Beyond GDP: multidimensional indicators systems for sustainable development and quality of life

Maria Pia Sorvillo
Istat

Pisa, 6.12.2019

1. **Beyond GDP: Sustainable development and the 2030 Agenda**

2. Measuring quality of life and well-being

3. Well-being indicators & economic planning

Not only GDP

"The welfare of a nation can scarcely be inferred from a measure of national income"
Simon Kuznets, 1934

"Our Gross National Product, now, is over $800 billion dollars a year, but that Gross National Product…counts air pollution and cigarette advertising, and ambulances to clear our highways of carnage. It counts special locks for our doors and the jails for the people who break them … it measures everything in short, except that which makes life worthwhile"
Robert Kennedy, 1968

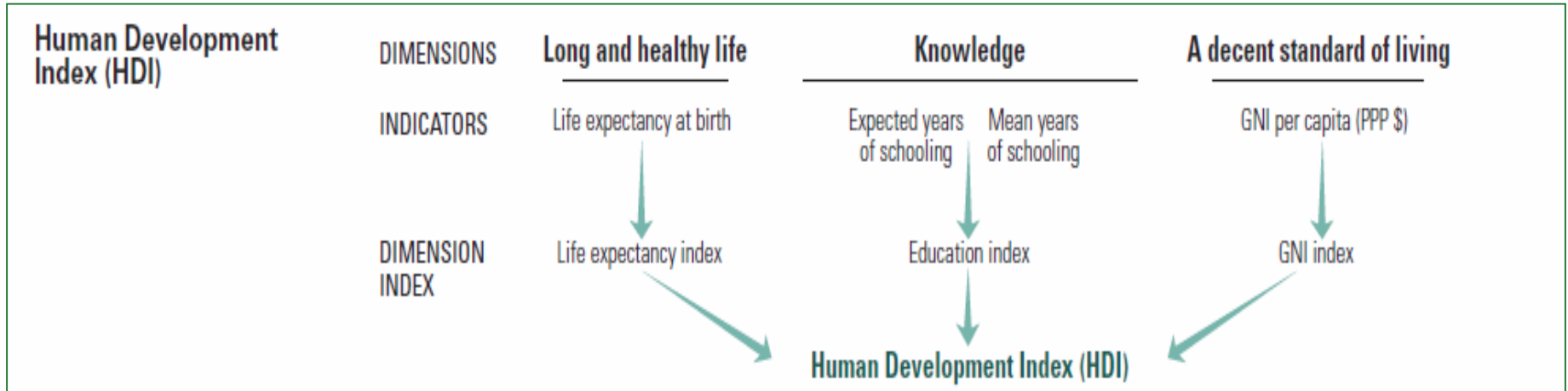*"The real wealth of a nation is its people."* **UNDP, 1990 (Mahbub ul Haq)**

"It has long been clear that GDP is an inadequate metric to gauge well-being over time …."
Joseph Stiglitz, Amartya Sen, Jean-Paul Fitoussi, 2009

- To overcome the «GDP-centric» approach
- To evaluate progress also from a social and environmental perspective
- Not replacing, but complementing GDP

The UNPD Human Development Index (1990)

Human Development Index (HDI)

DIMENSIONS	Long and healthy life	Knowledge	A decent standard of living
INDICATORS	Life expectancy at birth	Expected years of schooling / Mean years of schooling	GNI per capita (PPP $)
DIMENSION INDEX	Life expectancy index	Education index	GNI index

Human Development Index (HDI)

- Effective and easy to communicate
- Only 3 dimensions covered
- Recently complemented by other indices (inequality, gender disparity and poverty)

HDI in 2015

The most advanced countries

1	Norway	0.949
2	Australia	0.939
2	Switzerland	0.939
4	Germany	0.926
5	Denmark	0.925
5	Singapore	0.925
7	Netherlands	0.924
8	Ireland	0.923
9	Iceland	0.921
10	Canada	0.920
10	United States	0.920

Italy is ranking 26° (HDI=0.887)

...and those lagging behind

179	Eritrea	0.420
179	Sierra Leone	0.420
181	Mozambique	0.418
181	South Sudan	0.418
183	Guinea	0.414
184	Burundi	0.404
185	Burkina Faso	0.402
186	Chad	0.396
187	Niger	0.353
188	Central African Republic	0.352

Risks

- Goodhart's law: "when a measure becomes the target, it can no longer be used as the measure."

- A lot remains hidden

The new idea gains momentum

- To consider more aspects of people life
- Taking into account environmental issues (not a burden, but a necessary component of development)

Millennium Development Goals (UN 2000)

Global decision to launch a policy agenda focusing on people development

→ More dimensions (3 → 8)

→ Wider set of indicators (4 → 60)

The 8 Millennium Development Goals

1. ERADICATE EXTREME POVERTY AND HUNGER
2. ACHIEVE UNIVERSAL PRIMARY EDUCATION
3. PROMOTE GENDER EQUALITY AND EMPOWER WOMEN
4. REDUCE CHILD MORTALITY
5. IMPROVE MATERNAL HEALTH
6. COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES
7. ENSURE ENVIRONMENTAL SUSTAINABILITY
8. GLOBAL PARTNERSHIP FOR DEVELOPMENT

e.g., indicators for Goal 2 are:
- Net enrolment ratio in primary education
- Proportion of pupils starting grade 1 who reach last grade of primary
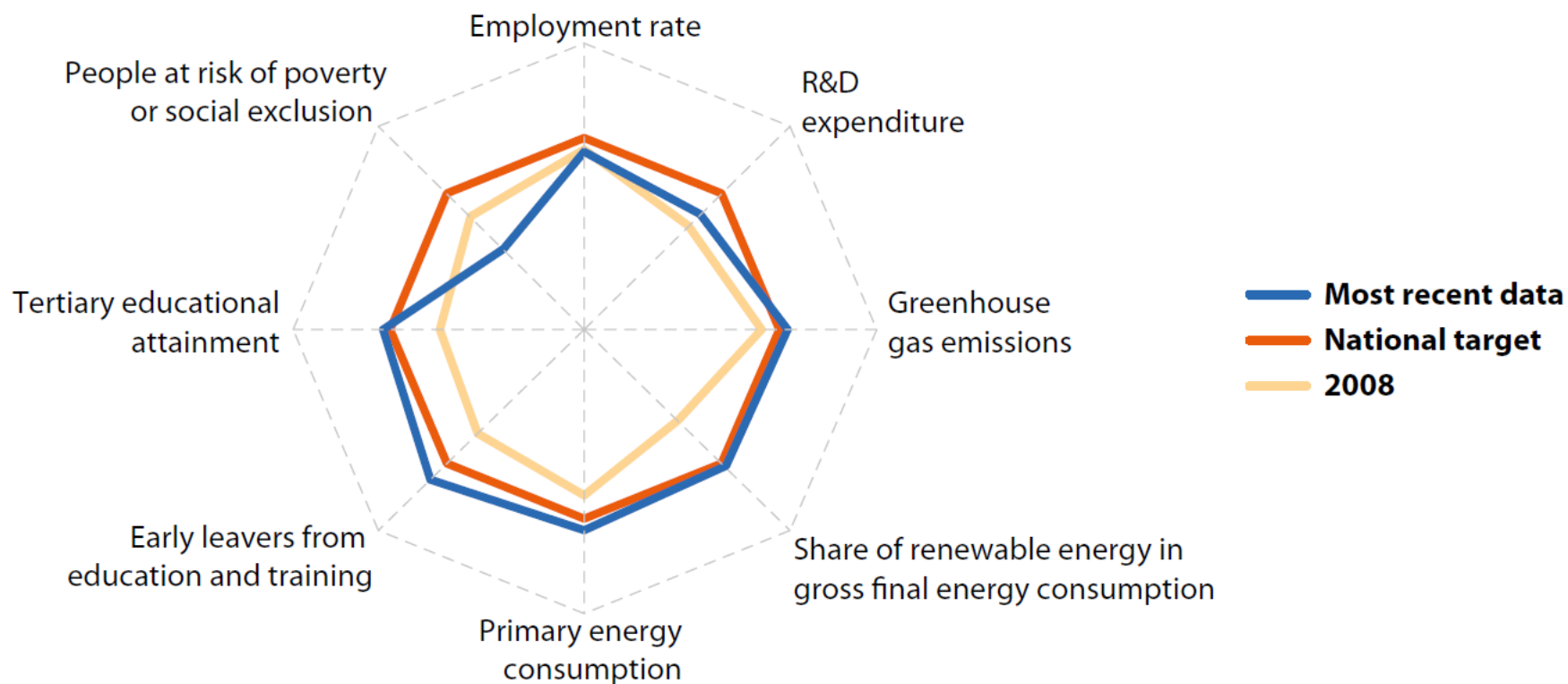- Literacy rate of 15-24 year-olds, women and men

A development strategy for European countries

EUROPE 2020
A European strategy for smart, sustainable and inclusive growth

OBJECTIVES	8 INDICATORS AND 8 TARGET (Italy)
Increasing Employment	Employment rate of the population aged 20-64 →75% (67%)
More R&D	Public and private investment in R&D → 3% of GDP (1.53%)
Better Environment	Greenhouse gas emissions →-20% (-13%) Renewable energy → 20% (17%) Energy efficiency → +20% (+13.4%)
Equitable and Increasing Education	School drop-out rates → 10% (16%) Population 30-34 with tertiary education → 40% (26%)
Reducing Poverty	People at risk of poverty or social exclusion → -20mln (-2.2)

Italy and EU2020 targets

Change since 2008 in relation to national targets

Employment rate

People at risk of poverty or social exclusion

R&D expenditure

Tertiary educational attainment

Greenhouse gas emissions

Early leavers from education and training

Share of renewable energy in gross final energy consumption

Primary energy consumption

Legend:
- **Most recent data**
- **National target**
- **2008**

Note: Most recent year for which data are available; see table below.

Source: Eurostat (see dedicated web section: Europe 2020 headline indicators)

eurostat

From MDGs to the 2030 Agenda

September 2015, the United Nations Sustainable Development Summit approved the 2030 Agenda, built on the MDGs experience

A balance between 3 dimensions:

- Economic growth

- Social inclusion

- Environment protection

17 Sustainable Development Goals (SDGs):

• Interlinked and interconnected

• Global (it applies to countries at all levels of development)

• Implementation process constantly monitored

The Goals

An integrated vision

PEOPLE
End poverty and hunger in all forms and ensure dignity and equality

PLANET
Protect our planet's natural resources and climate for future generations

PROSPERITY
Ensure prosperous and fulfilling lives in harmony with nature

PARTNERSHIP
Implement the agenda through a solid global partnership

PEACE
Foster peaceful, just and inclusive societies

Sustainable Development

17 Goals

169 Targets

244 Indicators

A focus on statistical measures

- Development of broader measures of progress to complement GDP

- Quality, accessible, timely and reliable disaggregated data

- Follow-up and review of accomplishment (national, regional and global level)

All countries should contribute to:

- Define indicators

- Produce needed data

- Analyze results

Defining the set of indicators

High-level Group for Partnership, Coordination and Capacity-Building for statistics for the 2030 Agenda for Sustainable Development

- Member States and regional and international agencies (observers)
- Strategic leadership for the SDGs implementation insofar statistical monitoring and reporting is concerned
- Italy represents South-Europe

Inter-agency Expert Group on SDG Indicators

- ✓ Member States and regional and international agencies (observers)
- ✓ Provide proposals about the indicator framework, for consideration by the UN Statistical Commission
- ✓ To produce the Tier Classification and Metadata Repository
- ✓ Work Plans for Tier III Indicators

Tier classification of the SDGs Indicators

Multiple 2%

Tier 3 25%

Tier 1 40%

Tier 2 33%
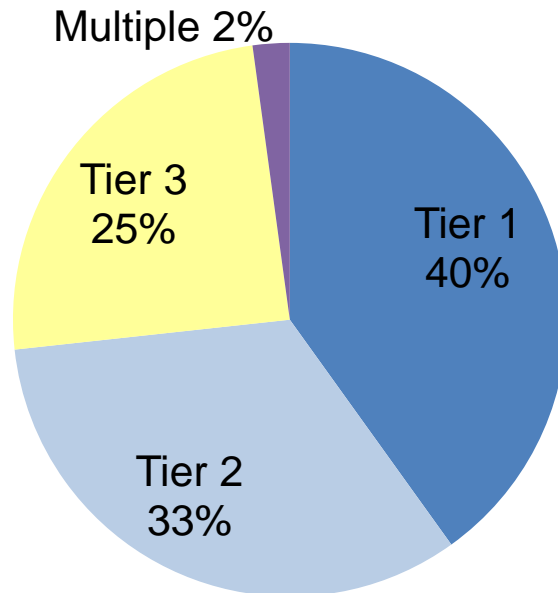
1= conceptually clear, internationally established methodology and standards;
data regularly produced by at least 50% of countries

2= conceptually clear, internationally established methodology and standards;
data are not regularly produced

3= internationally established methodology/standards to be developed

- 13% are not so relevant to developed countries
  (e.g. persons below the international poverty threshold = 1.25 $ per day)
- Work in progress: complete revision by 2020

SDGs indicators in Italy - 1

The project started at Istat in 2016

- Assessment of data availability and data gaps

- Elaboration and dissemination of available indicators

Broad cooperation needed

- Istat

- Ministries

- Central Bank

- Public organizations

- Universities

- NGOs

SDGs indicators in Italy - 2

First dissemination: December 2016
90+ indicators (international, proxy, additional)

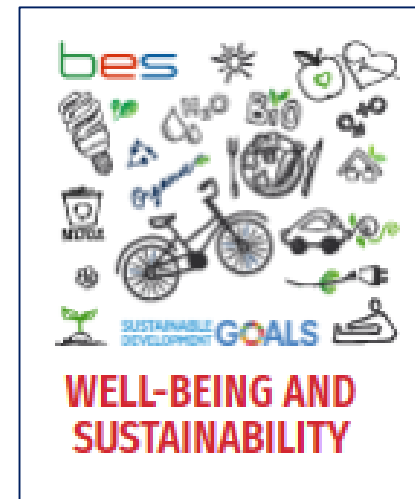**6 months- updates**
April 2019: 273 national indicators

Break down:
Gender, age, region, geography, citizenship, disability

Annual Report:
Second edition July 2019

https://www.istat.it/en/well-being-and-sustainability

Data on the web

Latest update: **17 April 2019**

Goal 1 | xls | pdf |
End poverty in all its forms everywhere

Goal 2 | xls | pdf |
End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

Goal 3 | xls | pdf |
Ensure healthy lives and promote well-being for all at all ages

Goal 4 | xls | pdf |
Ensure inclusive and equitable quality education and promote life-long learning opportunities for all

Goal 5 | xls | pdf |
Achieve gender equality and empower all women and girls

Goal 6 | xls | pdf |
Ensure availability and sustainable management of water and sanitation for all

Goal 7 | xls | pdf |
Ensure access to affordable, reliable, sustainable and modern energy for all

Goal 8 | xls | pdf |
Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Goal 9 | xls | pdf |
Build resilient infrastructure, promote sustainable industrialization and foster innovation

Goal 10 | xls | pdf |
Reduce inequality within and among countries

Goal 11 | xls | pdf |
Make cities and human settlements inclusive, safe, resilient and sustainable

Goal 12 | xls | pdf |
Ensure sustainable consumption and production patterns

Goal 13 | xls | pdf |
Take urgent action to combat climate change and its impacts

Goal 14 | xls | pdf |
Conserve and Sustainably Use Oceans, Seas and Marine Resources for Sustainable Development

Goal 15 | xls | pdf |
Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Goal 16 | xls | pdf |
Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Goal 17 | xls | pdf |
Strengthen the means of implementation and revitalize the global partnership for sustainable development

Information available

Metadata
- Description
- Typology (identical, similar, contextual)
- Source
- Responsible body

Indicator's disaggregation
- ✓ Geographical
- ✓ Gender
- ✓ Ages
- ✓ Others (e.g. occupational status, disability,….)

Time series
- At least 10 years

Goal 1 End poverty

Target	Global indicator	Italy indicator
1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.25 a day	1.1.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)	---
1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	1.2.1 Proportion of population living below the national poverty line, by sex and age	Proportion of population living below the national (absolute) poverty line *Incidenza di povertà assoluta individuale*

The Excel file

Global indicator -English -Italian		Source	Survey Name	Name of indicator -English -Italian	Units	Time Series												
						2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	1.2.1	Istat	- Proportion of population living below the national poverty line, by sex and age - Percentuale di popolazione che vive al di sotto della soglia di povertà nazionale, per sesso ed età	Consumi delle famiglie (PSN:IST-00682) Indagine sulle spese delle famiglie (PSN:IST-02396)	- Proportion of population living below the national (absolute) poverty line - Povertà assoluta	%												
					Italia	%	3,3	2,9	3,1	3,6	3,9	4,2	4,4	5,9	7,3	6,8	7,6	7,9	8,4
					Territorio													
					Nord	%	2,3	2,2	2,6	2,7	3,1	3,5	3,4	5,5	5,5	5,7	6,7	6,7	7,0
					Centro	%	2,7	2,6	2,8	2,8	2,1	4,5	4,0	4,6	5,9	5,5	5,6	7,3	6,4
					Mezzogiorno	%	5,0	3,8	3,8	5,2	6,0	4,8	6,1	7,3	10,6	9,0	10,0	9,8	11,4
					Sesso													
					Maschi	%	3,1	2,6	2,8	3,4	3,9	4,1	4,2	6,0	7,3	7,0	7,9	7,8	8,8
					Femmine	%	3,5	3,1	3,3	3,8	4,0	4,2	4,7	5,8	7,4	6,6	7,3	7,9	8,0
					Classe di età													
					0-17 anni	%	3,9	2,8	3,1	3,7	4,3	4,5	5,0	6,9	9,9	10,0	10,9	12,5	12,1
					18-34 anni	%	3,1	2,3	2,7	3,9	4,2	4,5	4,6	6,8	8,7	8,1	9,9	10,0	10,4
					35-64 anni	%	2,7	2,4	2,6	3,1	3,4	3,8	4,0	5,7	6,9	6,1	7,2	7,3	8,1
					65 anni e più	%	4,5	4,6	4,4	4,4	4,4	4,3	4,8	4,9	5,1	4,5	4,1	3,8	4,6
					Tipologia comunale													
					Centro area metropolitana	%	....	....	....	....	....	....	....	....	....	6,8	8,6	5,9	8,2
					Periferia area metropolitana e comuni con 50.001 abitanti e più	%	....	....	....	....	....	....	....	....	....	6,5	7,8	9,6	9,7
					Altri comuni fino a 50.000 abitanti (diversi dai comuni periferia area metropolitana)	%	....	....	....	....	....	....	....	....	....	6,9	7,3	7,4	7,8
					Cittadinanza													
					Italiana	%	....	....	....	....	....	....	....	....	....	4,9	5,2	5,5	6,2
					Straniera	%	....	....	....	....	....	....	....	....	....	27,8	34,3	34,0	32,3

The SDGs Report 2019

Full Report
https://www.istat.it/it/files//2019/08/SDGs-
2019_inglese.pdf

Executive summary
https://www.istat.it/it/files//2019/04/2019_04_2
4_SDGs_nota-per-la-stampa_english.pdf

The general evolution

Figure 1.3 - Goals trends and availability of indicators

International comparisons

Figure 1.4 - People at risk of poverty or social exclusion. Year 2017 and 2016/2017 variations
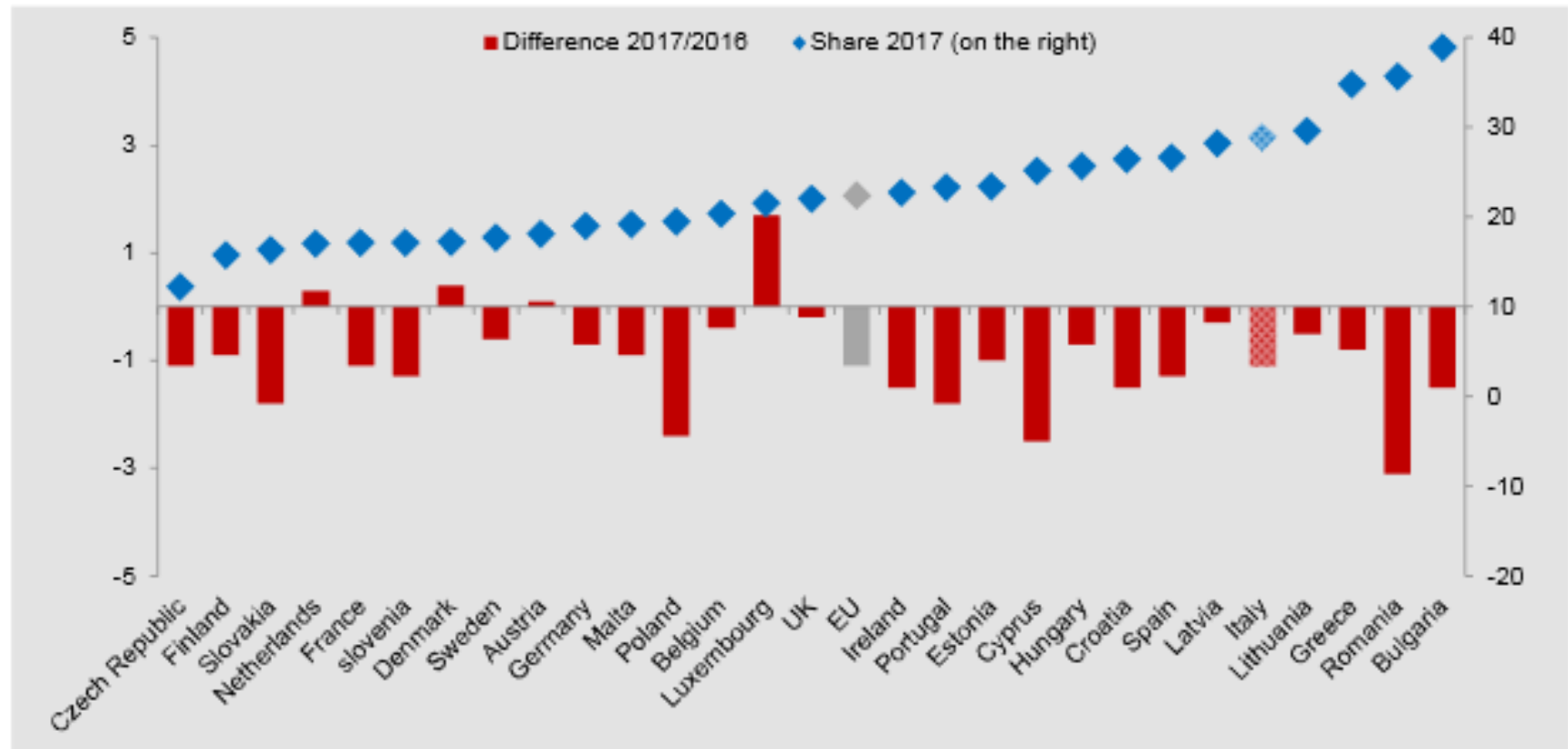
Time series and territorial differences

Figure 1.3 - In work at risk of poverty. Years 2004-2017 (%)
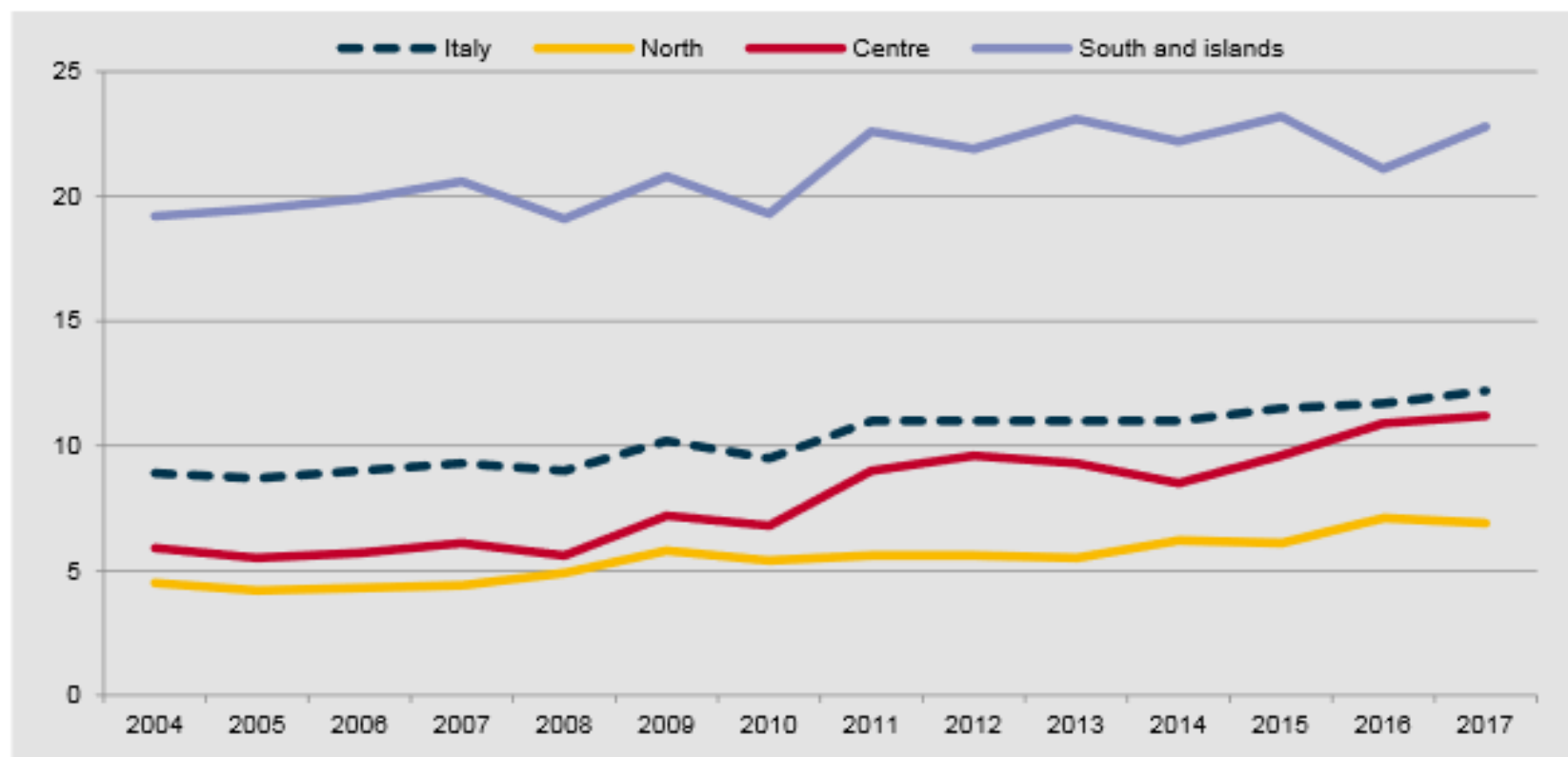
Analysis by age
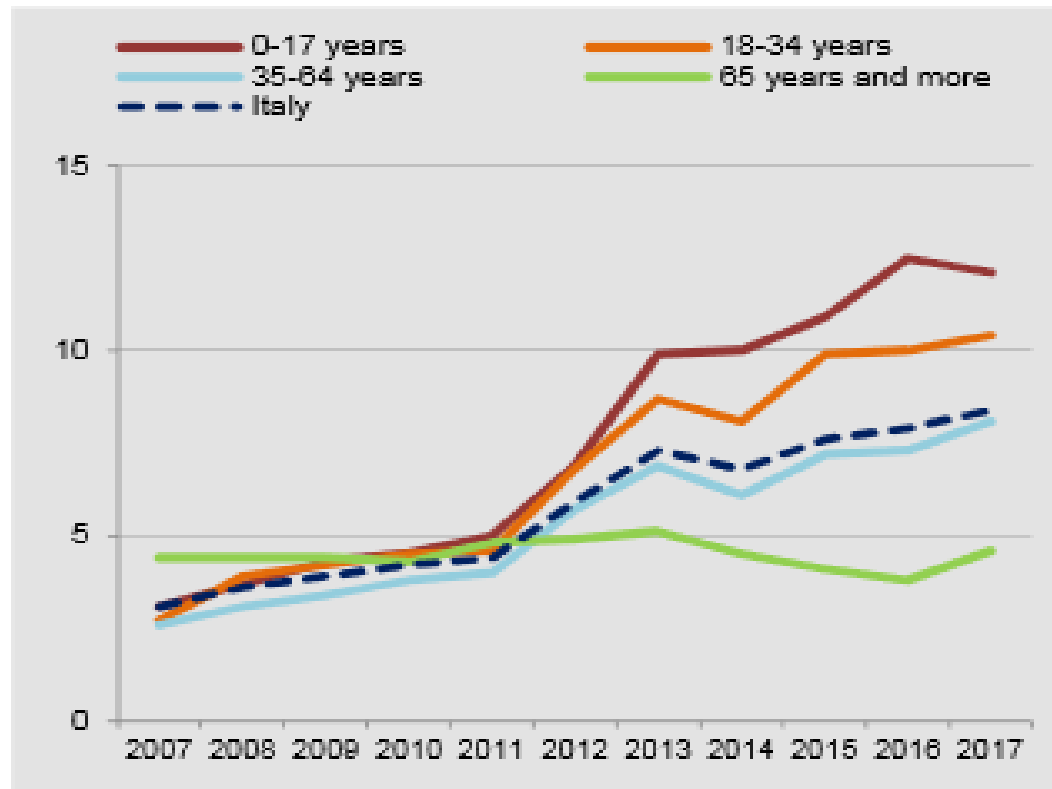
Source: Istat, Household Budget Survey

Population living in absolute poverty by age class and geographical area (%)

Figure 4.3 - Statistical indicators for SDGs monitoring by typology of links - Strong (more than 10 links)
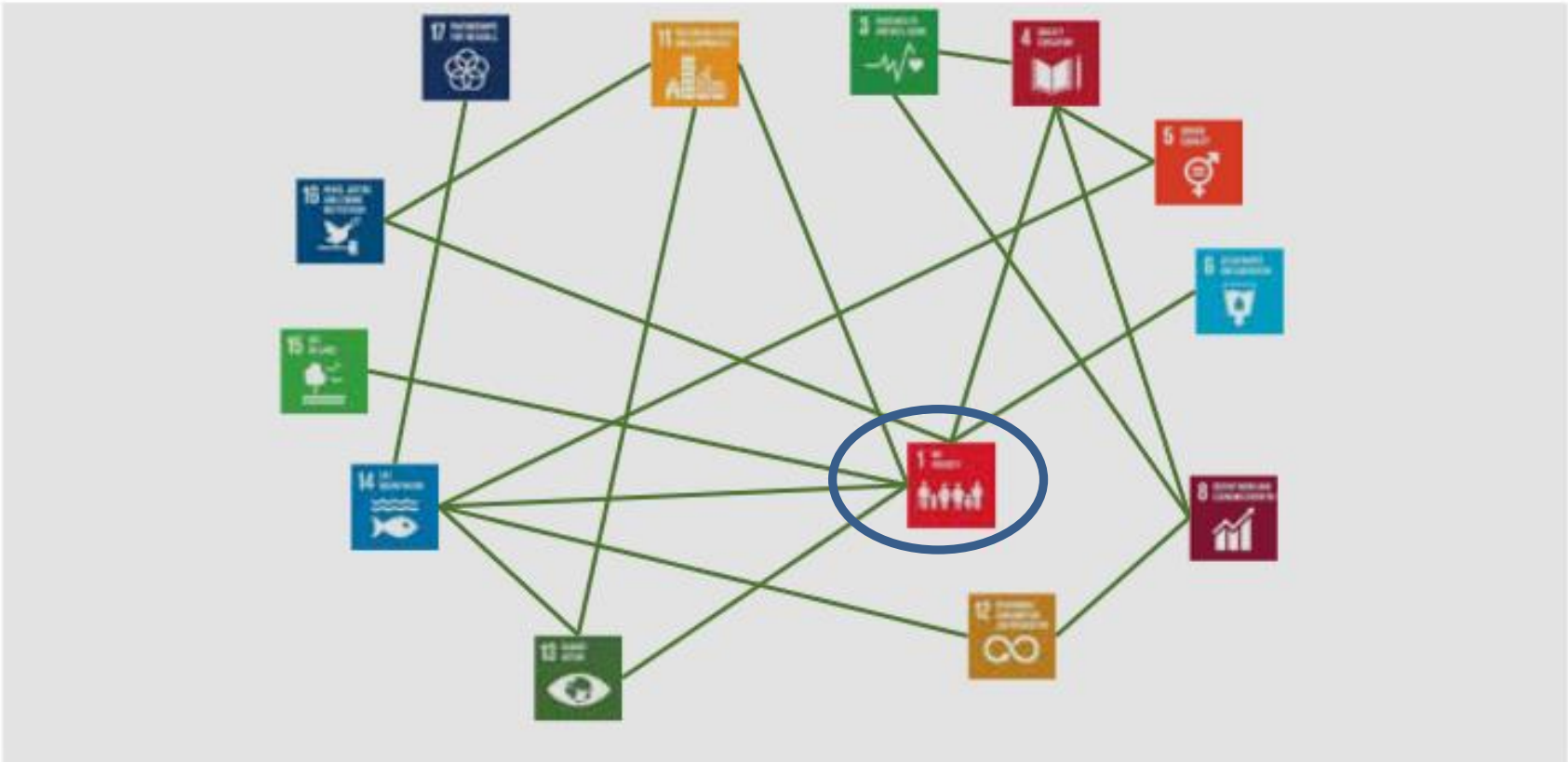
SDGs and policy making: the National Strategy for Sustainable Development

Italy position with respect to the 17 Goals

National weak and strong points

Priority areas Strategic choices National targets

Draft of the National Strategy for Sustainable Development

Italian Strategy presented to the UN High Level Political Forum on Sustainable Development

2016 — January 2017 — July 2017

Consultations
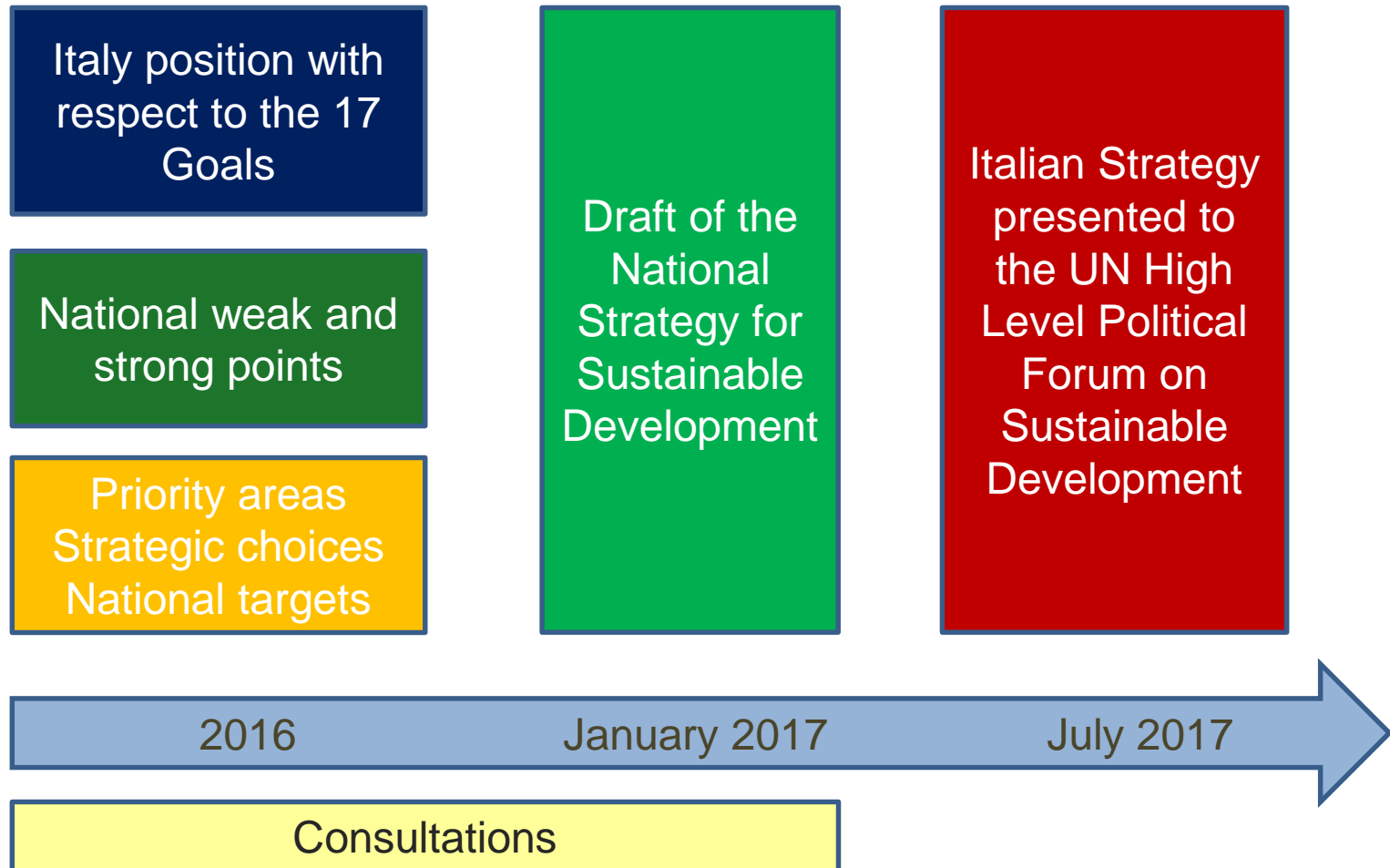
NSSD approved December 2017

- Reporting and monitoring progress
- Defining national quantitative targets
- Developing models to evaluate policy (sub-set of indicators)
- Clear responsibilities

Office of the Prime Minister
- **Coordination**

Ministry of Environment
- **National issues**

Ministry of Foreign Affairs
- **International relationships**

Ministry of Economy and Finance
- **Link with economic policy**
- **Coordination for evaluation modelling**

ISTAT
- **Data and indicators**

Directive from the Prime Minister (March 2018)

"On the implementation of the 2030 Agenda and the National Strategy for Sustainable Development"

- ✓ Main objective of the Government
- ✓ A national committee to be established
- ✓ Annual report on the strategy implementation and evaluation of results

Working group on indicators for the NSSD implementation

- To define a limited set of indicators to monitor implementation
- To define national targets to be achieved by 2030

A new coordination body: "Italy Well-being"

Established by the Prime Minister in 2019

Tasks:

- Support and reinforce policies and initiatives of the Italian Government for Equitable and Sustainable Well-being (Bes) and for the National Strategy for Sustainable Development (NSSD)

- Technical and scientific support to the Prime Minister

- Coordination and monitoring of specific activities of the Ministries

- Assistance to Regions, Autonomous Provinces and Local Authorities in the promotion of good practices

- Implementation of ad hoc methodologies and guidelines for the measurement of quality of life indicators

Supported by a committee of experts:
- President of the Italian National Institute of Statistics
- President of the National Research Council
- President of the Institute for Environmental Protection and Research
- President of the National Institute for Social Security
- Experts from Academia
- Spokesperson for the Italian National Alliance for Sustainable Development

The **Green New Deal** is mentioned in the updated Planning Document on economic and financial policy (NADEF) as "the pivot of the Government's development strategy"

An ad hoc bill for the country's ecological transition was announced, attached to the 2020 Budget Law

Two dedicated investment funds are planned, assigned to the State and local authorities, for a total value of 50 billion in 15 years

At the center of public investment are air quality, the protection of the environment, the spread of renewable energies, the fight against climate change

D.L. "Climate" is the first act of the **Green New Deal**
(Ecobonus for the scrapping of polluting vehicles, tree planting programs, removal of subsidies to economic activities environmentally harmful, facilitations for the purchase of loose products,…)

ASVIS – Alleanza Italiana per lo Sviluppo Sostenibile (Italian Alliance for Sustainable Development)

Established in 2016 (corporate foundation Unipolis + Tor Vergata University)

It brings together 220+ institutions, associations, universities, in order to:

- **Raise awareness** in Italian society and among economic stakeholders and institutions about the importance of the 2030 Agenda for Sustainable Development

- Support the development of a **culture of sustainability**, also through changes in production and consumption models

- **Analyze opportunities and issues** for Italy linked to the Agenda

- Give a contribution to the **definition and monitoring** of the NSSD.

Since 2016, an annual report is produced:
a tool to analyze Italy progress
towards the 17 Goals
and identify the areas in which action must be taken
to ensure economic sustainability,
social and environmental of the development model

https://asvis.it/asvis-report/
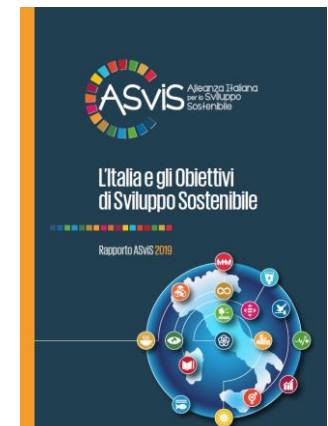
SDGs in Europe

Eurostat project and web site:

- Collection of relevant documents

- Monitoring Reports

- Visualization tools

- Comparative analyses

http://ec.europa.eu/eurostat/web/sdi/overview

Sustainable development in the European Union

Monitoring report on progress towards the SDGs in an EU context | 2019 edition

EUROSTAT SUPPORTS THE SDGs

eurostat

Based on the EU SDG indicator set

It is aligned <u>as far as appropriate</u> with the UN list of global indicators, but it is not completely identical. This allows the EU SDG indicators to focus on monitoring EU policies and on phenomena particularly relevant in a European context

100 indicators (about 6 for each goal)

Overall progress in EU

Overview of EU-28 progress towards the SDGs over the past 5 years, 2019
(Data mainly refer to 2012-2017 or 2013-2018)

Other visualizations

eurostat

Legend:

◎ Indicator with quantitative target (Click the icon to download the indicator targets). In this case, the arrow should be interpreted according to the left-hand column below, for all other indicators according to the right-hand column below.

↑	Significant progress towards EU target	Significant progress towards SD objectives
↗	Moderate progress towards EU target	Moderate progress towards SD objectives
↘	Insufficient progress towards EU target	Moderate movement away from SD objectives
↓	Movement away from EU target	Significant movement away from SD objectives
:	Calculation of trend not possible (for example, time series too short)	

Multidimensional poverty

👥	People at risk of poverty or social exclusion	↗ ◎
💶	People at risk of income poverty after social transfers	↘
🐷	Severely materially deprived people	↑
⚙	People living in households with very low work intensity	↑
👤	In work at-risk-of-poverty rate	↓

Basic needs

🏠	Population living in a dwelling with a leaking roof, damp walls, floors or foundation or rot in window frames or floor	↑
🩺	Self-reported unmet need for medical care	↑
🚿	Population having neither a bath, nor a shower, nor indoor flushing toilet in their household	↑
♨	Population unable to keep home adequately warm	↑
👨‍👩‍👧	Overcrowding rate	↑

Trends
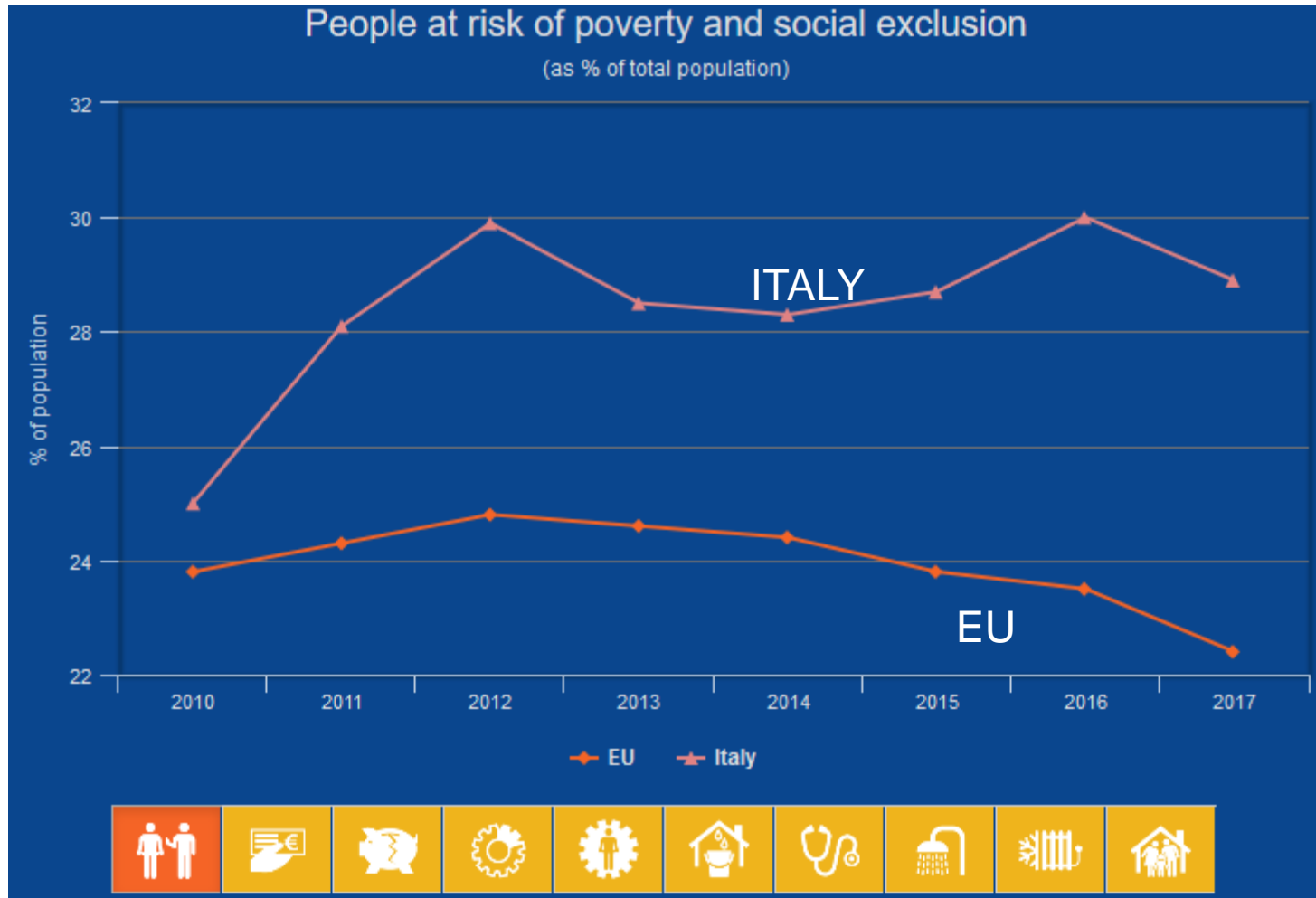
and comparisons

People at risk of poverty or social exclusion, 2017
(as % of total population)

The Sustainable Development Goals Report 2019

United Nations

UN Report: an overview of the world's implementation efforts to date, highlighting areas of progress and areas where more action needs to be taken.

Report by Bertelsmann Stiftung and Sustainable Development Solutions Network (SDSN): changes over time; trajectories until 2030; SDG Index and Dashboards; policy considerations

Table 3 | The 2019 SDG Index

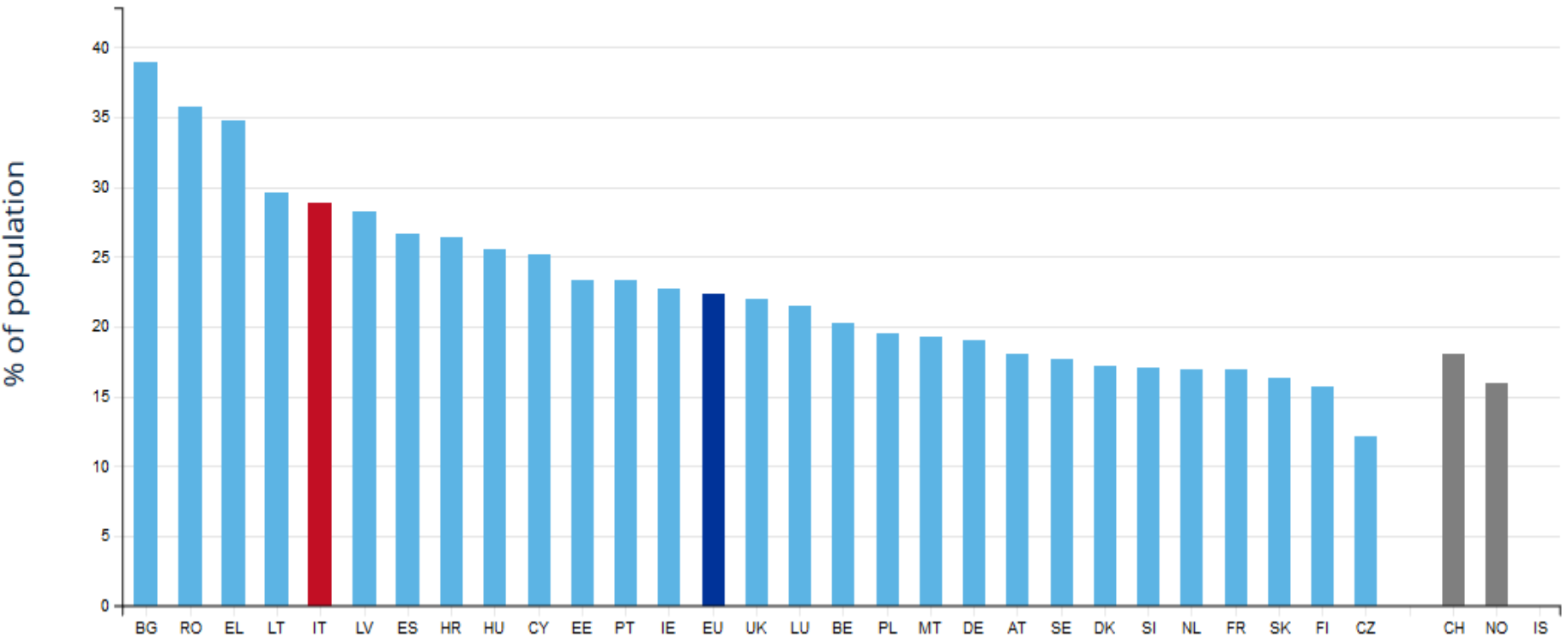| Rank	Country	Score	Rank	Country	Score
1	Denmark	85.2	42	Romania	72.7
2	Sweden	85.0	43	Uruguay	72.6
3	Finland	82.8	44	Serbia	72.5
4	France	81.5	45	Argentina	72.4
5	Austria	81.1	46	Ecuador	72.3
6	Germany	81.1	47	Maldives	72.1
7	Czech Republic	80.7	48	Kyrgyz Republic	71.6
8	Norway	80.7	49	Israel	71.5
9	Netherlands	80.4	50	Greece	71.4
10	Estonia	80.2	51	Peru	71.2
11	New Zealand	79.5	52	Uzbekistan	71.1
12	Slovenia	79.4	53	Algeria	71.1
13	United Kingdom	79.4	54	Vietnam	71.1
14	Iceland	79.2	55	Russian Federation	70.9
15	Japan	78.9	56	Cuba	70.8
16	Belgium	78.9	57	Brazil	70.6
17	Switzerland	78.8	58	Iran, Islamic Rep.	70.5
18	Korea, Rep.	78.3	59	Azerbaijan	70.5
19	Ireland	78.2	60	Albania	70.3
20	Canada	77.9	61	Cyprus	70.1
21	Spain	77.8			
22	Croatia	77.8			
23	Belarus	77.4			
24	Latvia	77.1			
25	Hungary	76.9			
26	Portugal	76.4			
27	Slovak Republic	76.2			
28	Malta	76.1			
29	Poland	75.9			
30	Italy	75.8			
31	Chile	75.6			
32	Lithuania	75.1			
33	Costa Rica	75.0			
34	Luxembourg	74.8			
35	United States	74.5			
36	Bulgaria	74.5			
37	Moldova	74.4			
38	Australia	73.9			
39	China	73.2			
40	Thailand	73.0			
41	Ukraine	72.8			

SUSTAINABLE DEVELOPMENT REPORT 2019

Transformations to achieve the Sustainable Development Goals

Includes the SDG Index and Dashboards

BertelsmannStiftung   SUSTAINABLE DEVELOPMENT SOLUTIONS NETWORK

	1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION	7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS
Australia																	
Austria																	
Belgium																	
Canada																	
Chile																	
Czech Republic																	
Denmark																	
Estonia																	
Finland																	
France																	
Germany																	
Greece																	
Hungary																	
Iceland																	
Ireland																	
Israel																	
Italy																	
Japan																	
Korea, Rep.																	
Latvia																	
Luxembourg																	
Mexico																	
Netherlands																	
New Zealand																	
Norway																	
Poland																	
Portugal																	
Slovak Republic																	
Slovenia																	
Spain																	
Sweden																	
Switzerland																	
Turkey																	
United Kingdom																	
United States																	

Source: Authors' analysis

HLPF 24-25 september 2019:
Accelerating the implementation of the 2030 Agenda

"We recognize the **many efforts** at all levels since 2015 to realizing the vision of the 2030 Agenda… Sustainable Development Goals are increasingly incorporated in national policies…

At the same time, we are concerned that **progress is slow** in many areas. Vulnerabilities are high…risk of missing the **poverty** eradication target…**hunger** is on the rise… progress towards **gender equality** and the empowerment of all women and girls is too slow…**Inequalities in wealth**, incomes and opportunities are increasing in and between countries…. **Biodiversity loss**, environmental degradation… climate change continue

We commit to: (a)Leaving no one behind; (b) Mobilizing adequate and well-directed financing; c) Enhancing national implementation…. i) **Investing in data and statistics** for the Sustainable Development Goals (to address the gaps in data; to encourage international cooperation)… "