

Measurement of Well-Being

Some initiatives from Official Statistical Institutes

Plateau Claire
Insee



Mesurer pour comprendre



Background

Measurement of Well-Being

a relatively new field in Official statistics

- Measuring Subjective Well-Being (SWB) has been for a long time an Academic subject
- Until recently, it was mostly at the initiative of NSIs
- But because of more support from politicians, the media and the public opinion, it is no longer the case.
- In 2013, every European Member State is going to collect data on subjective well-being with the European Survey on Income and Living conditions (EU-SILC) because of a new commission regulation (EC N° 62/2012)

A new political context

- The recent economic and financial crisis with terrible loss in well-being
 - Increasing awareness of the importance of preserving the social and natural environment
- Two important conferences on moving beyond GDP
 - The Istanbul conference devoted to the OECD Project “measuring progress in societies”
 - The European Commission’s communication “Beyond GDP”
- The publication of the Stiglitz commission report which recommends improving the measurement of social well-being and quality of life in order to avoid focusing exclusively on Gross Domestic Product

Recommendations of the Stiglitz Commission concerning quality of life (1)

- Quality of life (QoL) depends on people's objective conditions and capabilities
- Measures of both objective and subjective well-being provide key information about people's quality of life
- Quality of life is multidimensional. It depends on:
 - Material living standards (income, consumption and wealth)
 - Health
 - Education
 - Everyday activity including work
 - Governance and basic rights
 - Social connections and relationships (inclusion/exclusion)
 - Natural and living environment (present and future conditions)
 - Factors shaping one's personal and economic security
 - Overall experience of life

Recommendations of the Stiglitz Commission concerning quality of life (2)

- Statistical offices should incorporate questions to capture people's life self evaluations, hedonic experiences and priorities in their own survey
- Steps should be taken to improve measures of each dimension of quality of life
- Quality of life in all the dimensions covered should assess inequalities in a comprehensive way
- Survey should be designed to assess the links between various quality of life domains for each person. This information should be used when designing policies in various field
- Statistical offices should provide the information needed to aggregate across quality-of-life dimensions, allowing the construction of different indexes

Measuring well-being in the European Statistical System (ESS)

EU statistical governance

➤ Eurostat

- Is the statistical office of the European Union.
- Provides the European Union, with statistics at European level that enable comparisons between countries and regions

➤ The European Statistical System (ESS)

- Is a partnership between Eurostat and the National Statistical Institutes (NSIs).
- Functions as a network in which Eurostat's role is to lead the way in the harmonization of statistics in close cooperation with NSIs.

➤ Production of statistics labelled as “official” European statistics

- To guarantee high quality statistics, standard for developing, proceeding and disseminating statistics according the European Statistics Code of Practice (2005)

➤ Subjective measures in the ESS have always provoked an intensive debate

A sponsorship group and the Sofia memorandum

- The Sponsorship Group on measuring Progress, well-being and sustainable development
 - Launched in May 2010, with 4 Task Forces
 - To translate the recommendations of the Stiglitz report into concrete proposals for the ESS and to prioritise actions
 - Task force 3 has the mandate to propose multidimensional measures of quality

- An important milestone: the Sofia memorandum
 - Adopted by the DGINS in September 2010
 - Recognises that official surveys must cover objective and subjective conditions of quality of life
 - Insists on timeliness, comparability and coverage in the measurement of indicators
 - Not that EU-SILC is the main instrument but has to be complemented by other data sources

Recommendations of the Sponsorship

Recommendations adopted by the DGINS in September 2011

- QoL: adopt the conceptual framework with 8+1 dimensions
- Data at individual level are necessary for analysis and subpopulations
- The construction of an overall indicator of QoL is not recommended
- EU-SILC should be developed further to serve as a core instrument connecting the different dimensions of QoL. Improve timelines and comparability of EU-SILC Variables
- Take care that existing or future survey will take into account QoL
- At short term, complement the coverage of the dimensions with additional sources
- Propose a preliminary list of indicators of QoL for each dimension (work will be continued by an Expert group)
- A website that gathers all available indicators of QoL

Eu-SILC: a core social survey in the ESS

2013 EU-SILC Ad-hoc module

➤ Components

- Core Module: primary variables
 - **Cross-sectional data** (annual data) with variables on income, poverty, social exclusion, health and other living conditions
 - **Longitudinal data** pertaining to individual-level changes over time, observed periodically over a four year period
- Ad-Hoc module: secondary variables

➤ Legal basis (2003) variables common concepts, classification procedures

➤ Quality requirement: large sample size by country, some larger (NUTS2)

➤ Manual: a reference questionnaire (importance of wording) in all EU language via a translation protocol

➤ 2013 EU-SILC Ad-Hoc module (commission regulation N°62/2012, 24/01/2012)

- Provide a more comprehensible set of variables on well-being
- Use as much as possible already tested variables in the ESS
- 22 variables divided in 7 areas (secondary variables)
- First results in 2015

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:022:0009:0015:EN:PDF>

2013 EU-SILC Ad-Hoc Module

Areas and list of target variables

- 1- Overall experience of life (2)
 - Overall life satisfaction- Meaning of life
- 2- Material living conditions (2)
 - Satisfaction with financial satisfaction- Satisfaction with accommodation
- 3- Health (5)
 - Being very nervous- Feeling down in the dumps -Feeling calm and peaceful - Feeling downhearted or depressed - Being Happy
- 4- Productive and valued activities (3)
 - Job satisfaction – Satisfaction with commuting time – Satisfaction with time use-
- 5- Governance and basic rights (3)
 - Trust in the political system - Trust in the legal system - Trust in the police
- 6- Leisure and social interactions (4)
 - Satisfaction with personal relationships- Personal matters (anyone to discuss with)- Help from others- Trust in others
- 7- Natural and living environment
 - Satisfaction with recreational and green areas - Satisfaction with living environment
- 8- Economic and physical safety
 - Physical security

Dissemination of available QoL indicators

- Dissemination of available quality of life indicators on Eurostat website at the end of 2012
http://epp.eurostat.ec.europa.eu/portal/page/portal/quality_life/introduction
- The data presented come from several sources from within the European Statistical System (ESS), in particular:
 - **SILC** (statistics on income and living conditions),
 - **LFS** (labour force survey),
 - **EHIS** (European Health Interview Survey),
 - and administrative sources.
- In case no data are available from within the ESS, external links to non-ESS sources, such as the **EQLS** (European Quality of Life Survey), are used as *placeholders*.

French initiatives in measuring Well Being

New surveys to measure people's subjective well-being

- Several specific modules added to existing surveys
 - French version of EU-SILC (from 2010 onwards)
 - Introduction of new questions to assess global satisfaction on a scale from 0 to 10 concerning dwelling, job (if employed), leisure, relations with relatives, current life
 - A self administrated questionnaire for 2000 households for calibrating responses and better understanding people's opinions
 - French Time Use Survey (2011)
 - Questions for a subset of households to grade quality of time spent on each activity on a scale from -3 to +3
- An innovative experimental survey (2011)
 - To explore different dimensions of quality of life in a single source
 - To study at an individual level the accumulation of deprivation
 - To study links between objective determinants of quality of life and subjective well-being
 - 10 000 persons 18 years and more; response rate: 38%

The French new Quality of Life Survey 2011

- Gathering questions of existing surveys to cover most dimensions in the same questionnaire
 - Living conditions: *EQLS 2007 and French EU-SILC*
 - Environmental and insecurity: *EQLS 2007, French EU-SILC*
 - Psychosocial risks at work: *EQLS 2007 and main points from the French expert panel report*
 - Physical health: *EU-SILC*
 - Social connections: *EQLS 2007*
 - Emotional stability: *the World Health Organization module*
 - Confidence in society and in public decision-makers: *adaptation of EQLS 2007*
 - Satisfaction in general: *Gallup-type question Welfare*

The French new Quality of Life Survey (2011)

Variables used for indicators of quality of life (1)

➤ Material living conditions

- Poor housing conditions: lack of space, damp, lack of outdoor space
- Financial constraints: insufficient means to heat or cool the home, take holidays, replace furniture, buy meat, buy new clothes, invite guests to the home, run a car, difficulties paying rent etc., difficulties paying for medical treatment, forced to leave home.

➤ Health

- Poor physical health: perceived state of health, chronic illnesses, health problems afflicting daily life,
- Poor emotional well being (stress in daily life): not in a good mood, lack of energy and motivation, not calm and relaxed, not fresh and rested when waked up

➤ Psychosocial risks relating to work (poor well-being at work):

- stressed, working to tight deadlines, witnessing things you disapprove, lacking independence, underpaid, not having the satisfaction of a job well done, working in dangerous conditions, too tired to perform household tasks, difficulty fulfilling family obligations, difficulty concentrating at work,

The French new Quality of Life Survey 2011

Variables used for indicators of quality of life (2)

- **Lack of trust in society (governance and individual rights)**
 - Distrust of others, tension between rich and poor, tension between bosses and workers, tension between men and women, tension between young and old, tension between ethnic groups, tension between religious groups, lack of faith in the law, the press, the police, experts, public officials,
- **Weak social connections:**
 - Unsatisfied with family, not in contact with family members, lack of conversation, lack of trust in others
- **Poor environmental conditions:**
 - Poor water quality, noise, air pollution, lack of green spaces, dirty surroundings
- **Economic and physical insecurity:**
 - Unemployment, risk of losing job, crime rates in the area,

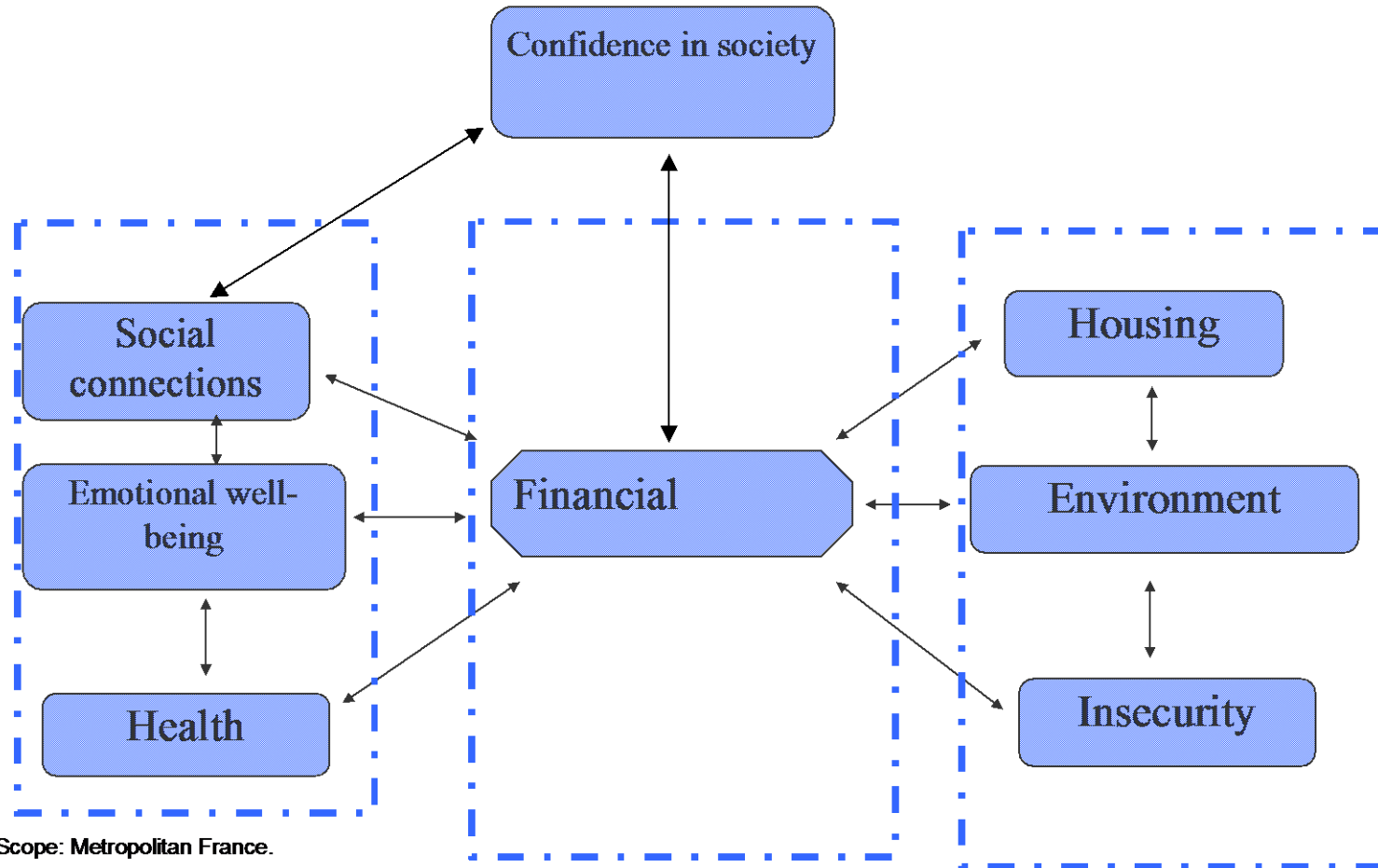
Construction of synthetic indicators by dimension

- Computation of scores by addition of binary items (privations) in the same dimension. As usual, this method assumes that :
 - items provide useful information for the dimension
 - cumulating hides specificities of given items
 - bad quality of life in the dimension increases with the number of « privations »
 - addition is an easy way of computation
 - When items have a good correlation, the weighting scheme has no impact on the result
- A person cumulating enough privations has a poor quality of life in the corresponding dimension :
 - the indicator equals « 1 » when the score exceeds a given threshold
 - ... with the question of the determination of the level of the threshold
 - About 10% of the individuals
- Advantage of the method: indicators calculated at the individual level
 - allows the production of quality of life indicators for every conceivable social group

No overall indicator of quality of life available

- The underlying principle of the calculation of the synthetic indicator by dimension is that the different items provide a measure for the same latent concept. The variables should be correlated
- The 9 dimensions of the quality of life are not correlated. It would be an element of subjectivity in determining a process to combine the elements into one indicator.
- Therefore we prefer not to calculate a global composite indicator (i.e for the 9 dimensions as a whole), even if it would allow for an easy ranking of Quality of Life, and had the potential to make the subject very accessible to politicians, journalists and the general public.
- We prefer radar charts to compare different social groups

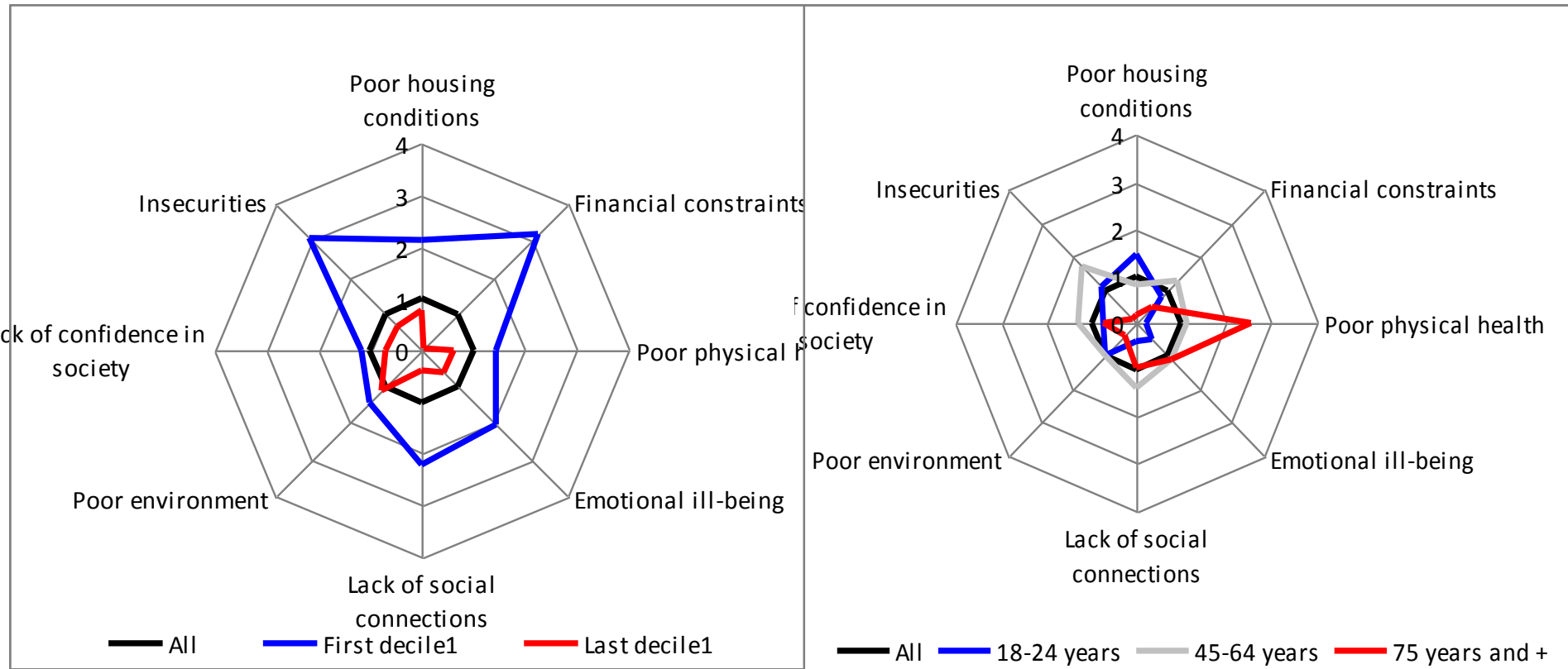
Some results: Links between quality of life indicators



The dimensions of quality of life

By income per consumption unit

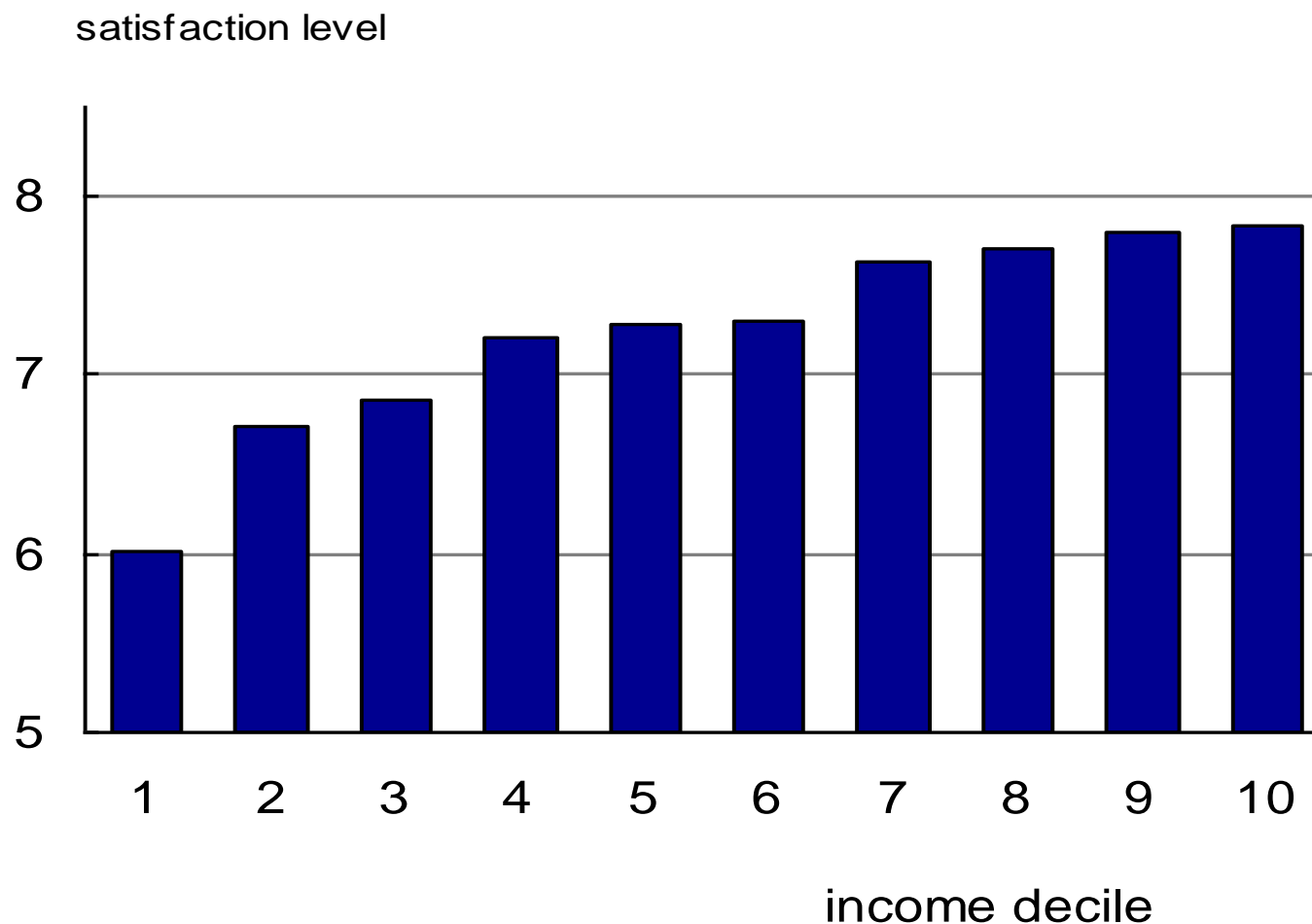
By age



Source: French Quality of Life survey (2011)

People of modest means living in urban areas are the ones who cumulate most often difficulties in the different dimensions

Average life satisfaction by living standard



Source: French version of EU-SILC (2010)

Main drivers of subjective well-being

- Importance of financial constraints and material deprivations
- But to explain higher level of satisfaction, other factors play as much or even greater role
 - weak social and family ties,
 - stress in every day life

followed by

- *Health*
- *Housing*
- *Physical and economic insecurity*

- Importance of psycho-social risks at work to explain lower global satisfaction
- This information is of paramount importance for the policy makers who can't act on global life satisfaction, but only the drivers of QoL

The enjoyable moments of day-to-day life a question of activities – and their context

Results from the 2009 French time Use Survey

- The daily activity which we most enjoy are those associated with free time
- Context in which an activity is carried out is crucial in its appraisal; the same person can range the same activity differently
- For example, making a journey alone is disagreeable, making a journey with company is much more enjoyable. And of course, a bit of sunshine really can brighten up your day

Methodological aspects: physical or economic insecurity are two distinct realities

- Whereas it was recommended by the Stiglitz report to summarize physical and economic security into a single indicator , it seems to make nonsense
- A tentative synthetic indicator was based on questions dealing with the amount of crime in the neighborhood, the fact of being unemployed and the risk of losing one's job
- It appears that there is no overall consistency between perceived crime and job insecurity, as far as a socio-demographic profile of the disadvantaged is concerned, nor is there between any of the three factors taken together.
- It tends to show that, in the future, it will be preferable to split this synthetic indicator into two subindicators, one covering physical insecurity and the other economic insecurity

Methodological aspects: assessment of causality links

- For instance, the causality links observed between the degree of social ties and global satisfaction can a priori either reflect a causal effects or, more simply, long lasting difference between individuals
- Global satisfaction depends on objective circumstances (specific facts) but also, in part, with respondent's personality such as risk aversion, preference for present and optimism

➔ *Necessity to address questions of heterogeneity between individuals with the use of panel data (EU-SILC)*

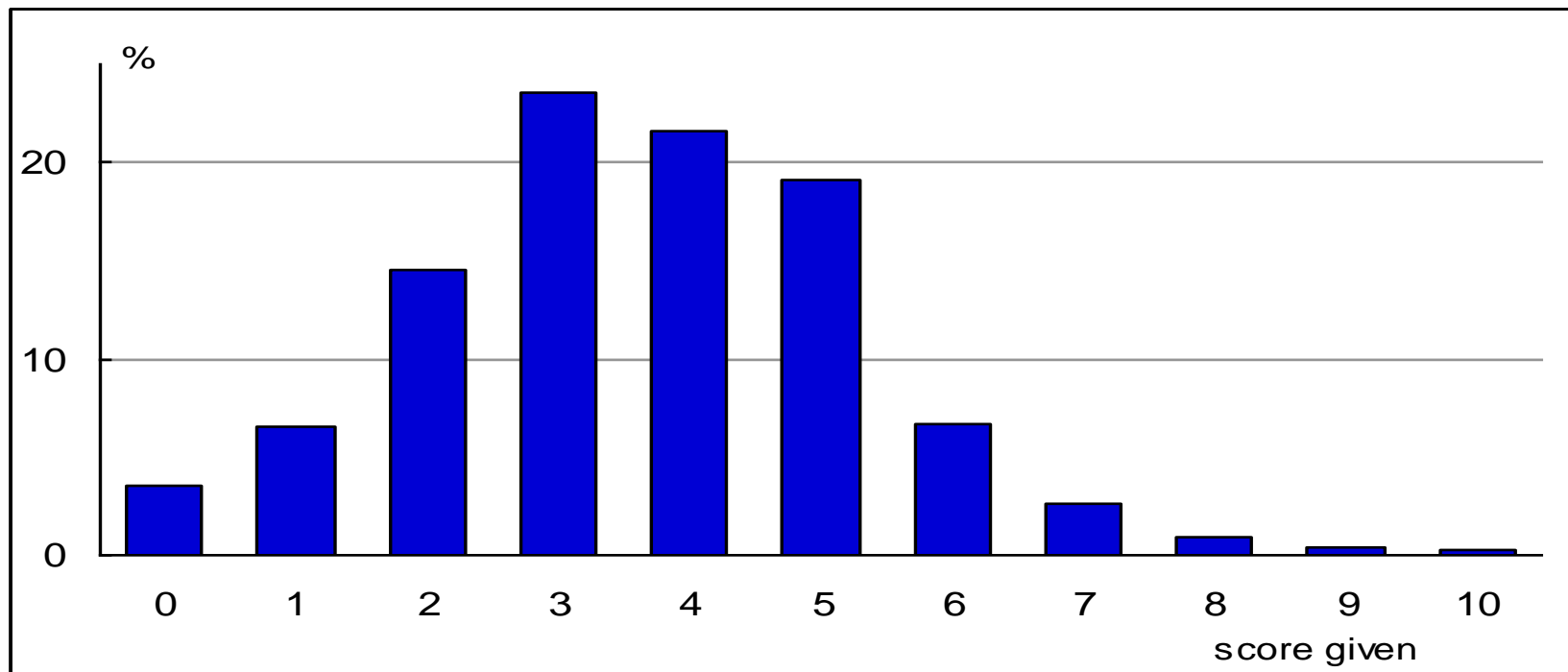
- The first studies on panel data tend to show that the link between social ties and level of life satisfaction is a causal link indeed
- This information is of paramount importance for policy makers who cannot act direct of people's life satisfaction but can only act upon the drivers of objective Quality of Life

EU-SILC: treatment of individual effects with panel data (on going work)

- Individual effects: non observable variables (level of optimism, of risk aversion, of confidence in others, in the personal scales ...)
- EU-SILC is a longitudinal survey: in France, the same households are surveyed for 9 years running
This longitudinal dimension will permit to:
 - eliminate individual effects
 - give estimations on the consequences of health problems, a job loss, a divorce, a fall of income ...
- We also drop off a self-administered questionnaire:
 - questions on attitude towards optimism, risk, trust in people, time preference ...
 - anchoring vignettes: scenarios to compare the respondent to others (personal scales)

EU-SILC: an example of anchoring vignette on overall satisfaction of life

- Jacques is 40 years old. He is a middle-school teacher. He lives with his wife, who is unemployed, and their three children in a small apartment in the suburbs, purchased with a mortgage. The neighbors are fairly noisy. Even if his children do not lack anything, it's not always easy to make ends meet. Jacques has no health problems, but he has trouble sleeping because he has a difficult class this year.
- ***How would you rate Jacques's situation in terms of his life at the present time? (from 0 is the least favorable situation, and 10 the most favorable situation.)***



Methodological aspects: Further statistical challenge (1)

- Other measurement errors can gravely undermine the collection of subjective well-being indicator.
- It will require further statistical treatment
- Responses may be biased by temporary vexations, or, the contrary, the recent fulfillment of personal wishes
- Responses can vary with the weather, the survey timing (Akay, Martison, 2009)
- Responses can vary with the position of questions in the questionnaire (Clark, Vicard, 2007)

Methodological aspects: further statistical challenge (2)

- To evaluate his global satisfaction, each respondent has a personal interpretation of the responses scale.
- This kind of error will be corrected by the information collected in the self administered questionnaire added to the French version of EU-SILC with fictitious scenarios for calibrating responses and better understanding people's opinions
- Therefore, measuring subjective well-being is in theory a statistically simple operation. But it is not immune to measure that can gravely undermine it.
- Some of these measurement errors can be corrected by statistical procedures. But they are expensive, as they generally require additional questions, or different protocols for each sub-sample, or the use of panel data.

Some French publications

- Measuring quality of life:
http://www.insee.fr/en/ffc/docs_ffc/ref/FPORSOC10E.pdf
- Life Satisfaction:
http://www.insee.fr/en/publications-et-services/dossiers_web/stiglitz/VE4-Anglais.pdf
- The enjoyable moments of day-to-day life:
<http://www.insee.fr/en/ffc/ipweb/ip1378/ip1378.pdf>
- Low income city-dwellers accumulate the most difficulties in term of quality of life:
http://www.insee.fr/en/themes/document.asp?reg_id=0&ref_id=FPORSOC12h_VE7_quali
- Quality of life and well-being often go hand in hand:
<http://www.insee.fr/en/ffc/ipweb/ip1428/ip1428.pdf>

Some European NSI's Initiatives

Several important initiatives in different EU countries to improve existing metrics

Different types of initiatives

- Nation-wide consultations such as the one launched by Prime Minister David Cameron in the UK
- Parliamentary commissions such as the ones established in Germany and in Finland
- Expert group tables tasked with proposing indicator based on existing statistics such as in Italy, Spain,
- New surveys or module added such as in France, Germany, Hungary, Ireland, Poland, The Netherlands
- Methodological activities undertaken by the OECD and the European Statistical System
- Publications, website to better communicate on well-being such as in Austria, Spain, Finland

The Measuring National Well-being Program in UK

- Nov 2010-April 2011: A national debate asking “what matters for you?”(34000 responses) to develop and publish an accepted and trusted set of National Statistics
- April 2011: Subjective well-being questions added to select ONS household surveys
- Development of a framework for measuring national well-being consisting in 10 domains (Individual WB, What we do, Where we live, Personal finance, Education and skills, The economy, Governance? Natural Environment) and around 40 headline measures of well being
- Nov 2012, Publication of the first annual report
“Measuring National Well-being : Life in the UK,2012”
http://www.ons.gov.uk/ons/dcp171766_287415.pdf

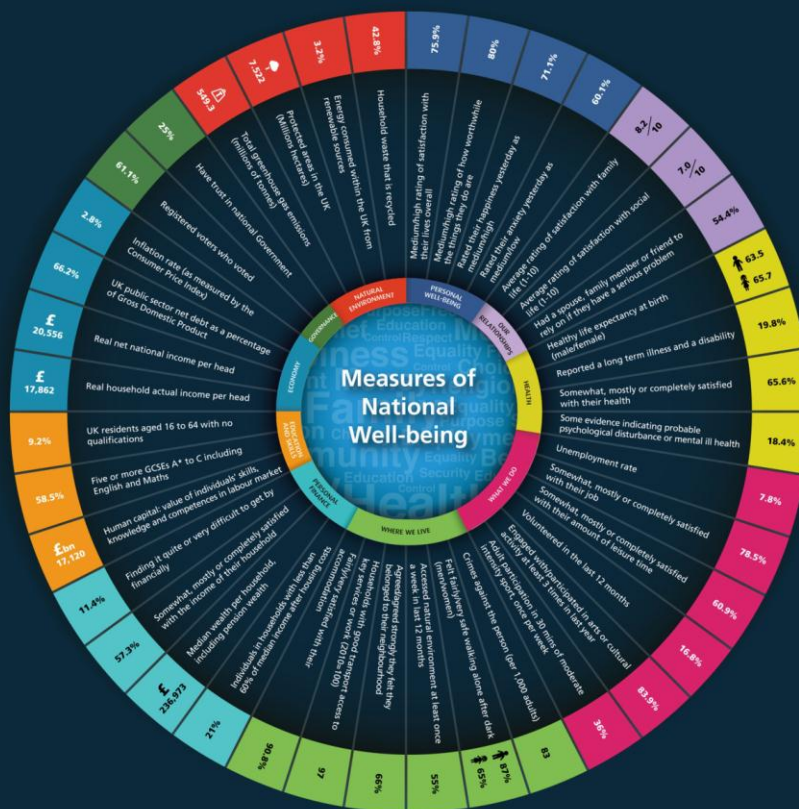
Publication of an interactive “wheel of measures” to show the latest data for each domain (regularly updated)
<http://www.ons.gov.uk/ons/interactive/well-being-wheel-of-measures/index.html>
- July 2013: The MNW program published a roadmap to include natural capital and ecosystems into the UK Environmental Accounts by 2020.

ONS Interactive “wheel of measures”

Office for National Statistics

May 2013 release

National Well-being



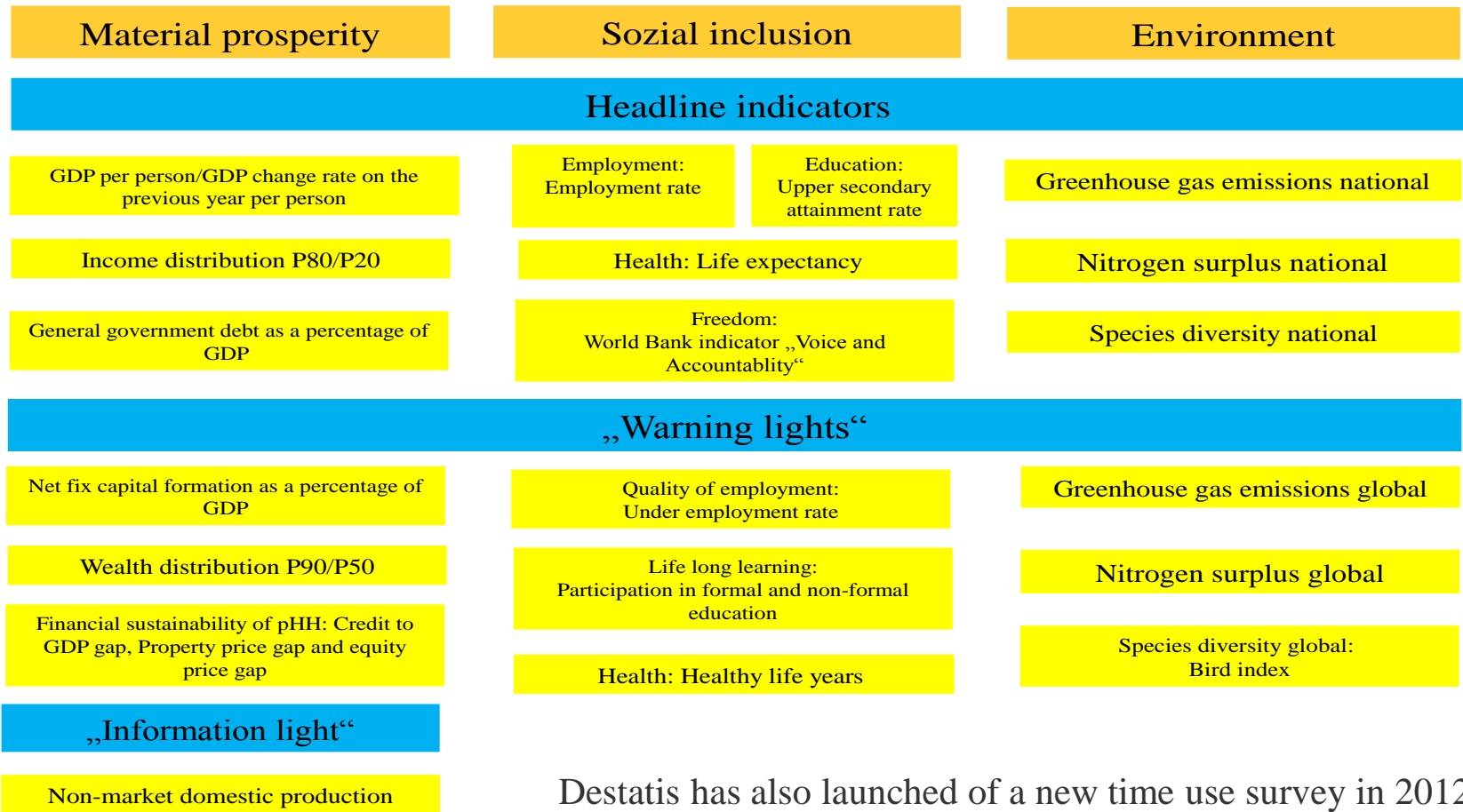
More data and interactive version available at: www.ons.gov.uk/well-being

Measuring what matters:
Understanding the nation's well-being

Data are the latest available at March 2013

The W³ indicator set in Germany

- Study Commission of the Parliament on Growth, Well-Being and Quality of life: final report June 2013; a dashboard of 20 Welfare indicators



Destatis has also launched a new time use survey in 2012, including the appreciation of the different activities

Few European Member State initiatives :

Poland

- In 2011, a new survey to measure well-being (Multidimensional Social Cohesion Survey)
- Plan to carry out on a regular, cyclical basis (every 4-5 years)
- Time Use Survey with questions to rate individual activities (launch 2013, results in 2014)

The Netherlands

- Currently, a social survey containing questions on the different dimensions of quality of life
- A study of the drivers of happiness (good health and social contacts related to high well being)

Ireland

- A module on well-being added to the Quaterly National Household Survey for quarter3 of 2013 (5 questions added)
- Intend to follow this experience

Austria

- In 2012, a new dataset « How's Austria? » comprising 30 headline indicators in three areas (wealth, quality of life, environmental sustainability)
- In 2013 Publication, a special chapter on Quality of Life

Few European Member- State initiatives

Italy (already presented in the first session on well-being by ISTAT)

- BES Initiative, monitoring of 12 domains and 134 indicators

Finland

- A service providing up-to-date statistical information on key social indicators called Findindicator as a joint effort of the Prime Minister's office and Statistics Finland

Portugal

- A new project to build a national Well-being Index to be published at the end 2013
- 10 synthetic indexes, one by each domain, and a final global index of well-being

Slovakia

- Publication a set of quality of life indicators annually on web site from 2014 onwards
- Etc...

Conclusions

- Measuring Well being is now high on the statistical agenda of EU NSIs.
- In 2014, for the first time, with EU-SILC, European statisticians will publish harmonized European-wide statistics on subjective well-being as recommended by the Stiglitz report

Measurement of well-being

Some Official Statistical Institutes' initiatives

Thank you for your attention!

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du lundi au vendredi de 9h00 à 17h00