Low income city-dwellers accumulate the most difficulties in terms of quality of life

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Many factors can affect people's quality of life: their material living conditions, physical and mental state of health, social connections and environment. Quality of life also depends on the degree of confidence they have in society, their level of security, both physical and economic, and also their working conditions if they are in work. All these dimensions are different facets of quality of life. They can be grouped into three categories. The core block relates to financial constraints and correlates with most of the other dimensions: for instance, financial difficulties are often associated with poor health and social connections, poor housing conditions, and physical and economic insecurity. Alongside this central block of financial constraints is a second based on quality of the environment, which correlates more with quality of housing and physical and economic insecurity. This can be interpreted as a block associated with the neighbourhood: the context in which people live. A third block focuses on emotional well-being and covers physical health and social connections. People of modest means living in urban areas cumulate the most difficulties in these three blocks.

Since 2008, and especially following the Stiglitz report, most European countries have launched initiatives to gain a better understanding of the quality of life of their population *(box 1)*. This is the case particularly in Luxembourg where an annual report is published, Poland, with a multi-topic survey on living conditions, the United Kingdom, Italy, Slovakia, Finland, Belgium and Spain. A partnership has also been set up within the European Union with the aim ultimately of providing a coherent system of quality of life indicators using surveys already available within the Union, even if these have to be adapted in order to meet the recommendations of the report more precisely.

In France, the official statistical service has embarked on the same process. All existing information on quality of life has been brought together and was made available from 2010 [Albouy, Godefroy, Lollivier, 2010]. At the same time, existing surveys have been enhanced by adding new variables: the panel survey on household income and living conditions now incorporates specific questions concerning general well-being and satisfaction in different areas; in the time-use survey, respondents now give a rating for their different activities. Preliminary results for these new subjects were published in 2011 [Godefroy, 2011; Ricroch, 2011].

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A specific survey on quality of life

One of the Stiglitz report's recommendations was to combine in the same survey questions on each dimension of quality of life in order to find out what correlations exist between them and define the people who accumulate poor quality of life across several dimensions *(box 2)*. For this purpose, a multi-mode survey (Internet and paper) was conducted to this effect in May 2011. Another objective of this survey was to contribute to discussions in the European Union on the best set of questions to use in surveys. Here we present the preliminary results from this survey on the quality of life dimensions recommended in the Stiglitz report, with the exception of perceived well-being, which has already been the subject of a specific publication, and education, which is covered by specialist surveys using a complex protocol that is impossible to apply using the Internet.[1] Regarding level of education, in the quality of life survey we have only educational qualifications, which are considered as a socio-demographic descriptor of the person, as are income per consumption unit, age, gender, size of urban unit, the fact of having been born in another country, or composition of the household.

The survey contains questions for all dimensions, each one allowing the computation of a binary item of «deprivation», such as «not being able to afford a holiday away from home», or «living in a noisy environment». Difficulties in the underlying (non-observable) dimension are considered to be all the greater when there is a combination of basic difficulties or deprivations. Thus the simple and traditional aggregation method used consists of adding items together for each dimension or sub-dimension to compute a score. These scores also have the advantage of eliminating uncertainty (related to data collection or to individual variations in preference). A synthetic indicator of poor quality of life in the dimension is then constructed from the score, based on the principle that beyond a certain number of basic difficulties the person is in an unfavourable situation. The threshold to be retained for each dimension is a matter of choice, but we usually try to set it so that 10% of the population cumulated the most difficulties *(table 1)*.

1. Proportion of disadvantaged persons according to the threshold applied to each dimension

as a %

	Threshold	Proportion of disadvantaged persons
Housing	2 items out of 3	11,4
Financial constraints	5 items out of 10	14,2
Physical health	2 items out of 3	16,3
Emotional well-being	3 items out of 4	13,9
Social connections	2 items out of 4	6,5
Environment	3 items out of 5	12,1
Confidence in society	8 items out of 11	10,5
Insecurity	2 items out of 3	3,3
Psychosocial risks at work[1]	4 items out of 10	11,6

1. For those persons in employment only.
Scope: Metropolitan France.
Understanding the table: for the "Housing" dimension, 11.4% of people declared that they are encountering at least 2 of the 3 listed basic difficulties. They are therefore considered to be in a poor situation (above the threshold) in this dimension.
Source: INSEE, Quality of Life survey 2011.

1. These protocols are used in surveys related specifically to this topic, such as the information and daily life survey on measuring literacy and numeracy and the OECD's PIAAC survey.

Box 1

A new political context to measure quality of life

In 2008, when the OECD's worldwide project on measuring the progress of societies was getting underway, a Commission on Measuring Economic Performance and Social Progress (also called the Stiglitz Commission) was set up in France. The Commission produced a detailed report suggesting additional indicators to GDP to measure «social progress». Measuring people's quality of life was one of the areas highlighted. In the report, quality of life is described in relation to nine different dimensions: material living conditions, health, education, productive activities, governance and the rights of individuals, leisure and social connections, the natural and living environment, economic and physical security and perceived well-being.

Also in 2008, when the European Council approved the European Economic Recovery Plan, it recognised that the current crisis should be seen as an opportunity to direct the economy towards growth with lower carbon emissions, using resources more efficiently and being more suited to the needs of society. The European Commission for its part stressed the need for more indicators than GDP alone, for measuring inequalities, sustainability and well-being.

Several States had already started along this path well before the Stiglitz report was produced, like the Netherlands, for example, with its Sustainability Monitor in 2007 and the United Kingdom, with the establishment of a «well-being knowledge base». In France there is a long tradition of publishing non-monetary indicators of living conditions and breaking down household income by social category.

However, the report did act as a trigger to strengthen efforts on national dashboards to measure the different areas that contribute to progress in society. In the autumn of 2010, the British Prime Minister, David Cameron asked the British Office for National Statistics to consider new ways to measure national well-being, and in Germany, in December 2010, the Bundestag set up a commission, one of whose objectives was to establish a global indicator of progress and well-being.

Main recommendations of the Stiglitz report

1- Recommendations concerning the national accounts

- when evaluating material well-being, look at income and consumption rather than production;
- emphasise the household perspective;
- consider income and consumption jointly with wealth;
- give more prominence to the distribution of income, consumption and wealth;
- broaden income indicators to non-market activities.

2- Recommendations concerning sustainability

Sustainability assessment requires a clearly defined dashboard of indicators:

- the distinctive features of this dashboard should be that they can be interpreted as variations of some underlying «stocks»;
- a monetary index of sustainability has its place in a dashboard of this kind;
- given the current state of our knowledge, the dashboard should focus primarily on the economic aspects of sustainability.

The environmental aspects of sustainability deserve separate follow-up based on a set of physical indicators. One of these should give a clear indication of our proximity to dangerous levels of environmental damage.

3- Recommendations concerning quality of life

Dynamic capabilities

- quality of life depends on the objective conditions in which people find themselves and on their capabilities;
- quality of life indicators, in all the components covered, should assess inequalities in a comprehensive way;
- surveys should be designed to assess links between various quality of life aspects for each person;
- the information obtained should be used when defining policies in different fields;
- statistical offices should provide the information needed to aggregate across the different quality of life dimensions allowing the construction of different indexes.

Well-being

Measurements of both objective and subjective well-being provide essential information about people's quality of life.

Statistical offices should include questions in their surveys that will help assess people's life evaluations, their experiences and priorities.

Box 2

Quality of life survey

The purpose of the quality of life survey was to use a single statistical source to look at the key components highlighted in the Stiglitz report, in order to examine correlations between these components and flag up any populations who were cumulating a range of disadvantages.

The questionnaire brought together existing sets of questions which had previously been scattered across other sources: living conditions (European Quality of Life Survey EQLS 2007 and the French questionnaire of EU-SILC); quality of the environment and insecurities (EQLS 2007, French EU-SILC), psychosocial risks at work (EQLS 2007 and main points from expert panel report), physical health (French EU-SILC), social connections (EQLS 2007), the WHO module on emotional stability, cohesion in society and trusting those in government (adapted from EQLS 2007), and a traditional Gallup-type question on satisfaction in general.

The self-administered questionnaire was completed over the Internet by 10,000 people aged 18 or over, who had been contacted by post in May 2011. Those who did not respond by Internet were contacted once again with a paper questionnaire to be returned by post. The response rate was 38%, fairly high for this type of data collection. Results were adjusted for non-responses and calibrated to margins. The urban units were those that had been redefined in 2010.

Those questioned were not asked about their income. The incomes used were based on declarations in income tax returns. This was only a partial total as transfers were not taken into consideration. No questions were asked about family relationships within the home. The demographic composition of the household variable refers to the number of adults and children living in the home, in terms of the tax declaration. In particular, it is not known whether two adults who are not married (or in a civil partnership) and are cohabiting do in fact form a couple. The equivalent income used here represents the total tax income of the people in the household converted to the number of units of consumption that they represent.

First quality of life dimension, living conditions

Within the living conditions dimension there are two sub-dimensions, housing and financial constraints. Three questions are used to describe poor housing conditions and provide a basis on which three items can be constructed: shortage of space, damp, or not having a garden or balcony. For all items, and hence for the synthetic indicator, deprivation decreases according to equivalent income (tax income per consumption unit) and decreases substantially with age *(table 2)*. In contrast, deprivation increases considerably with the degree of urbanisation.

2. Housing

	Lack of space	Damp	No outdoor space	**Compound poor housing condition indicator**
Income	-	-	-	-
Age	--	--	--	--
Qualifications				
Women	-			
Born abroad				+
Size of the urban unit	++	+	++	++
Household composition				
1 adult living alone	+	+	++	++
adults without children				
1 adult with child(ren)	+	+	+	+
adults with child(ren)	-		+	

Scope: Metropolitan France.
Note: '+' positive correlation, '++' very postitive correlation, '-' negative correlation, '--' very negative correlation. When the box is empty, no correlation. These signs provide a summary of the information obtained from qualitative regressions with a large number of modalities for these criteria. It was necessary to make choices to summarise the information. The full regressions are available in Amiel et alii (2012).
Understanding the table: as income increases, the risk of facing poor housing conditions declines.
Source: INSEE, Quality of Life survey 2011.

Box 3

Cronbach's Alpha

Cronbach's coefficient alpha is a statistical index which varies from 0 to 1 and which is used to assess the internal consistency of a set of items supposedly measuring the same underlying component. The degree of consistency is higher the closer value of the coefficient is to 1. In practice, values higher than 0.7 are considered as high or very high, values between 0.5 and 0.7 are considered as borderline for constructing a compound indicator and values below 0.5 are unacceptable.

$$\alpha = \frac{k}{1-k}\left[1 - \frac{\sum_{i=1}^{k} \sigma_{y_i}^2}{\sigma_x^2}\right]$$

where k is the number of items, is the variance of the total score and is the variance of item i.

Living alone or as a single adult with a child increases difficulties for all items and also for the indicator. Gender, educational qualifications and geographic origin have little effect. While the items are relatively coherent in terms of populations discriminated, they are slightly less so in terms of statistical consistency. This is measured using Cronbach's alpha, a coefficient that measures the correlation between items and score *(box 3)*. In this case, the coefficient is poor at 0.41. Removing some items and building alternative scores does not improve matters. Damp in the home is the deprivation that correlates least with the score.

Concerning financial constraints, the questions pinpoint people who do not have enough to keep their home warm enough, to go on holiday away from home, to be able to replace furniture, to buy meat, to buy new clothes, to invite friends and family, that do not have a car, find it difficult to pay the rent and bills, have to go without medical care or risk having to leave their home. All these deprivations decrease very strongly according to income and level of qualifications; age also reduces the frequency of a number of these deprivations. Living in the Paris conurbation increases deprivation in terms of ability to invite friends, to have a car and medical care, but does not affect the indicator *(table 3)*. Living alone increases all deprivations and has a considerable effect on the synthetic indicator. Living alone with children also increases most deprivations (except for those regarding clothes and warmth) and affects the indicator. On the other hand, with some exceptions, being born in another country does not have a significant effect. A few gender effects are observed occasionally, but not enough to show up in the synthetic indicator. This sub-component is very consistent, with an excellent Cronbach's alpha of 0.81; the item that is least correlated with the score is not having a vehicle.

3. Financial constraints (1)

	Unable to…				
	… keep home at the right temperature	… afford holidays	… replace furniture	… afford a meal with meat	… buy new clothes
Income	--	--	--	--	--
Age	--	-	-		
Qualifications	-	--	--	--	--
Women		+	+		+
Born abroad					
Size of urban unit					
Household composition					
1 adult living alone	+	+	+	++	+
adults without children					
1 adult with child(ren)		+	+	++	
adults with child(ren)					

Scope: Metropolitan France.
Note: *see Table 2*.
Understanding the table: as income increases, the risk of facing financial constraints declines considerably.
Source: INSEE, Quality of Life survey 2011.

3. Financial constraints (2)

	Unable to …					Compound financial constraints indicator
	… invite people around	… afford a car	… pay the bills	… afford health care	… keep the home	
Income	--	-	--	--	--	--
Age			--	--	--	--
Qualifications	--	--	--	-	-	--
Women		+				
Born abroad			+			
Size of urban unit						
Paris	+	++		+		
Smaller urban units						
Household composition						
1 adult living alone	+	++	+	+	+	+
adults without children						
1 adult with child(ren)	+	++	+	+	+	+
adults with child(ren)						

Scope: Metropolitan France.
Note: *see Table 2.*
Understanding the table: as income increases, the risk of facing financial constraints declines considerably.
Source: INSEE, Quality of Life survey 2011.

Physical health and emotional well-being

Once again there are two sub-dimensions, physical health and emotional well-being. Questions relating to physical health cover perceived state of health, the existence of a chronic illness, or difficulties in daily life associated with a health problem. Physical health deteriorates considerably with age and when living alone *(table 4)*. On the other hand, difficulties lessen as income and qualification levels increase. No effect of gender, urbanisation or place of birth is noted. The health items are relatively consistent one with another, with the Cronbach's alpha at 0.62; all three items have a similar correlation to the score.

4. Physical health

	Poor or very poor declared state of health	Chronic health problem	Restricted in habitual activities	Compound poor physical health indicator
Income	-		--	--
Age	++	++	++	++
Qualifications	-	-	--	--
Women				
Born abroad				
Size of urban unit				
Household composition				
1 adult living alone	+	+	+	+
adults without children				
1 adult with child(ren)				
adults with child(ren)		+		

Scope: Metropolitan France.
Note: *see Table 2.*
Understanding the table: as income increases, the risk of poor physical health decreases considerably.
Source: INSEE, Quality of Life survey 2011.

Emotional well-being is assessed through four questions taken from the World Health Organization: not feeling in a good mood, calm and relaxed, fresh and rested or feeling lacking in energy *(table 5)*. The questions bring out fairly homogeneous socio-demographic profiles. People in the first decile by income per consumption unit are very exposed for all items. A higher income and a higher level of qualifications reduce tensions. Women are, on average, more vulnerable in terms of calm and feeling fresh and relaxed than for good mood or energy. Being the only adult in the household and living with children increases stress and affects all the indicators. Being born abroad has no effect, nor has the degree of urbanisation, provided the other socio-demographic factors are taken into account. The items are very homogeneous, with an excellent Cronbach's coefficient alpha of 0.81; they all correlate very well with the score.

5. Emotional well-being

	Not in a good mood	Not calm and relaxed	Lacking in energy	Not fresh and rested	**Compound emotional well-being indicator**
Income					
1st decile[1]	++	++	++	++	++
other deciles	-	-	-	-	-
Age		-		-	
Qualifications	-	-	-	-	-
Women		+		+	+
Born abroad					
Size of urban unit					
Household composition					
1 adult living alone	+		+	+	
adults without children					
1 adult with child(ren)	+	+	+	+	+
adults with child(ren)					

1. The first decile is composed of the 10% of households with the lowest income per consumption unit.
Scope: Metropolitan France.
Note: *see Table 2.*
Understanding the table: being a woman increases the risk of emotional ill-being.
Source: INSEE, Quality of Life survey 2011.

Social connections, a heterogenous dimension

The questions asked refer to dissatisfaction associated with family life, with not seeing family members, not being able to talk to anyone, or not trusting other people. The items discriminate fairly similar population profiles, at least none are contradictory *(table 6)*. Men, people on a low income per consumption unit or with a low level of qualifications are generally poorer in terms of social connections; women in particular speak more to other people and are more satisfied with their family life. Age and urbanisation do not systematically have an effect on all the items. Being the only adult, with or without children, is penalising because of the low level of satisfaction obtained from family life. Being born abroad has no specific effect. Even though the profiles are relatively homogeneous, the items are much less so, with a very mediocre Cronbach's alpha of 0.33. The items therefore seem to be complementary rather than substitutes. However, given the data available, it is impossible to test an alternative score.

6. Social connections

	Not satisfied with family life	Don't see the family	No-one to talk to	No confidence in others	**Compound indicator of a lack of social connections**
Income	--	--		-	**--**
Age		++			
Qualifications	-			-	**-**
Women	-		-		**-**
Born abroad					
Size of urban unit	+	+			
Household composition					
1 adult living alone	++				**++**
adults without children					
1 adult with child(ren)	++				**++**
adults with child(ren)					

Scope: Metropolitan France.
Note: *see Table 2*.
Understanding the table: being a woman reduces the risk of a lack of social connections.
Source: INSEE, Quality of Life survey 2011.

Quality of the environment: correlated to income, age and degree of urbanisation

The living environment is described by questions on quality of drinking water, noise, air pollution, green spaces and cleanliness of the neighbourhood. The items are relatively homogeneous here in terms of socio-demographic profiles *(table 7)*. Age and income have rather a positive effect on perceived quality of the environment, but with income the first five deciles do rather contrast with the rest. As is to be expected, urbanisation has a very negative effect, except for quality of drinking water. Living alone goes hand in hand with a poor quality of life in terms of the compound indicator, due to noise and a lack of cleanliness. Once again, being born abroad has no particular effect. The basic items are relatively homogeneous, with a Cronbach's alpha of 0.57; the least correlated item is quality of drinking water, as was to be expected, because of urbanisation.

Unlike the previous dimension, this is the first time in France that a survey has been used to measure a synthetic indicator of perceived quality of the environment. Given the results we obtained, this would appear to be just as possible for this dimension as for the others.

7. Environment

	Poor quality tapwater	Noise	Polluted air	Lack of green spaces	Waste in the street	**Compound poor environment indicator**
Income				-		**-**
Age	--	-	-	--		**--**
Qualifications						
Women					-	
Born abroad						
Size of urban unit	-	+	++	++	++	**++**
Household composition						
1 adult living alone		+			+	**+**
adults without children						
1 adult with child(ren)						
adults with child(ren)						

Scope: Metropolitan France.
Note: *see Table 2*.
Understanding the table: as the size of urban unit increases, the risk of having a poor-quality environment increases considerably.
Source: INSEE, Quality of Life survey 2011.

People with no trust in society in all categories

Assessing trust in society is again a first for national statistics in France. The aim is to describe how the societal externalities can influence people's quality of life. The questions are for the most part inspired by those in the European Quality of Life Survey. Two main groups of questions were asked: perceived tensions between social groups (between poor and rich people, management and workers, men and women, between generations, ethnic groups, religious groups) and the lack of trust towards certain institutions (legal system, press, police, scientific experts, and public officials).

The items that were constructed with these questions seem to have little correlation with the usual socio-demographic descriptors *(table 8)*. Income has little, or even no effect, except on the presence of tensions between rich and poor (the rich perceive less tension of this type) and between management and workers. Women systematically trust institutions more. Women perceive more tensions between the sexes, but perhaps more surprisingly, less tension associated with ethnic origin. Generally, the over-75s trust institutions more, and perceive

8. Confidence in society

	Tensions between...					
	… rich and poor	… employers and employees	… men and women	…generations	… ethnic groups	… religious groups
Income	-	-				
Age			+			
45-64 years	+					
75 and over						-
other Ages						
Qualifications (post secondary education)			-	-		
Women			+		-	
Born abroad	-					
Size of urban unit						
Household composition						

	Little confidence in …					**Compound indicator of a lack of confidence in society**
	… justice	… the press	… the police	… experts	… public leaders	
Income						
Age						
45 years and over		-				
65 years and over					-	
75 years and over	-		--			
Other ages						
Qualifications (post secondary education)			-			-
Women	-	-	-	-	-	
Born abroad						
Size of urban unit						
Household composition						
1 adult living alone	+		+			
adults without children						
1 adult with child(ren)						
adults with child(ren)	+	+	+	+		

Scope: Metropolitan France.
Note: *see Table 2*.
Understanding the table: as qualification levels rise, the risk of lacking confidence in society decreases.
Source: INSEE, Quality of Life survey 2011.

fewer tensions between religious groups. Qualifications generally have a negative effect on the items and the global indicator: those with the highest level of qualifications feel less tension and overall have a higher level of confidence in society. For given socio-economic descriptors, people born abroad do not feel tensions between ethnic and religious groups any more than the others and they are less aware than the others of tensions between rich and poor. The size of the urban unit does not have an effect. The composition of the household does not have an effect, except episodically: people living alone trust the legal system and the police less, and people living alone with children have less confidence in the legal system, the police, the press and scientific experts.

Although the items are not well correlated with the usual socio-economic descriptors, the Cronbach's alpha coefficient is very satisfactory at 0.70: the different items are therefore well correlated one with another. Moreover, all the items have a correlation with the score of between 0.2 and 0.4. Finally, when assessed using this series of apparently ill-assorted questions, trust in society forms a sufficiently homogeneous dataset to make up a component that can be represented by a synthetic indicator.

Physical or economic insecurity: two distinct realities

This component is assessed from questions on the amount of crime in the neighbourhood, on being unemployed, or the risk of losing one's job. In fact, there is no overall homogeneity between perceived crime and job insecurity *(table 9)*. In both instances the risk decreases with age and with the qualification level (not very significantly for perceived job insecurity). Economic insecurity recedes slightly with income, while physical insecurity does not depend on this. Women, on the other hand feel crime less, but do not stand out in terms of economic insecurity. Urbanisation has a major effect on perceived crime, with this effect reaching its height in the major conurbations in the provinces rather than in Paris. Living alone with children has a significant effect on the indicator, and is almost significant for each item. Being born abroad has no effect, apart from the risk of becoming unemployed.

This component is not very homogeneous as far as a socio-demographic profile of the disadvantaged is concerned, nor is it between items, since the Cronbach's alpha is poor at 0.05. In future, it will probably be preferable to split this component into two sub-components, one covering physical insecurity, and the other economic insecurity, and to find more questions, so that a convincing synthetic indicator can be constructed for each sub-component.

9. Insecurities

	Local crime	Unemployment	Risk of losing job	**Compound insecurity indicator**
Income		--		
Age	-	-	-	-
Qualifications	-			--
Women	-			
Born abroad			+	
Size of urban unit	++			
Household composition				
1 adult living alone				
adults without children				
1 adult with child(ren)				+
adults with child(ren)				

Scope: Metropolitan France.
Note: *see Table 2*.
Understanding the table: as age increases, the risk of insecurities diminishes.
Source: INSEE, Quality of Life survey 2011.

Psychosocial risks at work are spread relatively evenly across the population in work

Productive activities are measured by a series of questions relating to psychosocial risks at work. Once again, this is an innovation for public statistics. A first set of questions follows the proposals of the college of experts on the psychosocial risks at work formed at the request of the French Minister of Labour Employment and Health. The questions are representative of the six different categories selected by the experts: work intensity and working time (work that is demanding and stressful, problems with deadlines), emotional demands (witnessing things that are difficult to cope with), autonomy at work (having a great deal of autonomy), social relations at work (being well-paid), ethical suffering (having the means to carry out work of quality) and insecurity in the work situation (working in dangerous conditions where health is at risk). Three questions relating to finding a balance between work and family life are also asked: coming home from work too tired to do the household jobs that need to be done, difficulty in fulfilling family responsibilities because of the time spent at work and difficulties concentrating at work due to family responsibilities.

Only people in work were asked the questions, and given the survey population, psychosocial risks at work were analysed only in the under-65s in work. There is no socio-demographic factor that systematically affects the items, and few have any effect even occasionally *(table 10)*. There is a trend for demanding work to be slightly more widespread in the second

10. Psychosocial risks at work

	Time-consuming	Deadlines	Things that are difficult to tolerate	Lack of autonomy	Badly paid
Income	+				-
Age					
45-64 years				+	
other ages					
Qualifications (post secondary education)					-
Women		-	+		
Born abroad		-			
Size of urban unit					
Household composition					

	Poor-quality work	Hazardous working conditions	Too tired for housework	Difficult to fulfil family obligations	Difficult to concentrate at work	**Compound indicator of psychosocial risks at work**
Income						
1st and 2nd deciles					+	
Other deciles						
Age						
Qualifications (post secondary education)		-				
Women		-				
Born abroad				+		
Size of urban unit						
Household composition						
1 adult living alone					-	
adults without children			-			
1 adult with child(ren)						
adults with child(ren)						

Scope: Metropolitan France, people of ages 18 to 65 in employment.
Note: *see Table 2.*
Understanding the table: as income increases, the risk of having a time-consuming job increases.
Source: INSEE, Quality of Life survey 2011.

half of the equivalent income scale. As is to be expected, those with the highest incomes and those with a higher education qualification most frequently consider themselves to be well paid. People aged between 45 and 65 complain more about a lack of autonomy in their work. Women say they suffer more from having to witness things that are difficult to endure. On the other hand, they are less often faced with problems of deadlines and dangerous working conditions. People with a higher education qualification also say that they are less frequently faced with dangerous working conditions. None of the socio-demographic variables selected affects not having the means to carry out work of quality (and in any case the statistical adjustment is of very poor quality for this item). Fewer families with several adults and no children believe that they come home from work too tired to carry out domestic work. Fewer people born abroad consider that it is difficult for them to fulfil their family responsibilities because they spend too much time at work. Finally, people who are unable to concentrate at work because of their family responsibilities are more often in the first decile for income per consumption unit, while this is less frequently the case for adults living alone.

There is a lack of homogeneity in the way the socio-demographic characteristics affect items, such that none of them accounts for the disparities in the synthetic indicator, which could seem to be fairly diverse as regards the population studied, as the college of experts feared. One of the reasons may be that the survey, which is not exhaustive, provides no information on people's jobs, and this could be a key explanatory factor. However, the items appear much more homogeneous if we look at the Cronbach's alpha, which is very satisfactory at 0.64. Having a demanding job or not being able to carry out the necessary household jobs or family responsibilities are the items that correlate best with the score. Given this homogeneity, it would seem justified to build a synthetic indicator for the dimension, at least in order to compare it with the other dimensions selected in the Stiglitz report.

18-25s more vulnerable to housing difficulties, 45-64s to poor social connections and insecurities

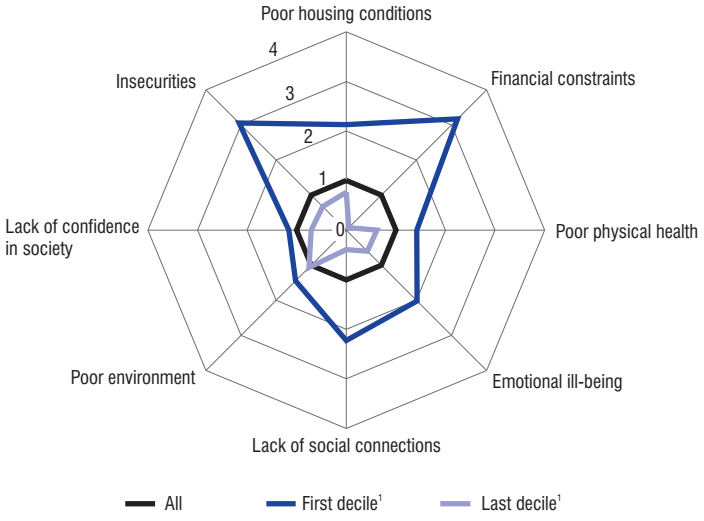
One way of examining how the different sub-populations are affected by poor quality of life is to show deviations in relation to the overall situation on the same graph. The use of radar charts is recommended by the European working group responsible for making proposals on measuring quality of life in Europe. To make the graphs easier to read, it is best to standardise the results, so that the proportion of people in difficulty in the population as a whole is equal to 1 for each component.

We note here that there are disparities according to income *(table 11)* in all dimensions, but that these are particularly clear in relation to financial constraints (which is logical) and insecurities.[2] In addition, people aged 75 and over are penalised because of their poor physical health, whereas the young have to cope with a poorer quality of life in terms of housing. The 45 to 64 age group are more exposed to poor social connections and insecurities, because of risks linked with losing their job. People living in conurbations of over 200,000 inhabitants suffer from a poorer quality of life in terms of environment, insecurities and housing. Finally, adults living alone with children have a worse quality of life with regards to most of the components, apart from physical health. They are particularly vulnerable to insecurities and stress in daily life. They have difficulties with housing, financial constraints and social connections as do adults living alone.

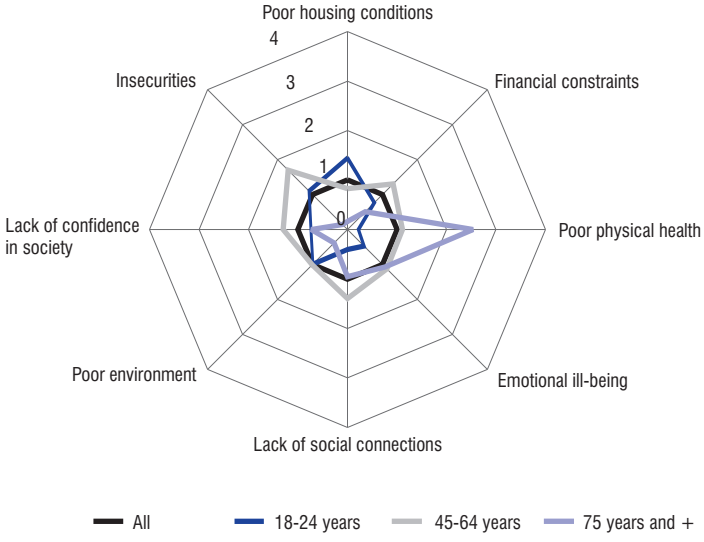
2. Psychosocial risks are not considered in this presentation of the general population. As we have seen, they are in any case discriminated very little by the socio-demographic variables, which means that disparities on the branch of the relevant «radar» are barely perceptible.

11. The dimensions of quality of life

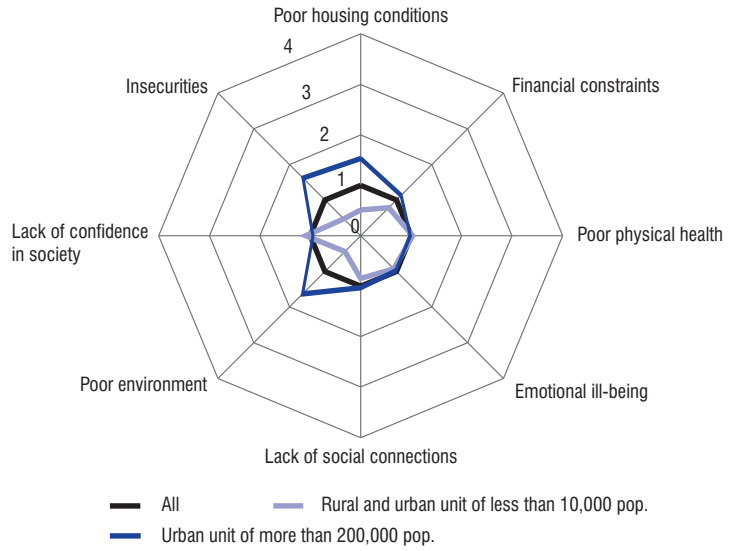
By income per consumption unit



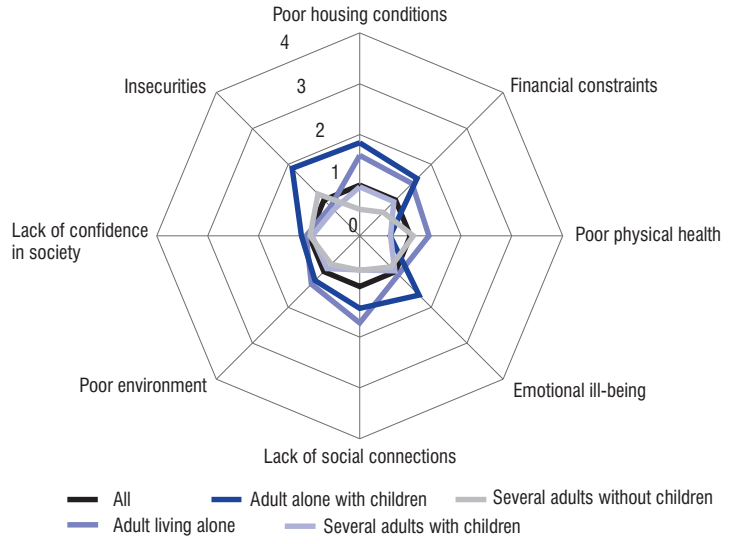
By age



By degree of urbanisation



By household composition



1. When people are ordered by income per consumption unit, the deciles separate them into ten groups of equal size. A person in the first decile is among the 10% of people with the lowest incomes per consumption unit.
Scope: Metropolitan France.

Understanding the graph: each spoke on the radar represents one of the dimensions of the quality of life. The further outwards you move along the line, the greater the difficulties in the dimension in question. The first graph shows average quality of life per income: the people in the first decile of income per consumption unit are 2.1 times more in difficulty in housing than the average for all peoples.
Source: INSEE, Quality of Life survey 2011.

Low income, no qualification and living alone in an urban area go hand in with poor quality of life

Another way of examining how poor quality of life tends to cumulate is to add up the number of unfavourable synthetic indicators for each person. This procedure is not really one that is recommended by the European working group. Indeed, each dimension may well be considered homogeneous given the way in which the synthetic indicator is constructed, but nevertheless there is little chance that such homogeneity will be found in the sum of the synthetic indicators, as we have seen for the physical and financial insecurities. There is a risk that we will be adding up things that are very different.

However, if we produce a score where the number of insufficiencies are added together[3] for each person, and if we examine the way in which this score is correlated with the socio-demographic descriptors, what transpires is ultimately not surprising, given what has gone before: the score is in fact lower when income or qualification levels are high. It is also particularly high for the first income decile. It is less so for the 18 to 24 age group (probably because of health), yet for all that it does not increase for the high age groups. It declines with urbanisation. Adults living alone or as a lone parent with children are more susceptible to suffer a combination of deprivations. Gender and being born abroad do not have an effect.

Everything suggests that low income and lack of a qualification, combined with the fact of living in an urban environment and being the only adult in the household, strongly increase the risks of poor quality of life. This result is not in itself counter-intuitive, even though no simultaneous analysis of most of the components had ever been carried out before based on the same survey.

People with the lowest incomes per consumption unit and who live in conurbations of more than 50,000 inhabitants have the lowest quality of life. In contrast, people whose income per consumption unit is higher than the median and who live outside the largest conurbations in the provinces and Paris have the best quality of life.

Correlations between components: the key role of financial constraints

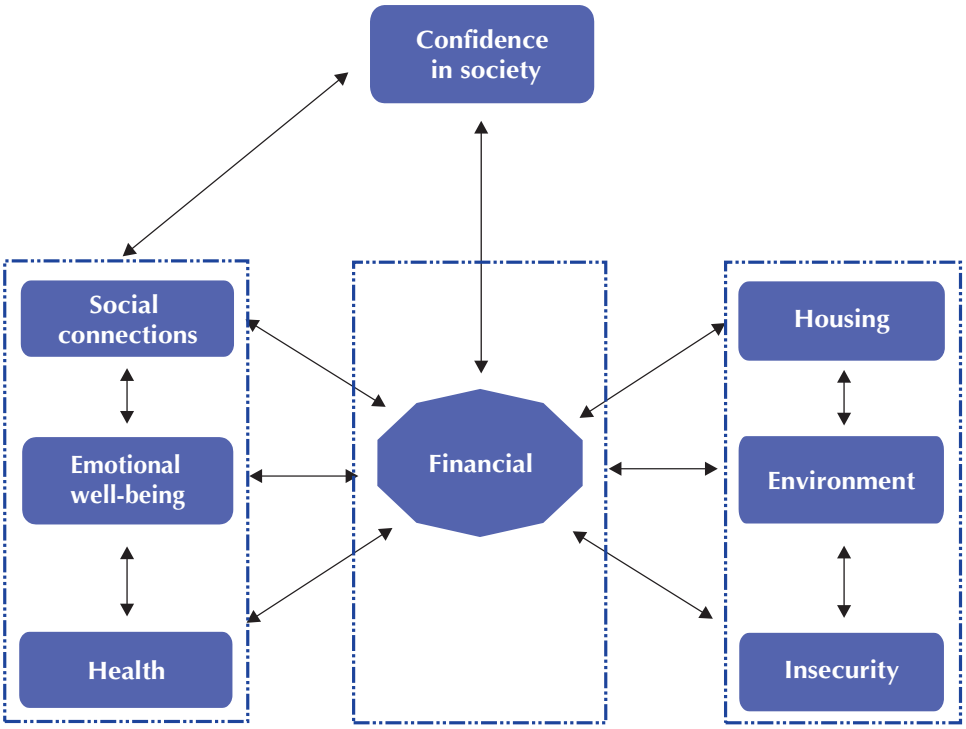
Another way of examining links between synthetic indicators of quality of life for the different dimensions is to examine how they are correlated one with another. As one might expect, in view of earlier work on similar subjects [Lollivier, Verger, 2005], the correlations are weak (coefficients peak at 0.25) but nevertheless positive. This confirms the idea developed in the Stiglitz report that quality of life is multidimensional and cannot be reduced to a single composite indicator.

The indicator relating to financial constraints is the one that shows the strongest correlations with all the others; the confidence in society indicator is least correlated. Over and above the central role played by financial constraints, two major blocks emerge: the first relates to quality of the environment, and is correlated more with quality of housing and physical and financial insecurity *(table 12)*. The second block takes in emotional well-being, physical health and social connections. Confidence in society lies alongside these two blocks and is correlated with social connections, as well as financial constraint. If we limit this to people in work aged under 65, psychosocial risks are correlated best with financial constraint, just ahead of emotional well-being and insecurities.[4] Correlation is weakest in relation to difficulties with housing and the quality of the environment. ■

3. In this analysis of the general population, psychosocial risks at work are not taken into account as they can only apply to people in work.

4. Proof that psychosocial risks and emotional unease are concepts that are indeed relevant.

12. Links between quality of life indicators



Scope: Metropolitan France.
Source: INSEE, Quality of Life survey 2011.

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