# HERIWELL

Cultural Heritage as a Source of Societal Well-being in European Regions













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# The contribution of Cultural Heritage to Societal Well-being: evidence and challenges

Comparable data and quantitative methods to estimate cultural heritage contribution to well-being

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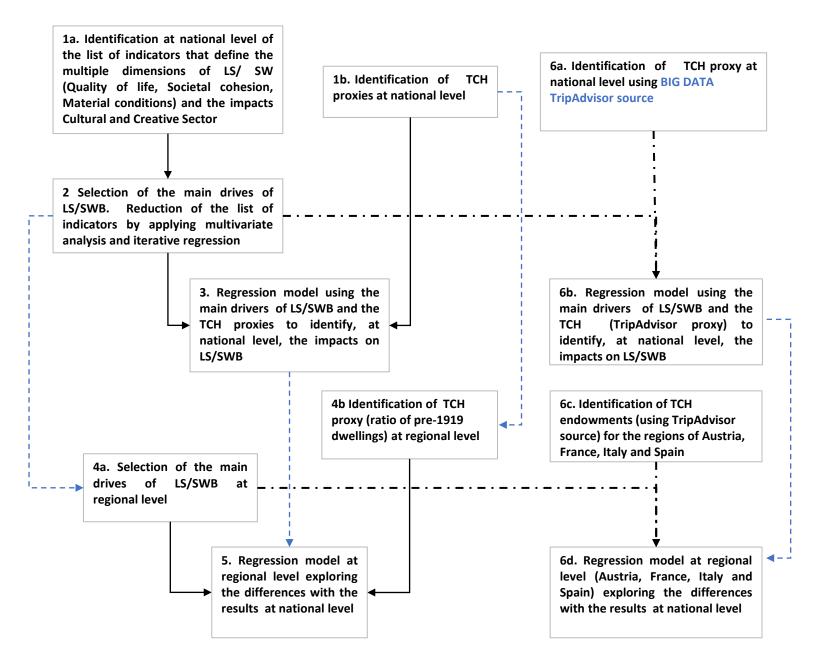
# How to measure the impact of tangible heritage on societal well-being?

- Main constraints in exploring the impact of tangible heritage on societal well-being:
  - the majority of the definitions of societal well-being adopted so far do not consider cultural heritage among the determinants of well-being, while the cultural sector is only partially considered among the determinants of well-being, especially as a "relational good";
  - difficulty of defining quantitative indicators of tangible cultural heritage endowments comparable across countries and over time;
  - the relationship between tangible heritage and societal well-being is not direct because TCH produces its effects on the different dimensions of SWB often intermediated by and jointly with other factors that affect the cultural heritage sector: for instance, investments in heritage preservation, valorization and enhancement policies, accessibility, participation, etc..

## What data and indicators?

- An indicator of Life satisfaction considered as a proxy for societal well-being (Source EU-SILC)
- Other considered indicators:
  - A set of 18 indicators on the different dimensions off well-being drawn from EU-SILC and SDG frameworks.
  - A set of 11 indicators are drawn from Cultural Statistics.
  - 3 indicators to measure tangible cultural heritage :
    - the "Historical building stock" approximated by the ratio between the number of dwellings built before 1919 and the total number of dwellings. This indicator has already been used as a proxy for tangible cultural heritage in the ESPON HERITAGE project (ESPON 2019);
    - the share of European Regional Development Fund (ERDF) allocated to cultural heritage that, even with some limits, approximate an indicator of expenditure on tangible cultural heritage;
    - a new indicator based on TripAdvisor data.

## Multi-step methodology



## **Main results**

#### **National level**

- The multivariate and the iterative regression analyses show that the main drivers of Life satisfaction/societal well-being are few and belong to the dimensions of Quality of life (Good health), Societal cohesion (Poverty risk, with a negative sign) and cultural participation (Cultural online accessibility).
- The main societal well-being and cultural drivers are stable in the two cross-sections analyses for year 2013 and year 2018.
- The regression analysis shows that tangible cultural heritage has a positive effect on LS/SWB in a positive interaction with Good health (Quality of life) and Public expenditure on culture and in a negative interaction with the NEET ratio (Societal cohesion).

#### Regional level

• The **regression analysis** shows that tangible cultural heritage has a positive effect on Life satisfaction/Societal well-being in a positive interaction with cultural participation (Cultural online accessibility) and in a negative interaction with Poverty risk (Societal cohesion dimension).

# TripAdvisor as a new source for tangible cultural heritage

- **TripAdvisor user reviews** are used as a measure of the appreciation that cultural consumers assign to the sites they have visited.
- For each geographical entity, nation or region, the list of "things to do" proposed by TripAdvisor users was surveyed.
- Then, the TripAdvisor web page of each attraction has been loaded in order to obtain: the number of reviews, the ranking in the list of the other things to do in the same area, and the type of attraction classified according to the TripAdvisor taxonomy (e.g. Amusement & Theme Parks, Ancient Ruins, Architectural Buildings, Churches & Cathedrals, Religious Sites, Castles, Points of Interest & Landmarks, Museums, Scenic Walking Areas, etc.).
- A new indicator of tangible cultural heritage has been defined, on an experimental basis, starting from the distribution of the number of reviews for each geographical entity.

# TripAdvisor as a new source for tangible cultural heritage: the results

#### **National level**

• Tangible cultural heritage, approximated by the **TripAdvisor indicator**, shows a positive relationship with LS/SWB in a positive interaction with driver belonging to CCS (employment in CCS on total employment) and, in a negative interaction with drivers belonging to the Societal cohesion dominion (Poverty risk and NEET rate)

#### **Regional level**

- TCH, approximated by **TripAdvisor indicator**, shows a positive relationship with Life satisfaction/societal well-being in a positive interaction with other main drivers like: tertiary education, adult participation in learning (Quality of life dimension), ebook purchases (cultural participation) and gross disposable income of households (Material conditions).
- The use of the TripAdvisor indicator at NUTS2 level confirms the usefulness of this data source to monitor the contribution of tangible cultural heritage to societal well-being at regional level.

## **BIG DATA: Wikipedia source**

- The online visits on Wikipedia have been experimentally used to explore the **impacts** of the COVID-19 lockdowns on the popularity and dynamics of the virtual cultural demand for two specific sites: Colosseum and Louvre.
- The analysis, disaggregated by device and user language, captures the differences in the origins and needs of online visits. The analysis shows that the pandemic has had a negative effect on "virtual" cultural consumption of the two sites: Colosseum and Louvre.
- The information provided by Wikipedia can be used in both real-time assessments of demand and policies (nowcasting) and to improve the strategies that affect the future of a site (forecasting).