Well-being indices: what about Italian scenario? Indici di benessere: lo scenario italiano

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Abstract This paper proposes a review of the Italian well-being scenario, introducing its peculiarities and defects. The aim is to provide a detailed image, also to policy-makers, describing the accuracy, timeliness and territorial coverage. All these characteristics are a challenge for a good planning, for a correct international comparison or to integrate well-being indices with new data, represented, as example, by big data.

Abstract Questo lavoro propone una rassegna delle misure del benessere in Italia, presentandone peculiarità e difetti. L'obiettivo è fornire un'immagine dettagliata, anche ai policy-makers, descrivendone l'accuratezza, la tempestività e la copertura territoriale. Tutte queste caratteristiche rappresentano una sfida per una buona pianificazione, per un corretto confronto internazionale o per l'integrazione con nuove fonti di dati, rappresentate, ad esempio, dai big data.

Key words: well-being indices, social indicators, quality of life, official statistics

1 Background

The importance of well-being has been widely acknowledged and its measurement is a matter that scholars have been tackling for a long time. Traditionally the most commonly employed indicator was the Gross Domestic Product (GDP) thanks to its ability to connect goods and services with different nature, to its linear methodology, to its objectivity and clearness, and the usefulness in international comparisons.

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Many issues have been raised about the adequacy of GDP as an indicator of well-being, concluding that the use of GDP as a proxy of well-being can lead to misleading conclusions [3]. On the one hand negative events such as natural disasters, earthquake or foods, or big car accidents, reduce wealth of society but can increase GDP: on the other hand it doesn't take into account distribution of income, so that a great disparity and poverty of capabilities wouldn't be noticed. To overcome the GDP issues, alternative approaches have been developed across the years and they are still nowadays a core topic. A recent theoretical framework about well-being is the capability approach proposed by [7]. Following this approach, in 2007, the European Commission, European Parliament, Club of Rome, Organization for Economic Co-operation and Development (OECD) and WWF, hosted the conference titled "Beyond GDP". In August 2009, the European Commission released its road map, the Communication "GDP and beyond: Measuring progress in a changing world", when the so-called Stiglitz Commission [8] suggested to build a complementary statistical system, focused on social well-being and suitable for measuring sustainability. Shortly, going beyond GDP implies to develop indicators that are as clear and appealing as GDP, but more inclusive of environmental and social aspects of progress [6]. The proposed measure accounts a wide set of indicators representing both objective and subjective assessment, and including also people's perception of quality of life. The commission suggests to take into consideration the following aggregated dimensions: Material living standards, Health, Education, Personal activities including work. Political voice and governance. Social connections, Environment and insecurity. Following this advise, have been developed a huge number of indicators [3], with different structures, considering a great variety of dimensions and for many purposes. International examples of those indices are: the Human Development Index, the Better Life Index, the Happy Planet Index, the Canadian Index of Well-being and the Gross National Happiness Index.

In the field of subjective well-being, new measure have been recently proposed using big data: [9] developed a system to predict the life satisfaction of Facebook users based on lexical and topical features, many studies used Twitter data for the same purpose ([4]). In Italy, [2] proposed the iHappy index, an indicator of happiness that, using information from million of tweets, measures the average level of idiosyncratic happiness in the 110 Italian provinces. [5] developed the Social Well-being Index (SWBI), a multidimensional well-being composite indicator relying always on Twitter data and derived from a new human supervised technique of sentiment analysis (see [1] for details). All these proposals try to overcome the lack in official statistics, they use this new kind of information represented by big data whether by integrating them with statistics or by themselves, in any case for this kind of proposals the methodological challenges are still many and open.

In this paper we review the traditional indices used to measure well-being in Italy, their purposes, limitations, and their progressive evolution. This simple description is the starting point to understand well-being measurement in our Country, how it is addressed, and what is the quality of this kind of data. In future steps of our research we will propose new approaches to maximize advantages and to cut down limitations of the treated indices.

2 The Italian case

The interest in Italy towards well-being is constantly increasing, also due to the fact that there are still a number of open questions related to its measurement. First of all, we need accurate indices to face the European and international comparison in the best possible way. But above all it is increasingly necessary to inform policymakers about the perceived effect of local policies. Then availability of sub-national data would be extremely useful, and due to the active well-being process that rapidly changes over time, high frequencies information would be even more welcome. For all these reasons the knowledge, and the characteristics of information sources about well-being in Italy is a straightforward and actual interest.

In the following subsections we describe: the Better Life Index (BLI), used for comparison in international context, the Fair Sustainable Well-Being Index (BES), elaborated by the Italian Institute of Statistics (ISTAT) as the Italian answer to the Stiglitz Commission proposal, and the "Il sole 24 ore" Quality of Life (QoL) index, that has a long history in the Italian society.

2.1 The Better Life Index - BLI

The BLI initiative, launched in 2011, is built around eleven topics that reflect what the OECD has identified as essential to well-being in terms of material living conditions (Housing, Income and wealth, Jobs and earnings) and quality of life (Social connections/community, Education and skills, Environmental quality, Civic engagement and governance, Health status, Life satisfaction, Personal security or safety, Work and life). Each dimension is built on one to four specific indicators that are averaged with equal weights, and have been chosen on the basis of a number of statistical criteria such as relevance and data quality and in consultation with OECD member countries. As the BLI gathers many indicators, expressed on different units, in order to compare and aggregate the values a normalisation, according to a standard formula, is performed. Moreover, thanks to its web platform, to visualise and compare the performances of the members, it is also possible to mix the set of dimensions, giving different weights, in order to elaborate an index coherently with one's preferences (see [6]).

Data mostly come from official sources such as the OECD or National Accounts, United Nations Statistics, National Statistics Offices. Instead, some indicators are based on data from the Gallup World Poll: a division of the Gallup Organization that regularly conducts public opinion polls in more than 140 countries around the world. Unfortunately, about time frequency, almost always information is delayed. With reference to the Italian 2017 index only the 21% refers to 2016, sometimes the measure is the 3-year average 2014-2016, and for all the other indicators there is a greater lag, that, for example, for "time devoted to leisure and personal care" arrives to 18 years. To aggravate the situation of this index, essentially born for comparisons between countries, the fact that these delays change with the country considered. At the moment, most of the indicators in the BLI are not available at a more disaggregated level for a great number of countries, but there is a regional edition (https://www.oecdregionalwellbeing.org). However, in this case, the situation worsens even more, it should be noted that in the June 2016 release, currently on line as the latest available, the most updated data for Italy dates back to 2014. Perhaps because of these source disparities between countries, in all the OECD publications, they talk about "first year available" and "last year available", without specifying, if not in the most specific material, the true reference for each country.

2.2 The Fair Sustainable Well-Being Index - BES

The BES (Benessere Equo Sostenibile) is setting up from a dashboard of twelve dimensions: Economic well-being; Education and training; Environment; Health; Landscape and culture heritage: Politics and institutions; Research and innovation; Security; Service quality; Social relationship; Subjective well-being; Work and life balance. Although it is clear conceptually and statistically similar to the Better Life Index, in the first two years the BES does differ it avoided any form of aggregation: in the periodical report, for each dimension, the entire set of proxies, with 130 indicators, is presented and discussed. For this reason, from 2013 to 2014, the only available aggregation form was provided by IRES Piemonte (the Regional Institute for Economic and Social Research of Piemonte). Since 2015, ISTAT provided by its self a general and domain specific composite indicators for Italian regions, nevertheless, for the composite indicator of the single dimensions often not all the indicators are accounted. Concerning time frequency, also in this case quite always the information is delayed. Only for instance, for Health in 2015 no one indicators refers to 2015, the 36% refers to 2014, and the 64% is more delayed. In addition to the regional edition, there are, for some years and some Italian provinces or chief towns, some pilot versions of the BES in which the indices considered are not the same and the subjective component is not provided for.

2.3 The "Il Sole 24 Ore" Quality of Life Index - QoL

Since 1990, the Italian business newspaper "Il Sole 24 Ore" publishes a well-being index of the Quality of Life (QoL) for all the Italian provinces. This composite indicator is strictly objective and it is defined along six categories, namely: Income, savings and consumption; Environment, services and welfare; Business, work and innovation; Justice, security and crime; Demographics, family and integration; Culture, leisure and participation. Since 2016, the considered indicators for every topic pass from six to seven, achieving a total number of 42 indicators. Note that, as the QoL index cover only material quality of life, it becomes for media a benchmark indicator for Italian well-being. Despite efforts to improve the quality, the index, in

addition to having a low frequency with only an annual data, often shows delayed information. This is a serious flaw when decision makers want to base their choices on such information. Moreover, the indicators associated to the different dimensions change over the time, and in some cases the same indicator correspond to different dimension year by year. For example, the "broadband coverage", traditionally in Environment, services and welfare topic, from 2013 to 2014 pass to Culture, leisure and participation. Furthermore, also when the indicator is the same, sometimes is detected with different measures. For instance, the information about "shows" in Culture, leisure and participation some years has been detected as number of shows, number of cinemas, or number of cinema seats per inhabitants. For this reasons with time series we are obliged to use the score and not the real value of the variables.

3 Negative and positive aspects of Italian well-being indices

This review shows that well-being information actually provided for Italy has been improved according to the suggestions of scientific international community. In Table 1 a synthesis of their principal traits. Especially, BES takes into account both subjective and objective dimensions, and with its great number of indicators, it performs a good multifaced source of information. Nevertheless, despite all efforts made to improve the measures of well-being, all the indices still presents several gaps. First of all, concerning time frequency, in addition to be designed as low frequency data the info is often delayed. Moreover, some indicators associated to the different dimensions change over time or the same indices correspond to different dimension year by year, or they are detected with different measures. Finally many indicators are not available at a more disaggregated level: they do not allow comparisons of disparities within a country or between social groups.

4 Conclusion

All the indices flaws, summarised above, are serious issues when decision makers want to base their choices on them, or when you need to make national or international ranking. To overcome this matter and to improve the quality of well-being data, the efforts could be address to a better data planning or to the integration of official statistics with more frequent and light surveys with new kind of information like social networks or big data. Before doing this, we can't forget to solve the linked methodological issues, and official statistics must however be more accurate, more frequent and considered local level too, without forgetting the subjective dimension.

| Index | Starting year | Frequency | Dimensions | Indicato number | Subjective | Level |
|-------|------------------|--|--|--|---|---|
| BLI | 2013 | Annual | Housing Income and wealth Jobs and earnings Social connections/community Education and skills Environmental quality Civic engagement and governance Health status Life satisfaction Personal security/safety Work and life | 3 2 4 1 3 2 2 4 2 2 2 1 2 2 | Subjective dimension "life satisfaction" with only 1 indicator | National Regional level with delays and disparities |
| BES | 2013 | Annual The 19% of the indicators are surveyed with more delay | Work and life balance Economic well-being Education and training Environment Health Landscape and cultural heritage Politics and institutions Service quality Research and innovation Security Social relationships Subjective well-being | 14 10 11 15 14 12 12 130 11 7 11 9 4 | The subjective dimension, with its 4 indicators is available at regional and not for provincial level | Regional There is a local pilot experience only for few self- selected provinces from 2013 to 2015 |
| QoL | 1990 | Annual | Income, savings and consumption Environment, services and welfare Business, work and innovation Justice, security and crime Demographics, family and integration Culture, leisure and participation | 7 7 7 42 7 7 7 | Unconsidered | For the 110 Italian provinces |

Table 1 Synthesis of the principal traits for the three considered indices

References

- Ceron, A., Curini, L., Iacus, S.M.: iSA: A fast, scalable and accurate algorithm for sentiment analysis of social media content. Information Sciences, 367-368, 105–124 (2016)
- Curini, L., Iacus, S.M., Canova, L.: Measuring Idiosyncratic Happiness Through the Analysis of Twitter: An Application to the Italian Case. Social Indicators Research, 2, 525–542 (2015)
- 3. Fleurbaey, M.: Beyond GDP: The Quest for a Measure of Social Welfare. Journal of Economic Literature **47**, 1029–75 (2009)
- Dodds, P.S., Harris, K.D., Kloumann, I.M., Bliss, C.A., Danforth, C.M.: Temporal Patterns of Happiness and Information in a Global Social Network: Hedonometrics and Twitter. PLoS ONE, 6, 1–26 (2011)
- Iacus, S.M., Porro, G., Salini, S., Siletti, E.: Social networks data and subjective well-being: an innovative measurement for Italian provinces. Italian Journal of Regional Science, in press.
- 6. OECD: How's Life? 2013. Measuring Well-being, OECD Publishing (2013)
- Sen, A.: Development as Capability Expansion. Readings in Human Development, Oxford University Press (2003)
- Stiglitz, J., Sen, A., Fitoussi, J.P.: Report by the Commission on the Measurement of Economic Performance and Social Progress, INSEE (2009)
- Schwartz, H.A., Sap, M., Kern, M.L., Eichstaedt, J.C., Kapelner, A., Agrawal, M.,... Ungar, L.H.: Predicting Individual Well-Being Through the Language of Social Media. Pacific Symposium on Biocomputing, 21, 516-527 (2016).