# Measuring quality of life

*Valérie Albouy, Pascal Godefroy, Stéfan Lollivier**

**Can quality of life be measured? Many factors enter into the equation and these are not limited to purely material or monetary aspects. The concept of "quality of life" is much wider than standard of living or material living conditions, it also takes into account working conditions, the degree of social integration, health and education, whether people are particularly fragile economically (e.g. unemployed) or physically, etc. In this article we propose an initial measurement of "quality of life".**

What does well-being consist of? The question may seem naive, and putting it to economists may be a surprising thing to do. And yet many are of the opinion that this apparently very personal subject needs to be analysed and measured. The study "France, portrait social" has already looked at this question by devoting a section to finding out who described themselves as happy [Afsa C. Marcus V., 2008]. We discovered that in the course of a lifetime, the feeling of well-being starts to decline between the ages of 25 and 40 approximately, and then a clear upturn can be seen, reaching a peak during a person's sixties. This "happiness curve" did not correspond exactly to the average income growth curve: there may be a discrepancy between financial resources, in other words the "means" people have at their disposal, and the "results" in terms of well-being.

This study looked at the well-being people experienced or their general satisfaction with their life at a given moment. This well-being is generally measured by asking participants to choose a level of satisfaction. In the happiness study, the question that was asked was, "Overall, are you very satisfied, fairly satisfied, not very satisfied or not at all satisfied with your life nowadays?" Other questions may be asked, especially in surveys covering several countries (*Insert 1)*.

To measure well-being, another approach is to measure a person's quality of life, in other words assessing their situation in terms of several different dimensions (in material terms, in terms of health, housing conditions, insecurity, etc.) then deducing whether they are in a position to have a "satisfactory" quality of life. To distinguish this analysis from the previous one, this method is sometimes defined as an "objective" approach to measuring well-being, as it is based on precise and measurable criteria. The factors taken into account are not limited to purely material (or monetary) aspects. Thus the concept of "quality of life" is broader than standards of living or material living conditions, which are used to measure inadequate living conditions (see article "La pauvreté en conditions de vie a touché plus d'une personne sur cinq entre 2004 et 2007", "Poor living conditions affected more than one person in five between 2004 and 2007" in this work). To measure these conditions, Insee used a list of questions relating to people's economic strain, late payments, consumption restrictions and possible housing difficulties. When we look at quality of life, we are attempting to measure people's situation in terms of working conditions, access to leisure, their degree of social integration, whether they are particularly vulnerable economically (e.g. a sudden drop in income) or physically, etc.

* Valérie Albouy, Pascal Godefroy, Stéfan Lollivier, Insee

*Insert 1*

## "Experienced" quality of life: how do Europeans judge their quality of life?

In international surveys, four main dimensions are often studied to assess "experienced" quality of life:

- well-being, or satisfaction with life in general;
- satisfaction with specific aspects, such as standard of living, personal relationships, public services;
- confidence in the future, or trust in other individuals, institutions, etc.
- social cohesion, measured by perceived tensions between social groups, according to age, social category, income, geographic origins, etc.

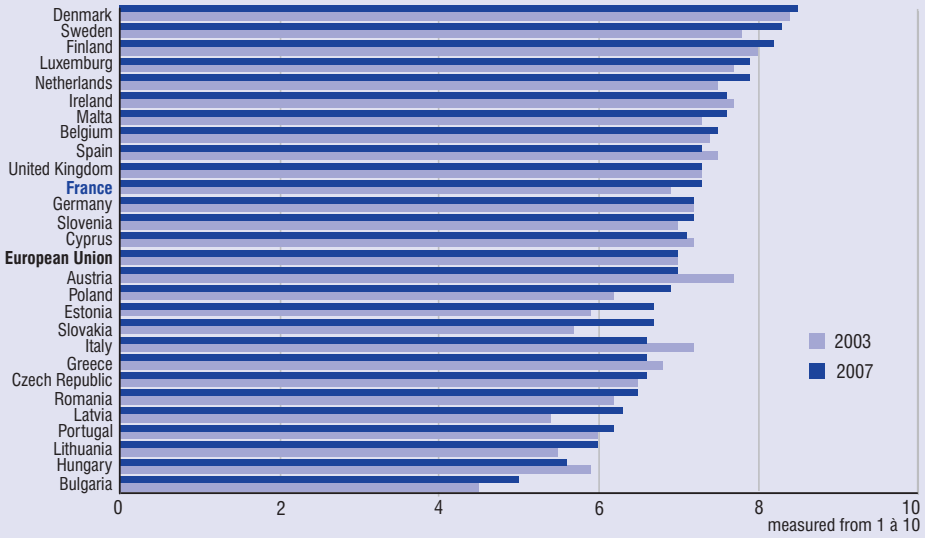
These key areas were examined in particular in the European Quality of Life survey. This was carried out in 2003 and 2007 by the European Foundation for the Improvement of Living and Working Conditions (Eurofound). Interviewing 1,000 people aged 18 or over in face to face interviews in each country, this survey covered the European Union countries and also Bosnia-Herzegovina, the former Yugoslavian Republic of Macedonia, Turkey and Norway. The results shown here are taken from Eurofound publications.

Between 2003 and 2007, the results are relatively stable. Improving quality of life is more noticeable in the new Member states.

### Subjective well-being

Measured on a scale of 1 to 10, the feeling of overall life satisfaction was generally lesser in the new member States.

### Overall satisfaction indicator in 2003 and 2007



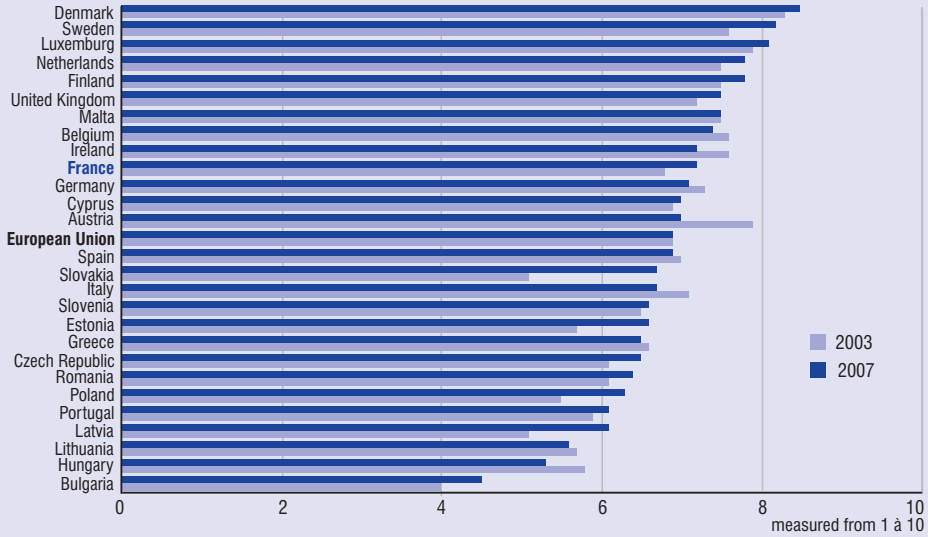

*Source: Eurofound*

*Insert 1 (contd.)*

**Satisfaction with standard of living**

The country classification is similar to that for overall satisfaction. Satisfaction with standard of living, measured on a scale of 1 to 10, has mainly improved for the new member States.

## Satisfaction with standard of living indicator

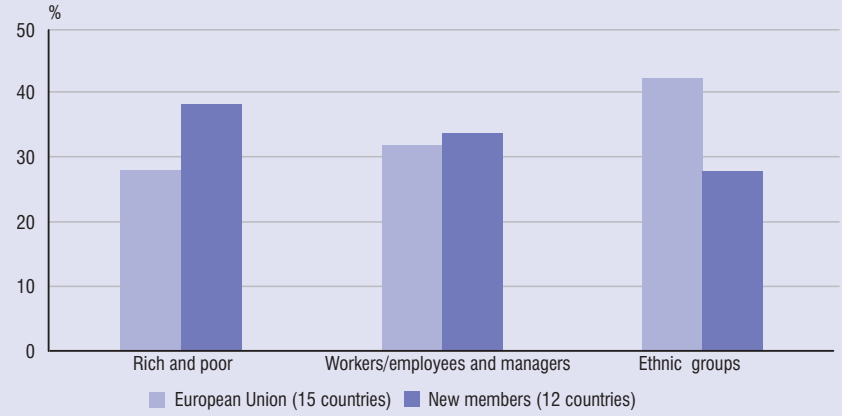



*Source: Eurofound*

**Tensions between social groups**

In most countries, less than 20% of people reported that they perceived a lot of tension between men and women or between age groups. On the other hand, about one-third of people reported a great deal of tension between rich and poor, between workers/employees and managers or between ethnic groups. Between 2003 and 2007, the proportion of people reporting "a lot of tension" between the three groups mentioned dropped in Europe by between 4 to 6 points, depending on the group.

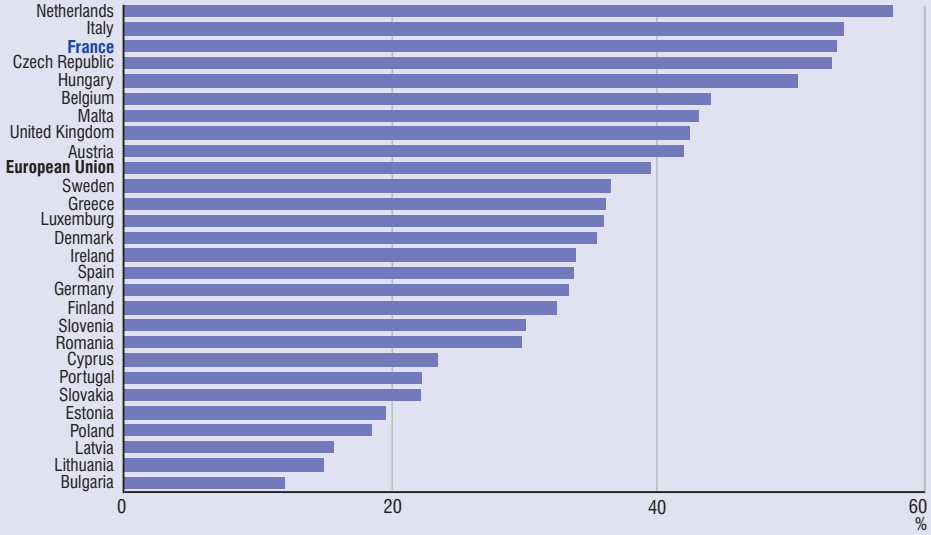
## Percentage of people reporting a lot of tension between social groups in 2007



*Insert 1 (contd.)*

Tensions between ethnic groups are more marked in the Europe-15, especially in the Netherlands, Italy and France, than in the new member States, although Hungary and the Czech Republic do stand apart.

### Percentage of people reporting a lot of tension between ethnic groups in 2007

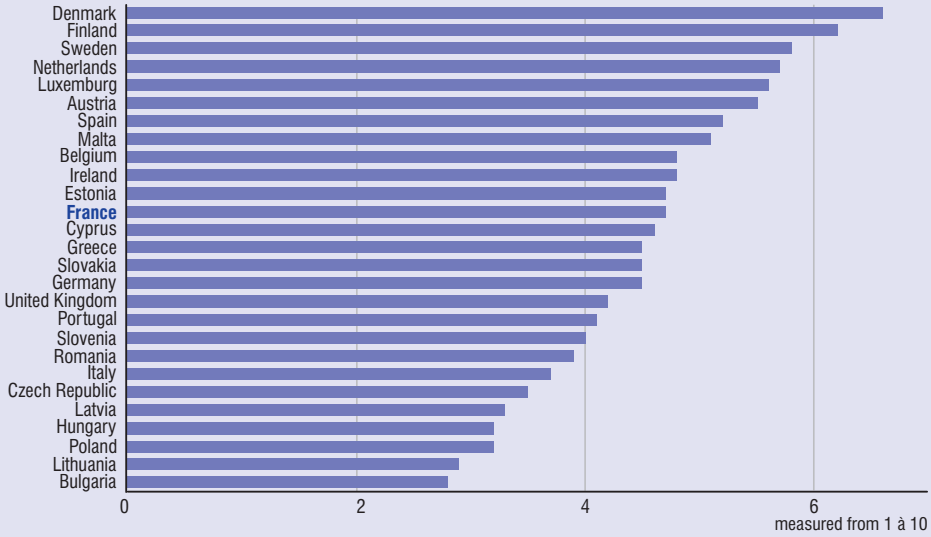



*Source: Eurofound*

### Trust in political institutions

Measured on a scale of 1 to 10, this is higher in the Europe-15, and particularly in northern Europe.

### Mean index of level of trust in the government, national parliament or political parties




*Source: Eurofound*

The range of objective characteristics to consider is therefore wide and relatively complicated to define as any choice is based implicitly on value judgements. The Commission on the Measurement of Economic Performance and Social Progress ("Stiglitz-Sen-Fitoussi" Commission) considered this question. Their report, published in 2009, recommends that when considering quality of life, as well as material living conditions, we should also take into consideration factors such as health and education, everyday living conditions (especially in terms of employment and housing), political voice, people's social networks and natural environment and all the factors that define personal and economic security.

The 2010 edition of "France, portrait social" contains three articles covering some of these matters. One looks at inadequate living conditions and shows that this concerns people in a wide range of differing circumstances (family, work, in terms of life cycle). The nature, scale and duration of material deprivation differ according to circumstances. The second article looks at political voice. This is expressed mainly in participation in elections, which has tended to decline in recent years in the developed countries. This decline is often interpreted as being due to a lack of trust in political bodies. The article shows that this decline in electoral participation, which is particularly marked among the young generations, is rather the sign of a change in the way they vote, with young people voting more intermittently. Lastly, the third article looks at social connections. The "Stiglitz-Sen-Fitoussi" Commission stresses the fact that people who have the advantage of a large social network "report higher life-evaluations, as many of the most pleasurable personal activities involve socialising. The benefits of social connections extend to people's health and to the probability of finding a job, as well as to several characteristics of the neighbourhood where people live (e.g. the prevalence of crime and the performance of local schools)".

## Health, friends, money, security, etc.: many factors affect quality of life

These thematic articles deal with important aspects of quality of life. However, one of the challenges of a multidimensional approach to quality of life is ultimately to produce a synthesis of the question. We attempt this here by considering 9 aspects of quality of life, for which statistics are already available: material living conditions, financial risks to which people are exposed, their health, their level of education, working conditions, involvement in public life, contacts with others, economic security and physical security (Appendix). Most of the corresponding indicators are calculated on the basis of data from the SRCV survey *(Insert 2)*.

For most of these dimensions, our analysis is in line with the "Stiglitz-Sen-Fitoussi" Commission recommendations, and for most of them, their effect on quality of life is fairly intuitive. For example, level of education affects quality of life, over and above its effect on professional careers and future income. Social connections have a direct bearing on quality of life, as they are usually a source of satisfaction, but they also constitute a resource that can be mobilised in most aspects of life. Studies on well-being also stress that uncertainty surrounding one's future economic situation has a negative effect on the quality of life of those concerned. Theoretically, risk concerns all factors that can lead to a sudden loss of income or status in the future, in other words, for working people this can be illness, maternity and unemployment, or for working and retired people alike, uncertainties hanging over the pension systems. For the moment, the only measurement used here is that of the risk of finding oneself unemployed in the coming year.

*Insert 2*

**Data**

These derive mainly from the SRCV survey (Statistiques sur les Ressources et les conditions de vie), the French part of the European SILC survey (Statistics on Income and Living Conditions). It is coordinated by Eurostat, with data for France being organised and collected by Insee. We use data from 2006, 2007 and 2008, including the French modules of the survey (labelled globally as "social indicators"), introduced in 2008 and administered together with the European questionnaire. For all of these years, and every year since, participants were asked to complete a questionnaire concerning social participation, associations, or contacts with friends and family. An annual questionnaire on working conditions was also added to the French part of the questionnaire in 2008. Lastly, a European module is included every year in the questionnaire. The 2006 module related to social participation.

Every year, as well as the characteristics of people and households, we have up-to-date information on any deprivations and problems they face. However, in some cases (quality of housing, budgetary problems, restrictions on consumption), the questions were put to one household member. In the article, we have chosen to use an individual approach. To each individual aged 16 or over who was surveyed, we therefore transferred the problems faced by the household, i.e. in the absence of ad hoc individual information about these problems, we hypothesised equidistribution of problems between household members. While this seems plausible for housing problems, it is perhaps less so in matters of consumption restrictions [Godefroy, Ponthieux, 2010].

Lastly, the Commission highlighted the fact that the nature of daily activities can have a considerable effect on people's personal well-being. However, bringing together the "quality" of activities of daily life into a single indicator is difficult to achieve. To a certain extent, people's taste for activities is a personal matter which varies considerably from one person to another, and therefore applying a standard across the board makes little sense. On the other hand, regardless of individual likes or dislikes, the nature of activities practised does depend on where people are in their life cycle, their family situation, their professional activity, etc.

So it is difficult to find an indicator to measure the quality of personal activities which is applicable to everyone and is relevant to each individual. For the working population, measuring the "quality" of their job in terms of working conditions would seem logical, given the importance of this activity in their lives. What is more, quality of employment has been considered in previous studies and so the fruits of earlier work could be used. However, by making this choice, the quality of personal activities is then only measured for people who are in work. A possible extension in future would be to extend the measurement of this dimension to other people.

## Each quality of life dimension is measured via several indicators

The measurement of situations in each quality of life dimension is based on several indicators *(Appendix)*. For example, material living conditions are measured using 9 indicators concerning housing conditions, and 13 indicators concerning consumption restrictions (on food, enforced lack of durables, holidays, etc.). As for working conditions, they are described via 12 indicators (existence of conflicts, overwork, unsocial hours, etc.). The number of indicators depends of course on the available information: for health, only two fairly general indicators were used. Similarly for education, where only the lack of a diploma and recent vocational training were measured, whereas we could envisage, if this work were extended in future, including a measure of people's competencies (in written and oral comprehension and numeracy).

For each aspect of quality of life, we consider that a person does not reach a "standard" level if they have experienced a number of difficulties above a certain threshold. Each threshold is fixed arbitrarily [Lollivier, Verger, 1997]: the methodology used here is exactly the same in this matter as that used for inadequate living conditions, where the threshold was chosen so that, overall, the share of people in poor living conditions was similar to the share of those who were poor in terms of monetary poverty [Guio, 2009].

## Standard of living: revealing an unfavourable situation in almost all dimensions

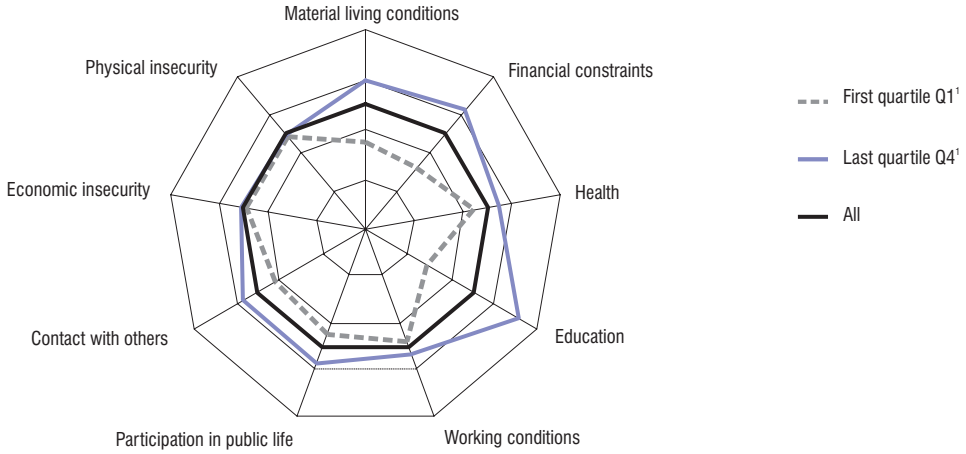
Some people or some social groups are more at risk of accumulating disadvantages in several dimensions of their lives. This is the case for those with the lowest standard of living. Compared with the general population, the 25% with the lowest living standards (first quartile Q1) run a greater risk of experiencing problems in all of the quality of life dimensions *(figure 1a)*, whereas the wealthiest 25% (bottom quartile Q4) present a lower risk in all these dimensions. On average, people with a low standard of living are therefore disadvantaged in all dimensions of their lives. They have to cope with greater financial constraints (by definition) but also with material living conditions that are distinctly inferior, their health is worse and they have a lower level of education. On average, they also have more difficult working conditions, lower levels of economic and physical security, fewer contacts with others and they are more in the background in terms of public life. The relative risk, for each dimension in their life, of being in the group of "disadvantaged" people is often 1.5 to more than 2 times greater when one is in the poorest quarter of the population. Conversely, on average those who are financially best-off cumulate benefits in all the previous dimensions, except for physical security. As well as observing that people with a low standard of living are disadvantaged in almost all dimensions, the scale of this disadvantage is variable: logically, it is greater in terms of material or financial living conditions, fairly marked in terms of health, level of education, social connections or economic insecurity, but less clear cut in terms of physical insecurity, participation in public life or working conditions.

There is much more contrast in the situation of young people (16-29 year-olds) *(Figure 1b)*: on the one hand, they have material and financial living conditions that are considerably less favourable than the rest of the population but they do have better levels of education and health, and they have more social connections. Conversely, the health of the over-60s is worse but they also have less contact with others and, more particularly, a much lower level of education than the rest of the population. However, they have fewer financial constraints, better living conditions in material terms, and a higher level of physical security.

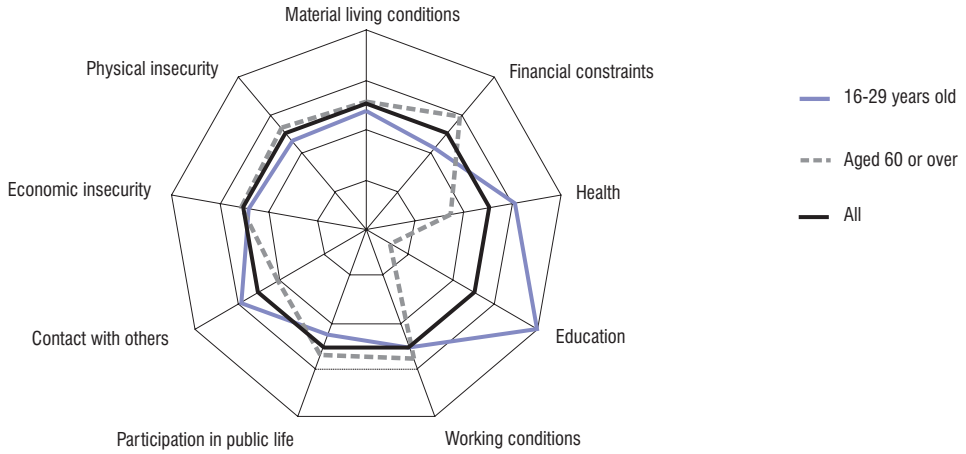
Among the family configurations, single-parent families cumulate disadvantages in the largest number of dimensions *(Figure 1c)*: on average they have more problems in six of the dimensions selected. However, since single parents tend to be younger, they are also in better health and better educated. But their level of economic insecurity, measured by the risk of unemployment within the year, is as high as that of the poorest quarter of the population or that of the under-30s.

## 1. Quality of life dimensions

### a. According to standard of living




### b. According to age



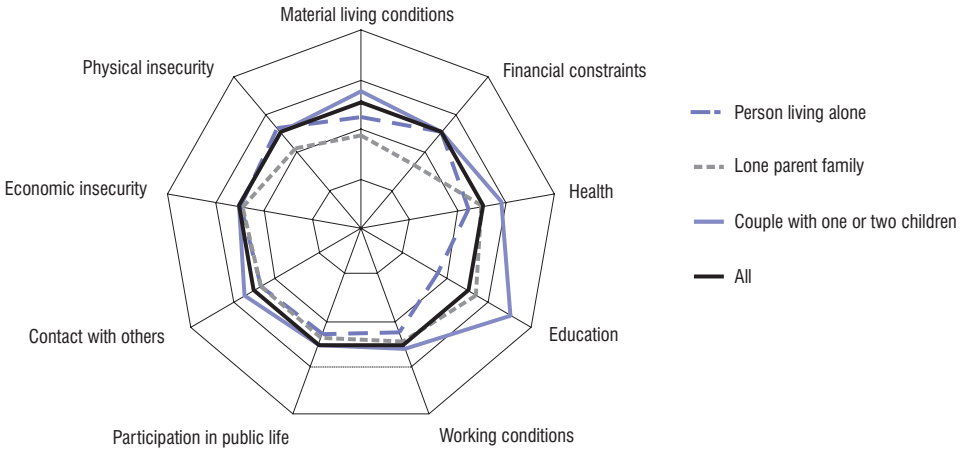

1. If people are ordered according to standard of living, the quartiles separate them into four equal groups: a person in the living standard first quartile (Q1) is one of 25 % of people with the lowest living standards

Area: mainland France, population of households, people aged 16 years old or more (except for the security dimension, 18-75 years old; for working conditions, 16 years old or more and in employment; for economic insecurity, employed people in 2006). How to read it: each radius represents a dimension of quality of life. The scale is inverted in relation to the indicator for each dimension: the further away from the centre, the weaker the indicator is and hence the better the quality of life in that dimension. Thus, in figure 1a, the wealthiest people (those in the last standard of living quartile) have a better quality of life than average in all dimensions, apart from the physical and economic insecurities for which their situation is equivalent to the average for the population.

*Source: Insee, SRCV surveys 2006, 2007, 2008, 2009;French victimization household survey 2009*

**1. Quality of life dimensions (contd.)**

### c. According to family composition




Area: Mainland France, population of households, people aged 16 years old or more (except for the security dimension, 18-75 years old; for working conditions, 16 years old or more and in employment; for economic insecurity, employed people in 2006).
How to read it: each radius represents a dimension of quality of life. The scale is inverted in relation to the indicator for each dimension: the further away from the centre, the weaker the indicator is and hence the better the quality of life in that dimension. Couples with one or two children are better situated in the dimensions related to education, health, material living conditions and contacts with other people.
*Source: Insee, SRCV surveys 2006, 2007, 2008, 2009; French victimization household survey 2009.*

## Towards a composite measure of quality of life

Using this dimension by dimension approach it is not possible to appreciate quality of life as a whole. To do this, we present a composite indicator of quality of life *(Figure 2)*. This is produced from an aggregation of indicators relating to each of the quality of life dimensions. It is calculated for each social group studied here. This is not possible at the level of individuals,

**2. Composite indicator of quality of life: relative risk of "poor quality of life"**

| | Standardised synthetic indicator | | | Composition of sub-populations | | |
|---|---|---|---|---|---|---|
| | Traditional | Add 1 to each threshold | Deduct 1 from each threshold | Women (%) | No diploma (%) | Average age (years) |
| **All** | 14 | 10 | 23 | 52 | 30 | 48 |
| **Multiplicative coefficients of the risk of poor quality of life** | | | | | | |
| **Family configuration** | | | | | | |
| Person living alone | 1.2 | 1.2 | 1.1 | 58 | 38 | 57 |
| Single parent family | 1.4 | 1.4 | 1.4 | 64 | 31 | 39 |
| Couple without children | 1.0 | 0.9 | 1.0 | 50 | 37 | 58 |
| Couple with one or two children | 0.8 | 0.7 | 0.8 | 50 | 14 | 41 |
| Couple with 3 children or more | 1.1 | 1.1 | 1.1 | 50 | 31 | 48 |
| **Age** | | | | | | |
| 16-29 years old | 0.9 | 0.9 | 1.0 | 49 | 17 | 23 |
| aged 60 or over | 1.1 | 1.2 | 1.1 | 55 | 56 | 72 |
| **Standard of living** | | | | | | |
| Q1 | 1.5 | 1.7 | 1.4 | 55 | 47 | 47 |
| Q4 | 0.6 | 0.5 | 0.6 | 0 | 0 | 50 |

Area: Mainland France, population of households, people aged 16 years old or more (except for the security dimension, 18-75 years old; for working conditions, 16 years old or more and in employment; for economic insecurity, employed people in 2006).
How to read it: the risk of "poor quality of life" is 14% in the population as a whole. In comparison, the risk is 50% higher (multiplied by 1.5) for the most disadvantaged people (first quartile for living standard).
*Source: Insee, SRCV surveys 2006, 2007, 2008, 2009; French victimization household survey 2009; sample composition SRCV 2008.*

as there is no single statistical source that covers all the dimensions. Since it aggregates the indicators of the different dimensions, it is an indicator of "poor quality of life": the higher the indicator, the worse the quality of life of the people concerned.

When constructing a composite indicator, the question arises as to the importance to give each dimension, a recurring dilemma in the literature on composite indicators. Any weighting system that is chosen, including the equiweighting option, remains arbitrary. One possibility would be to weight each dimension according to the average preferences in the population: to simplify, this would mean asking the opinion of those concerned about the way in which the situations that they experience affect their well-being [Afsa C., 2008]. However, this method requires some fairly comprehensive data on people's perception in different situations, and there is no guarantee that these individual perceptions will remain stable over time.

In its construction, the quality of life indicator is worth an average of 1 in the population of over-15s. These are people with the highest standard of living (top quarter) who are also at the top of the scale for this indicator: the risk of their quality of life being adversely affected is 40% lower than for the population of the study taken as a whole. Conversely, for those with the lowest standard of living (lowest quarter) the risk that they will have a poor quality of life is 53% higher, on average. This is also the case for single-parent families (38%). The quality of life of people over 60 or people living alone is less good than average, but for different reasons. For people living alone, their quality of life is adversely affected by their living conditions (financial or material), whereas education level and health reduce the quality of life of senior citizens.

This multidimensional indicator is still in the preliminary stages. One of its limitations is that it does not take into account correlations between the different aspects of quality of life, and yet cumulating problems in several dimensions probably truncates quality of life more than if these problems were considered separately. Nor, as it is constructed at present, does it provide a complete scale of quality of life, either global, or field by field. The methodology consists of splitting the population in two for each dimension, separating the very disadvantaged from the rest, thus providing a quality of life indicator which is just one view among several other possible ones of the way problems are distributed throughout the population. This is particularly true in the case of studies presented here as the thresholds chosen are relatively low: in each dimension, whenever possible, the thresholds are chosen so that between 10% and 20% of the total population is in the "disadvantaged" group. With a threshold at 10%, and to a lesser extent when it is at 20%, the people in a dimension who are in great difficulty are selected, and in fact they are fairly remote from the quality of life that prevails in the population as a whole.

Of course we could adjust the settings that determine when a person is in difficulty in each field: for example, until now we have said that a person had housing problems whenever they had at least 3 "problems" from among the 9 that were measured; this threshold, and the thresholds chosen for the other dimensions, could be increased by one unit. The quality of life indicator then becomes more restrictive since in each dimension the probability of being in the "disadvantaged" group is lower. However, this does not alter the "ranking" of the socioeconomic groups: people with a high standard of living or couples with one or two children still have the best quality of life; those with a "low" standard of living, elderly people, people living alone and single-parent families, are the ones with an inferior quality of life. With this new indicator, on the other hand, the gaps between the groups appear less marked. If, on the contrary, we want to be more demanding in terms of the minimum quality of life threshold, by lowering the setting at which a person is in difficulty in one dimension, then the differences in quality of life between groups tend to increase. This means that differences in quality of life are all the more marked when defined in terms of the absence, or almost total absence, of difficulties in the different dimensions that make up quality of life. ■

## To find out more


Afsa C., Marcus V., "Le bonheur attend-il le nombre des années ?" (Does happiness depend on one's age?), in "France, portrait social", *Insee Références*, édition 2008.

Afsa C., "Analyser les composantes du bien-être et de son évolution. Une approche empirique sur données individuelles" (The structure of subjective well-being and its evolution. An empirical analysis based on individual data) *Working document*, G2008/12.

Godefroy P., Ponthieux S., "Pauvreté en conditions de vie en France et privation matérielle en Europe" (Poverty in living conditions in France and material deprivation in Europe), in *"Les Travaux 2009-2010"*, Onpes.

Guio A.C., 2009, "What can be learned from deprivation indicators in Europe", *Eurostat Methodologies and Working Papers*, 2007.

Lollivier S., Verger D., "Pauvreté d'existence, monétaire ou subjective sont distinctes" (Subsistence, monetary and subjective poverty are distinct notions), *Économie et Statistique*, n° 308-309-310, Insee, 1997.

Stiglitz J., Sen A. and Fitoussi J.-P., Report by the Commission on the measurement of economic performance and social progress, Éditions Odile Jacob, 2009.

# APPENDIX

## The different quality of life dimensions and how they are measured

### Material living conditions

Material living conditions are perceived via housing conditions and consumption restrictions.

For housing, there are five indicators describing the facilities available inside the home. There are two more that measure the presence of damp and noise nuisance. Finally, two indicators measure home population density (and overcrowding). The frequency with which each of these problems occurs varies considerably: fewer than 1% of people live in a home where there is no bathroom, for example, whereas a quarter think that their home is difficult to heat. Eight per cent of people live in housing that has at least three out of the nine defects measured, the threshold for considering that a person is living in poor housing conditions.

Material living conditions are measured by restrictions in access to 13 consumer items (food, holidays, furniture, clothing, home computer, etc.). Fifteen per cent of the total population said that there were at least 4 areas where their consumption was restricted.

The indicator for problems with living conditions is the arithmetic mean of the indicators for the two sub-dimensions.

%

| Material living conditions | **All** | Perso living alone | Single parent family | Couple with one or two children | 16-29 year-olds | 60 year-olds or over | 1st living standards quartile (Q1) | Last living standards quartile (Q4) |
|---|---|---|---|---|---|---|---|---|
| Noise disturbance in the home | **18** | 20 | 26 | 16 | 21 | 16 | 21 | 14 |
| Severe or moderate overcrowding | **10** | 13 | 20 | 7 | 17 | 4 | 18 | 5 |
| Home difficult to heat | **26** | 27 | 28 | 21 | 26 | 30 | 33 | 18 |
| Home damp | **13** | 14 | 20 | 11 | 16 | 10 | 20 | 7 |
| No bathroom inside the home | **1** | 2 | 1 | 0 | 0 | 2 | 2 | 0 |
| No central or electric heating system | **6** | 7 | 6 | 5 | 5 | 7 | 10 | 2 |
| No hot water | **1** | 1 | 1 | 0 | 0 | 1 | 1 | 0 |
| No inside toilet | **1** | 2 | 1 | 0 | 1 | 1 | 2 | 0 |
| Home too small (subjective assessment) | **12** | 11 | 18 | 15 | 17 | 5 | 18 | 8 |
| **Housing problems (at least 3 out of 9)** | **8** | **10** | **14** | **6** | **12** | **5** | **16** | **3** |
| Unable to afford to get together with friends / family for a drink / meal at least once a month | **10** | 15 | 20 | 5 | 9 | 12 | 21 | 2 |
| Problems keeping home at the right temperature | **5** | 8 | 10 | 3 | 6 | 5 | 10 | 2 |
| Unable to afford one week's holiday away from home once a year | **31** | 38 | 51 | 25 | 34 | 32 | 57 | 9 |
| Unable to replace worn out furniture | **32** | 39 | 54 | 24 | 35 | 31 | 56 | 10 |
| Unable to replace worn out clothes by some new ones (not second hand) | **13** | 17 | 22 | 8 | 13 | 13 | 27 | 3 |
| Unable to afford a meal with meat, chicken or fish every second day | **8** | 12 | 16 | 5 | 9 | 7 | 16 | 2 |
| Unable to give gifts to family or ftiend at least once a year | **9** | 14 | 17 | 5 | 9 | 11 | 22 | 2 |
| Does not own two pairs of properly-fitting shoes | **8** | 10 | 16 | 6 | 9 | 8 | 20 | 2 |
| No full meal on at least one day during the last two weeks | **3** | 4 | 7 | 1 | 3 | 2 | 7 | 1 |
| No internet access | **7** | 9 | 16 | 4 | 9 | 6 | 16 | 1 |
| No home computer | **6** | 9 | 13 | 3 | 6 | 6 | 12 | 1 |
| No dish-washer | **6** | 6 | 15 | 4 | 10 | 4 | 15 | 1 |
| No car | **4** | 8 | 10 | 2 | 5 | 3 | 9 | 1 |
| **Consumption restrictions (at least 4 out of 9)** | **15** | **23** | **32** | **9** | **16** | **16** | **34** | **3** |
| **Restrictions on living conditions** | **12** | **16** | **23** | **8** | **14** | **10** | **25** | **3** |

Area: Mainland France, people aged 16 or over, living in ordinary households.
*Source: Insee, SRCV 2008, cross-sectional weighting.*

## Financial constraints

There are 8 indicators to measure the financial difficulties people may have in managing their budget. For example, when housing costs represent more than one third of total income, or when a person frequently has a bank overdraft or is late in paying bills. A ninth indicator is a person's subjective appreciation of his financial situation.

%

| Financial constraints | **All** | Person living alone | Single parent family | Couple with one or two children | 16-29 year-olds | 60 year-olds or over | 1st living standards quartile (Q1) | Last living standards quartile (Q4) |
|---|---|---|---|---|---|---|---|---|
| Repayments (loans, credit) represent more than one third of income | **9** | 5 | 8 | 16 | 9 | 2 | 8 | 10 |
| Opinion on standard of living: it's difficult, you have to get into debt to manage | **15** | 18 | 31 | 12 | 18 | 12 | 33 | 3 |
| Bank overdraft (very often) in the last 12 months | **11** | 7 | 17 | 12 | 16 | 3 | 15 | 6 |
| Difficult to cover expenses from income | **18** | 19 | 34 | 17 | 22 | 13 | 36 | 6 |
| Get into savings to balance the budget | **35** | 30 | 35 | 39 | 36 | 32 | 34 | 29 |
| Have no savings | **15** | 17 | 25 | 10 | 17 | 13 | 29 | 5 |
| Arrears on utility bills (electricity, gas, telephone, etc.) | **5** | 4 | 11 | 5 | 9 | 2 | 12 | 1 |
| Arrears on rent payment and service charges | **4** | 5 | 12 | 3 | 7 | 1 | 10 | 1 |
| Arrears on tax paiyments | **2** | 1 | 3 | 2 | 3 | 1 | 3 | 1 |
| **Financial constraint (at least 3 out of 9)** | **15** | **15** | **29** | **15** | **21** | **8** | **30** | **4** |

Area: Mainland France, people aged 16 or over, living in ordinary households.
*Source: Insee, SRCV 2008, cross-sectional weighting.*

## Health

State of health is measured using two indicators. The first is the subjective appreciation that people have of their health. Participants are first invited to rank their state of health from 1 to 5 (using what is called the "European" scale: very good, good, passable, poor and very poor). People who report that they are in poor or very poor health are considered to be dissatisfied. The second indicator measures whether their daily activities are limited in any way due to health problems. People considered to be in poor health are those concerned by at least one of the two indicators.

%

| Health | **All** | Person living alone | Single parent family | Couple with one or two children | 16-29 year-olds | 60 year-olds or over | 1st living standards quartile (Q1) | Last living standards quartile (Q4) |
|---|---|---|---|---|---|---|---|---|
| Poor health (self-reported) | **8** | 12 | 8 | 3 | 1 | 18 | 13 | 5 |
| Health limits daily activities | **8** | 12 | 8 | 3 | 1 | 19 | 11 | 6 |
| **Health problems (at least 1 out of 2)** | **12** | **16** | **12** | **5** | **2** | **25** | **17** | **8** |

Area: Mainland France, people aged 16 or over, living in ordinary households.
*Source: Insee, SRCV 2008, cross-sectional weighting.*

## Education

Here we consider that a person's level of education has a negative effect on his quality of life if he has no diploma and has not had any recent vocational training.

%

| Education | All | Person living alone | Single parent family | Couple with one or two children | 16-29 year-olds | 60 year-olds or over | 1st living standards quartile (Q1) | Last living standards quartile (Q4) |
|---|---|---|---|---|---|---|---|---|
| No diploma | **30** | 38 | 31 | 14 | 17 | 56 | 47 | 14 |
| No recent professional training | **89** | 96 | 76 | 98 | 56 | 100 | 86 | 91 |
| **Educational problems (2 out of 2)** | **28** | **38** | **25** | **14** | **7** | **56** | **44** | **13** |

Area: Mainland France, people aged 16 or over, living in ordinary households.
*Source: Insee, SRCV 2008, cross-sectional weighting.*

## Working conditions

Working conditions are measured via 12 indicators. Some describe conditions that may affect psychological well-being: arguments with clients, excessive workload, imbalance between professional life and private life. Some describe physical hardships: exposure to health risks, working unsocial hours. The last one covers the risk, as the employee sees it, of being without a job in the near future. Those whose working conditions are poor are those with 5 problems out of the 12 that have been measured; 10% of the population is in such a situation.

%

| Working conditions | All | Person living alone | Single parent family | Couple with one or two children | 16-29 year-olds | 60 year-olds or over | 1st living standards quartile (Q1) | Last living standards quartile (Q4) |
|---|---|---|---|---|---|---|---|---|
| Works on assembly line | **17** | 17 | 16 | 15 | 17 | 12 | 22 | 11 |
| Poor relationships with work colleagues | **5** | 5 | 4 | 5 | 5 | 3 | 5 | 4 |
| Does not use skills to the full | **17** | 17 | 19 | 14 | 20 | 11 | 21 | 13 |
| Exposed to harmful or toxic products | **15** | 17 | 15 | 14 | 16 | 11 | 17 | 10 |
| Works at night | **7** | 7 | 5 | 8 | 7 | 3 | 8 | 6 |
| Will leave job in next 12 months (redundancy, resignation, end of contract) | **13** | 17 | 12 | 9 | 27 | 6 | 20 | 9 |
| Physically demanding | **34** | 32 | 37 | 32 | 35 | 33 | 43 | 24 |
| Under pressure | **32** | 34 | 29 | 32 | 28 | 25 | 26 | 42 |
| No possibility of promotion | **60** | 58 | 68 | 58 | 54 | 91 | 74 | 52 |
| Tensions with the public | **15** | 14 | 15 | 15 | 14 | 10 | 11 | 19 |
| Difficulties balancing work and other family obligations | **11** | 7 | 14 | 15 | 8 | 6 | 12 | 12 |
| Work not recognised for its true worth | **44** | 40 | 46 | 47 | 41 | 32 | 40 | 40 |
| **Difficult working conditions (at least 5 out of 12)** | **10** | **14** | **11** | **9** | **10** | **5** | **12** | **7** |

Area: Mainland France, people aged 16 or over, living in ordinary households.
*Source: Insee, SRCV 2008, cross-sectional weighting.*

## Participation in public life

Participation in public life is measured according to three aspects: political commitment (including participation in the electoral process), professional commitment, and participation in groups or organisations (holding a position of responsibility in an association, including voluntary work). The indicators used are as follows: not voting in the last elections, not being a member of a political party, not being a member of a trade union, not having a position of responsibility in an association, and not doing voluntary work. The last four indicators are not particularly discriminatory, and as it stands, participation in the electoral process counts for a great deal in this dimension.

20% of the total population do not participate in public life in any of the ways measured.

%

| Participation in public life | All | Person living alone | Single parent family | Couple with one or two children | 16-29 year-olds | 60 year-olds or over | 1st living standards quartile (Q1) | Last living standards quartile (Q4) |
|---|---|---|---|---|---|---|---|---|
| No position of responsibility in an association | **94** | 94 | 95 | 93 | 96 | 93 | 96 | 91 |
| Not a volunteer worker | **83** | 83 | 86 | 83 | 87 | 82 | 86 | 81 |
| Not a member of a political party | **99** | 99 | 100 | 99 | 100 | 99 | 100 | 99 |
| Not a member of a trade union | **98** | 98 | 98 | 97 | 99 | 99 | 99 | 96 |
| Did not vote at last elections | **24** | 28 | 27 | 25 | 29 | 20 | 28 | 18 |
| **Difficulties in social participation (5 out of 5)** | **20** | **24** | **22** | **20** | **24** | **18** | **24** | **14** |

Area: Mainland France, people aged 16 or over, living in ordinary households.
*Source: Insee, SRCV 2006, cross-sectional weighting.*

## Contact with others

Social connections seem to represent an important dimension of quality of life, but they are difficult to measure. Indeed, available data does not make it possible to distinguish, for example, whether the lack of contact is imposed or chosen.

The indicators used here are indicators of "strength" of relationships with others and not their quality. The strength of social relationships is measured by participation in associations, the strength of relationships with family and friends. For associations, the indicator relates to participation in activities with groups or leisure organisations (sports clubs, recreational clubs), and not membership of trade unions (which is taken into account in the degree of involvement in public life). Simple membership is distinguished from having some position of responsibility: as ordinary members, people have the opportunity to widen their social network; with a position of responsibility, they are participating in a process of a political nature (see once again the participation in public life dimension). The other four basic indicators that are used relate to contacts with family and friends in the last twelve months, with a distinction being made between face to face meetings and other types of contact (letter, e-mail, telephone and SMS).

People defined as having little contact with others are those who report 2 types of lack of contact from among the 5 indicators used: this concerns 13% of the population.

%

| Contact with others | **All** | Person living alone | Single parent family | Couple with one or two children | 16-29 year-olds | 60 year-olds or over | 1st living standards quartile (Q1) | Last living standards quartile (Q4) |
|---|---|---|---|---|---|---|---|---|
| Contacts with friends (excl. meetings) | **8** | 10 | 8 | 6 | 2 | 15 | 12 | 5 |
| No meetings with friends | **6** | 8 | 7 | 3 | 2 | 11 | 8 | 3 |
| No contacts with family | **4** | 4 | 6 | 3 | 4 | 5 | 7 | 2 |
| No meetings with family (excl. contacts) | **2** | 3 | 4 | 2 | 1 | 2 | 4 | 1 |
| No participation in associations | **75** | 75 | 77 | 78 | 70 | 73 | 79 | 70 |
| **Difficulties in contacts with others (at least 2 out of 5)** | **13** | **16** | **15** | **9** | **6** | **21** | **20** | **7** |

Area: Mainland France, people aged 16 or over, living in ordinary households.
*Source: Insee, SRCV 2006, cross-sectional weighting.*

## Economic insecurity

The degree of people's economic insecurity is measured according to the objective risk of losing their job in the year to come. This risk is measured on the basis of monitoring people's employment trajectories the previous year.

%

| Economic insecurity | All | Person living alone | Single parent family | Couple with one or two children | 16-29 year-olds | 60 year-olds or over | 1st living standards quartile (Q1) | Last living standards quartile (Q4) |
|---|---|---|---|---|---|---|---|---|
| **Movement from employment to unemployment between 2006 and 2007** | **3** | **3** | **4** | **2** | **4** | **2** | **4** | **2** |

Area: Mainland France, people aged 16 or over, living in ordinary households.
Note: of people in employment in 2006, surveyed in 2006 and 2007, 2.5 % were unemployed in 2007.
*Source: Insee, SRCV 2006-2007, longitudinal weighting.*

## Physical insecurity

Physical insecurity was measured using objective indicators, from the 2009 French victimization household survey, looking at burglaries, damage to property, theft with violence, physical and sexual violence (including domestic) over the last two years. 12% of people had been victims of at least one physical aggression.

%

| Physical insecurity | **All** | Person living alone | Single parent family | Couple with one or two children | 16-29 year-olds | 60 year-olds or over | 1st living standards quartile (Q1) | Last living standards quartile (Q4) |
|---|---|---|---|---|---|---|---|---|
| Burglary or attempted burglary | **3** | 2 | 5 | 3 | 2 | 3 | 3 | 4 |
| Damage to or wilful destruction of property | **4** | 4 | 6 | 4 | 4 | 5 | 4 | 5 |
| Theft with violence | **1** | 1 | 1 | 1 | 2 | 0 | 1 | 1 |
| Physical violence | **3** | 2 | 5 | 3 | 5 | 1 | 3 | 2 |
| Domestic violence (physical or sexual) within the household | **3** | 1 | 5 | 3 | 4 | 1 | 3 | 1 |
| **Physical insecurity (at least 1 experience of victimisation)** | **12** | **10** | **19** | **12** | **15** | **9** | **13** | **12** |

Area: Mainland France, people aged 18-75 years old
*Source: Insee, French victimization household survey 2009;*