Filomena Maggino Giampaolo Nuvolati *Editors* 

# Quality of Life in Italy

Research and Reflections



### Quality of Life in Italy

### Social Indicators Research Series

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Filomena Maggino • Giampaolo Nuvolati Editors

# Quality of Life in Italy

Research and Reflections



Editors Filomena Maggino Università di Firenze Firenze, Italy

Giampaolo Nuvolati Dipto. Sociologia e Ricerca Sociale Università di Milano-Bicocca Milano, Italy

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# Chapter 1 Introduction

### Filomena Maggino and Giampaolo Nuvolati

In the past, alongside the international network development, the theoretical reflection and the applied research on quality of life found it hard to take shape in Italy, especially in the academic field.

However, it should be pointed out that several local administrations promoted numberless studies and researches on liveability of cities and regions. In fact, many pioneer territorial experiences were accomplished during the 1970s, promoted by cities, provinces and regional administrations (e.g. the Bilanci Sociali d'Area, Regional Social Balance, in Milan) and testified a wide interest in quality-of-life studies at local level.

Other experiences have to be added, even though their nature is typically journalistic, like the annual report on quality of life in Italian provinces realized by *Sole 24*, national daily business newspaper.

More recently, a campaign (*Sbilanciamoci!*) involving almost 50 associations, NGOs and networks working on globalization, peace, human rights, environment, fair trade, ethical finance urged the development of an alternative index for analysing quality of life, of development and of public action to be used by local authorities. The *QUARS* is a synthetic index that takes into account different dimensions of development at regional level (quality of production and consumption, environmental sustainability, democratic participation and so on).

In the end, all those experiences were fragmentary, with low comparability and theoretical and methodological reflections.

Statistics for Social Research & Multivariate Statistical Analysis, Lab-StaRSE, Università degli Studi di Firenze, Via Laura, 48, I-50121 Florence, Italy e-mail: filomena.maggino@unifi.it

### G. Nuvolati

Urban Sociology, Università degli studi di Milano Bicocca, Stanza U7-332, III Piano, Via Bicocca degli Arcimboldi, 8, 20126 Milan, Italy e-mail: giampaolo.nuvolati@unimib.it

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F. Maggino (⊠)

At the same time, official statistics have been developing important experiences in quality-of-life research, like the Multipurpose Survey project, introduced by the Italian National Institute of Statistics (ISTAT) during the 1990s and still carried on.

By considering the depicted frame, organizing a national conference on quality of life seemed to be a precious occasion in order to evaluate the state of the art and to take stock of the development of quality-of-life studies in Italy, by comparing different experiences, also referable to different scientific disciplines, and trying to reconsider and reassemble them in a single and joint frame.

This book represents the output of that conference, organized in Florence by the Italian Association for Quality-of-Life Studies (AIQUAV) in September 2010.

At the same time, the book makes an interesting analysis of well-being and quality-of-life topics, paying attention to specific group of populations and themes. In particular, it focuses on some classical quality-of-life concerns: health problems, economic unbalances, employment, democracy and public knowledge, participation. It is very useful not only for scholars but also for users, practitioners, public administrators dealing with quality-of-life issues at different level.

The book is interesting in particular for Italian readers having chapters specifically devoted to the Italian experiences. Some other articles regard the European countries and make possible some comparative analysis. The chapters could be also very useful in order to address economic, social and health policies oriented to improve living conditions, some others to identify a general framework to look at in order to increase democratic and participative processes in the contemporary society. As a matter of fact, quality of life is a multidimensional concept including all these dimensions.

The book is organized in four parts.

The *first part* includes articles concerning conceptual and methodological aspects involved in quality-of-life measurement and promotion.

In their chapter, Enrico Giovannini (President, Italian National Institute of Statistics, ISTAT) and Tommaso Rondinella (ISTAT) illustrate the activities started in Italy aimed at strengthening the ability of official statistics to measure specific dimensions of well-being and the ongoing national consultation, involving the Italian National Institute of Statistics and the National Council for Economics and Labor (CNEL). This process is aimed at identifying a set of indicators showing a strong methodological soundness and grounded on a conceptual framework conceived through a democratic process able to grant legitimacy to the selected key indicators.

Matteo Mazziotta and Adriano Pareto (ISTAT) propose an interesting solution aimed at overcoming the problems yielded by non-compensatory approaches to composite indicators construction. In particular, the solution normalizes the indicators through a traditional 'standardization' and summarizes the indices of the sub-dimensions of the composite indicator using a penalty function to be applied to cases showing 'unbalanced' values of the indicators. They compare the proposed approach with traditional ones by using data collected by 'Il Sole 24ore' on quality of life in Italian provinces.

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The chapter prepared by Marco Fattore (University of Milano-Bicocca), Filomena Maggino (University of Florence) and Emilio Colombo (University of Milano-Bicocca) illustrates, through real examples pertaining to material deprivation, an alternative to composite indicators, a new methodology allowing statistical evaluation of ordinal data related to socio-economic phenomena, by overcoming the problems of the classical aggregative approach. Traditionally, in evaluation studies, ordinal scores are turned into numerical values, inconsistently with the real nature of the phenomena at hand. The proposed innovative approach allows this inconsistency to be overcome by employing a benchmark approach founded on partially ordered set (POSET) theory, a branch of discrete mathematics providing tools for dealing with multidimensional systems of ordinal data. This approach allows the problem of 'weighting' evaluation dimensions to be handled in pure ordinal terms.

Enrica Chiappero and Nadia von Jacobi (University of Pavia) discuss the impact on the construction of multidimensional indexes of poverty and well-being of three methodological assumptions – namely, the transformation function, the aggregation procedure and the chosen weighting system. They conducted a robustness analysis aimed at quantifying the relative and global impact of different combinations of the three methodological choices on poverty estimates both at national and sub-national level.

The chapters of the *second part* are introduced by Linda Laura Sabbadini (ISTAT), who gives an inspiring picture of the social change in Italy through official statistics.

The authors of subsequent chapters, all researchers at ISTAT, focus on particular aspects of quality of life.

Silvia Montecolle and Sante Orsini investigate the structure and dynamics of the satisfaction by exploiting the wide set of information provided by the multipurpose household survey 'Aspects of daily life' (1993–2009). The survey project gathers annually information on satisfaction of the Italian population aged 14 and over (every year the sample included about 40,000 individuals). Results, obtained by analysing data through a multiway approach, show a strong and stable structure over time.

Alessandra Federici, Maria Giuseppina Muratore and Daria Squillante explored, in their well-documented chapter, the relationship between quality of life and security. Their contribution allows the reader to realize how difficult it is to study 'security' for many reasons, starting from its definition (involving other concepts, like 'worry' and 'risk', and different aspects, mainly objective and subjective, and their relationship), its measurement, its data creation and its analytical approach (which should take into account the complex relationship between the different aspects).

The role of working time in individual quality of life is explored in Maria Clelia Romano and Daniele Spizzichino's chapter. The illustrated analysis allows the authors to investigate the subjective perception of the quality of working time (component of multidimensional concept of quality of working life and measured in terms of level of satisfaction with time devoted to work) and its relationship with the cognitive dimension of subjective well-being and the worker's and job's characteristics.

The chapters of the *third part* reflect on the relationship between quality of life and other significant aspects, such as democracy, statistics and public knowledge, security policies and working conditions.

Civic evaluation has been defined as a comparative action research performed by citizens in order to assert their own point of view through the use of established and verifiable methods to issue reasoned judgements on realities that are significant for the protection of rights and quality of life. The chapter of Angelo Tanese and Alessio Terzi regards these topics and in particular the activities performed by *Cittadinanzattiva*: the first organization in Italy aimed at promoting and developing civic evaluation projects and methodologies in different public sectors of intervention.

According to Maurizio Sajeva (University of Turku, Finland Futures Research Centre), security, quality of life and development are concepts to be considered by adopting a holistic approach. In his chapter, the author presents a set of theoretical issues, shows the Finnish approach to these topics and concludes underlying the importance of governance for a secure and sustainable socio-economic development. Security, hardly achievable individually, is the result of a more holistic thinking. Individual security and freedom implies the security and freedom of all.

The relationship between statistics, democracy and public knowledge is the topic analysed by Paolo Parra Saiani (University of East Piedmont). In particular, his analysis regards the success of quantification in the administration of the State and the contextual conditions that interfere with the transformation of information into knowledge. As a matter of fact, we have arrived till today, with a large amount of data available, but with little support to effective citizen's knowledge.

Federica Origo (University of Bergamo) and Laura Pagani (University of Milano-Bicocca) present a paper regarding the linkages between flexicurity and workers' well-being in Europe. Using micro-data from the Eurobarometer survey, authors estimate the effect of a micro-level measure of flexicurity on overall job satisfaction by gender, age and education. Results confirm that job stability offered by the type of labour contract and perceived security are quite different things, and that the duration of the contract may be hardly important for job satisfaction if the worker perceives that he/she is not at risk of losing his/her job.

The chapters contained in the *fourth part* deal with topics which can be included in the traditional field of health-related quality-of-life research.

The methodological paper of Lisa Gnaulati, Francesca Ierardi, Stefania Rodella and Elena Ruviglioni concerns a specific tool aimed at reading and evaluating published and validated measures of health-related quality of life (HRQoL). This tool was created by the Quality and Equity Unit of Regional Agency for Healthcare services of Tuscany Region, in collaboration with the University of Florence. The application of the tool to a set of questionnaires, among the most utilized at international level, is oriented to underline positive aspects and critical areas in HRQoL measures.

While many studies showed that the perceived health represents one of the best predictors of future mortality, the Italian National Institute of Statistics established since the 1980s a particular survey project, aimed at monitoring the perceived health, as part of the more general concept of individual health. The applied questionnaire

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includes internationally shared and validated instruments, such as the SF-12 and part of the SF-36. Data allow Lidia Gargiulo, Laura Iannucci and Alessandra Tinto (ISTAT) to investigate Italian population's health with reference to not only physical (such as energy and fatigue) but also mental components (anxiety, depression, loss of behavioural/emotional control, psychological well-being). The performed analysis of the identified indicators allows population's health-related quality of life to be described (also in terms of inequalities) and provide precious information useful for designing national and local health and social policies and services.

The chapter of Marco Bertelli, Annamaria Bianco, Daniela Scuticchio and Ivan Brown is aimed at studying the correlation between quality of life of individuals with intellectual disability and members of their families. To such a purpose, the chapter presents the results of an Italian research based on international survey tools. The study underscores the importance of recognizing variability among families and assessing all dimensions before intervening in an effort to improve quality of life.

At the end, we can say that this book (as well as the Florentine meeting) represents a proof of the great liveliness of quality-of-life research and researchers in Italy (not only in the Academic ambit) and demonstrates also how this issue came out from the academic research field and got firmly in policy agendas and among policy goals also in Italy.

### Part I Quality of Life: Methodological Aspects

### Chapter 2 Measuring Equitable and Sustainable Well-Being in Italy

Enrico Giovannini and Tommaso Rondinella

### 1 Introduction

Throughout history, various notions of well-being have been discussed depending on cultural influences and prevailing political regimes. In the twentieth century, well-being was often equated with economic welfare. After the Great Depression and World War II, national accounting, and in particular gross domestic product, came to be seen by many as the main way of measuring development. Although several alternative measures of well-being and societal progress have been developed by researchers during the 1970s and the 1980s (e.g., the ones grouped under the so-called social indicators movement), it is only in the 1990s that initiatives concerned with sustainable development and measuring human development such as the UNDP Human Development Index and the Millennium Development Goals, have captured the attention of media and have played a role in political debates. More recently, thanks to initiatives carried out by (some) national and local political authorities, to the research on the measurement of quality of life and happiness, and to initiatives undertaken by the OECD on measuring and fostering societal progress, a new movement aiming at measuring well-being is emerging.

In this context, measuring national well-being and societal progress in Italy is one of the challenges that the Italian National Institute of Statistics (Istat) is called to face. In recent years, Istat's attention toward this issue has taken the form of a number of activities aimed at strengthening the ability of official statistics to measure specific dimensions of well-being. Such initiatives include objective and subjective measures of individual well-being, the strengthening of environmental measures and accounts, and the adaptation of macroeconomic aggregates to provide distributional information and to overcome GDP limitations in general.

President's office, Italian National Institute of Statistics – ISTAT, Via Cesare Balbo 16, 00184 Rome, Italy

e-mail: giovannini@istat.it; rondinella@istat.it

E. Giovannini • T. Rondinella (⋈)

During the last 2 years, a further improvement has been made by publishing the annual report "Noi Italia" which provides a brief presentation of the most relevant, according to Istat, statistical information for describing the state of the country and by including in the Multipurpose Survey (Indagine Multiscopo) an internationally comparable single question on overall life satisfaction as well as a question on how relevant the different dimensions of well-being are for citizens. Finally, in 2011, Istat together with the National Council for Economics and Labor (CNEL) started a national consultation to identify a shared set of indicators of the progress of Italian society, therefore honoring the recommendations by the OECD and the Stiglitz Commission.

This initiative needs to take into account, at least, two major challenges. First, a sufficient and robust statistical production able to cover all relevant dimensions of progress must be made available. Second, the starting up of a democratic process is needed to grant public legitimacy to the selected key indicators. Only if the latter condition is satisfied, the set may (have the chance to) become a tool recognized by different social components for assessing the state of the country and for effectively supporting policy decisions toward progress.

This paper initially describes the international context in which the Istat initiative moves. Then, it presents the current statistical production by Istat with respect to the measurement of well-being and societal progress assessing its ability to answer to Stiglitz Commission's recommendations. Finally, it illustrates the Istat-CNEL initiative aiming at the identification of a set of key indicators for measuring progress in Italy.

### 2 The Context

Measuring the well-being of individuals and societies has been a concern of statisticians for some time, but over recent years, the discussion on how to measure progress is gathering momentum worldwide. It is being discussed by policy makers at all levels and has increasingly attracted media attention. A consensus has not emerged yet on the best way to go, but in June 2007 the European Commission, the OECD, the Organization of the Islamic Conference, the United Nations, the United Nations Development Programme and the World Bank adopted the "Istanbul Declaration" (OECD 2007) which highlighted an international consensus on the need to "undertake the measurement of societal progress in every country, going beyond conventional economic measures such as GDP per capita" and launched the Global Project on Measuring the Progress of Societies, as the worldwide reference point for those who wish to measure and assess the progress of their societies.

The most influential work in this area has been the one by the Commission on the Measurement of Economic Performance and Social Progress ("The Stiglitz Commission," Stiglitz et al. 2009), set up by French President Nicolas Sarkozy in January 2008. The Commission produced a final report in September 2009 calling for a "shift [of] emphasis from measuring economic production to measuring people's well-being." The Commission's aim has been to identify the limits of GDP as an

indicator of economic performance and societal progress, to consider what additional information might be required for the production of more relevant indicators of social progress, to assess the feasibility of alternative measurement tools, and to discuss how to present the statistical information in an appropriate way.

The issue was a theme for discussion even at the 2009 Pittsburgh Summit, where the G20 Leaders asked for work on measurement methods that "better take into account the social and environmental dimensions of economic development" as an inherent part of the implementation of the new Framework for a Strong, Sustainable and Balanced Growth (G20 2009). An important development has also come with the European Commission Communication "GDP and beyond: Measuring progress in a changing world" (European Commission 2009) which fulfills the commitment made at the "Beyond GDP conference," where it was clearly stated that "... It's time to go beyond GDP" (Barroso 2007). The communication has molded the ideas presented at the conference into a EU roadmap for action committing itself to work in several areas to improve existing measures and to report on the implementation and outcomes of the listed actions by 2012.

It is against this background that within the European Statistical System (ESS) the *Sponsorship Group*<sup>1</sup> "Measuring Progress, well-being and sustainable development" has been established with the mandate of coordinating activities on the issue and building on the recommendations from the above-mentioned Stiglitz report and Commission Communication, taking also in consideration the objectives of the European Commission Europe 2020 Strategy.<sup>2</sup> The key challenge, within the ESS, is to implement the recommendations arising from these converging initiatives, in order to deliver richer statistical information and further enhance harmonization at the international level, in particular in Europe.

Meanwhile, on September 30, 2010, the 96th Conference of Directors General of the National Statistical Institutes (DGINS) produced the "Sofia memorandum" recognizing the validity of the Stiglitz Commission's recommendations, listing a number of improvements that NSIs should adopt (such as to reconcile national accounts aggregates with household survey data, to give more attention to the household perspective, to capture distributional aspects, to harmonize environmental measures and improve timeliness of quality-of-life statistics) (DGINS ESSC 2010).

Finally, in February 2010, the Franco-German Ministerial Council decided to ask the French *Conseil d'Analyse Économique* (CAE) and the German Council of Economic Experts (GCEE) to follow up the Stiglitz's outcomes. The CAE and GCEE have recently published a report on "Monitoring economic performance, quality of life and sustainability" (CAE and GCEE 2011) which, starting from the domains

<sup>&</sup>lt;sup>1</sup>Sponsorship group cochained by the Eurostat and FR-INSEE (National Statistical Institute of France) directors general, with the participation of 16 member states (presidents/directors general of NSIs: AT, BG, CH, DE, DK, ES, FR, IT, LU, NL, NO, PL, SE, SI, SK, UK) as well as OECD and UNECE.

<sup>&</sup>lt;sup>2</sup>The activities on the GDP and beyond communication and the Stiglitz report in the European Commission and in the European Statistical System (ESS) are also coordinated by the interdepartmental coordination group cochaired by Eurostat and DG Environment directors general, with the participation of 11 commission DGs and 3 agencies.

and indicators of the Stiglitz Commission, discusses how comprehensiveness and accuracy of an indicator set might be traded off optimally with parsimony and cost to provide a reliable basis for regular, timely, and digestible reporting on three key issues: economic performance, quality of life, and sustainability.

## 3 A Framework to Measure Equitable and Sustainable Well-Being

The Stiglitz Commission's recommendations for the measurement of progress reduce the emphasis toward economic indicators in favor of a multidimensional approach that considers social and environmental well-being as important as the economic well-being. Hall et al. (2009) have developed a framework that aims at measuring societal progress defined as an increase in "equitable and sustainable well-being." In particular, building on the model described in Fig. 2.1, they propose to consider final and intermediate goals, as well as the relationships between them and two crosscutting dimensions, as follows:

Final goals	Intermediate goals
<ul> <li>Ecosystem condition: outcomes for the environment</li> <li>Land (geosphere)</li> <li>Freshwater, oceans, and seas (hydrosphere)</li> <li>Biodiversity (biosphere)</li> <li>Air (atmosphere)</li> </ul>	<ul><li>Economy</li><li>National income</li><li>National wealth</li></ul>
Human well-being: outcomes for people, individual aspects  Physical and mental health Knowledge and understanding Work Material well-being Freedom and self-determination	<ul> <li>Governance</li> <li>Human rights</li> <li>Civic and political engagement</li> <li>Security and violence</li> <li>Institutional trust</li> <li>Access to services</li> </ul>
<ul> <li>Human well-being: outcomes for people, social aspects</li> <li>Social connections</li> <li>Social participation</li> <li>Interpersonal trust</li> </ul>	<ul><li>Culture</li><li>Cultural heritage</li><li>Arts and leisure</li></ul>
Links between the two sets of goals	Crosscutting perspectives
Resource management, use, development, and protection  Resource extraction and consumption  Pollution  Protection and conservation of economic and environmental assets  Ecosystem services  Resources and processes provided  Impact of natural events	<ul> <li>Intragenerational aspects: equity/inequality</li> <li>Intergenerational aspects: sustainability/vulnerability/ resilience</li> </ul>

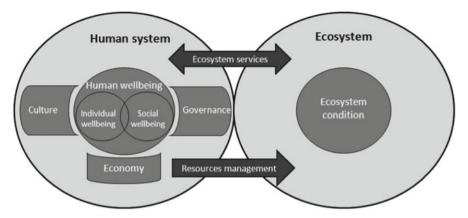


Fig. 2.1 The framework of the progress of societies (Source: Hall et al. 2009)

Italy is strongly committed to following the approach toward progress defined at international level, and a widespread consensus exists over the need to widen the observation of key indicators for the evaluation of progress and citizens' well-being in our country. Yet, the definition of a shared set of key national progress indicators needs to be broadly legitimated if it has to become a tool for monitoring a shared vision of progress for the country (Rondinella et al. 2011).

A recent OECD working paper by Scrivens and Iasiello (2010) well identifies the challenges that the definition of a set of societal progress indicators has to face in order to be used and applied in decision-making processes. The first challenge is in fact granting legitimacy to the tools, which means that "the issues highlighted by the indicators are considered important" and that selected indicators "provide meaningful measures of those issues." The general answer to this is that "indicators must be developed with the participation of those who will use – and learn from – them."

The other two challenges identified by Scrivens and Iasiello lie in the choice of the wider information system in which progress indicators are used (*fit-for-purpose information*) and in the ability to produce policy incentives. The former implies the assessment of the opportunity to use either composite indexes, a restricted set of headline indicators, or a broader and more comprehensive set, facing the trade-off between communication needs and avoiding simplistic views of the issue. The latter is less straightforward since in order to define a policy-relevant set of indicators, it is not enough to "produce academically certified data and handling it to policy makers" (Innes 1990, p. 8), and it is politically very difficult to fix binding conditions for the fulfillment of objectives implicitly or explicitly set by progress indicators. In order to guide policy decisions, progress indicators need to be accompanied by sufficient incentives for policy makers to enact change which can be fostered either by including politicians in the selection process, identifying an independent watchdog

or by keeping public attention around the selected issues high. This is why Istat has proposed to CNEL to launch a joint initiative to measure societal progress involving all components of society through a consultation process as described in Chap. 5. Before entering into such a presentation, it is useful to briefly describe the available official statistics relative to the dimensions of well-being as selected by the Stiglitz Commission's report and by the OECD. Therefore, the next section, following the current structure of the report, presents the most relevant advancements within Istat statistical production concerning (a) economic performance, (b) quality of life, and (c) environmental sustainability.

### 4 Istat Current Production

### 4.1 Measuring Economic Performance

### 4.1.1 GDP

Economic performance is classically represented by production growth. Istat currently produces GDP estimates at both annual and quarterly frequency. However, this indicator can be expanded in order to include a number of neglected components. Much has already been done in recent years within European official statistics, namely, the development of supply and use tables, the estimates of the underground economy, the inclusion of all productive units' activity within national accounts (exhaustiveness), the deflation of public services aggregates embedding quality changes. With respect to the nonobserved economy, it has to be highlighted that within Istat (Calzaroni 2000) a pioneering work has been carried out which has subsequently led to the definition of international standards as presented in OECD guidelines (OECD 2002).

Another challenge is the estimation of public services' values, which should be based on actual production (output), rather than on the cost of production (input). Hopefully, it will be possible to overcome these limitations in a relatively short time. Relying on Time Use Survey Data, a preliminary estimate (Baldassarini and Romano 2006) of nonmarket activities of households has also been produced, but being still at an early stage, it cannot be included yet in the formation of GDP.

According to the Stiglitz report, *net domestic product* (NDP), i.e., net of depreciation, should be used rather than *gross domestic product*. Of course, Istat produces the net aggregate, even though the measurement of depreciation presents some difficulties. For example, in recent years, technological innovation has grown fast and that makes it harder to estimate the depreciation rate of capital assets and depreciation of capital even without taking into account environmental degradation.

One of the criticisms in considering GDP as the only indicator of welfare is that the market prices used in its calculation do not reflect the use value of goods and services, nor they reflect the environmental damage that production and consumption generate. Moreover, markets are not perfectly competitive and consumers do not

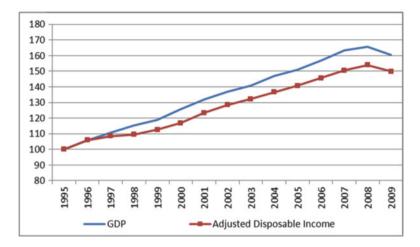


Fig. 2.2 Adjusted disposable income and GDP, Italy 1995–2009, 1995 = 100 (Source: Istat)

always possess the information essential for their choices. On this front, the estimation of national accounts in real terms is guaranteed by the treatment of quality change through the use of price deflators as well as a variable weighting system for production and consumption price indexes which, following international standards, take into account the changes in products' quality.

### 4.1.2 Income and Consumption

The Stiglitz-Sen-Fitoussi Commission suggests increasing attention in the observation of income whose key measure should be disposable income, i.e., the amount of current resources available to households for final use, consumption, and saving, less depreciation. Including all the transactions affecting consumption capacity of the beneficiaries means extending the concept of disposable income. It should also include the use of goods and services freely provided by the government and nonprofit institutions, such as medical care, hospital stays, housing allowance, crèches, and similar. This leads us to the definition of the *adjusted households' disposable income* aggregate that can bring a sharper focus on the role of government in the process of income redistribution and, more generally, the actual redistributive capacity of welfare systems. This is a neutral indicator with respect to differences in coverage of social protection systems across countries and to the public/private mix. Istat already produces this measure, whose evolution (compared to GDP) is shown in Fig. 2.2.

In addition, disposable income is sided by the *replacement rate* for maintaining the standard of living guaranteed by the public pension system, i.e., the ratio between the first pension and the last pay from work. Apart from being an indicator of extreme relevance to pension system's financial sustainability, this rate provides basic information on the adequacy of the benefits it guarantees.

With regards to consumption, Istat Division for National Accounts produces quarterly and annually the aggregate of *Actual Household Final Consumption*. It also includes, in the final consumption of households, the expenses arising from private social institutions and public social transfers in kind.

### 4.1.3 The Extension of National Accounts

National accounts are an essential tool to guide decisions of economic agents and to evaluate policy results. Yet, their theoretical and conceptual framework was not specifically designed to analyze individual and societal well-being, but to analyze the economic system of a country and some sheer economic dimensions of well-being. In addition, the process of maintenance of the system, which depends on international definition of the aggregates, may lag behind the changes in economic and social reality, showing certain stickiness in timely adaptation. Nevertheless, the Italian system of national accounts has gradually opened to integrate information on the distribution and variability of stocks, such as wealth – in addition to the flows – and on social and environmental phenomena, in addition to the traditional economic and financial dimensions. This is possible through satellite accounts.

For some time, in fact, Istat Division for National Accounts has worked to develop new projects that meet the new perspectives of well-being analysis, including quarterly accounts by institutional sector, studies on globalization, estimates for total and partial factor productivity, the first prototype estimates of the stock of real assets for institutional sectors, in order to produce a complete system of balance sheets, and national estimates of adjusted disposable income and actual household consumption. In addition, an experimental work aimed at building a satellite account for households includes data on unpaid work and nonmarket activities, as well as human and social capital. Within environmental satellite accounts, pilot studies have been carried out, among others, on physical and monetary environmental assets accounts, on supply/use tables in physical terms, and physical accounts for waters.

### 4.2 Measuring Quality of Life

Over the past 20 years, social statistics in Italy have seen a continuous progress, with the production of large amounts of data and indicators for the measurement of quality of life. Istat has developed a strong set of information through the development of the Multipurpose Survey and other household surveys, which today are widely used for designing and evaluating social policies. Work, family life and relationship, the economic conditions of families, leisure, political participation, social lifestyles, the relationship with services, cultural enjoyment, security, health conditions are investigated taking into account people's actual behavior as well as individual subjective dimensions. The Multipurpose Survey is one of the most advanced and ambitious

social surveys systems at international level: it is structured as an annual survey named "Aspects of daily life," integrated by five in-depth surveys on family, health, leisure, security, and time use carried out every 5 years and a survey over travel and holidays carried out every 3 months.

The Stiglitz report suggests considering measures that relate to the subjective experience in addition to objective measures of quality of life. The Multipurpose Surveys integrate subjective measures in all different areas of investigation: from health, family, work, leisure, and relationships with friends, to citizens' security, poverty, or economic conditions, just to name a few. In addition, in the latest edition of the survey, Istat added an indicator on individual's perception of "life as a whole" on an internationally comparable scale from 0 to 10 and a question about the degree of trust toward others.

Of course, the measurement of perceptions, opinions, and attitudes of people do not replace events or behaviors measured in objective terms, but it manages to capture information on issues and events of reality under investigation that could not be otherwise obtained. The inclusion of subjective questions in official surveys has not been a shift in focus from one level to another, but rather an extension of the usual procedures of statistical collection and production of social data, an enrichment of the spectrum of information that allows a better reading of the phenomena, putting citizens at the center of official statistics.

In this way, Istat is able to produce most of the information needed for a multidimensional measurement of well-being. Below is the description of such a wealth of information according to the eight areas of well-being identified by the Stiglitz Commission.

### 4.2.1 Material Living Standards

The measures of material well-being are fundamentally based on two surveys: the European Survey on Income and Living Conditions (EU-SILC) and the national survey on households' consumption. The European survey gathers different measures of individual and household income, as well as indicators of deprivation and social exclusion. It includes a number of aspects of particular importance for a multidimensional analysis of quality of life, such as participation in the labor market, health, education, characteristics of the house and the area of human habitation, expenditures on rent or mortgage, as well as the main economic problems of families in a perspective of deprivation. In the Italian case, the size of the sample is enlarged with respect (Eurostat 2010) to the European standards, so as to allow a regional disaggregation of data.

The national survey on households' consumption covers the different models of household spending and highlights the subjective assessment of families with respect to changes in their purchasing behavior. The results are also used for the calculation of relative and absolute poverty indicators. Thanks to this survey, Italy is one of the few countries in the world that produces a measure of absolute poverty. For both

measures on income and consumption, Istat produces median values, deciles, and Gini index, thus applying Stiglitz report's recommendations for an enhanced attention toward distributional issues.

### **4.2.2** Health

The Multipurpose Survey "Health conditions and use of health services" investigates aspects typically found in this area (acute and chronic diseases, some types of disabilities, conditions of disability, use of drugs) along with health-related quality-of-life indicators. These are tools used at international level that enable the identification of two synthetic indices of health status: the Physical Component Summary measure (PCS) and the Mental Component Summary measure (MCS). Using the data from this 5-year survey, it is possible to build one of the main indicators of quality of life – the life expectancy free of disability – while an annual survey permits to estimate the life expectancy in good health.

#### 4.2.3 Education

A number of different sources provide a composite picture of human capital in Italy. Apart from traditional statistics on formal education which are prepared by the Ministry of Education, Istat annually tracks the number of early school leavers and NEETs (Not in Employment, Education, or Training) through the Labour Force Survey and provides information on school attendance, tuition fee, and English and computer science classes through the Multipurpose Survey. Harmonized indicators on lifelong learning, one of the key issues of the Lisbon strategy, will be produced by 2011, thanks to a European survey.

The skill levels of a population are an important piece of information for measuring human capital that is currently not included in Istat's output, but should soon be covered by the OECD "Programme for the International Assessment of Adult Competencies," which joins the already existing International Adult Literacy Survey (IALS) and the OECD survey PISA (Programme for International Student Assessment) for 15-year-old students. Finally, the information framework on human capital will be complemented by an education satellite account on which Istat has already started to work.

#### 4.2.4 Personal Activities and Work

The Time use survey measures in detail the number of hours devoted to different types of activities during the day. This is a key source to analyze leisure, housework, care activities, and work allowing to assess the weight they have in citizens' life. Following the Stiglitz report, the survey may be strengthened by including the feelings felt at certain times of the day. Using additional tools, an in-depth analysis

could be performed to take into account the quality of working conditions. The Labour Force Survey measures nonstandard employment, underemployment, underutilization of human capital, and the gender gap. Moreover, the structural survey data on wages allows indicators to be developed on the sectoral and territorial pay differentials.

Labor indicators include also subjective measures such as a single question on job satisfaction (which is also asked to housewives), while surveys on "critical aspects of women's career paths" and "family and social subjects" collect data on satisfaction in relation to several job characteristics (content, salary, relationship with superiors, relationships with colleagues, etc.) and expectations of individuals on family and children, job opportunities, career progression, stabilization, and change of employment.

### 4.2.5 Political Voice and Governance

A fundamental element to exercise the right to self-determination is the presence of a flourishing and functioning democracy, universal suffrage, free press, a judicial system that guarantees the right to justice, and lively civil society organizations. The measurement of these dimensions is particularly difficult using the indicators traditionally produced by Istat. Today, data are available on the duration of civil and criminal trials, allowing the efficiency of the judicial system to be evaluated, or data on citizens' fear of being victim of criminal acts or of going out at night alone in the dark.

In terms of political participation, since 1993 Istat has produced indicators of invisible political participation (speaking and being informed about politics by frequency, channel information, reasons for not participating) and visible political participation (participation in demonstrations, rallies, or party meetings). The availability of these indicators may allow the construction of composite indicators of civic and political engagement. Nevertheless, it would be useful to have indicators on press freedom similar to those published by nongovernmental agencies.

### 4.2.6 Social Connections and Relationships

Interpersonal relationships influence quality of life in various ways. People with stronger social relationships show a higher life satisfaction, better health, a higher probability of finding a job. Istat produces quite an important set of information on this issue including indicators about friendship, kinship, the frequency with which people meet their relatives and friends, and informal support networks. Through the Multipurpose Survey, it is possible to estimate the fundamental characteristics of social networks of solidarity (caregivers and family helpers), the type of help offered, any sharing of it with others, the number of hours dedicated to it, all fundamental elements to help measure social capital. This is also characterized by the relations one has with his/her neighbors and by the perception that

people have of whom they can really rely on in case of need. Subjective indicators on the satisfaction of family and friends relationships have been collected every year since 1993.

### 4.2.7 Insecurity

Indicators on safety and violence have been developed in recent years by Istat. Next to security information from the objective point of view (crime suffered), subjective opinions are enquired in a specific survey that investigates such issues as the sense of insecurity at home or out in the street at night and the risk of crime and social decay in the area where the family lives. Another important survey from the standpoint of security and safety concerns women and has been specifically conducted to detect physical and sexual violence, inside and outside the family.

Economic security is then covered by objective and subjective information related to living and working conditions.

### 4.3 Environmental Statistics and Accounts

From the standpoint of environmental statistics, Italy has seen a remarkable growth in the availability of objective and subjective statistical information. The information set on environmental issues has increased continuously.

Indeed, environmental statistics have been covering more and more issues recently, thanks to the development of a survey on water and urban environment and the implementation of agri-environmental indicators. Alongside *pressure* indicators, which measure what is taken from the environment (withdrawal of natural resources, energy consumption from different sources, soil use or urban sprawl) and released into it (emissions, pollution, and waste production), and measures of *impact*, which describe the ultimate effects of environmental changes and human activities, Istat produces *response* indicators that describe and quantify the society's efforts to solve environmental problems (protected areas, water softening, or green agricultural practices of firms). These performance indicators are directly related to the implementation of policies or strategies that have the reduction of impacts on nature as their ultimate goal. Moreover, through surveys, Istat covers also the views that people have over environmental conditions.

Istat has also been involved in the collection of indicators for the analysis of sustainable development from the list of 140 indicators proposed by Eurostat.

In the last decade, a regular production on the side of environmental accounting has emerged in response to a request expressed at both national and international level. Istat already includes in its production a number of environmental accounts which will soon become compulsory at European level. Time series for economy-wide material flows are published regularly covering extraction of different materials and weights of imports and exports by product along with supply-use and input-output tables and time series since 1980 for the material flows indicators requested at international level: domestic material input (DMI), domestic material consumption

(DMC), total material requirement (TMR), total material consumption (TMC), physical trade balance (PTB).

National accounts include also aggregates of emissions associated with production activities (NAMEA) available also at regional level for 10 pollutants.

In relation to the economic effort borne by the country to protect the natural system, Istat records activities and financial transactions related to the environment, such as costs for environmental protection, environmental taxes, as well as the main economic aggregates for the field of eco-industries, for which Istat is carrying out a reconnaissance of available sources. The conceptual framework and methodology of initiatives to protect the environment are given by SERIEE (*Système Européen de Rassemblement de l'Information Economique sur l'Environnement*), which defines two separate satellite accounts: the satellite account of the costs of "environmental protection" (EPEA – Environmental Protection Expenditure Account) and the satellite account of the costs of the "use and management of natural resources" (RUMEA – Resource Use and Management Expenditure Account). These accounts can also be used to determine unit costs to be applied for the quantification of interventions needed against ecosystem degradation, an effort which started with the Italian contribution to CICES, the Common International Classification of *Ecosystem* Services.

Further elements of assessment of natural resources are provided by the accounts for monitoring fossil energy resources, in physical and monetary terms, and the economic accounts for forestry (EAF). A feasibility study has been done for the implementation of the European Framework for Integrated Environmental and Economic Accounting for Forests (IEEAF).

Istat is therefore aligned with the most advanced standards in terms of environmental monitoring.

### 5 The Launch of a National Consultation

The wealth of data described so far supports an interinstitutional initiative promoted by the National Council for Economics and Labor (CNEL) and Istat for the identification of a set of indicators of societal progress and well-being which was launched in December 2010. The initiative aims at carrying out a process which will involve all major representatives of Italian civil society in the definition of the dimensions of progress and their related indicators (see www.misuredelbenessere.it).

CNEL leadership of the process is a guarantee for its legitimacy: CNEL is in fact a council established by the Italian Constitution and composed by representatives of all major working categories, including representatives of entrepreneurs, unions, and of the third sector, for a total of more than 100 counselors representing different citizens groups. CNEL working groups and assembly will also serve as places for deliberation over controversial issues and trade-offs. The initiative sets up a steering committee jointly coordinated by CNEL and Istat including 20 participants from CNEL, nongovernmental organizations and public institutions and establishes of a scientific committee hosted by Istat and composed by experts in the subject. A public consultation has been organized for a broader citizens' inclusion.

The CNEL-ISTAT initiative adds Italy to the group of countries (France, Germany, the United Kingdom, Canada, the United States, Australia, Ireland, Luxembourg, Mexico, Switzerland, and the Netherlands) that decided to measure societal well-being by using a selected set of statistical indicators identified through the joint efforts of union/management representatives and civil society. As recommended by the OECD and by the Stiglitz Commission, this approach will give the country a shared perspective on the evolution of primary economic, social, and environmental dimensions. In particular, the initiative's objectives are to:

- Develop a shared definition of progress in Italian society, by defining the most relevant economic, social, and environmental dimensions.
- Select a set of high-quality statistical indicators that are representative of the different domains.
- Communicate the results of this process, informing citizens of indicator values in the most thorough possible way. The set of indicators defined is in fact intended for a broad public audience as well as for policy users.

The process will be divided into three phases fulfilling the objectives:

- 1. During the first phase, the steering committee defined the dimensions to be taken into account which are then discussed by CNEL thematic working groups and finally approved by CNEL assembly. In November 2011, the committee published a first proposal of 12 dimensions. These are environment, health, economic well-being, education and training, work and reconciliation of life times, social relationships, security, subjective well-being, landscape and cultural heritage, research and innovation, quality of services, and politics and institutions. Meanwhile, Italian citizens have been able to express their priorities on the dimensions of well-being that are most relevant for individuals and society both through an ad hoc open online consultation and by answering a specific question which has been included in the Multipurpose Survey since 2011.
- 2. The second phase is devoted to the analysis of the available indicators which could be used to represent the various dimensions, stressing their technical features, and the opportunity of using them. Istat will be responsible for this part of the work and will be supported by a scientific committee composed by internal and external experts in the use and building of indicators. On this basis, a first set of indicators will be identified in order to be utterly discussed by CNEL workgroups and approved by the assembly.
- 3. The last phase will be dedicated to the drafting of a final report and the development of different tools for dissemination/communication.

Politics will be formally excluded from the process. Nevertheless after each phase of the initiative, the Parliament will be informed about the major results emerging from the consultation process.

As discussed in the second section, one of the critical aspects of this kind of processes is how to guarantee a solid legitimacy to the final output. In order to produce a set of indicators which effectively represents people priorities for the progress of the nation, such a set has to be widely discussed and recognized as

valid by most national actors: it is a one-shot opportunity for the creation of a tool able to guide national policies. This will allow policy makers and public opinion to (hopefully) always refer to a shared national vision of progress, even if it may change over time.

The stakeholder discussion within CNEL will be sided by a public consultation which will be conducted in two parallel streams. The first one is an online consultation in which experts, practitioners, and anyone interested in the issue will be asked to define relevant dimensions to monitor progress and well-being in Italy. This tool is similar to the one proposed by ONS in the United Kingdom. The second consultation stream is the inclusion of a specific question in the Multipurpose Survey "Aspects of daily life," which is submitted annually to 24,000 families (54,000 individuals). In the 2011 edition of the Multipurpose Survey, Istat Tried to assess the importance citizens attribute to different dimensions of well-being. Citizens are asked to assign a score from 0 to 10 according to the increasing "importance for well-being and life" people give to the aspects presented in Box 2.1. Such a tool will allow not only to add a robust assessment of people's priorities to the debate which will take place in 2011–2012 but also to continuously monitor changes over time so to alert over the need to modify the set of indicators. The high scores of all the selected dimensions shows clearly the multidimensionality of wellbeing. Almost no differences emerge among age, gender, level of education and territory. Major variability is shown by the percentage of people assigning a score of ten to the different domains.

Aspects on which Italians will be asked to assess the importance Average		
for life and individual wellbeing (0-10) scor		of 10s
Being in good health	9,7	79,9
Guarantee the future of you children socially and economically	9,3	66,1
Have a decent work of which being satisfied	9,2	59,5
Have an adequate income	9,1	56,0
Good relationships with friends and relatives	9,1	53,2
Feeling safe with respect to criminality	9,0	53,6
Be happy in love	9,0	56,3
Live in a society in which you can trust others	8,9	48,8
Good education	8,9	48,3
Present and future environmental conditions	8,9	48,8
Good governance	8,8	46,6
Good quality accessible services	8,7	43,9
Good quality and adequate time for leisure	8,5	37,4
Be able to influence local and national policies	7,8	30,6
Participation to community life through political and associative structures	7,1	18,7

Finally, the steering committee of the initiative will be also in charge of solving two key issues: to define the most appropriate information, by deciding which degree of detail the set of indicators has to reach and to study the opportunity to develop a tool explicitly designed for policy-making and in that case to define the strategies for maximizing political commitment in following indications emerging from progress measurement.

### 6 Conclusions

Italian official statistics appear fully capable of meeting the demand coming from society and from international debate for the multidimensional measurement of well-being and societal progress. Most of the issues raised by the Stiglitz report, in fact, are already satisfied by the information system developed by Istat in terms of economic performance, objective, and subjective quality-of-life and environmental measures. Italy is therefore ready to face the challenge of building a shared measure of progress which may become a constant reference for citizens, media, and policy makers.

To this end, Istat and CNEL launched an 18-month initiative for the measurement of "equitable and sustainable well-being." The process aims at producing a set of indicators able to provide a shared vision of progress for Italy which will be legitimated by a consultation of experts, relevant stakeholders, and citizens through dedicated meetings and workgroups, an online consultation, and the inclusion of a question – in one of Istat major social surveys – that allows to identify people's priorities when dealing with individual and national well-being. The appointment is for the end of 2012, when the publication of the first joint Istat-CNEL report is scheduled.

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### Websites

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