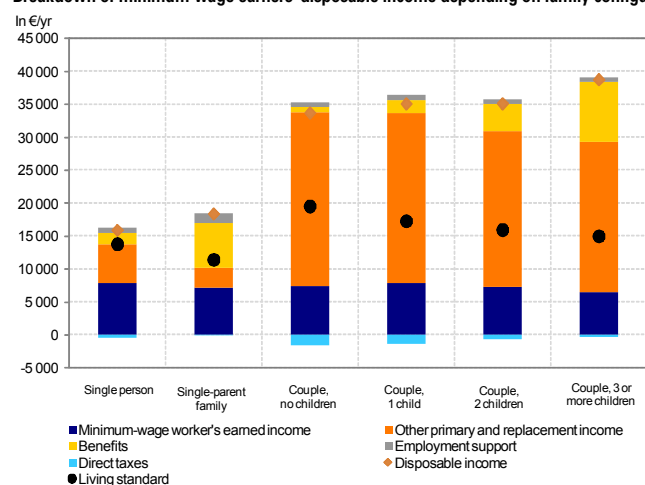


Living standards of minimum-wage earners

- Under French welfare and tax legislation, real disposable household income for workers on the "Smic" minimum-wage rose faster than the real minimum-wage, for a given family configuration and number of hours worked, between 1999 and 2011, with disposable income rising by over 10% against a 5% rise in the minimum-wage. Various mechanisms introduced to support low-earners' incomes have played a decisive role in this rise in disposable income.
- In 2010, the average living standard of minimum-wage earners represented only two-thirds of the living standard of workers paid above the minimum-wage. This difference stems largely from the fact that the earned incomes of minimum-wage earners are lower than those of the other workers, especially since most work part time and are more likely to experience periods out of work during the year.
- The French welfare and tax redistribution system boosts average living standards for minimum-wage earners by 8.5%. Ultimately, welfare benefits (family allowances, housing benefits, and income support) together with employment support schemes represent 12% of their disposable income.
- Due to effects relating to redistribution and household composition, living standards of minimum-wage earners may vary greatly in the final analysis, indeed 30% of them belong in the top 5 living standards deciles. Among others, these differences stem from intra-year changes in their work situation (with periods out of work, for example), the composition of their household, and above all the contribution or otherwise of a partner's income. Livings standards of people on the minimum-wage living in a single-parent family are well below those of people living in a couple with no children, even if their earned incomes are similar.
- Family configuration shapes not only the level but also the composition of minimum-wage earners' disposable income. For example, benefits take on greater importance—in terms of both amount and their share of minimum-wage earners' disposable income—in families with children than in families with none. For couples, the average size of welfare benefits increases with the number of children. The relative importance of employment support is small, on average, in comparison with other components of disposable income for minimum-wage earners, since they undergo periods of unemployment or because their household receives other income making them ineligible for these means-tested support mechanisms.

This study was prepared under the authority of the Directorate General of the Treasury (DG Trésor) and does not necessarily reflect the position of the Ministry for the Economy, Finance and Industry.

Breakdown of minimum-wage earners' disposable income depending on family configuration



Source: Saphir model based on 2008 ERFIS tax and benefits income survey, 2010 legislation, DG Trésor.

A single hourly wage might suggest that workers on the minimum-wage form a homogenous group, especially in terms of their living standards. However, living standards reflect the sum of incomes received in a given year by all members of a household. Yet a feature of minimum-wage earners is that they experience a variety of individual employment situations over the year (in terms of weekly hours worked, succeeding periods in and out of work, or in retirement), and that they live in different family configurations.

These heterogeneous living standards complicate the task of analysing the redistributive impact of the minimum-wage, even though this is supposed to guarantee a basic income for people in work¹. This is because the size of the minimum-wage's redistributive effect depends on labour market characteristics², as well as on the welfare and tax redistribution system and on household composition.

We have used two complementary tools in analysing the respective contributions of changes in the welfare and tax redistribution system on the one hand and in household composition on the other. To begin with, a retrospective analysis of test cases highlights the influence of changes in welfare and tax legislation, especially the creation of new benefits or changes in the method serving to adjust them, on the dynamics governing living standards for minimum-wage earners. However, the test cases represent only a limited number of situations and depend on a

strong assumption of the unitary nature of the type of income (the wage) and its stability over the year. Then, a cross-section analysis, based on a representative sample (see Box 1) takes the diversity of situations "of minimum-wage earners" into account in order to appreciate the actual impact of the welfare and tax redistribution system on their living standards.

There are fewer economic studies of the redistributive impact of the minimum-wage than on its possible distorting effects on salaried employment. The great majority of these studies find that the redistributive power of the minimum-wage is weak³. Two reasons, which apply also in France, are put forward to account for this limited impact:

- minimum-wage earners are evenly distributed along the spectrum of living standards and may even belong to households with high disposable income. In our study, 30% of minimum-wage earners belong to the top 5 living standards deciles;
- at the lower end of the scale of living standards, the wages of minimum-wage earners represent less than half of their households' disposable income. Accordingly, the wages of individuals on the minimum-wage in the first living standards decile in France represent slightly over a quarter of their households' disposable income.

1. The introduction of employment support schemes has played a crucial role in the evolution of real disposable income for minimum-wage earners over the past decade.

For a given quantity of work and family configuration (See Box 1), the specific effect of welfare and tax legislation on changes in the disposable income of a household on the minimum-wage serves to analyse the dynamics of the different components of this income.

1.1 Real disposable income of households on the minimum-wage rose by more than 10% between 1999 and 2011

The disposable income of the types of minimum-wage households studied rose in real terms between 1999 and 2011, reflecting purchasing power gains for these households, outpacing the rise in the minimum-wage. Because newly created benefits accounted for much of the increase, this rise in disposable income did not affect labour costs (see Chart 1). Between 1999 and 2011, the net minimum-wage rose by 5% in real terms. The introduction of the 35-hour working week led to a rise in the hourly wage via the Guaranteed Monthly Remuneration (*Garanties Mensuelles de Rémunération-GMR*) without leading to a higher annual earned income⁴. For the situations studied, over the same period, the rise in disposable income was between 2 and 7 times more dynamic (see Table 1).

Consequently, between 1999 and 2011, the disposable income of a single person with no children having worked full time at the hourly minimum-wage increased by 12%, whereas that of a single person out of work fell by 2% in real terms.

1.2 A series of changes to the welfare and tax redistribution system account for the growth in the disposable income of minimum-wage households since 1999

The steep rise in the disposable income of minimum-wage households over the past decade was mainly due to the introduction of employment support schemes, namely the employment tax credit (*prime pour l'emploi* - PPE, introduced in 2001) and the in-work income supplement (*RSA activité*, introduced in 2009, see Box 2) in the course of the 2000s⁵ (see Table 1). For the configurations studied, the assistance provided by these schemes represents between half and all of the purchasing power gains for minimum-wage earners. The rise in the minimum-wage⁶ contributes differently to households' disposable income depending on their family configuration. Tax changes⁷ have tended to nudge purchasing power upwards. Finally, welfare benefits, which are inflation-indexed, do not contribute to the rise in the disposable income of minimum-wage earners.

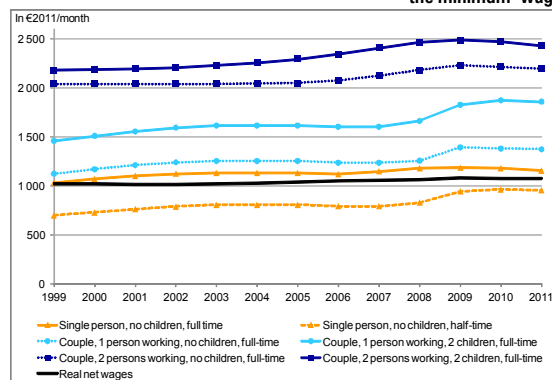
- (1) In the absence of a minimum income, people in work could find themselves earning less than the minimum-wage, particularly in the case of less productive people.
- (2) On the demand side, the existence of a minimum-wage could curb demand for low-productivity labour and thus keep people out of work; on the supply side, people could be encouraged to seek work if the minimum-wage exceeds the floor wage they require in order to enter the labour market.
- (3) For example, Johnson and Browning (1983), Freeman (1996) and Neumark et al (2005).
- (4) There were several levels of guaranteed monthly remuneration (GMR) depending on the date of the switch to the 35-hour week. This study assumes that minimum-wage workers moved to the 35-hour week between July 1, 1998 and June 30, 1999 (GMR 2).
- (5) J. Duval (2009), "The French employment premium and its beneficiaries, 2001-2008", *Trésor Economics*, no. 63, Juillet and C. Tavan, and C. Bourgeois (2009), "The "Revenu de Solidarité Active" or earned-income supplement: its design and expected outcomes", *Trésor Economics*, no. 61, July 2009.
- (6) The French minimum-wage, the *Salaire minimum interprofessionnel de croissance*, or "Smic", is revised on January 1 of each year on the basis of the change in the consumer price index (excluding tobacco) for urban households headed by a blue-collar or white-collar worker, plus half of the change in purchasing power of the hourly wage rate index for all blue-collar workers (with the possibility of a further upward revision). It is also revised automatically when the consumer price index (excluding tobacco) reaches a level corresponding to an increase of at least 2% relative to the index observed at the time of setting the immediately previous minimum-wage.
- (7) Particularly the residence tax reform in 2006.

The rise in the disposable income of minimum-wage earners has gone through three broad phases (see Chart 1):

- **between 1999 and 2003**, the real disposable income of households on the minimum-wage rose distinctly even though the purchasing power of the minimum-wage remained stable, mainly due to the introduction of the employment tax credit in 2001 and its gradual phasing-in until 2003;
- **between 2003 and 2007**, real disposable income remained stable for most configurations, despite an increase in the employment tax credit for part-time work in 2006, and also despite residence tax relief;
- **between 2007 and 2011**, the disposable income of each configuration of households on the minimum-wage rose sharply, then stabilised from 2009 onwards, or even dipped slightly for certain family configurations. The rapid increase between 2007 and 2009 followed the 2008 housing benefit reform⁸ and above all the introduction of the *revenu de solidarité active* (RSA) on June 1, 2009. The year 2009 was exceptional in that respect, in the sense that households were able to combine an employment tax credit in full with half of the in-work income supplement⁹. The stabilisation of disposable income, indeed its decline in certain cases (−3% for single people in full-time work; −2% for

couples working half-time) is accounted for by the fact that, exceptionally, households received both the in-work income supplement and the employment tax credit in 2009, by the declining size of the employment tax credit due to the freeze on this scheme since 2009¹⁰, and by the delay in adjusting for inflation in the minimum-wage indexation mechanism¹¹.

Chart 1: Change in real disposable income of households on the minimum-wage



Source: Paris scale model, 1999-2011 legislation, DG Trésor.

Box 1: Paris and Saphir, two approaches to assessing minimum-wage earners' living standards

The **Paris scale model** serves to recalculate tax and welfare transfers according to the legally applicable scales for given configurations of families and means, in order to determine a household's disposable income. The legislation referred to is the average legislation in force over the year. For the sake of simplicity, the scale model adopts the following assumptions:

- household's only income is from work, the income being stable over time as proportion of the minimum-wage;
- household lives in rented accommodation, is eligible for housing benefit, and lives in cities with a population over 100,000;
- household takes up all of the benefits for which it is eligible;
- couples are either married or in civil partnership, and the children are aged between 6 and 10.

The **Saphir micro-simulation model** is based on a representative sample of the population, namely the 2008 *enquête sur les revenus fiscaux et sociaux* (ERFS- tax and benefits income survey), which describes the characteristics of households and their income. To represent the socio-demographic and economic situation in 2010, income data derived from the 2008 ERFS survey have been extrapolated to 2010 and the population structure has been modified, particularly in terms of age and family structure. The chief characteristics of Saphir are as follows:

- scope is restricted to "ordinary" households in Metropolitan France. This therefore excludes people living in institutions such as university halls of residence, hostels, etc. and the homeless;
- benefits and transfers are calculated according to the legally applicable scales in force in 2010. Households are assumed to take up benefits to which they are entitled. However, according to the *Comité national d'évaluation du RSA*, two thirds of households eligible for the in-work income supplement did not take it up in 2010. Non-take-up is therefore introduced occasionally in order to furnish a more realistic picture of the effect of the RSA, this being indicated whenever it is done;
- data are self-reported and there are gaps concerning certain aspects, which can be a source of uncertainty.

In this study, the "**welfare and tax redistribution system**" is defined as all benefits, i.e. minimum social benefits (social inclusion benefit or "*RSA socle*", minimum old-age pension, disabled adult's allowance), family allowances and housing benefits), employment support schemes (in-work income supplement—and the employment tax credit—"PPE") and direct taxes (income tax and residence tax). This definition therefore does not include extra-legal and local benefits within the scope of transfers to households. Moreover, unemployment benefit and retirement pensions are treated as deferred income, not as transfers.

Household **disposable income** before transfers consists of its primary and replacement income over the year (earned income, retirement pensions, unemployment benefit, investment income, etc.). After adding benefits and deducting the above-defined taxes, this income corresponds to disposable income after transfers.

The **living standard** corresponds to disposable income divided by the number of consumption units making up the household. The first adult in the household corresponds to a whole unit, the other members of the household are counted as a half-unit if aged over 14, and as 0.3 unit below the age of 14. All individuals in a given household have the same living standard.

A person is considered to be **poor** if his or her living standard is below the **poverty threshold**, defined as 60% of the median living standard of the population as a whole

1.3 The disposable income of households with one working member and of people working half-time has risen faster than for other households on the minimum-wage

The overall rise in the real disposable income of households on the minimum-wage conceals pronounced differences depending on their family configuration and the

number of hours worked by household members in work. All other things being equal, the disposable income of households with only one person working or whose working members work half-time has risen faster. These differences flow from the fact that the various forms of employment support introduced in the past decade have targeted certain family configurations or time worked especially: this applies to couples with

- (8) From January 1, 2009 onwards, housing benefit eligibility has been calculated for year n based on year n-2 income. The non-adjustment of households' means in 2008 resulted in an increase in amounts paid.
- (9) In 2009, eligible households began receiving the earned-income supplement in June as well as the employment premium in respect of their 2008 income.
- (10) The maximum amount of the employment premium, paid to people working full-time at the minimum-wage over the year, fell from €946/y in 2009 to €836/y in 2011 (in 2011 euros, excluding top-up payments), making a real decline of 13%.
- (11) Between 2009 and 2011, the nominal 2.7% increase in the net minimum-wage corresponds to a real decline of 1%. This is because the revision to the minimum-wage carried out on January 1 of year n is based on inflation measured at the end of year n-1.

one person in work and to people on half-time work. For these people, around three-quarters of the increase in disposable income is explained by the creation of the employment tax credit and the RSA between 1999 and 2011.

1.4 The share of earned income in households' disposable income has fallen as a result of the development in employment support schemes

Family benefits have amplified this phenomenon among households with children. While the minimum-wage remains the chief determinant of the disposable income of single people in full-time work and with no children, and of couples with both

members in work, its contribution to the disposable income of couples with one person working and to people working part-time is small, now, because these households usually receive either the employment tax credit or the in-work income supplement (See Table 2). In 2011, net earned income represented 93% of disposable income for a single person working full time, and 88% for a couple with both members working full-time and with 2 children, versus 56% for a single person working half-time, and 33% for a couple with one person working half-time and with 2 children.

Table 1: Contribution of its components to changes in disposable income between 1999 and 2011

Family configuration and time worked	Change (in %)	Contribution (% point)			
		Net wage	Employment tax credit (PPE) and in-work income supplement	Directs taxes (excl. PPE)	Welfare benefits
Single person, no children, full time	12	5	7	4	-4
Single person, no children, half-time	37	4	30	3	0
Couple, 1 person working, no children, full-time	22	5	16	2	-1
Couple, 1 person working, no children, half-time	34	3	36	0	-5
Couple, 1 person working, 2 children, full-time	28	4	21	2	1
Couple, 1 person working, 2 children, half-time	23	1	25	-3	0
Couple, 2 persons working, no children, full-time	15	5.5	7.5	2	0
Couple, 2 persons working, no children, half-time*	17	5	9	2	0
Couple, 2 persons working, 2 children, full-time	11	4.5	6.5	0	0
Couple, 2 persons working, 2 children, half-time*	12	4	8	0	0

* The main provider works full-time for the hourly minimum-wage, the second provider works half-time for the hourly minimum-wage.

Source: Paris scale model, 1999-2011 legislation, DG Trésor.

Table 2: Ratio of net wages to household disposable income

Family configuration and time worked	1999	2006	2011
Single person, no children, full time	99%	94%	93%
Single person, no children, half-time	73%	67%	56%
Couple, 1 person working, no children, full-time	91%	85%	78%
Couple, 1 person working, no children, half-time	55%	55%	43%
Couple, 1 person working, 2 children, full-time	70%	66%	58%
Couple, 1 person working, 2 children, half-time	38%	38%	33%
Couple, 2 persons working, no children, full-time	104%	97%	94%
Couple, 2 persons working, no children, half-time*	91%	89%	78%
Couple, 2 persons working, 2 children, full-time	94%	90%	88%
Couple, 2 persons working, 2 children, half-time*	84%	86%	78%

* The main provider works full-time for the hourly minimum-wage, the second provider works half-time for the hourly minimum-wage.

Source: Paris scale model, 1999-2011 legislation, DG Trésor.

Box 2: Employment support schemes: the employment tax credit (PPE) and the in-work income supplement

The employment tax credit (PPE)

The *prime pour l'emploi* (PPE) is an employment tax credit (or negative income tax) introduced in 2001, aimed at people in work but with a low income from their economic activity (Article 200 e of the French General Tax Code). Minimum-wage earners in full-time work qualify for its maximum amount.

The PPE has been adjusted regularly since its inception: the rate at which the tax credit is paid has been increased (progressively from 4.4% in 2001 to 7.7% in 2008), and a top-up payment has been introduced for people who have worked part-time or for part of the year (the *majoration temps partiel* or part-time work top-up). These changes have led to an increase in the amounts paid in respect of the PPE. Since 2009, and following the introduction of the RSA, the PPE scale has been frozen. The 2011 scale therefore corresponds to the 2008 scale, implying a drop in the amounts paid in respect of the PPE.

The in-work income supplement

The *revenu de solidarité active* (RSA) was mainstreamed on June 1, 2009. Through its "in-work" (*activité*) component, the RSA provides low-paid workers with a stable income supplement. It boosts household incomes to a guaranteed minimum level defined as the sum of a family-based lump sum (corresponding to the maximum amount of the *RSA socle*, which replaced the *revenu minimum d'insertion* (RMI minimum integration income) and the *allocation parent isolé* (API single parent allowance)), and 62% of the household's earned income. The in-work income supplement is targeted in particular at low-paid workers in a low-income household and people paid on the basis of the minimum-wage may be eligible to it.

The RSA was linked to the PPE in such a way that amounts paid in respect of the in-work income supplement in the course of year *n* are deducted from the amount due in respect of the PPE in year *n+1*, based on income for year *n*. In that case, the *RSA activité* will not necessarily add to the disposable income of people claiming it if the PPE is more beneficial for them.

Many households failed to take up the in-work income supplement at the time of its introduction. According to the quantitative survey carried out by the RSA assessment committee, ignorance of the mechanism is probably the chief reason for this failure to claim (cited by 47% of non-claimants). According to the national assessment committee, it would probably reach more people if they had a better awareness of the scheme and if eligibility was tested more effectively.

2. Minimum-wage earners are more likely to be at the bottom of the living standards ladder and are more frequently assisted by the welfare and tax redistribution system

An analysis based on a representative sample (see Box 1) complements this test-case analysis and yields a realistic picture of the variety of situations in which "minimum-wage earners" find themselves.

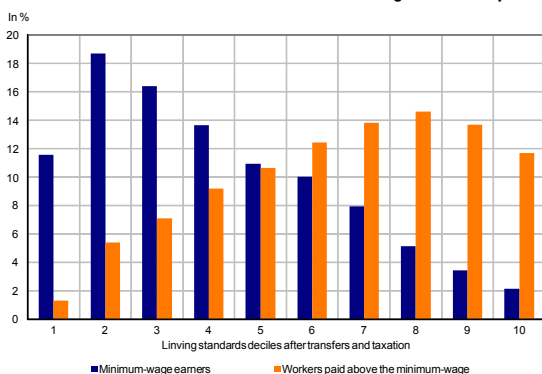
Minimum-wage earners are defined as people who, at a given moment in the year, receive an hourly wage less than 1.1 times the "Smic" when in work. Some minimum-wage earners may therefore be unemployed or in retirement for another part of the year, and hence may be in receipt of a retirement pension or unemployment benefit, which contribute to their annual disposable income (Box 3).

2.1 The disposable income of minimum-wage earners is less than that of other wage-earners

In 2010, the average living standard (see Box 1) of minimum-wage earners was €16,700 pa, which was 1.5 times below that of workers paid over 1.1 times the minimum-wage (€24,400 pa). By comparison, the average living standard of households in 2010 was €21,960 pa. The living standard considered here takes account of the heterogeneous nature of annual earned incomes, of family configurations and of the system of transfers and taxes. For minimum-wage earners, it is distinctly higher than the theoretical living standard for someone working full-time throughout the year as identified in the test cases (e.g. €13,850 pa for a single person with no children).

Minimum-wage earners are twice as likely to belong in the first five living standards deciles, i.e. 71%, versus only 34% for workers paid above the minimum-wage (see Chart 2). They are also distinctly more at risk of poverty: in 2010, 21% of minimum-wage earners were poor (see Box 1), versus just 3% for workers paid above the minimum-wage (Table 3).

Chart 2: Breakdown of workers' living standards by decile



Source: Saphir model based on 2008 ERFIS tax and benefits income survey, 2010 legislation, DG Trésor

Scope: wage-earning individuals

Note: living standards deciles are calculated on all households, after benefits and taxation.

2.2 The welfare and tax redistribution system raises minimum-wage earners' living standards by 8.5% on average

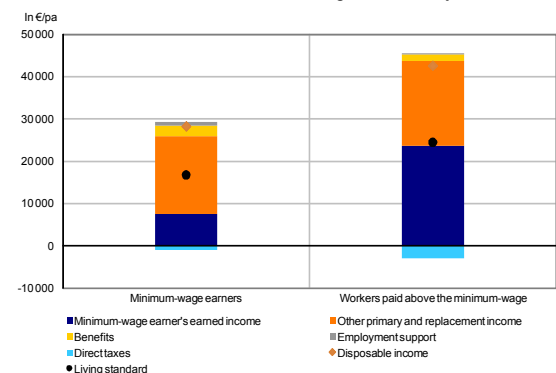
The welfare and tax redistribution system provides support to minimum-wage earners in order to supplement their low primary and replacement incomes. The share of individuals whose household is a net beneficiary of the welfare and tax redistribution system, i.e. whose income after transfers and taxation exceeds their prior income, is greater among minimum-wage earners (70%) than for other wage earners (38%). This should raise their living standard by 8.5% on average¹², whereas taxation reduces that of workers paid above the minimum-wage by 3.6%. Altogether, transfers narrow the differences in the living standards of minimum-wage earners

and better-paid workers: the average living standard of those on the minimum-wage is 1.6 times lower before transfers, compared with 1.5 times after transfers.

Transfers to households via the welfare and tax redistribution system are concentrated on the first living standards deciles. Living standards of minimum-wage earners belonging within the first two living standards deciles rise by 87% and 33% respectively after benefits and taxes. Practically all minimum-wage earners belonging in the first decile are net beneficiaries.

A worker's individual earned income contributes far less to the disposable income of minimum-wage earners than to that of workers paid above the minimum-wage, namely 25% versus 54%. The bulk of the minimum-wage earner's annual disposable income comes from other household income received in the course of the year, such as unemployment benefit paid to the worker in periods between work, retirement pensions, or partner's income. Welfare benefits such as housing benefit, family allowances and income support, while accounting for a minority share, also contribute three times more (9%) to the minimum-wage earner's disposable income than to that of other workers (3%). The positive contribution made by the employment support schemes (the RSA activité and the PPE, +3%) is equal to the negative contribution of taxation (-3%) to the disposable income of minimum-wage earners.

Chart 3: Breakdown of wage-earners' disposable income



Sources: Saphir model based on 2008 ERFIS tax and benefits income survey, 2010 legislation, DG Trésor

Scope: wage-earning individuals

Note: See Box 1 for definition of disposable income.

Table 3: Poverty rates among wage earners

	Poverty rate before benefits and taxation	Poverty rate after benefits and taxation
All individuals	21%	13%
All wage-earners	12%	6%
Minimum-wage earners	34%	21%
Workers above the minimum-wage	7%	3%

Source: Saphir model based on 2008 ERFIS tax and benefits income survey, 2010 legislation, DG Trésor.

Scope: individuals in Metropolitan France reporting a positive or nil income and where the reference person is not a student.

Note: the poverty threshold is calculated in both cases here after benefits and taxation.

Benefits and direct taxes reduce the poverty rate for minimum-wage earners by 13 percentage points, bringing it down to 21%, which is still 8 points above the poverty threshold for all individuals in Metropolitan France. They lower the poverty rate for workers above the minimum-wage by 4 points, bringing this to 3% (see Table 3). The reduction in the poverty rate via the welfare and tax redistribution system is rela-

(12) This effect is attenuated by non-take-up of the RSA activité, see p. 8.

tively more pronounced for better-paid workers (for whom it is halved), since their standard of living before benefits and direct taxes is closer to the poverty threshold than that of minimum-wage earners.

2.3 Reduced annual working time diminishes the annual earned income of minimum-wage earners

Minimum-wage earners' living standards are low primarily because their earned income over the year is low. In addition to a lower hourly wage, this results from a smaller annual volume of work: they are more likely to work part-time and to experience more interruptions to their work in the course of the year¹³. Only 45% of minimum-wage earners are in full-time work throughout the year, compared with 76% of workers paid above 1.1 times the minimum-wage. The employment history of minimum-wage earners tends to be more uneven: 37% of them experience an interruption to work of at least one month during the year, versus 12% for workers paid above the minimum-wage. They more frequently work part-time than the other employees: when they are in work, 25% of minimum-wage earners are on part-time work for at least one month in the year, versus 16% of the other workers (Chart 4).

Chart 4: Time worked and number of months worked by wage-earners



Source: Saphir model based on 2008 ERFIS tax and benefits income survey, 2010 legislation, DG Trésor

Scope: individual workers

Interpretation: 37% of minimum-wage earners work less than 12 months per year. Of these, 29% work full-time when in work, and 8% work part-time.

Box 3: Identifying minimum-wage earners

The tax and benefits income (ERFS) survey identifies minimum-wage earners by comparing information on reported incomes with that on work, in particular the number of hours worked.

To isolate wage earners receiving the hourly minimum-wage, we count only people **reporting strictly positive wages**. Moreover, the following are eliminated from the scope of our analysis: individuals aged under 18 or over 65, students and apprentices^a in the fourth quarter, workers paid abroad^b, year-round pensioners, and individuals whose amount of work is not known (in particular because they report themselves to be self-employed). **The scope of wage-earners thus defined comprised 23 million individuals in 2010.** This estimate is close to the one estimated from the 2009 ERFIS for the contribution to the report of the Minimum-Wage Experts Group (i.e. 23.5 million wage-earners).

- **Determining the annual number of hours worked**

A monthly work timetable of activity reflecting the work status and amount worked (share of working time in 5 different formats) is constructed on the basis of quarterly information on economic activity, length of time in the job, and retrospective work timetable^c. The annual hourly volume is determined by weighting an annual number of hours of full-time work (corresponding to the legal- and not the actual-number of hours worked, i.e. 35 hours per week) by the amount worked over the year. The resulting working time does not include overtime, if any.

- **Determining the hourly wage and identifying minimum-wage earners**

The net hourly wage is determined as the ratio of net earned income to the annual volume of hours worked. When this net hourly wage is less than 1.1 times the net hourly minimum-wage in 2010, i.e. €7.66/hour (the average rate for the year in 2010), the worker is considered to be a minimum-wage earner. In 2010, it is reckoned that 14.8% of workers were paid at or around the minimum-wage thus defined.

Table 4: Numbers and net hourly wages of workers

	Minimum-wage earners	Workers paid above the minimum-wage	All
No. of workers (in million)	3.4	19.6	23.0
Av. net hourly wage (in €)	5.5	15.3	13.8

Source: Saphir model based on 2008 ERFIS tax and benefits income survey, 2010 legislation, DG Trésor.

Scope: individual wage-earners.

- Students and apprentices are not liable for tax, and are therefore not required to report their income below a certain threshold. Consequently, little is known about their earned income. Moreover, they are often only very partially economically active, and there is little information about the number of hours they work.
- They are not subject to minimum-wage rules.
- In the absence of information on the past, the last-known amount of work done is retropolated.

3. The living standard of minimum-wage earners depends on their employment history and family background

Living standards of minimum-wage earners are heterogeneous: the 25% least well-off minimum-wage earners have a living standard of less than €12,000 pa, or 72% of the average living standard of minimum-wage earners; the 25% best-off have a living standard of more than €19,400.

Differences in employment histories over the year partly account for the heterogeneity of minimum-wage earners' living standards, but they are not the main determining factor. The earned income of minimum-wage earners depends heavily on the number of months worked in the year and the weekly

number of hours worked, but other income components attenuate their effect on the final living standard. That is because the average annual living standard of minimum-wage earners in work throughout the year amounts to €17,000 for those working part-time, and €17,100 for those working full-time. By comparison, the average annual living standard of minimum-wage earners who have not been in work continuously throughout the year amounts to €15,900.

The family situation of minimum-wage earners does more to explain the heterogeneity of their living standards. That is

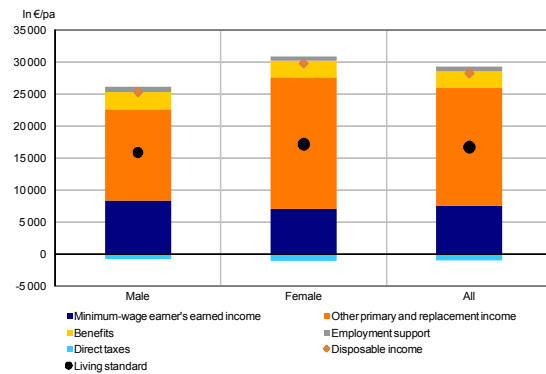
(13) The study by N. Missègue and L. Wolff (2011) "Écarts de niveau de vie: l'impact du salaire horaire, du temps partiel et des durées d'emploi" (Differences in living standards: the impact of hourly pay, part-time working and job duration), *Les revenus et le patrimoine des ménages* (Household income and wealth), Insee Référence, analyses this aspect in greater detail.

because individual earned-income supplements provided by the other members of the household, along with the welfare and tax redistribution system (which takes account of the family situation), are the major determining factors of the final living standard of minimum-wage earners.

3.1 Women on the minimum-wage have a lower earned income, but a higher disposable income

Women on the minimum-wage have a lower earned income than men on the minimum-wage (€7,100, versus €8,400), because they work fewer hours. On the other hand, they have a higher average disposable income on average (€31,300, versus €27,000) (Chart 5). They are less likely than men to belong in the first two living standards deciles (28%, versus 36%) (see Chart 6).

Chart 5: Breakdown of minimum-wage earners' disposable income according to gender



Source: Saphir model based on 2008 ERFIS tax and benefits income survey, 2010 legislation, DG Trésor.
Scope: individuals on hourly minimum-wage.

Table 5: Contribution of partner's income for minimum-wage earners living in couples (in %)

	Income of minimum-wage earner's partner			
	Partner with no income	Partner with income below that of the person on minimum-wage	Partner with income above that of the person on minimum-wage	All
Male	21	33	46	100
Female	4	6	89	100
All	9	14	77	100

Source: Saphir model based on 2008 ERFIS tax and benefits income survey, 2010 legislation, DG Trésor.

Scope: individuals on hourly minimum-wage living in couples.

Note: for each partner, all individual income is taken into account, i.e. earned income, retirement pensions, and unemployment benefit.

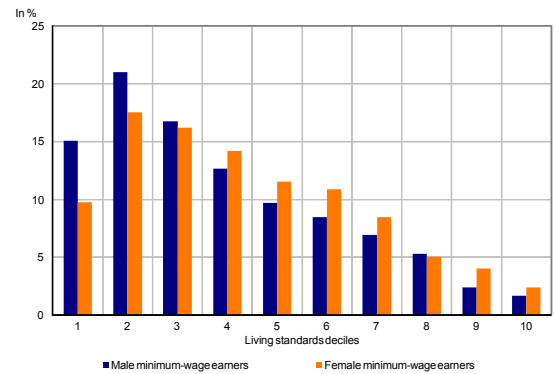
Interpretation: 21% of men living in couples and earning the minimum-wage live with a partner who has no income; 33% with a partner whose income is less than his; and 46% with a partner whose income is higher.

3.2 The welfare and tax redistribution system contributes even more to the disposable income of minimum-wage earners with children

Among minimum-wage earners, those living in single-parent families have the lowest average standard of living (€11,400 pa); those living in a couple with no children have the highest average standard of living (€19,500 pa) (see Chart 7).

The average net earned income of minimum-wage earners varies relatively little according to family configuration, ranging between €6,500 pa for people living in a couple with three children, and €7,500 pa for a single person. However, expressed as a share of disposable income, it accounts for a larger proportion for single persons and single-parent

Chart 6: Breakdown by decile of minimum-wage earners' living standards according to gender



Source: Saphir model based on 2008 ERFIS tax and benefits income survey, 2010 legislation, DG Trésor.

Scope: individuals on hourly minimum-wage.

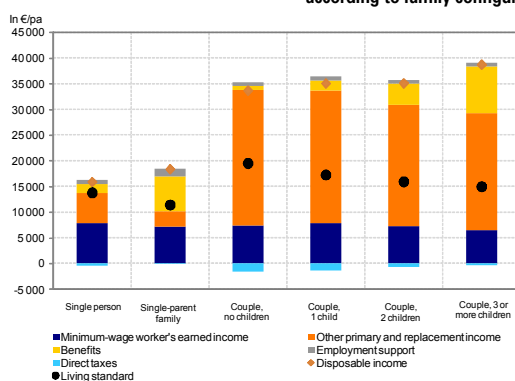
Interpretation: 21 % of male minimum-wage earners belong in the 2nd living standards decile.

The reason for this difference lies in the share of other household income, which contributes €20,500 for women and €14,200 for men. This is because women on the minimum-wage are more likely than men to live in a couple (73%, versus 65%) and, when they do live in a couple, they are less likely to be the main provider. Overall, the earned income of women contributes less to the disposable income of their household (23%) than does that of male minimum-wage earners (30%).

families (respectively 50% and 39% of disposable income) than for couples (around 20%). This is because other forms of household income supplement the latter's income.

Benefits have a greater impact in families with children than in families with none. For couples, the average amount of welfare benefits rises with the number of children (€1,900 pa for couples with one child, rising to €9,100 pa for couples with three children or more). The reason for this is that benefits scales incorporate a family dimension. For example, family allowances start with the second child, then rise significantly from the third one onwards; ceilings on means-tested benefits are higher for families with children; and housing benefit is increased also.

Chart 7: Breakdown of disposable income of minimum-wage earners according to family configuration



Source: Saphir model based on 2008 ERFIS tax and benefits income survey, 2010 legislation, DG Trésor.

Scope: individuals on hourly minimum-wage.

Note: Children are under 18. Single people are therefore people with no partner and no children under 18.

Single-parent families benefit more from employment support schemes, the RSA in particular (€1,440 pa on average, versus around €700 pa for the other family configurations).

3.3 The impact of the RSA on the disposable income of minimum-wage earners is limited by non-take-up of the *RSA activité*

The largest percentage of minimum-wage earners belongs to a household eligible for the *RSA activité* (in-work income supplement), i.e. 30%, versus 7% for workers earning more than the hourly minimum-wage (Table 6). After allowing for non-take-up of the *RSA activité*¹⁴, the share of those actually in receipt of the *RSA activité* is much lower, at 9% for minimum-wage earners and 2% for workers above the minimum-wage.

Non-take-up of this benefit results in a slower rise in the living standard associated with the *RSA activité* for 14% of minimum-wage earners. The income shortfall for these people is €123 per month, on average, or 12% of their disposable income.

Allowing for non-take-up limits the effect of the tax and benefits system on the living standard of minimum-wage earners, which rises by only 7.5%, instead of 8.5% if they take up all of their entitlements (see 2.2). This average effect covers a range of different situations, depending on workers' living standards. The average living standard of minimum-wage earners belonging to the first living standards decile would rise by 87% if they took up their *RSA activité* benefit in full, whereas the actual rise is only 74%.

Table 6: Impact of non-take-up of the "RSA activité" on workers

	Share of individuals eligible for the <i>RSA activité</i>	Share of individuals actually in receipt	Income shortfall due to non-take-up of <i>RSA activité</i> by households concerned	
	In %	In %	In €/month	In % of disposable income
Minimum-wage earners	30	9	123	12
Workers above the minimum-wage	7	2	72	6
All workers	11	3	93	9

Source: Saphir model (with non-take-up of *RSA activité*), based on 2008 ERFIS tax and benefits income survey, 2010 legislation, DG Trésor.

Scope: individual wage-earners.

Note: Individuals are considered eligible for the RSA if they belong to a household receiving the RSA in cases of full take-up of benefits.

Adélaïde FAVRAT and Delphine PRADY

(14) See Box 1. A person is considered to be a non-claimant when he or she is eligible for the RSA by virtue of his or her situation but does not apply for it.

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