



SMALL AREA METHODS  
FOR MONITORING OF POVERTY  
AND LIVING CONDITIONS IN EU



The project Makswell main aims, actual results  
and plan for the future

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PISA, 8-10 MAY 2018

WORKSHOP "SMALL AREA METHODS AND LIVING CONDITIONS  
INDICATORS IN EUROPEAN POVERTY STUDIES IN THE ERA OF  
DATA DELUGE AND BIG DATA"

FINAL EVENT OF THE JEAN MONNET CHAIR SAMPLEU

1 Motivations

2 Motivations and organisation of the project

3 Where we are



# Motivation 1 - growing attention to the beyond GDP indicators



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



# Motivation 1

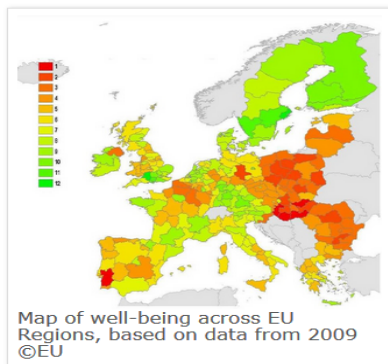
## Mapping well-being in Europe

FEB

04

2015

**A recent JRC report reviews the literature on the concept of well-being, and describes a method that can provide an integrated description of well-being across Europe. The authors measure well-being using 12 indicators available from Eurostat for all European**



# Motivation 1

European Commission > Environment > Beyond GDP

Home About us Policies Funding Legal compliance News & c

## Beyond GDP

Measuring progress, true wealth, and well-being

BEYOND GDP

- About Beyond GDP
- News
- Newsletters
- Events
- Indicators

### What is the 'Beyond GDP' initiative

The Beyond GDP initiative is about developing indicators that are as clear and appealing as GDP, but more inclusive of environmental and social aspects of progress.

This website updates on recent developments and ongoing work.

#### News



**EU progress towards sustainable development in 2017**

20.11.2017



# Motivation 1

## National News for Italy ✕

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PRIMO RAPPORTO DELLA STATISTICA  
NATURALE E FINANZIARIA 2017

### State of natural capital in Italy 23.05.2017

Read the [full report \(IT\)](#) and the [report synthesis \(EN\)](#).

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DOCUMENTO DI ECONOMIA  
E FINANZA 2017

### Italy's 2017 Economic and Financial Document includes BES indicators 11.04.2017

Read the article in [Italian](#) or [English](#).

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INDICATORI ITALIANI PER  
GLI OBIETTIVI DI SVILUPPO  
SOSTENIBILI

### Italian Indicators for the Sustainable Development Goals 14.12.2016

View the [indicators](#) and read the [information note](#).

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[Read all news items for Italy.](#)

# Motivation 2 - improving the data available

## Why do we need flash estimates of income inequality and poverty indicators?



Providing timelier social statistics – especially indicators on income poverty and inequality – is a priority for the Commission and the European Statistical System.

Indicators on poverty and income inequality are based on EU statistics on income and living conditions (EU-SILC). They represent an essential tool to monitor progress towards the [Europe 2020](#) poverty and social exclusion target and to prepare the [European Semester](#) (the annual cycle of economic policy coordination between EU countries).

In order to better monitor the effectiveness of social policies at EU level, it is important to have timelier indicators.

In 2017, EU-SILC income indicators for 2015 (SILC 2016) will be available for all countries only by autumn, which is late for the EU's policy agenda. Efforts for improving the timeliness of EU-SILC data are ongoing but the collection and processing of EU-SILC data based on both survey and administrative sources, will always have a certain time lag.

A new approach was therefore proposed, which consists in the development of **flash estimates**. These are calculated on the basis of a statistical or econometric model and have a release date appreciably earlier than the actual data: in autumn 2017, flash estimates of income for 2016 (SILC 2017) are available. These will **complement** the EU-SILC data and can be used in preliminary discussions and analysis until the final EU-SILC data becomes available.

The key income indicators for which flash estimates will be available are:

- **AROP** – at-risk-of-poverty rate for the total population
- **QSR** – income quintile share ratio.



# Motivation 2

## INCOME, CONSUMPTION AND WEALTH

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

**exper****imental**

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](#).





# Motivation 3 - improving methodology

## Big Data and Macroeconomic Nowcasting: from data access to modelling

EMANUELE BALDACCI, DARIO BUONO, GEORGE KAPETANIOS,  
STEPHAN KRISCHE, MASSIMILIANO MARCELLINO,  
GIAN LUIGI MAZZI, FOTIS PAPAILIAS

2016 edition



## Motivation 4 - extending policy analysis

- In 2010 the European Union has set up a yearly cycle of economic policy coordination called the European Semester to ensure that Member States discuss their budgetary and economic plans with their EU partners at specific times throughout the year.
- It starts with the publication of the Commission's Annual Growth Survey (setting out general economic priorities) and Alert Mechanism Report (AMR) under the Macroeconomic Imbalance Procedure (MIP).
- The MIP aims to identify potential macroeconomic risks early on, prevent the emergence of harmful macroeconomic imbalances and correct the imbalances that are already in place.
- It is a system for monitoring economic policies and detecting potential harms to the proper functioning of the economy of a Member State, of the Economic and Monetary Union, and of the European Union as a whole.



## Motivation 4

The MIP Scoreboard indicators cover:

- Internal imbalances. these are imbalances that may arise from public and private indebtedness; financial and asset market developments, including housing and private sector credit flow, unemployment rate;
- External imbalances and competitiveness. they may arise from the evolution of the current account and the net investment positions of Member States, the real effective exchange rates, share of world exports and nominal unit labour cost;
- Employment indicators. these are activity rate, long-term and youth unemployment rates.



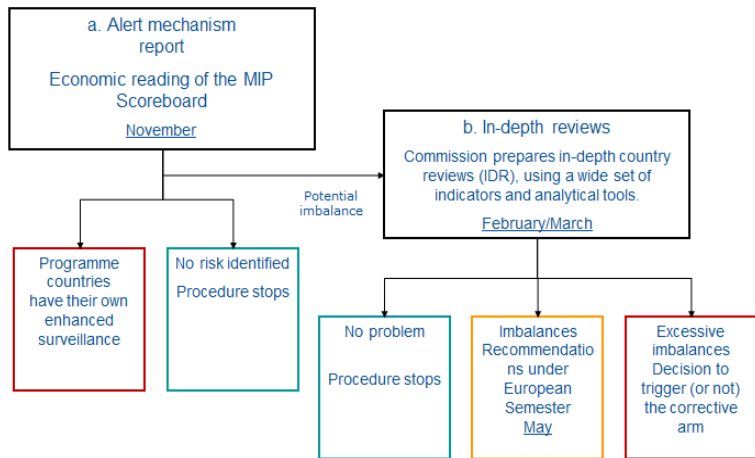
# Motivation 4

## Auxiliar indicator - 1

Employment rate	1 year % change
Activity rate	% of total population aged 15-64
Long term unemployment rate	% of active population aged 15-74
Youth unemployment rate	% of active population aged 15-24
Young people neither in employment nor in education and training	% of total population aged 15-24
People at risk of poverty or social exclusion	% of total population
People at risk of poverty after social transfers	% of total population
Severely materially deprived people	% of total population
People living in households with very low work intensity	% of total population aged 0-59



# Motivation 4



# Motivation 4

- Long-term and youth unemployment pose risks to social cohesion and growth. Although declining, both remain among the highest in the EU, also as a consequence of Italy's protracted recession. The low overall activity rate is constraining potential output growth. At the same time, the high level of youth unemployment can hinder young people's acquisition of skills and future employability.

Income inequality is high and rising in Italy, while marginally falling in the EU. According to data for 2016, the income of the top 20% of households was 6.3 times higher than that of the poorest 20% (S80/S20 indicator). This ratio has increased compared to the previous 3 years and is even higher for people of working-age, as the redistributive impact of pensions is excluded.



# Motivation 5 - example Italy

MINISTERO DELL'ECONOMIA E DELLE FINANZE



## DOCUMENTO DI ECONOMIA E FINANZA 2018

**Allegato**

Indicatori di benessere equo e sostenibile



# Motivation 5

Introduzione.....	5
Indice .....	6
I. Gli indicatori di benessere equo e sostenibile nel ciclo di programmazione economico-finanziaria .....	7
I.1 Il contesto normativo e teorico.....	7
I.2 Una sintesi dei principali risultati .....	9
II. L'andamento degli indicatori di benessere equo e sostenibile.....	13
II.1 Reddito medio disponibile aggiustato pro capite.....	13
II.2 Indice di disuguaglianza del reddito disponibile.....	15
II.3 Indice di povertà assoluta .....	16
II.4 Speranza di vita in buona salute alla nascita .....	19
II.5 Eccesso di peso .....	21
II.6 Uscita precoce dal sistema di istruzione e formazione.....	23
II.7 Tasso di mancata partecipazione al lavoro, con relativa scomposizione per genere .....	25
II.8 Rapporto tra tasso di occupazione delle donne di 25-49 anni con figli in età prescolare e delle donne di 25-49 anni senza figli.....	27
II.9 Indice di criminalità predatoria.....	29
II.10 Indice di efficienza della giustizia civile .....	30
II.11 Emissioni di CO2 e altri gas clima alteranti.....	31
II.12 Indice di abusivismo edilizio .....	33
III. L'ultimo triennio e le previsioni per il 2018-2021 .....	37





## Motivation 5

TABELLA III.1: INDICATORI DI BENESSERE EQUO E SOSTENIBILE - ultimo triennio e previsioni 2018-2021

	2015	2016	2017	2018	2019	2020	2021
Reddito medio disponibile aggiustato pro capite (1)	21.525	21.836	22.226	22.845	23.378	23.996	24.585
Indice di disuguaglianza del reddito disponibile (2)	6,3	6,3	6,4	6,3	6,2	6,2	6,2
Tasso di mancata partecipazione al lavoro (3)	22,5	21,6	20,5	19,9	19,3	18,7	18,2
<i>di cui: uomini</i>	19,0	18,2	17,3	16,8	16,3	15,8	15,3
<i>      donne</i>	26,8	25,9	24,5	23,7	23,0	22,3	21,6
Emissioni di CO2 e altri gas clima alteranti pro capite (4)	7,3	7,4	7,6	7,5	7,4	7,4	7,4

(1) Dati in euro. 2015-2017: Istat, Conti nazionali; per il 2017 dati provvisori. 2018-2021: previsione MEF-DT.

(2) Dati in valore assoluto. 2015-2017: Istat, Eu-Silc; per il 2016 e 2017 dati provvisori. 2018-2021 previsione MEF-DF.

(3) Dati in percentuale. 2015-2017: Istat, Rilevazione sulle forze lavoro. 2018-2021: previsione MEF-DT.

(4) Dati in tonnellate pro capite. 2015: Istat-Ispira Inventario e conti delle emissioni atmosferiche. 2016: stima Eurostat. 2017: stima Istat. 2018-2021: previsione MEF-DT.



# List of participants

<b>Participant No *</b>	<b>Participant organisation name</b>	<b>Country</b>
1 (Coordinator)	<b>Italian National Institute of Statistics (Istat)</b>	<b>Italy</b>
2	<b>University of Trier (UT)</b>	<b>Germany</b>
3	<b>University of Pisa (Unipi-Dagum)</b>	<b>Italy</b>
4	<b>University of Southampton (SOTON)</b>	<b>United Kingdom</b>
5	<b>Statistics Netherlands (CBS)</b>	<b>Netherland</b>
6	<b>Destatis</b>	<b>Germany</b>
7	<b>Hungarian Central Statistical Office (HCSO)</b>	<b>Hungary</b>
8	<b>Consorzio MIPA</b>	<b>Italy</b>



# Motivations vs organisation of WPs

WP1 < – > Motivation 1 - growing attention to the beyond GDP indicators

- WP1 will coordinate the creation of database for a wide set of EU countries that select and harmonize the national framework on well-being as well as the available SDG indicators.
- Attention will be done especially to the micro-macro approach derived inside the national account framework and the opportunities for extending the SNA beyond GDP.



# Motivations vs organisation of WPs

WP2, WP3, WP4  $\leftarrow$   $\rightarrow$  Motivation 2 - improving the data available, motivation 3 improving methodology

- WP2, WP2 and WP3 will help in the production of timely indicators selecting also new data sources (namely big data) and integrating them with traditional data (registers, administrative archives, survey data), surveying existing data from a range of data sources and illustrating where data exists and where there are gaps; the production of local estimates of poverty and living conditions are objectives of the WPs.



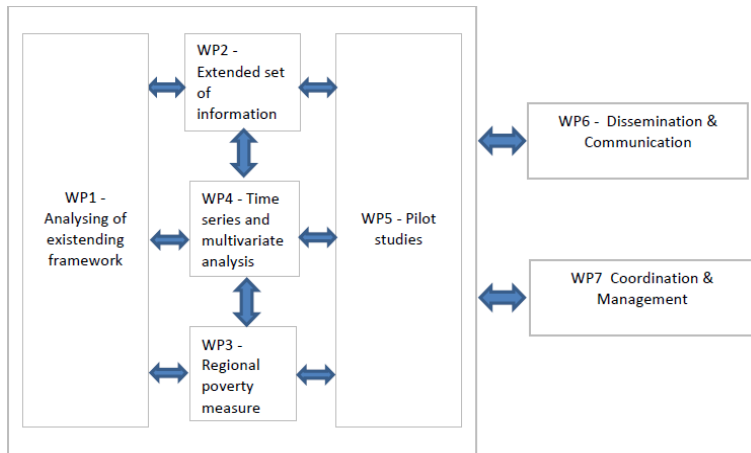
# Motivations vs organisation of WPs

## WP5 < – > Motivation 4,5 - extending policy analysis

- WP5 will extend the previous results providing tools for policy making. It will provide at a macro level a framework that include in the traditional macro econometric models specific measures for wellbeing. At micro level integrated living standard analysis will be developed
- there will be built up a pilot national study that will be useful for each country and that represents the contribution of the project to a general switch toward the assessment of the country development including beyond-GDP dimension
- reflection paper useful for the new call on the topic



# PERT chart



← → ↻ 🏠 <https://www.makswell.eu> how obtain blue from rgb

welbeing Pio visitati MySign Social Europe & Well... Workshop Universita' ... Technical changes in L... Culture statistics - cult... System of National Ac... eurostat-worksite accuel\_decoupe About this service - Eu...

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

## Latest news



## Project progression



## Research Work Packages







ADMINISTRATOR NEWS 02 MAY 2018 HITS: 57

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<https://twitter.com/MAKSWELLproject>



# WP1

- Analysis of the frameworks on wellbeing and sustainability at national and international level for policy making
- we asked to other NSI information on well-being, SDG and their use for policy evaluation (paper in on going)
- we have prepared a review on the studies and use of micro macro approach inside the boundaries of national accounts



## WP2

- **WP1 delivers a database** that contains a brief overview of the European countries about the frequency and the geographical level that SDG indicators are produced as well as an overview of the policy levels (national, NUTS 1, 2, or 3, or municipal level) where these indicators are used. This illustrates the demand and lack of timely and detailed indicators.
- The purpose of WP2 is to develop methodology to produce timely and detailed indicators using non-traditional data sources



# WP3

- Derivation of regional poverty measurements for selected countries as prototype for modern indicator methodologies level
- Comparison of regional poverty measurements between countries
- Focus on regional poverty measurement and regional consumer price indices (CPIs)



# WP4

- Use of multivariate time series models for estimating sustainability and welfare indicators
- Estimation of discontinuities, methodology and applications
- nowcasting and mixed frequency model for integrated analysis



## Common approach for WP2, WP3 and WP4

- extending cross-section dimension (NUTS) using SAE/big data
- improve timeliness using either big data or nowcasting
- improve the time series dimension (discontinuity)



# Goals

- Official statistics in Europe needs to do further efforts toward the assessment of the country development including beyond-the GDP dimension
- Sustainability needs to be disentangled along each dimension of the development, with focus on inequalities
- New and traditional data should be used and put in a **coherent, reusable frame** to use it for policy evaluation

