

Equitable and sustainable wellbeing in Italy

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Seminar on the Role of National Statistical Offices in the production of Leading,
Composite and Sentiment Indicators

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for Italy

1. Brief history

In 2010 Istat launched a joint initiative with the National Council for Economics and Labour (CNEL) for the measurement of Equitable and Sustainable well-being in Italy

B **E** **S**
E Q O
N U S
E O T
S E N
S I N
E R B
E I L
E E

Benessere (WELL-BEING): multidimensional analysis of relevant aspects of quality of life.

Equo (EQUITABLE): focus on distributional aspects of the determinants of well-being.

Sostenibile (SUSTAINABLE): sustainability for future generations.



4 novembre 2011

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Anno 2011

L'IMPORTANZA DELLE DIMENSIONI DEL BENESSERE PER I CITTADINI

An initial consultation stream was represented by the inclusion of a specific question in the 2011 Multipurpose Survey, 'Aspects of daily life', which is submitted to 24,000 families (**54,000 individuals**).

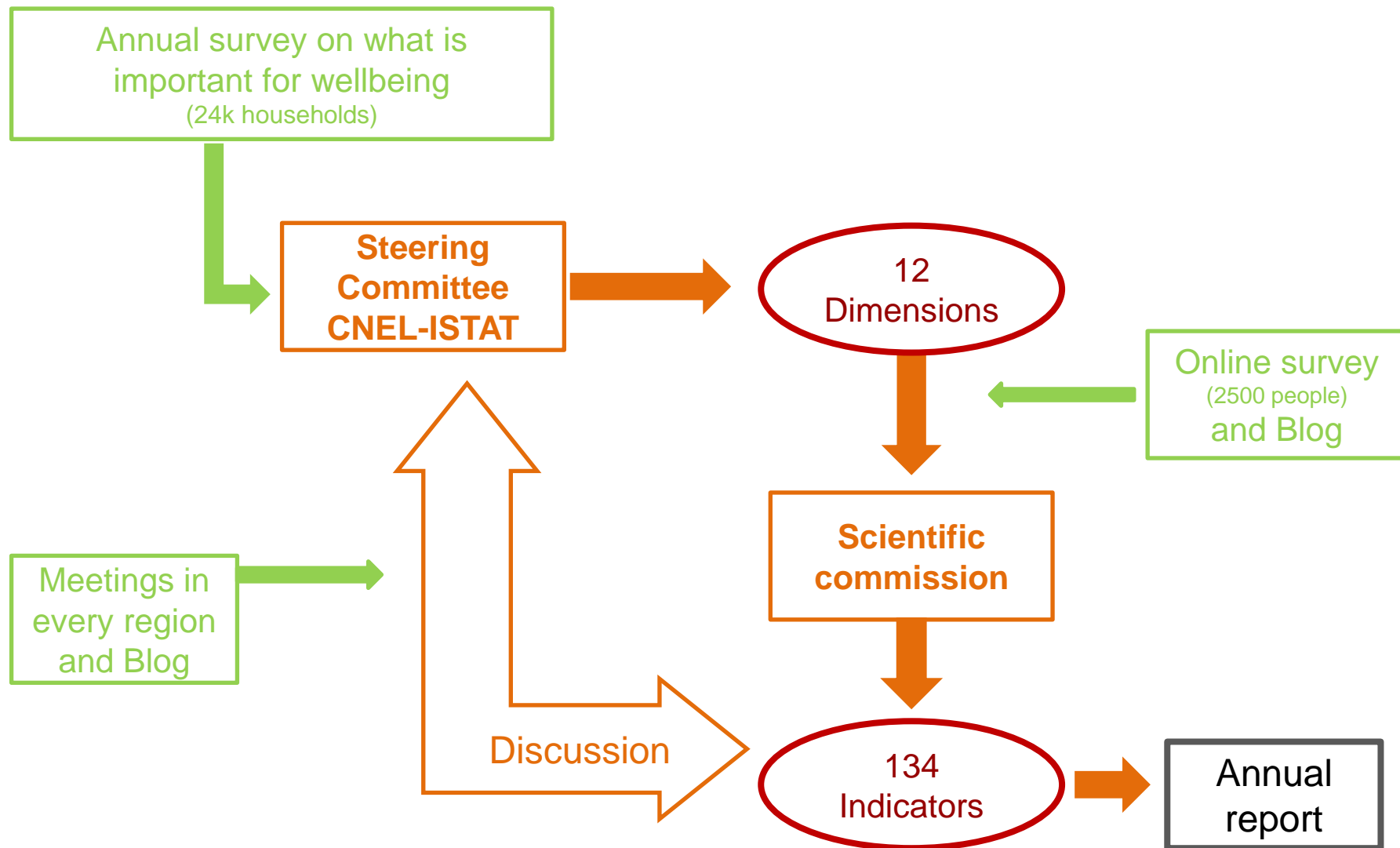
They were asked to assign a score from 0 to 10 to 15 different areas of well-being.

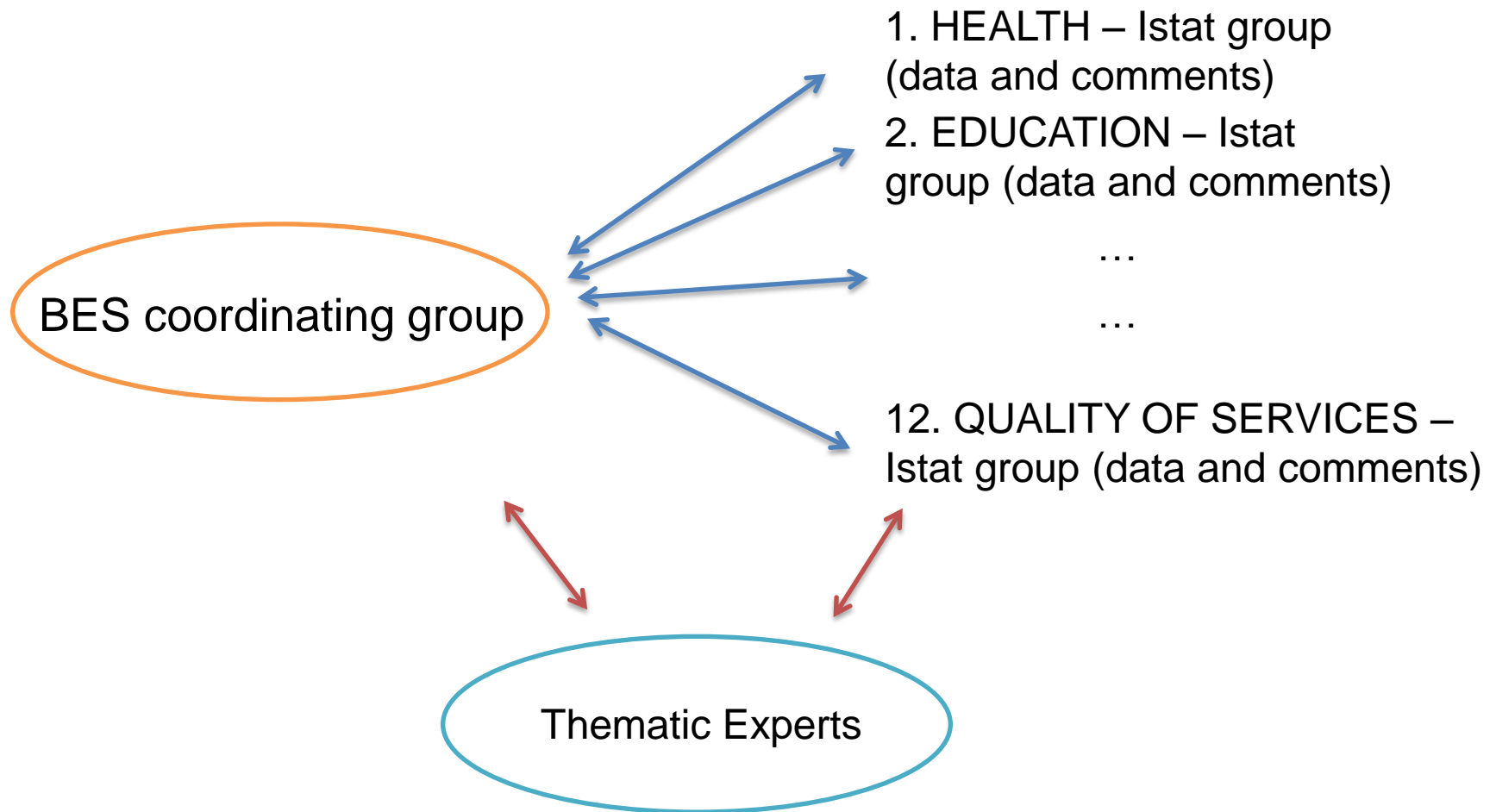
What is important for your well-being?

Score from 0 to 10 given to wellbeing dimensions – Year 2011	Mean	% of 10
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
Be happy in love	9,0	53,6
Feeling safe with respect to criminality	9,0	56,3
Good education	8,9	48,8
Present and future environmental conditions	8,9	48,3
Live in a society in which you can trust others	8,9	48,8
Good governance	8,8	46,6
Services accessible and of good quality	8,7	43,9
Adequate free time and of good quality	8,5	37,4
Be able to influence local and national policies	7,8	30,6
Participation to community life	7,1	18,7

Citizens responded by emphasizing the importance of all well-being dimension. The opinions of citizens on these aspects of their daily lives are homogeneous by sex and age group.

BES: a complex approach on measuring well-being





Key domains for BES

The individual sphere

1

HEALTH

2

EDUCATION AND TRAINING

3

WORK AND LIFE BALANCE

4

ECONOMIC WELL-BEING

5

SOCIAL RELATIONSHIPS

6

POLITICS AND INSTITUTIONS

7

SECURITY

8

SUBJECTIVE WELL-BEING

The context

9

LANDSCAPE
AND CULTURAL HERITAGE

11

RESEARCH AND INNOVATION

10

ENVIRONMENT

12

QUALITY OF SERVICES

Innovative aspects of the BES Framework

The 12 domains of the BES are **similar** to the domains used by other frameworks, anyway there are some difference.



BES

- 1 Health
- 2 Education and training
- 3 Work and life balance
- 4 Economic wellbeing
- 5 Social relationships
- 6 Policy and institutions
- 7 Security
- 8 Subjective wellbeing
- 9 Landscape and cultural heritage
- 10 Environment
- 11 Research and innovation
- 12 Quality of services

Quality of life

- 1 Overall experience of life
- 2 Material living condition
- 3 Productive or main activity
- 4 Education
- 5 Health
- 6 Leisure and social interactions
- 7 Economic and physical safety
- 8 Governance and basic rights
- 9 Natural and living environment

Better life Index

- 1 Housing
- 2 Income
- 3 Jobs
- 4 Community
- 5 Education
- 6 Environment
- 7 Civic Engagement
- 8 Health
- 9 Life Satisfaction
- 10 Safety
- 11 Work-Life Balance

The **differences**.

The Bes has a specific domain on social interaction while leisure time is considered only from the point of view of level of subjective satisfaction.

In terms of security Bes focus particularly on security from crime while other aspect of security are taken into account in other domains (for example job security in the work domain; economic security in economic well-being).

We have some domains such as Landscape and cultural heritage and Quality of services which are expression of specific requests from civil society.

BES Report: the evolution

Since 2013, 4 reports have been published. Each has been characterized by innovations.



2. Main characteristics of the Annual report of 2016

As it is not easy to read at the same time the yearly development of 130 indicators, since 2014, Istat started to build on composite indicators.



Composite indexes



New introduction focusing on the results of the last year by means of composite indicators

The evolution: composite indexes for Bes

No single composite indicator is built for the BES but we built at least one for each domain or subdomain.

The 12 domains are divided into 2 typologies, 9 of them are defined as outcome domains, and the remaining 3 as drivers of well-being. The domains are:

- Outcome: health; education and training; work and life balance; economic well-being; social relationship; security; landscape and cultural heritage; environment; subjective well-being;
- Driver: politics and institutions; research and innovation; quality of services.

Composite indicators were only calculated for outcome domains.

An important step was the definition of the method to be used to build composite indexes for Bes domains.

The constraints that have guided the work of implementation of composite indexes for the BES domains are mainly six:

- a) Possibility to compare across regions
- b) Possibility to compare over time
- c) No compensation between sub dimensions
- d) Simplicity and transparency of calculation;
- e) Easy interpretation of results;
- f) Robustness.

Un metodo di sintesi che risponda a alcuni vincoli

Various methods have been tested and Istat has adopted a composite index called AMPI (Mazziotta Pareto-Index) answers all 6 criteria.

Metodi sperimentati	Requisiti					
	a	b	c	d	e	f
1. Media indici 0-1	✓	✓	✗	✓	✗	✓
2. Media z-scores	✓	✗	✗	✓	✗	✓
3. Mazziotta-Pareto Index	✓	✗	✓	✓	✓	✓
4. Indice di Jevons	✓	✓	✓	✓	✗	✗
5. Media geometrica indici relativi	✓	✓	✓	✓	✓	✗
6. Adjusted Mazziotta-Pareto Index (AMPI)	✓	✓	✓	✓	✓	✓

MPI consists of an arithmetic mean adjusted by a function of variability that penalizes the geographical areas with a unbalanced distribution of the indicators. The underlying principle is that, in order to obtain a high value of the index, all the individual indicators must assume high values, assuming that the variables themselves have equal importance.

Composite indexes: definition of the set of indicators

Another important step was the definition of the sub set of indicators to be included in the composite measure for each domain.

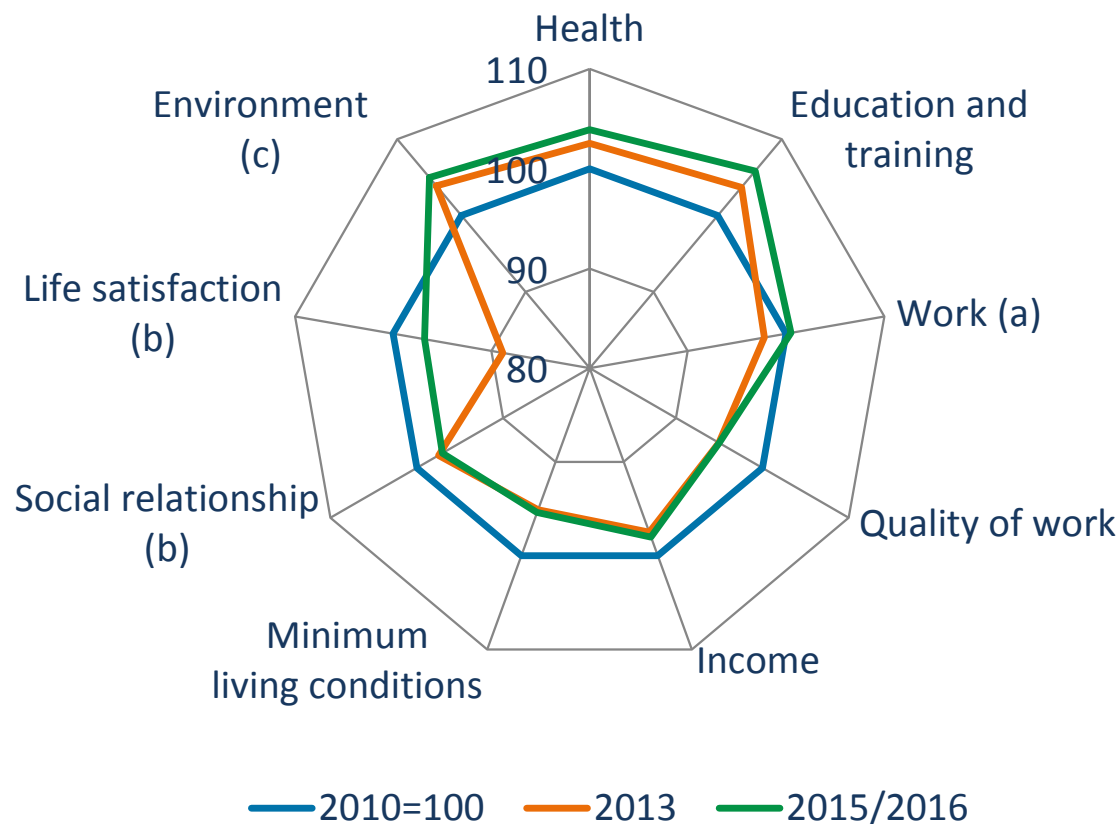
For each outcome domain a set of representative indicators has been identified in a way to give an image of the main attributes of the domain.

The constraints that have guided the work are:

1. Include only indicators which are equally relevant to the domain
2. exclude double counting: only one indicator for each sub-dimension, example employment rate and non-participation rate are both useful to describe the picture of the evolution of well-being in the work domain but only the first one was used for the composite indicator.
3. Exclude indicators for which there is no time trend or regional detail.

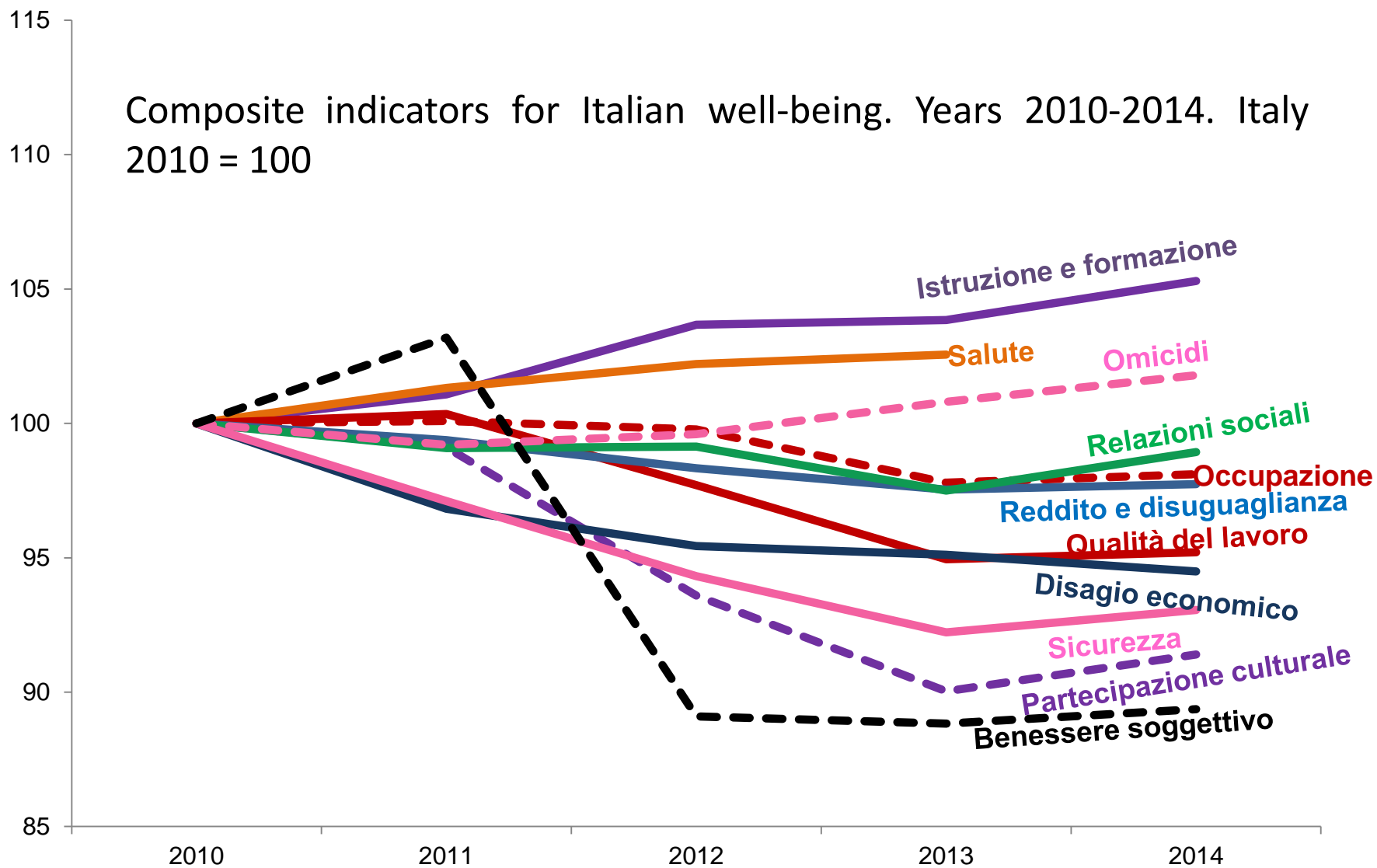
Composite indexes: the results

Composite indicators for Italian well-being. Years 2010, 2013, 2015-2016. Italy 2010 = 100



Composite indexes: the results

Composite indicators for Italian well-being. Years 2010-2014. Italy
2010 = 100



3. Territorial level and big data



PROVINCES' BES PROJECT

BES MEASURES at Provinces' Level

47 indicators

28 indicators identically calculated to the National Bes

19 proxy indicators: same aspects of the National Bes using different data sources

OTHER GENERAL INDICATORS

35 indicators

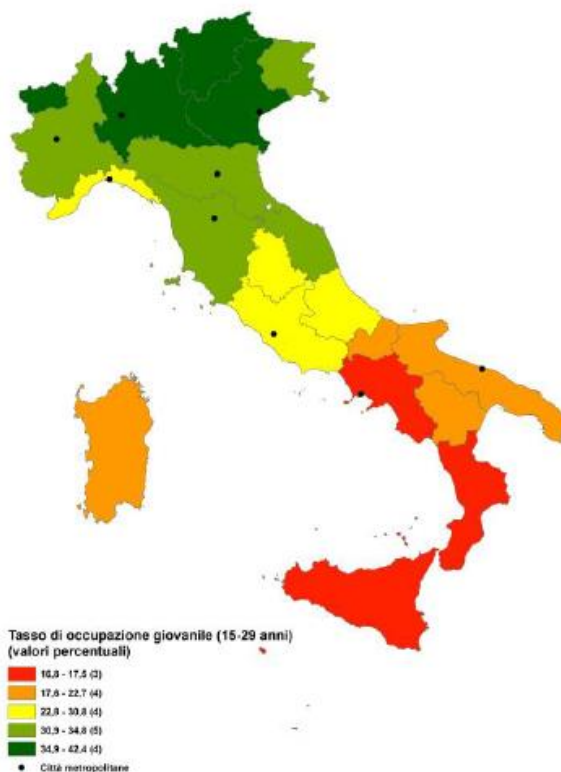
Measures of aspects of the territorial BES with reference to specific Provinces competences

Equitable Measures

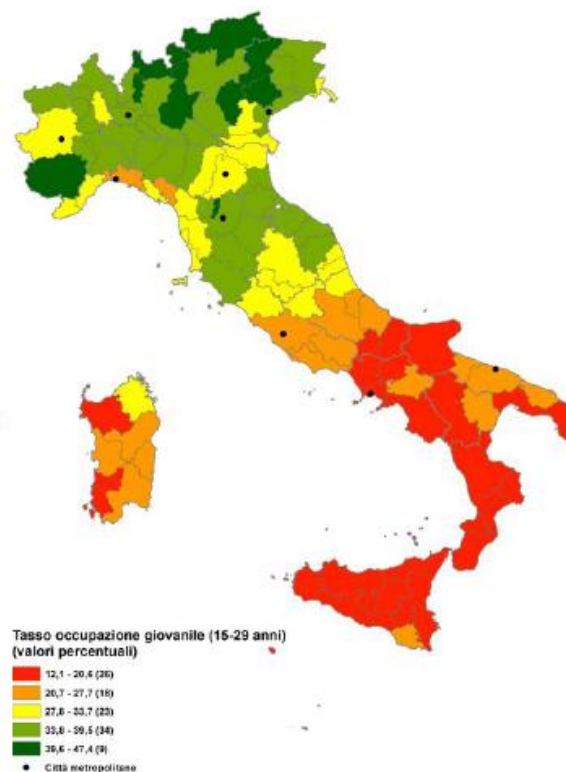


Youth employment rate 15-29 years (% values)

Regional values



Provincial values





CITIES' BES PROJECT

2015 UrBes

Report

The Cities' Bes Project tend to integrate measures at sub-national level

- Provinces
 - Metropolitan area
 - Capital city
 - **Municipalities**
-
- to evaluate local government action
 - working together Istat and Sistan Statistical Offices



Switch from survey to big data (administrative sources)

Target:

Enhance the information provided by ISTAT with reference to micro-territorial dimension at the sub-provincial level :

- ✓ municipalities
- ✓ aggregations of municipalities

Characteristic elements:

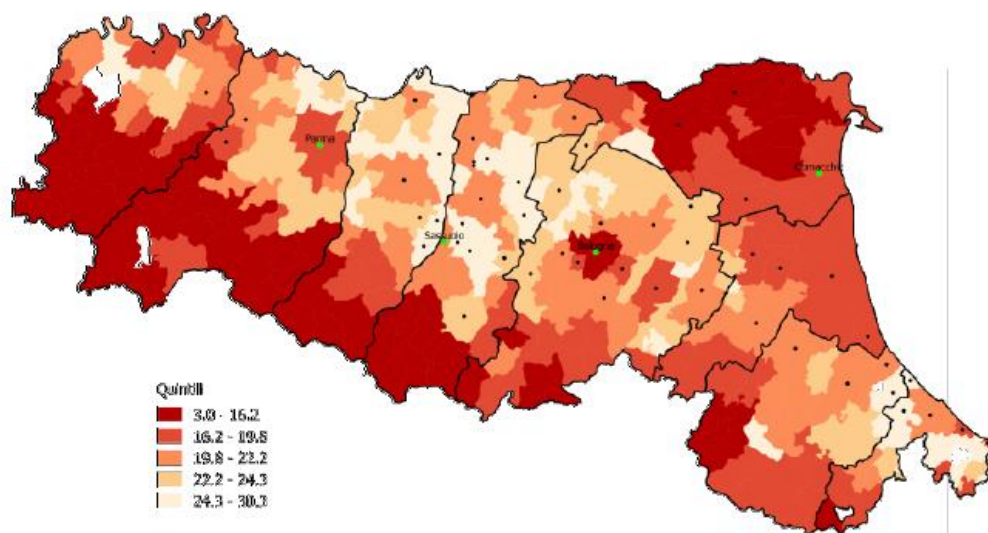
- Evolution of previous experiences
- Interaction between ISTAT structures
- Valuation of the SISTAN information asset
- Comparison of Municipalities

WELL-BEING MEASURES PROGRAM AT

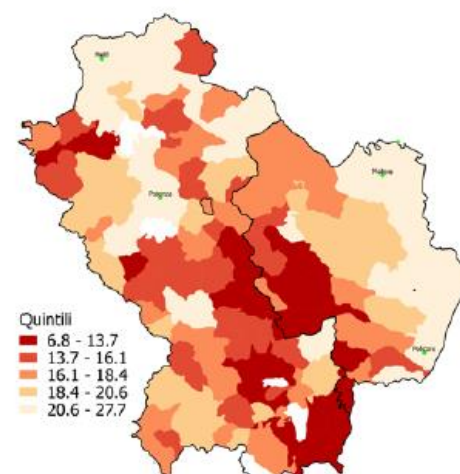
Comparing Municipalities into two Regions

Family members with components 0-14 years (% values)

EMILIA ROMAGNA



BASILICATA

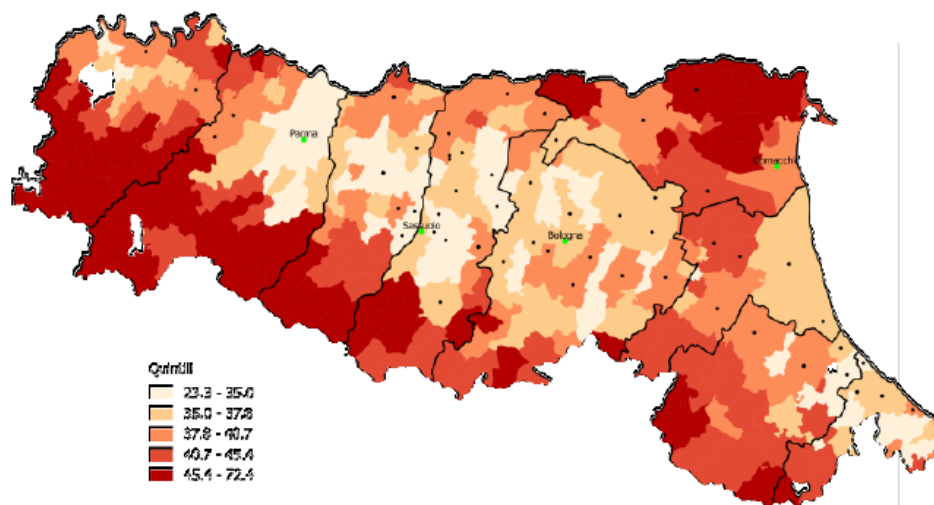


WELL-BEING MEASURES PROGRAM AT

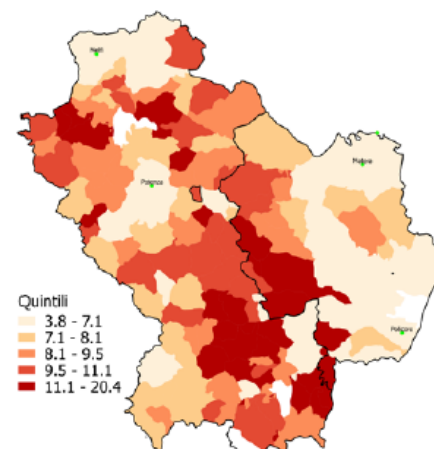
Comparing Municipalities into two Regions

Family members with components 85 years and older (% values)

EMILIA ROMAGNA



BASILICATA

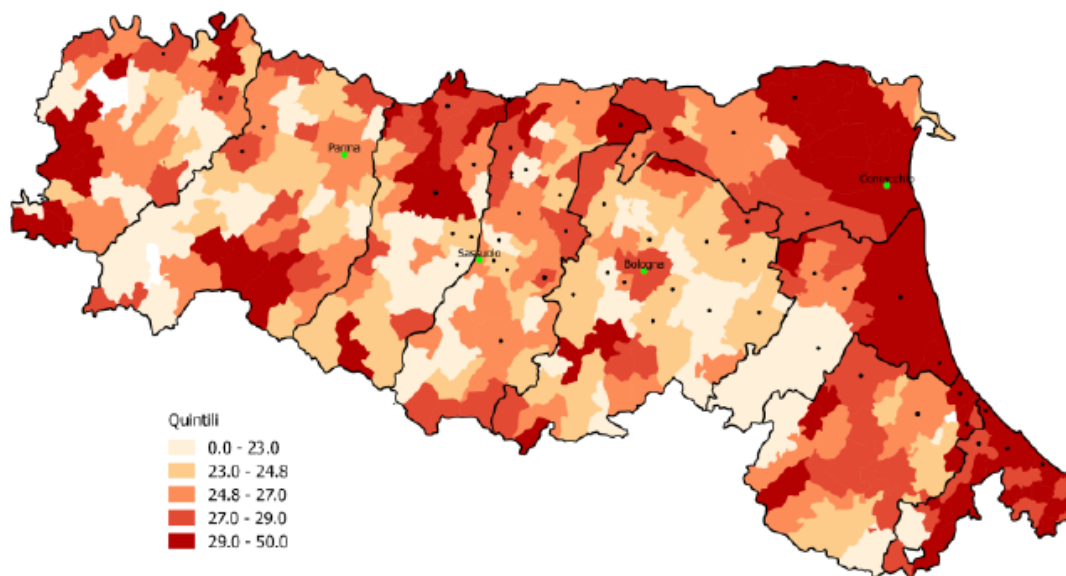


WELL-BEING MEASURES PROGRAM AT

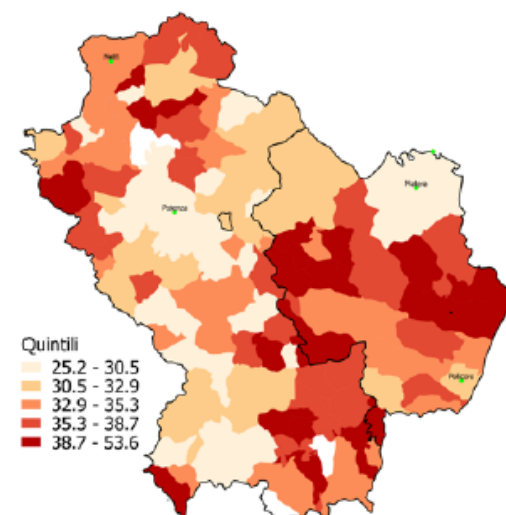
Comparing Municipalities into two Regions

Young people aged 15 to 29 who do not have regular employment in October and do not follow a study course

EMILIA ROMAGNA



BASILICATA

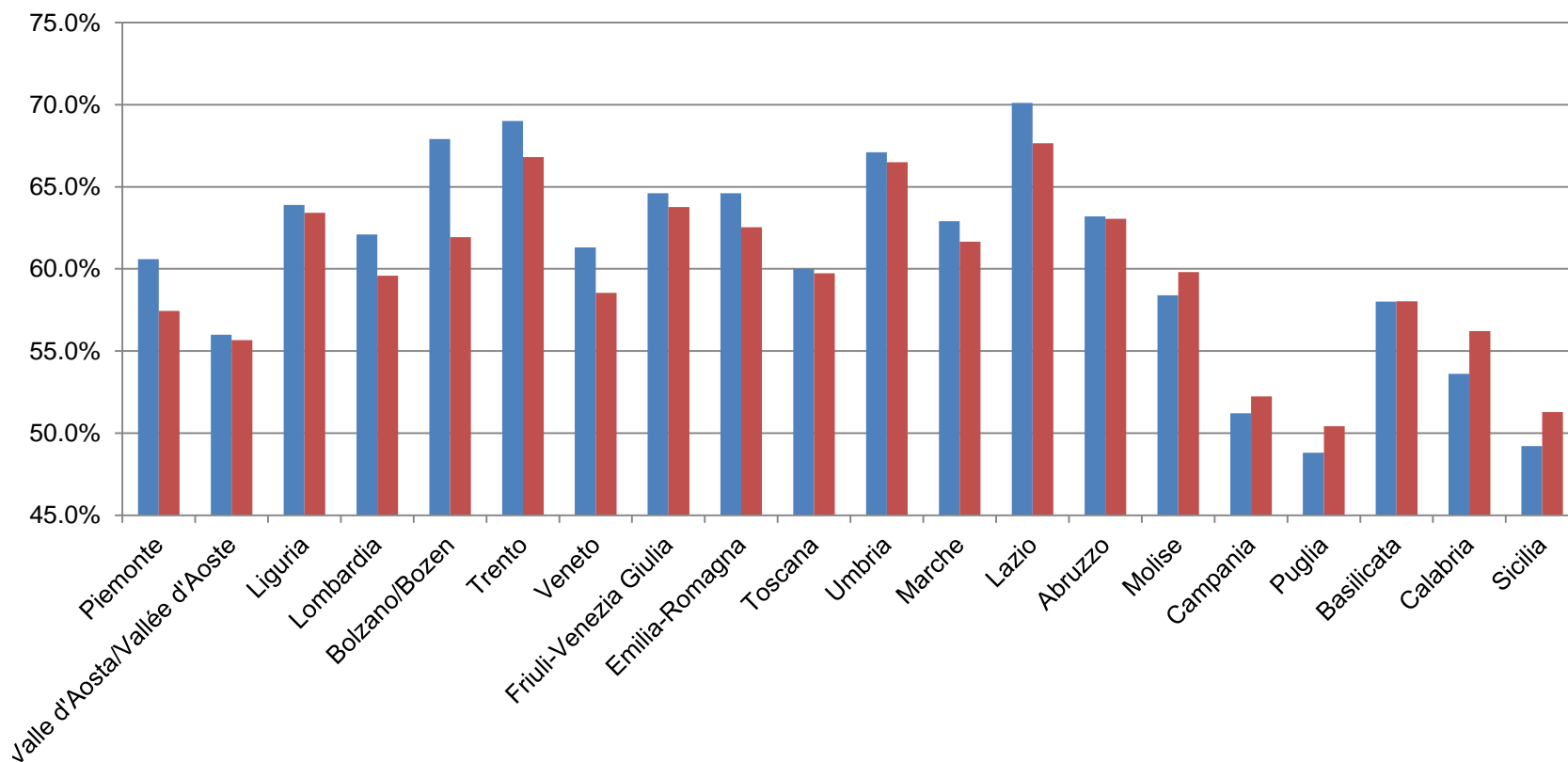


WELL-BEING MEASURES AT LOCAL LEVEL

Methodological and interpretative problems

25-64 year olds with at least the highest degree, year 2014

■ BES (FL) ■ Archimede



4. Well-being and SDGs



SDGs

The **17 Sustainable Development Goals** included in the 2030 Agenda represent the global action plan of the United Nations to eradicate poverty, protect the planet and ensure prosperity for all.

“The new agenda is a promise by leaders to all people everywhere. It is an agenda for people, to end poverty in all its forms – an agenda for the planet, our common home,” (Ban Ki-moon)

The Goals and targets are the result of over two years of intensive **public consultation and engagement with civil society** and other stakeholders around the world, which paid particular attention to the voices of the poorest and most vulnerable.



What are the common points?
What are the differences?



12 Domains of well-being

17 Goals

169 Target

134 indicators

244 Indicators

40 BES Indicators





3 indicators of BES “Health” domain are in Goal 3:
Good Health and Well-Being

2

EDUCATION AND TRAINING

3

2

4 QUALITY
EDUCATION



8 DECENT WORK AND
ECONOMIC GROWTH



3 indicators of BES “Education and Training” domain are in Goal 4: Quality Education

2 indicators of BES “Education and Training” domain are in Goal 8: Decent Work and Economic Growth

3

WORK AND LIFE BALANCE

2



8 DECENT WORK AND
ECONOMIC GROWTH



2 indicators of BES “Work and Life Balance” domain are in Goal 8:
Decent Work and Economic Growth

4

ECONOMIC WELL-BEING

3

1 NO
POVERTY



1

10 REDUCED
INEQUALITIES



1

11 SUSTAINABLE CITIES
AND COMMUNITIES



3 indicators of BES “Economic Well Being” domain are in Goal 1: No Poverty

1 indicator of BES “Economic Well Being” domain is in Goal 10: Reduced Inequalities

1 indicator of BES “Economic Well Being” domain is in Goal 11: Sustainable Cities and Communities



3 indicators of BES “Health” domain are in Goal 3:
Good Health and Well-Being

2

EDUCATION AND TRAINING

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EDUCATION



8 DECENT WORK AND
ECONOMIC GROWTH



3 indicators of BES “Education and Training” domain are in Goal 4: Quality Education

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WORK AND LIFE BALANCE

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domain is in Goal 10: Reduced Inequalities

1 indicator of BES “Economic Well Being”
domain is in Goal 11: Sustainable Cities
and Communities

1

HEALTH

2

EDUCATION AND TRAINING

3

WORK AND LIFE BALANCE

4

ECONOMIC WELL-BEING

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QUALITY OF SERVICES

0 indicators to SDGs

5

SOCIAL RELATIONSHIPS

8

SUBJECTIVE WELL-BEING

40 indicators to SDGs



40 indicators from BES

0 indicators from BES



5. Well-being and policy evaluation: the new challenge for Italy

The new Italian Budget Law (August 2016) establishes that public policies are regularly monitored and evaluated also through the effects on well-being indicators

- A high level committee is set up to propose a selection of BES indicators. It includes the Minister of Economy and Finance, Istat, Bank of Italy and 2 experts from University
- The proposal is then approved by the Parliament and becomes effective

Key selection criteria

1. Number of indicators

A high number of indicators allows to grasp the complexity of the different domains, but **few indicators facilitate the transition from a public debate focused almost exclusively on GDP to a more articulate framework.**

2. **Sensitivity to policy.** Selected indicators should be sensitive to public policy

3. **Extension, frequency of time series and timeliness.** Long time series improve the possibility to use the indicator for forecasting purposes; timeliness is needed to monitor policies' effects.

4. **International comparability**

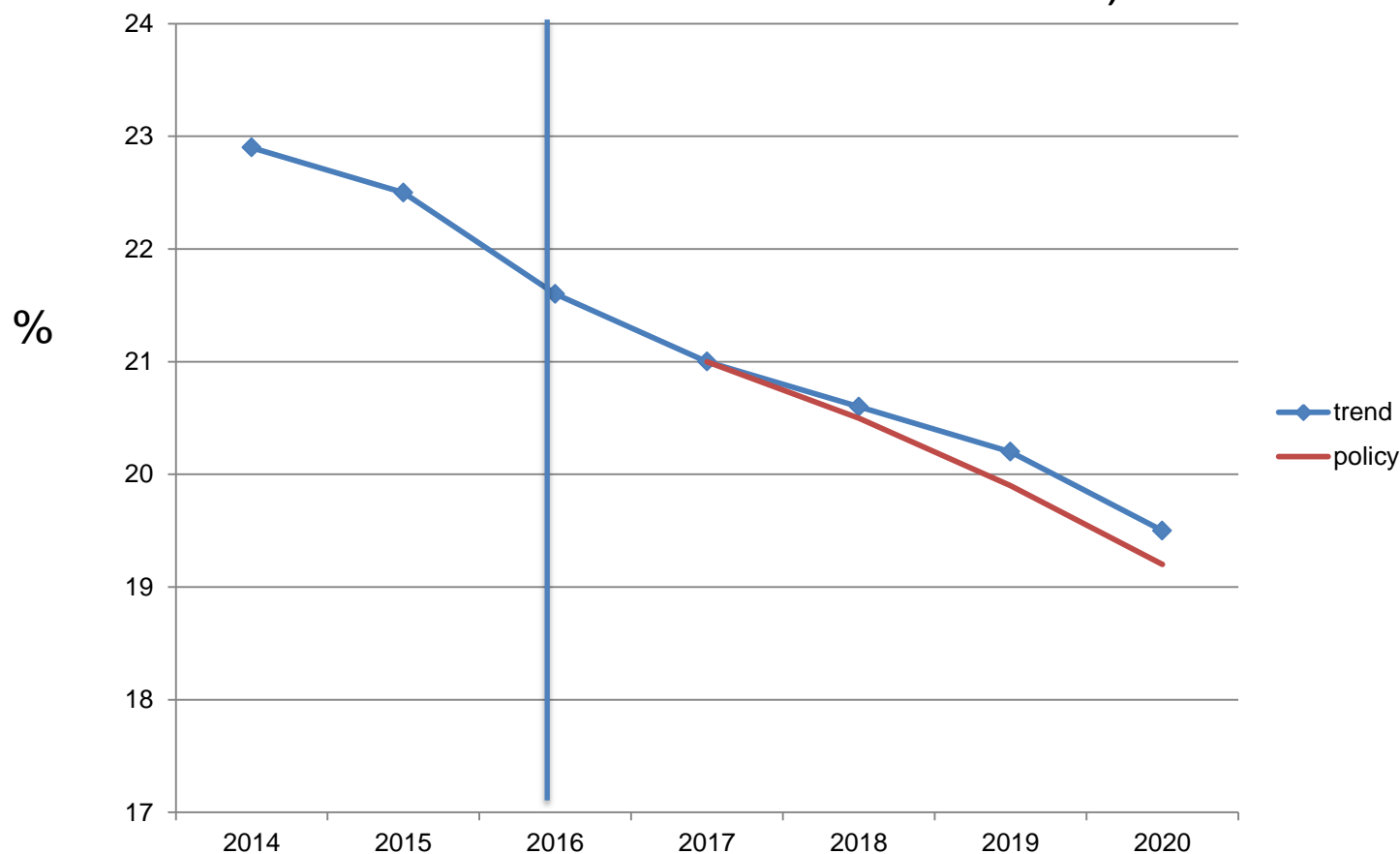
Indicators that are used also in international frameworks, e.g. EU 2020 and SDGs, facilitates international comparison and benchmarking. On the other hand, Italy has its own peculiarities that may require selection of specific indicators.

Bes indicators in Budget law (Def)

- April 2017: First exercise for Bes in DEF
- The preliminary selection includes only 4 indicators:
 - Mean adjusted income (per capita)
 - Non-participation in employment (rate)
 - Income inequality index (quintile ratio)
 - CO2 and other greenhouse gas emissions (tons x inhab.)

Non-participation in employment

(ratio between unemployed + non-active available to work and labour force + non-active available to work)



Source: Istat (2014 - 2016); MEF (2017-2020)

MAKSWELL

MAKING Sustainable development and WELL-being frameworks work for policy analysis

The MAKSWELL project proposes to extend and harmonizing the indicators able to capture the main characteristics of the beyond-GDP approach proposing a new framework that includes them in the evaluation of the public policies. Presented to call HORIZON 2020. First positive feedback in the evaluation process

Istat (coordinator), Univ. of Trier, Pisa, Southampton, CBS, Destatis, HCSO

Why do we produce statistics on the joint distribution of income, consumption and wealth?

experimental

Disparities in income and wealth are increasingly scrutinized, not only by the academic world but also by the public. The joint distribution of income, consumption and wealth data provides links between the three economic dimensions. These data help to describe more thoroughly material well-being and households' economic vulnerability. They also help to explain the dynamics of wealth inequalities. Further details on the results and the derived indicators can be found [here](#).

DATABASE

- Income, consumption and wealth – experimental statistics (icw) **Experimental** **New**
 - Saving rates (icw_sr) **New**
 - ZIP Median saving rate by age of the reference person - experimental statistics (icw_sr_01) **Experimental** **New**
 - ZIP Median saving rate by household type - experimental statistics (icw_sr_02) **Experimental** **New**
 - ZIP Median saving rate by income quintile - experimental statistics (icw_sr_03) **Experimental** **New**
 - ZIP Median saving rate by educational attainment level of the reference person - experimental statistics (icw_sr_04) **Experimental** **New**
 - ZIP Gini coefficient on household population - experimental statistics (icw_sr_05) **Experimental** **New**
 - ZIP Median consumption by income decile - experimental statistics (icw_sr_06) **Experimental** **New**
 - ZIP Proportion of consumption decile by income decile - experimental statistics (icw_sr_07) **Experimental** **New**
 - ZIP Aggregate propensity to consume by age of the reference person - experimental statistics (icw_sr_08) **Experimental** **New**