive and even regressive at the top of the income hierarchy [2]: the richest 0.1% of households are taxed at a very low rate. But redistribution through the tax-benefit system is effected not just through taxes but also through social benefits. We must therefore look at both these aspects to evaluate how redistributive the system is. This is especially true as Landais, Saez and Piketty take into account the VAT paid on consumption financed by social benefits, but not the benefits themselves, meaning that the more a poor household benefits (and spends) from social benefits, the more it seems to lose on redistribution.[3]

Four researchers from Crédoc, the French Research Center for the Study and Monitoring of Living Standards, have published a study [4] that takes benefits into account. They nevertheless conclude: "The French tax system, taken as a whole, is not very redistributive." The study uses post-redistribution standard-of-living deciles to review the benefits received and the taxes paid by households (direct taxes, indirect taxes and social contributions) as a percentage of disposable income, and compares France, Italy, the United Kingdom and Sweden. In France, net transfers (levies less benefits) represent only 23% of household disposable income in the first standard-of-living decile (the poorest), against 50% in the United Kingdom (see figure). At the other end of the scale, in France transfers lower the disposable income of the richest households by only 6%, versus 30% in the UK, 40% in Sweden, and 45% in Italy. France is thus considered to have the lowest level of redistribution, with little distributed to poor people and low taxes on the rich.

Figure. According to the CREDOC, the French tax-benefit system is not very redistributive

Summary of transfers received and contributions paid, as a % of disposable income, by standard of living decile



Source: Credoc calculations using data from the Luxembourg Income Study, 2006.

Note: People in the lowest standard of living decile (i.e. the poorest 10%) receive a net gain from redistribution equal to 23% of their disposable income. This net gain is calculated as the difference between their social transfers (social, sickness and pension benefits) and their contributions (income tax, social charges, indirect taxes).

Yet the French tax-benefit system is considered by international institutions as one of those that minimize inequalities the most. For instance, the OECD (2011) wrote: "Redistribution through taxes and benefits reduces inequality by just over 30% in France, which is well above the OECD average of 25%".

The OECD provides statistics on income inequality (measured by the Gini coefficient) before and after transfers. Of the four countries selected by the Crédoc, it is France where the Gini is reduced the most as a percentage by transfers (Table 1), to an extent equivalent to the level in Sweden, and significantly greater than the reduction in Italy and the UK. Euromod winds up with a substantially similar classification (Table 2).

Table 1. Gini index of income distribution (in 2010) according to the OECD

	Before transfers	After transfers	Impact of transfers		
Germany	0.496	0.286	-42.3		
Denmark	0.429	0.252	-41.3		
France	0.505	0.303	-40.0		
Italy	0.503	0.319	-36.6		
United Kingdom	0.523	0.341	-35.2		
Sweden	0.441	0.269	-39.0		
United States	0.499	0.380	-23.8		

Source: OECD (2013). The Gini index lies between 0 (perfect income equality) and 1. The distribution of income becomes more equal as the index approaches 0.

Table 2. Gini index of income distribution (in 2010) according to Euromod

	Before transfers	After transfers	Impact of transfers		
Germany	0.518	0.380	-48.1		
Denmark	0.443	0.334	-54.0		
France	0.483	0.349	-50.1		
Italy	0.497	0.373	-36.8		
United Kingdom	0.524	0.477	-38.0		
Sweden	0.429	0.317	-46.2		

Source: Euromod, 2012.

Table 3. Poverty rate (60% threshold)

	2005	2012
Germany	12.2	16.1
Denmark	11.8	13.1
France	13.0	14.1
Italy	18.9	19.4
United Kingdom	19.0	16.2
Sweden	9.5	14.2

Source: Eurostat, 2012.

The *Portrait social* [Social Portrait] by the INSEE provides a careful summary of how redistributive the French socio-fiscal system is (Cazenave *et al.*, 2012). It seems that inequality is reduced significantly (Table 4) in France: the inter-decile ratio (D10/D1) falls from 17.5 before redistribution to 5.7 afterwards.[5] According to the INSEE, 63% of the reduction in inequality comes from social benefits and 37% from levies, which confirms the need to take benefits into account in order to assess redistribution.

Table 4. Standard of living fractiles before redistribution according to the INSEE\*

	D1	Q1	Q2	Q3	Q4	Q5	D10
Average income before redistribution	4 128	7 266	15 591	21 474	28 626	55 292	72 195
Average disposable income (DI)	9 948	11 266	15 847	20 145	25 602	44 919	56 654
Net transfers	5 820	4 000	256	-1 329	-3 024	-10 373	-15 541
Net transfers as % of DI	59	36	2	7	-12	-23	-27

<sup>\*</sup> in euros per year per consumption unit. D1: the 10% of people with the lowest living standard; Q1: the 20% of people with the lowest living standard, etc.; D10: the 10% of people with the highest living standard.
Source: INSEE, 2013, Portrait social.

The vision presented by Crédoc of the redistributivity of the French tax-benefit system is thus unusual... and, to put it frankly, wrong.

The study is based on data from the *Budget des familles* [Family budget] survey that is not matched with fiscal data and which is generally considered less reliable than the Euromod survey or than the tax and social security figures used by the INSEE. This may explain some important differences between the Crédoc figures and those of the INSEE: for example, according to the INSEE, non-contributory transfers

represent 61% of the disposable income of the poorest 10%, but only 31% according to Crédoc (Table 5).

Like the INSEE, the Crédoc study ignores employer national health insurance contributions (which hit high wages in France, unlike most other countries) and the ISF wealth tax (which exists only in France). Furthermore, it does not distinguish between contributory contributions (which give rights to a pension or unemployment benefits) and non-contributory contributions (such as health insurance or family contributions), which do not give rights. However, low-wage workers are not hit by non-contributory contributions in France, as these are more than offset by exemptions from social security contributions on low wages.

Table 5. Redistribution for the extreme deciles A comparison of INSEE and CREDOC

		01	D	10
	INSEE	CREDOC	INSEE	CREDOC
Primary income (pre-distribution)	41.5	39	127.4	93
Contributory benefits		38		32
Non-contributory benefits	60.2	31	0.6	1
Social contributions	-2.1	-8	-10.1	-16
Direct taxes	0.4	0	-17.9	-10
Total: Net disposable income	100	100	100	100
Indirect taxes	-22	-36	-10	-13
Net transfers (excl. indirect taxes)	+58.5	+59	-27.4	7
Net transfers (incl. indirect taxes)	+36.5	+23	-37.4	- 6

Source: Authors' calculations based on INSEE (2013) and CREDOC (2013).

Most importantly, the study contains two errors that heavily distort the conclusions. The first methodological error is that, contrary to the INSEE, the authors include contributory transfers, in particular pensions [6], in social transfers. But for retirees, public pensions represent a very large part of their disposable income, particularly in France. Since the pension system ensures parity in living standards between retirees and active employees, then retirees show up in all the standard of living deciles and the tax-benefit system does not seem to be very redistributive, as it provides benefits to

wealthy retirees. And contrariwise, if a country's pension system does not assure parity in living standards between retirees and active employees, then the tax-benefit system will seem more redistributive, as it provides pensions only to the poor.

So paradoxically, it is the generosity of the French system towards pensioners and the unemployed that makes it seem to be not very redistributive. Thus, according to Crédoc, the richest 10% receive contributory transfers representing 32% of their disposable income, which means that, in total, their net transfers represent only a negative 6% of their income. This is especially the case as Crédoc does not take into account the old-age pension contributions (cotisations vieillesse) incurred by businesses. If, as the INSEE does, pensions (and more generally all contributory benefits) are considered as primary income, resulting from past contributions, the negative net transfers of the richest decile increase from -6% to -38%.

The other methodological problem is that Crédoc claims to take into account the weight of indirect taxes in disposable income (which INSEE does not). This comes to 36% for the poorest 10%, 23% in the middle of the income hierarchy, and only 13% for the best-off. The highly regressive nature of indirect taxes would make the whole tax system regressive: the poorest pay more than the rich. According to the figures from Landais, Saez and Piketty (2011), indirect taxation is definitely regressive (15% of the disposable income of the poorest, and 10% for the richest), but the gap is only 5%. According to the INSEE [7], the weight of indirect taxes in disposable income is 22% for the poorest, 16% in the middle income range and 10% for the richest. This difference comes from the structure of consumption (the poorest consume relatively more tobacco and petroleum products), and especially the savings rate, which increases as households earn more. In fact, the difference is undoubtedly overstated in an inter-temporal perspective: some

households will consume today's savings tomorrow, so it is then that they will be hit by indirect taxation. In fact, the Crédoc study heavily overestimates the weight of indirect taxes by using an extravagant estimate of the household savings rate [8]: the overall French household savings rate is -26.5%; only decile D10 (the richest 10%) have a positive savings rate; decile D1 has a negative savings rate of -110%, that is to say, it consumes 2.1 times its income. The poorest decile is thus hit hard by the burden of indirect taxes. But how likely is this savings rate?

National tax-benefit systems are complex and different. Comparisons between them need to be made with caution and rigour. To judge how redistributive the French system actually is, it is still more relevant to use the work of the INSEE, the OECD or Euromod than this (too) unusual study.

- [1] We would like to thank Juliette Stehlé, who provided assistance in clarifying certain points in this note.
- [2] See Landais C., T. Piketty and E. Saez, *Pour une révolution fiscal [For a tax revolution]*, Le Seuil, 2011.
- [3] See also Sterdyniak H., "Une lecture critique de l'ouvrage Pour une révolution fiscal" [A critical reading of the work Pour une révolution fiscal], Revue de l'OFCE, no. 122, 2012. Note also that you cannot arrive at an overall judgment on the progressivity of the system from the case of a few super-rich who manage to evade taxes through tax schemes.
- [4] Bigot R, É. Daudey, J. Muller and G. Osier: "En France, les classes moyennes inférieures bénéficient moins de la redistribution que dans d'autres pays" [In France, the lower middle classes benefit less from redistribution than in some other countries], Consommation et modes de vie, Crédoc, November 2013. For an expanded version, see: "Les classes moyennes sont-elles perdantes ou gagnantes dans la

redistribution socio-fiscale" [Are the middle classes losers or winners from the tax-benefit redistribution], *Cahiers de Recherche*, Crédoc, December 2012.

[5] Also note that the INSEE underestimates somewhat the redistribution effected by the French system since it does not take into account the ISF wealth tax. It also does not include employers' national health insurance, which in France is strongly redistributive as it is not capped. From the other side, it does not take account of indirect taxes.

[6] And replacement income such as unemployment benefits and sickness benefits.

[7] See Eidelman A., F. Langumier and A. Vicard: "Prélèvements obligatoires reposant sur les ménages:

des canaux redistributifs différents en 1990 et 2010" [Mandatory taxes on households: different channels of redistribution in 1990 and 2010], *Document de Travail de la DESE de l'INSEE*, G2012/08.

[8] Estimation from EUROMOD (2004): "Modelling the redistributive impact of indirect taxation in Europe", *Euromod Working paper*, June.

# Social inequality in the face of death\*

By Gilles Le Garrec

The problem of inequality in the face of death has become an important topic in French public discourse in recent times, in particular in autumn 2010 during debate about raising the

minimum legal retirement age by two years, by gradually shifting it from age 60 to 62. The debate became focused around a politically divisive issue: should the retirement age remain unchanged for low-skilled workers on the grounds that they enter the labour market earlier and / or have more strenuous jobs and live shorter lives? Since the socialist government came to power in 2012, two exemptions have been introduced to allow less-skilled workers to continue to retire at 60. First was the introduction in summer 2012 of an exception for a "long career", that is to say, for those who have contributed for a sufficiently long time. This September 2013 it has also been decided to set up a "hardship" account, starting in 2015, which will allow all employees who are exposed to working conditions that reduce their life expectancy to retire earlier. Nevertheless, the issue of inequality in the face of death — a taboo subject? — involves much more than simply the retirement age; before that, there are also the issues of inequality in income, housing, access to employment, education, etc. What follows is a small panorama (statistical) on inequality in the face of death in France, its causes and the difficulty of developing a political solution due to the multidimensional factors involved.

# Very old — but not very reliable — statistics

From the late 18th century [1], the development of censuses, which was associated with the rise of statistics, has made it possible to build up data that show the existence of a close link between inequality in the face of death and social inequality more generally. These early studies show that inequality in the face of death is explained primarily by income (Cambois, 1999). However, the import of these studies is limited due to the low reliability of their data and methodology. It is no easy matter to develop reliable indicators on this issue. Once we have the socio-professional categories (SPC) for death statistics and censuses, we can

easily calculate mortality rates by comparing the number of deaths for the year (or years) classified by SPC with the size of the population classified in the same way. For example, in France for the period 1907-1908 Huber catalogued on an annual basis the death of 129 business executives aged 25 to 64 out of a total of 10,000, compared with 218 workers. This simple and intuitive method nevertheless gives a distorted view of social inequality in the face of death, due to incompatibilities between population data and mortality data (Desplanques, 1993). The difficulty of obtaining an accurate representation of inequalities in the face of death becomes especially difficult with this method, as there is a growing trend for career paths to fragment, with alternating periods of activity and unemployment.

## The longitudinal method and its lessons

To overcome this problem, France's INSEE has developed a longitudinal method that consists of regularly monitoring a group of individuals who have particular characteristics at a given point in time, and ultimately the date of their death. The permanent population sample thus obtained, which was initialized during the census of 1968, currently includes approximately 900,000 individual histories, ensuring a good representation of the French population (Couet, 2006, for a description of this sample and how it was constructed). This large-scale socio-demographic panel makes it possible to draw a relatively accurate picture of social inequality in the face of death in France. This shows that individual lifetime varies greatly from one socio-professional category to another, especially among men (Table 1). Male executives have a life expectancy (at age 35) that is four to five years above the average for men. Excluding inactive people [2], the most disadvantaged groups are manual workers, followed by whiteemployees, with life expectancies that respectively, two years and one year less than the average. Another interesting point is that the overall gain of four

years in life expectancy over the period did not reduce inequalities in the face of death. The relatively stable result is that at age 35 the life expectancy of manual workers is six to seven years less (and white-collar employees five to six years less) than that of corporate executives and managers. In addition, at age 35 on average the latter experience 34 years in good health [3], 73% of their life expectancy, against 24 years for manual workers, or 60% of their life expectancy (Cambois et al., 2008). While among women, the difference in life expectancy between managerial personnel and manual workers was "only" three years at the time of the last census, the differences are comparable with those for men in terms of life expectancy in good health. The conclusion is clear: numerous social inequalities persist in the face of death, including in terms of health. This conclusion holds for every country in Western Europe that has conducted this kind of study, although it should be noted that the level of inequality in France appears to be the greatest by far (Kunst et al., 2000). The ratio of "manual to nonmanual mortality" in France was 1.71 for men age 45-59, whereas it is on the order of 1.35 in most other countries (Finland, second behind France in terms of inequality, is 1.53). Leaving aside issues of data comparability, alcohol consumption is, according to Kunst et al. (2000), the most important factor behind the specific situation of France. Indeed, the greatest inequalities in mortality in France are due to major differences in mortality due to liver cirrhosis and to cancer of the aerodigestive tract, both of which are associated with excessive alcohol consumption.

Table. Life expectancy of men and women at age 35, By period and socio-professional category

In years

Socio-professional category		Life expectancy at age 35		Difference with the average			Life expectancy at age 35			Difference with the average		
	1983- 1991	1991- 1999	2000- 2008	1983- 1991	1991- 1999	2000- 2008	1983- 1991	1991- 1999	2000- 2008	1983- 1991	1991- 1999	2000- 2008
		Men					Women					
Executives/managers	43,7	45,8	47,2	+4,5	+5	+4,4	49,7	49,8	51,7	+3,3	+1,8	+2,3
Intermediary profession	41,6	43,0	45,1	+2,4	+2,2	+2,3	48,1	49,5	51,2	+1,7	+1,5	+1,8
White collar employee	38,6	40,1	42,3	-0,6	-0,7	-0,5	47,4	48,7	49,9	+1	+0,7	+0,5
Manual worker	37,3	38,8	40,9	-1,9	-2	-1,9	46,3	47,2	48,7	-0,1	-0,8	-0,7
Inactive, not retired	27,5	28,4	30,4	-12,7	-12,4	-12,4	45,4	47,1	47,0	-1,0	-0,9	-2,4
Total	39,2	40,8	42,8	-	-	-	46,4	48,0	49,4	-	-	-

Source: Blanpain (2011), based on data from the permanent demographic sample, INSEE.

#### The causes

Several factors have been identified to explain the difference in mortality between socio-professional categories.

First, one can easily imagine that the working conditions of manual workers are usually physically demanding and debilitating. Moreover, during the 1980s we have seen a transformation in the structure of unskilled jobs. Over this period, the increasing need for businesses to be highly responsive has led to a more widespread use of flexible and precarious forms of employment (short-term contracts; atypical schedules; development of part-time, temporary work, etc.). But the increasingly precarious nature of work, which affects low-skilled jobs above all, is contributing to a serious deterioration in working conditions. Global economic conditions may therefore play a part in explaining disparities in mortality. In any event, working conditions are not improving as quickly for manual workers as for managers. This is certainly the view that was advocated in establishing the "hardship" account that is to be implemented from 2015. So any private sector employee who is exposed to working conditions that reduce life expectancy will accumulate points that will, among other things, enable them to retire early, and potentially before the statutory threshold of 62.

It should also be noted that the most disadvantaged groups cumulate a number of risky behaviours, such as smoking,

excessive alcohol consumption, poor diet and a sedentary lifestyle. In contrast, managers and the intermediate professions smoke and drink in moderation. As was already pointed out as a factor in France's poor results in Western Europe (Kunst et al., 2000), these differences in behaviour show up clearly in the mortality rates associated with certain diseases. The risk of death due to a tumour in the aerodigestive tract (larynx, pharynx, lungs, oesophagus, liver) is especially high among manual workers, and is at the heart of a significant portion of the observed differences in mortality. For example, during the 1980s, among men aged 45 to 54, the mortality rate associated with a tumour of the pharynx was 11 times higher for skilled workers and labourers than for teachers and the intellectual professions (Desplanques, 1993).

A lack of access to healthcare for the most disadvantaged groups is another explanation offered for the disparities in mortality, first of all because of costs. Mormiche (1995) thus shows that the consumption of medical products (their quantity but also their nature) is highly dependent on income. Disparities in access to healthcare are particularly marked for care that is expensive or poorly covered (especially dental). Herpin (1992) points out that a reduction in income due to a loss of employment leads to an almost proportional reduction in consumer spending, including on health. The risk of death rises by 60% for unemployed men in the years following a job loss (Mesrine, 1999). A man in poor health is of course more likely to be unemployed, but unemployment, due to the development of financial stress and disorientation and to personal factors, may affect health by creating a physical and emotional distance with respect to obtaining care.

Finally, the social environment and the local context play an important role in the persistence of social inequalities in the face of death, as can be seen in Table 1. The idea that the behaviour of individuals is influenced by their place of residence has been developed in an extensive literature in the

fields of both sociology and psychology (Roberts and DelVecchio, 2000). Mechanisms through which children identify with the behaviour of the adults surrounding them highlight a collective type of socialization. However, socio-spatial polarization, which is characterized by the creation of urban areas that cumulate all sorts of social disability, has been steadily increasing since the 1980s in France (Fitoussi et <u>al., 2004</u>). In these neighbourhoods, the high level of concentration of groups characterized by risky behaviours may, through this process of identification, root these behaviours in the core of people's lifestyle. This phenomenon may explain why prevention policies among high-risk populations are ineffective. The financial difficulties that are giving rise to the under-utilization of medical facilities can also wind up leading to social distancing from health issues. The weak participation of women from disadvantaged strata in public programmes to screen for breast cancer is illustrative of this. Moreover, even in countries where there is effective universal health coverage, the differences in the consumption of healthcare persist.

#### What should we conclude?

Social inequality in the face of death is a sensitive issue. At the heart of this problem lie a multitude of more or less overlapping causes. To be effective, policies to combat this type of inequality must grasp them as components of an ensemble, with interactions throughout their economic, social and spatial dimensions. While awaiting the reduction of these larger inequalities, it would seem worthwhile to establish just social policies that take account of this inequality in the face of death. In this regard, setting up a "hardship" account that enables any employee who is exposed to working conditions that reduce their life expectancy to retire earlier is definitely a step in the right direction. Nevertheless, the establishment of criteria is not as easy as it seems. Indeed, it is clear that a good share of social inequality in the face

of death can be explained by risky behaviour. Some might reason that such behaviours are an expression of individual freedom and that it is not up to society to compensate for the consequences. Or, it could be argued, to the contrary, that these behaviours are a response to psychosocial stress caused by, among other things, difficult working conditions. From this perspective, the compensation represented by an earlier retirement would seem more equitable. But it is not certain that we can really distinguish these two cases. You can bet that the future definition of the criteria for accumulating points to meet the "hardship" criteria giving entitlement to early retirement will be the subject of lengthy negotiations....

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- \* I would like to thank Sandrine Levasseur, Hélène Périvier and Evens Salies for their insightful comments.
- [1] Pioneering works that could be cited include those by Moheau (1778) and Villermé (1840).
- [2] A category that groups individuals who have never worked. For women, this means mainly "housewives".
- [3] Good health is defined by the absence of limitations on everyday activities and the absence of incapacity.