

Beyond GDP: One step forward

# Methodology for integrated measurement of sustainability transition

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# Acknowledgement

## This presentation based on a research project

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# Importance

## Clear consensus behind the 'Beyond GDP' approach

- limitations of Gross Domestic Product (GDP) metrics is well proved
- broad consensus in politics to improve the measurement of well-being and sustainability

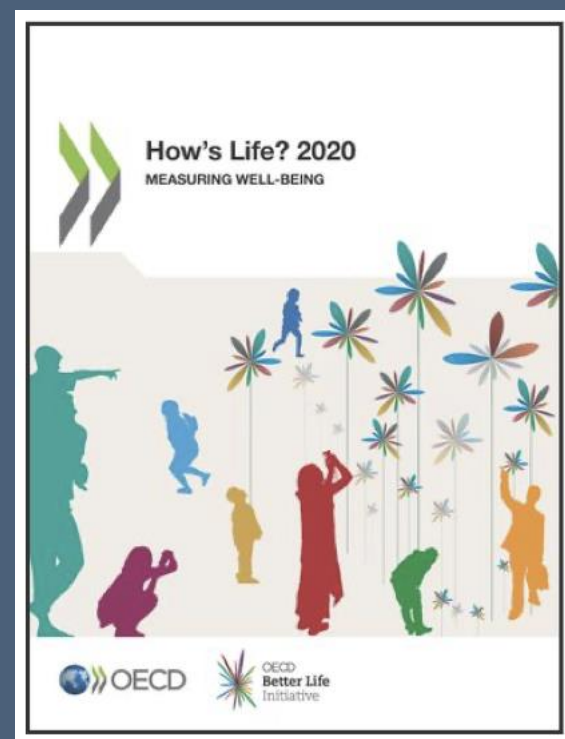
“We are committed to developing broader measures of progress to complement gross domestic product.” (Agenda 2030, 48.)

“By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product (...)” (SDG 17.19)

# Current status

Lot of ideas, but there is no silver bullet yet

- several well-founded well-being metrics
- plethora of sustainability composite indexes and dashboards
- lot of metrics related to SDGs
- debates ruled by GDP metric only  
*see: the on-going competitiveness debate in Europe*
- political/policy decisions based mostly on GDP



# The concept of an integrated measurement of sustainability transition

## Macroeconomic-based theoretical background

$$Y = f(K, L)$$



Development in macroeconomics

$$WB = X + Y = f(K_m, K_h, K_s, K_n)$$

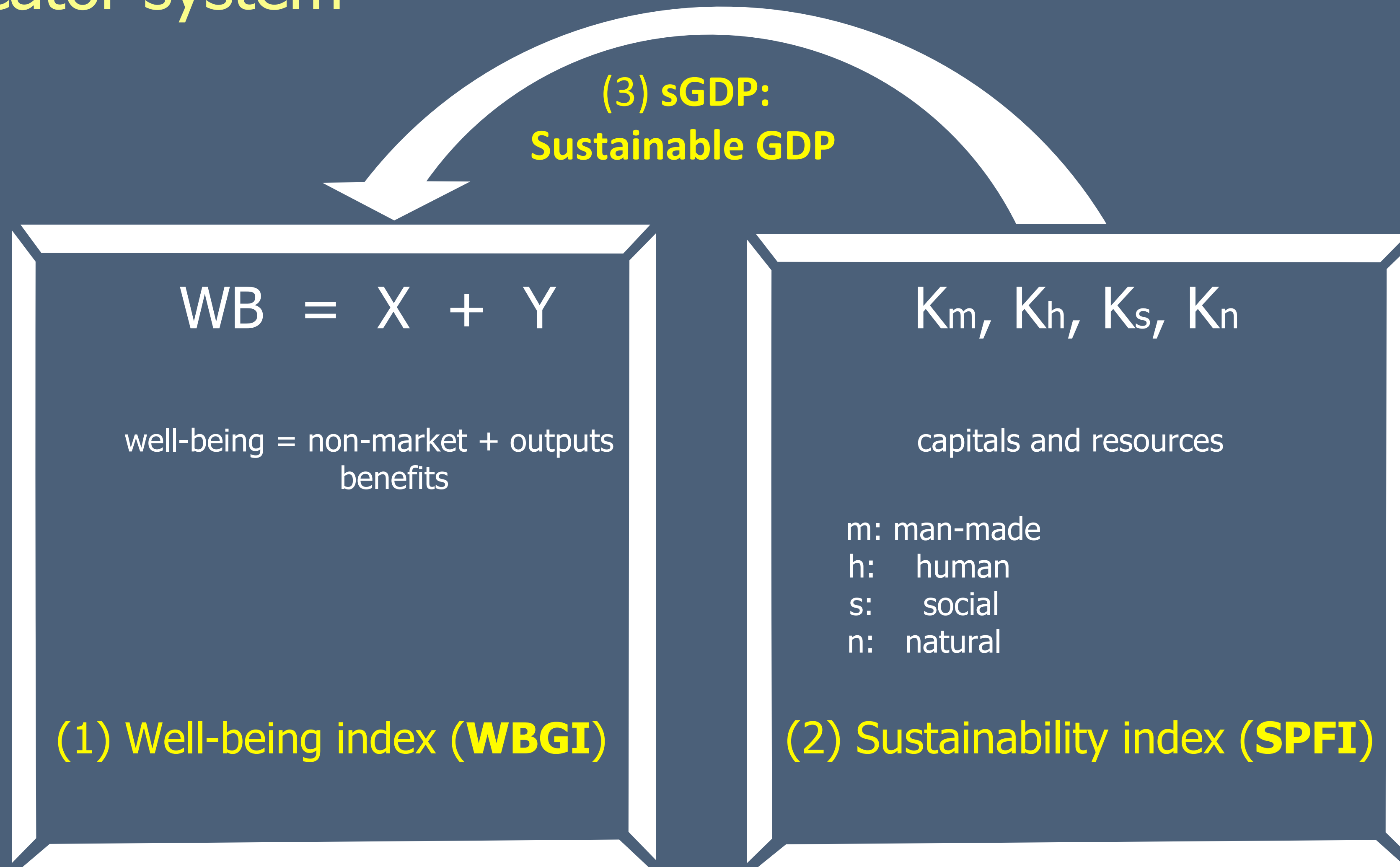
well-being = non-market + outputs = function of capitals and resources (factors of production)  
benefits



this is measured by GDP

m: man-made  
h: human  
s: social  
n: natural

# The indicator system



One integrated system with three indicators (two composite indices, one GDP-based metric)

# Integrated methodology for Beyond GDP metrics

## WELL-BEING BEYOND GDP INDEX

- composite indicator
  - beyond GDP is not without GDP!
  - other elementary indicators are used to evaluate human, social and environmental well-being factors
  - developed originally by Makronóm Economic Research Institute, Budapest
- 
- to measure four dimensions (human, social, economical and environmental)
  - cover all 17 SDGs - and more (e.g. demography)
  - modular - change in the composition of elementary indices is possible and necessary!
  - equally wheighted (for now)

## SUSTAINABLE PERFORMANCE FRAMEWORK INDICATOR

- composite indicator
- elementary indicators for quantity and quality of capitals and resources (factors of production)
- developed by Hétfa Research Institute, Budapest

## SUSTAINABLE GDP (sGDP)

- a valuable metric in itself
- can be used to create connection between the two composite indices
- unsustainability as a gap (disequilibrium)
- adjusts the level of GDP in economic (monetized, non-statistical) terms
- five factors are used: output gap, external gap, credit gap, social gap and ecological gap
- invented by MNB - Hungarian National Bank

# Sustainable GDP (sGDP) by MNB



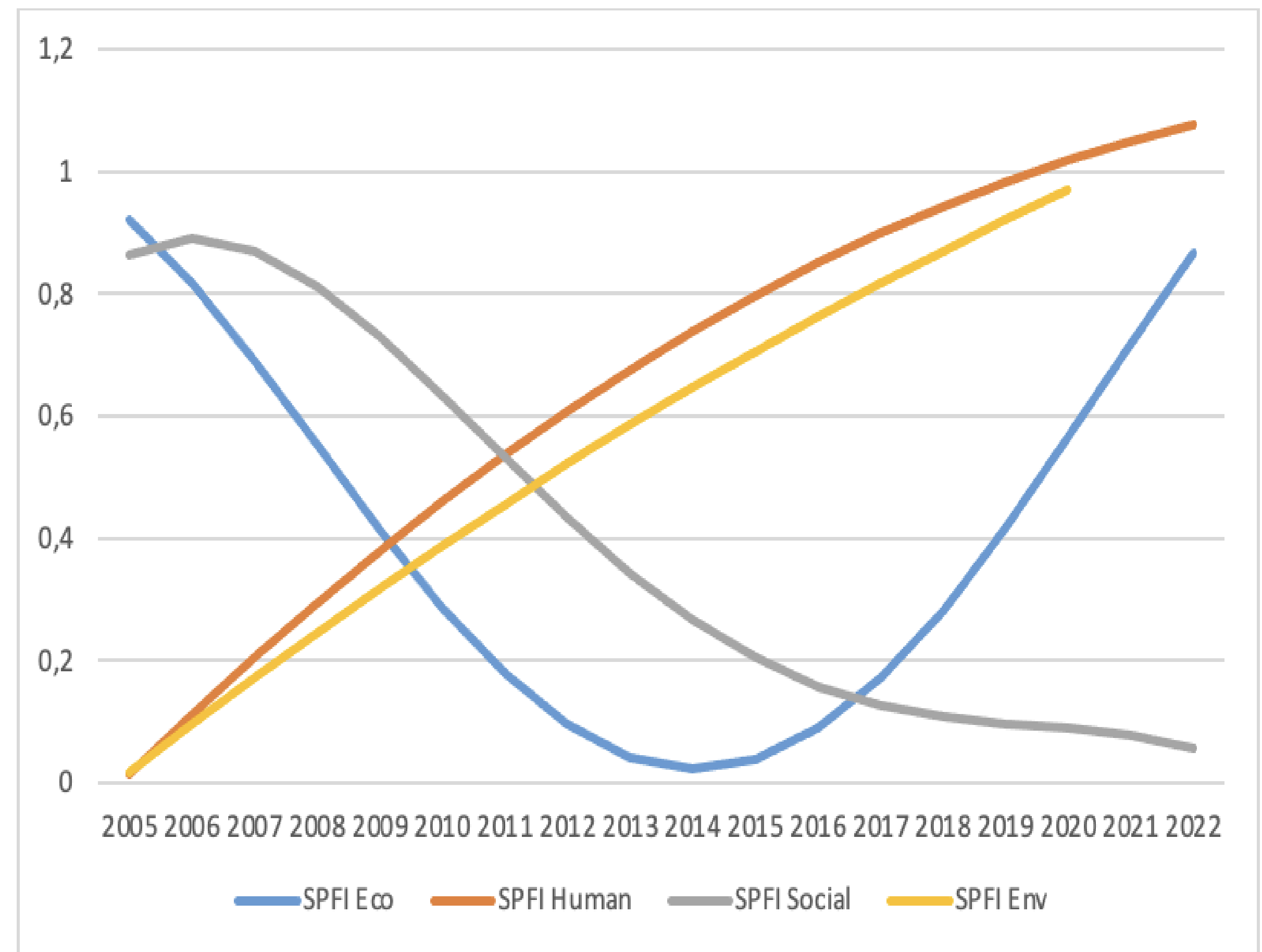
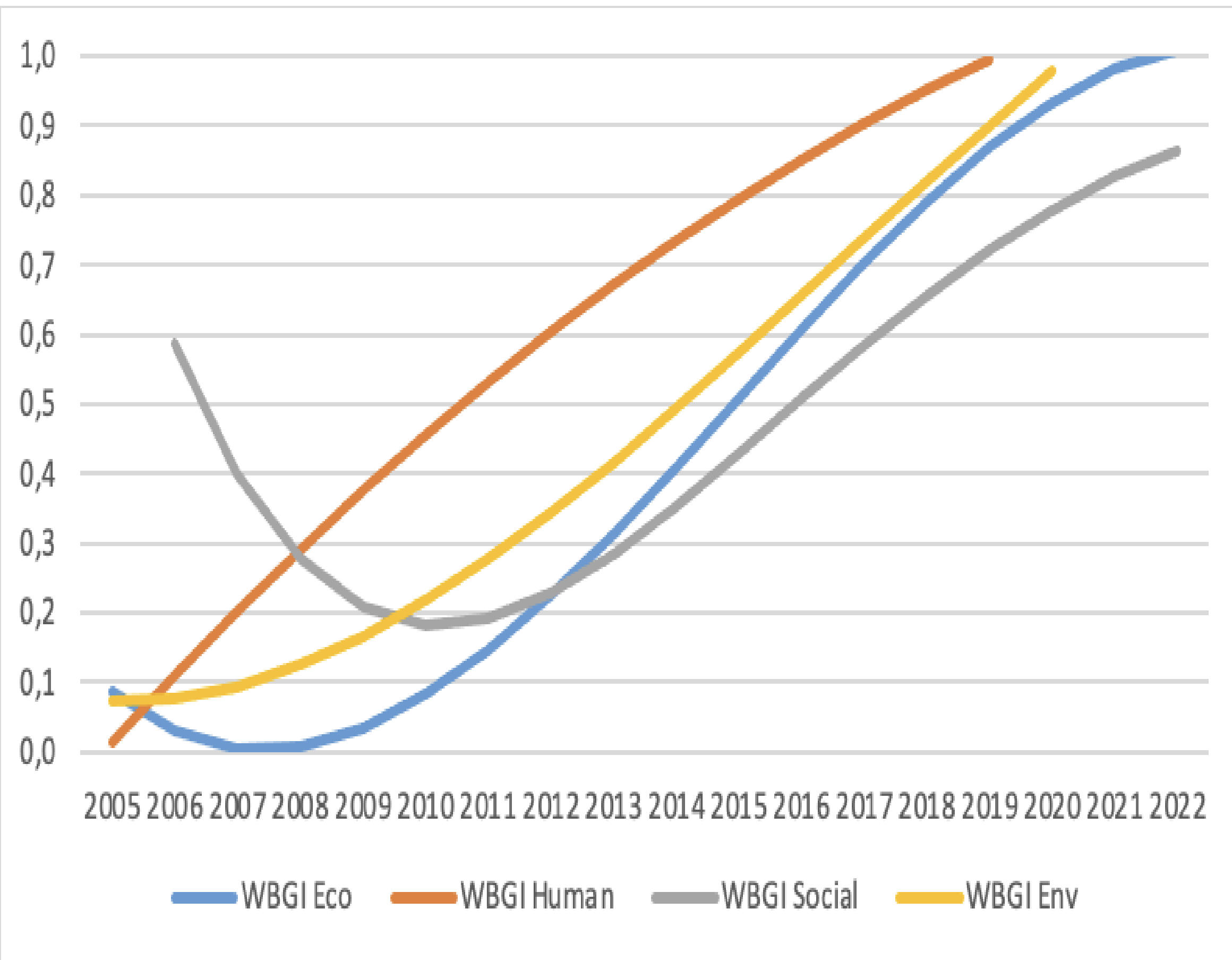
**What do we consider as a sustainable growth path?**  
It is the track where the different aspects of equilibrium (economic, financial, social and ecological) is in balance at the same time.

**We define the sustainability with the equilibriums,** while we claim that the deviation from the balances indicates the lack of sustainability

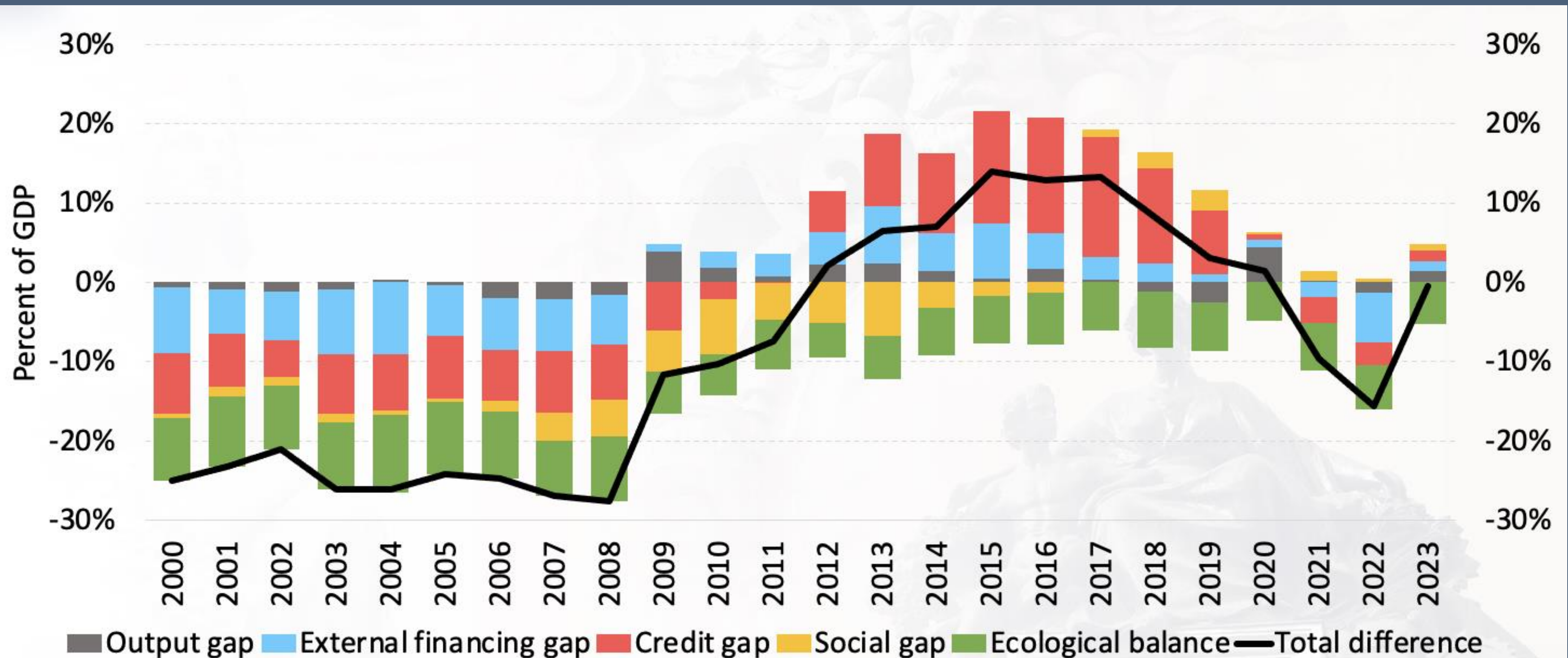
**This is a useful abstraction,** since the lack of balance can be captured easier than the sustainability in the economic, social and environmental subsystems of the economy.



# Results – WBGI and SPFI (Hungary, 2005-2022)



# Results – sGDP (Hungary, 2000-2023)



DECOMPOSITION OF THE DIFFERENCE BETWEEN GDP AND sGDP IN HUNGARY (2000-2023)

Source | AMECO, Eurostat, GFN, IMF, BIS, ECB, MNB

# What's new?

- not a single indicator, but an integrated system of three
- less number of elementary indicators (cca 80) are needed than the numbers of indices (200+) of the SDG measurement system
- the output side (well-being) is not mixed with the input side (sustainability), so we can discover the **trade-offs** (where the improvement of actual well-being is at the expense of the abilities of future generations)
- the third pillar (sGDP) is able to measure the gap between the current statistical GDP (real, PPS per capita) and the potential GDP based on sustainable activities
- **modularity and flexibility** are keys!
  - ❖ well-being is a function of values, cultural heritage, etc. - so this varies with location and in time
  - ❖ sustainability is also dependent from income level, location and time
  - ❖ **a longitudinal measure of one country's performance is more important than ranking countries**
  - ❖ it is necessary to implement the composite indicators by a country (or a region) related to their respective circumstances

There is no 'one indicator-set fits all'!

# In the near future...

- The next lot of small steps:
  - ❖ choose better proxies
  - ❖ improve the weighting method
  - ❖ make better selection of elementary indicators for well-being and sustainability
  - ❖ fill the data gaps
- The next big step is to **develop the SNA system**
- There are no excuses!  
Better indicators/metrics are very helpful, but we are well-informed enough that we are able to start the sustainability transition now!