



EUROPEAN UNION

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Inspire Policy Making with Territorial Evidence

WORKING PAPER

Measuring economic impact of cultural heritage at territorial level

Approaches and challenges



During the European Year of Cultural Heritage 2018, over 23 000 events were organised, reaching more than 12.8 million participants ⁽¹⁾. This clearly shows the potential impact that cultural heritage can have on economic development and people's quality of life.

The landmark study "Cultural Heritage Counts for Europe" (2015) ⁽²⁾ shows that an estimated 300 000 people work directly in the cultural heritage sector in the European Union (EU) and as many as 7.8 million jobs are created indirectly by the sector. However, there is still a limited understanding of what economic benefits cultural heritage brings to regions and cities.

This working paper is guided by the following questions:

- How can the economic impact of cultural heritage be defined? To which economic sectors does cultural heritage contribute? How significant is this contribution?
- How can economic impact of cultural heritage be measured? How can this be expressed in quantitative terms considering reliability and validity, at the territorial level?
- How can the results on the impact of cultural heritage across territories be compared?

This working paper is mostly based on the results and evidence from the ESPON 2020 Targeted Analysis project "Material Cultural Heritage as a Strategic Territorial Development Resource: Mapping Impacts through a Set of Common European Socio-economic Indicators" (ESPON HERITAGE) and the ESPON 2006 project "The Role and Spatial Effects of Cultural Heritage and Identity".

KEY MESSAGES

- The ESPON HERITAGE study on the economic value of material cultural heritage is the first study to be based on official statistics and not case studies. As such, it is a major innovation in creating tools for knowledge-based regional development policies on (material) cultural heritage.
- The results of the ESPON HERITAGE project show that, in terms of sectors, tourism and construction are the biggest contributors to the economic impact of material cultural heritage.
- In terms of gross value added (GVA), the material cultural heritage contributes 1.6 % to the total business economy and 3.4 % to the total services economy in the 11 countries/regions that were researched in the ESPON HERITAGE project.
- In many cases, the impact of material cultural heritage needs to be estimated using proxies; current official statistics are not adapted yet to cultural heritage so that measuring the impact is still not straightforward.
- Given the diversity of types of cultural heritage, potential impacts, sectors/activities concerned and countries/regions in Europe, a common approach and definition of all these elements is required to avoid fragmentation of the impact measurement.
- There is a potential to refine existing classification systems (such as the Statistical Classification of Economic Activities in the European Community – NACE – and the International Standard Classification of Occupations – ISCO) for defining the impact indicators; Eurostat and the European Commission will have a key role to play.
- The heritage sector would ultimately benefit from a European Heritage Satellite Account, not only to collect and present comparable economic indicators, but also to have a strategic instrument to make better policy decisions.

1 European Commission. 2019. *Implementation, Results and Overall Assessment of the European Year of Cultural Heritage 2018*. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2019:0548:FIN>

2 Cultural Heritage Counts for Europe. 2015. <http://www.encatc.org/culturalheritagecountsforeurope/outcomes/>

1. Introduction

Cultural heritage is one of Europe's greatest strengths and it forms an integral part of the life of its citizens. According to the 2017 Special Eurobarometer on Cultural Heritage ⁽³⁾, more than 7 in 10 respondents (73 %) live near some form of cultural heritage. Cultural heritage is recognised as not only a source of knowledge, social well-being, sense of belonging and community cohesion but also an essential part of Europe's socio-economic capital. Although cultural heritage is inherited from the past, in many ways it also forms a "living" cultural resource, which stimulates a wide range of economic activities as it spills over into the wider economy, contributing to employment and gross domestic product (GDP).

During the last decade, policymakers have increasingly acknowledged the role of cultural heritage as a strategic resource for economic growth, employment and territorial cohesion. This is reflected in several European policy documents, more recently the "New European Agenda for Culture" ⁽⁴⁾, adopted by the European Commission in May 2018, and the "European Heritage Strategy for the 21st Century" ⁽⁵⁾, adopted by the Council of Europe in April 2017.

Cultural heritage has been gradually streamlined in different policy areas, such as the EU cohesion policy (more than 90 regions have included culture and cultural heritage as part of their Smart Specialisation Strategy), thus showing the growing strategic importance that the topic has gained on the European agenda. Several initiatives at the European level contribute to the general appraisal of cultural heritage, such as the European Heritage Days, the European Heritage Label, the European Heritage Awards and the European Capitals of Culture.

Despite recent efforts to improve cultural heritage statistics by the European Commission, it is still a challenge to fully capture the significance of its impact on the economy and society. Standardised quantitative data and metrics (including Eurostat data) offer only a partial picture of the economic relevance of cultural heritage and its impact on different sectors. Existing economic impact studies on cultural heritage are limited in thematic (e.g. stand-alone heritage sites) or geographic scope (e.g. specific regions/countries) and have the clear limitation that their approach and results cannot be generalised. Therefore, there is an urgent need to establish a common framework in Europe to collect harmonised and comparable data on cultural heritage, in order to fully capture its contribution to the wider economy and the society. Cultural heritage impact indicators in this context can play a key role, as they present an opportunity to make a compelling case for considering the importance that cultural heritage has for economic and social development ⁽⁶⁾.

On 7 December 2018, the European Commission presented the European Framework for Action on Cultural Heritage ⁽⁷⁾. The Framework consists of 60 actions related to the promotion and protection of cultural heritage in the longer term. It calls for evidence-based decision-making in the cultural heritage field and enumerates a number of projects that are going to be carried out in order to address the issue of measuring the impact of culture and cultural heritage on economy, society and local development.

3 Special Eurobarometer 466. *Cultural Heritage*. 2017. <https://op.europa.eu/s/n2F2>

4 European Commission. 2018. *A New European Agenda for Culture*. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2018:267:FIN>

5 Council of Europe. 2017. *European Heritage Strategy for the 21st Century*. <https://www.coe.int/en/web/culture-and-heritage/strategy-21>

6 Monaco, P. 2019. Exploring the Links between Culture and Development: New Challenges for Cultural Indicators in the European Union. In *Cultural Heritage in the European Union. A Critical Inquiry into Law and Policy*. Leiden, Netherlands: Brill-Nijhoff. https://doi.org/10.1163/9789004365346_008

7 European Commission. 2019. *European Framework for Action on Cultural Heritage*. <https://doi.org/10.2766/949707>

2. Measuring the societal impact of cultural heritage – what is being done?

Currently, there are several European-scale initiatives that focus on analysing the impacts of cultural heritage and provide data and statistics on how culture is contributing to economic growth and social cohesion:

- 1) Eurostat is continuously improving the availability of statistical data on culture, based on the ESSnet-Culture framework⁽⁸⁾. There are no specific collections of data pertaining to culture and the contribution of culture to the economy, so other data collections are used to derive the information, for instance on cultural employment, trade in cultural goods or cultural participation.
- 2) The European Heritage Heads Forum's Task Force on Economy and Statistics⁽⁹⁾ regularly engages in carrying out studies on indicators that capture the socio-economic contribution of immovable cultural heritage.
- 3) The Cultural and Creative Cities Monitor⁽¹⁰⁾ is an online platform developed by the DG Joint Research Centre (JRC) and its 2019 edition provides information on 190 European cities, covering 29 indicators relevant to nine dimensions reflecting three major facets of the cultural, social and economic vitality of cities: cultural vibrancy, creative economy and enabling environment. The JRC is also regularly engaged in research using the Monitor's data⁽¹¹⁾.
- 4) A joint Directorate-General for Education, Youth, Sport and Culture (DG EAC) and Organisation for Economic Co-operation and Development (OECD) collaboration on the role of culture in local development, gathering data at the Nomenclature of Territorial Units for Statistics (NUTS) 2 level in relation to cultural participation, cultural employment and cultural public spending, will be considered⁽¹²⁾.
- 5) The first pan-European study on family-owned heritage houses and their socio-economic contribution was produced in 2019⁽¹³⁾, financed by the European Commission with the support of European Landowners' Organisation and the European Historic Houses Association.
- 6) A new Partnership on Culture and Cultural Heritage, within the framework of the Urban Agenda for the EU, was launched in 2019. Among other things, it will look at how to link territorial policies with the impact of cultural heritage⁽¹⁴⁾.

The ESPON 2020 programme is also contributing to these efforts. The European Framework for Action on Cultural Heritage foresees that the finalised ESPON HERITAGE study "**Material Cultural Heritage as a Strategic Territorial Development Resource: Mapping Impacts through a Set of Common European Socio-economic Indicators**" (2018–2019)⁽¹⁵⁾ and the ESPON study "**Cultural Heritage as a Source of Societal Well-being in European Regions**" (2020–2022) will play an important role in providing evidence and data on the impact of cultural heritage.

The previous ESPON programmes have contributed relevant research as well:

- The ESPON 2006 programme's project "**The Role and Spatial Effects of Cultural Heritage and Identity**"⁽¹⁶⁾ analysed the supply of and demand for cultural heritage in Europe by looking at various structural indicators. For instance, the supply was analysed in terms of stock of material cultural heritage (number of monuments and sites, protected landscapes and conjuncts, museums and galleries) and the demand for cultural heritage was analysed by looking at potential use pressure from locals and visitors.

8 See: <https://ec.europa.eu/eurostat/web/culture>

9 See: <http://www.ehhf.eu/economic-taskforce>

10 See: <https://composite-indicators.jrc.ec.europa.eu/cultural-creative-cities-monitor/>

11 Montalto, V., Tacao Moura, C. J., Langedijk S., Saisana, M. 2019. "Culture Counts: An Empirical Approach to Measure the Cultural and Creative Vitality of European Cities". *Cities* Volume 89. <https://doi.org/10.1016/j.cities.2019.01.014>

12 See: <http://www.oecd.org/cfe/leed/culture-and-creative-sectors.htm>

13 European Commission. 2019. *Study of Heritage Houses for Europe*. <https://doi.org/10.2766/636172>

14 Urban Agenda Partnership on "Culture and Cultural Heritage". 2019. *Culture and Cultural Heritage*. Orientation Paper. https://ec.europa.eu/futurium/en/system/files/ged/cch_orientation_paper_-_final-public_version.pdf

15 See: <https://www.espon.eu/cultural-heritage>

16 See: <https://www.espon.eu/programme/projects/espon-2006/thematic-projects/impacts-cultural-heritage-and-identity>

- The ESPON Atlas 2006 ⁽¹⁷⁾ featured European maps and analyses on cultural employment and regional specialisations in terms of culture and cultural heritage.
- The ESPON 2013 programme's project “**Attractiveness of European Regions and Cities for Residents**

and Visitors” ⁽¹⁸⁾ featured, among other things, European maps and analyses of regional endowment with socio-cultural capital, the regional creative workforce and the regional stock of monuments and tourist sites indexed in tourist guidebooks.

3.

What can be regarded as cultural heritage and how much cultural heritage is there in Europe?

In Europe, there is a common understanding that **cultural heritage** is what is considered worth preserving and passing on to future generations on account of its archaeological, historical, architectural or aesthetic value. However, each territory outlines its own set of criteria and processes to designate, conserve, maintain, communicate and transmit material cultural heritage by cultural heritage laws that reflect national or regional traditions.

The ESPON HERITAGE project, which looked at the material cultural heritage, developed an operational definition of material cultural heritage in order to be able to calculate the cultural heritage stock. It is hard to address the impact of cultural heritage without baseline information on the total population of heritage objects. The operational definition was an attempt to find the common denominator in the presence of different law systems across the 11 countries/regions studied.

Operational definition of material cultural heritage (ESPON HERITAGE project)



Objects of immovable (e.g. archaeological sites, cultural landscapes) and movable (e.g. paintings, books) nature recognised as having heritage value in each country/region according to three types of recognition:

1. listed (included in national and/or regional inventories, understood as sources made available by public authorities at national and regional levels where material cultural heritage is recorded) as having heritage value and legally protected (this also comprises the sites listed in the UNESCO World Heritage List);

2. listed (included in national and/or regional inventories) as having heritage value but not legally protected;
3. historical building stock.

This operational definition also includes places that are publicly accessible and where movable material cultural heritage objects are stored/exhibited, namely archives, libraries and museums.

Source: ESPON HERITAGE project, 2019.

Data collection on material cultural heritage objects is a challenging task; as there is no single repository of data at the European level, it is even more challenging if one wants to depict any regional breakdowns. Most of the

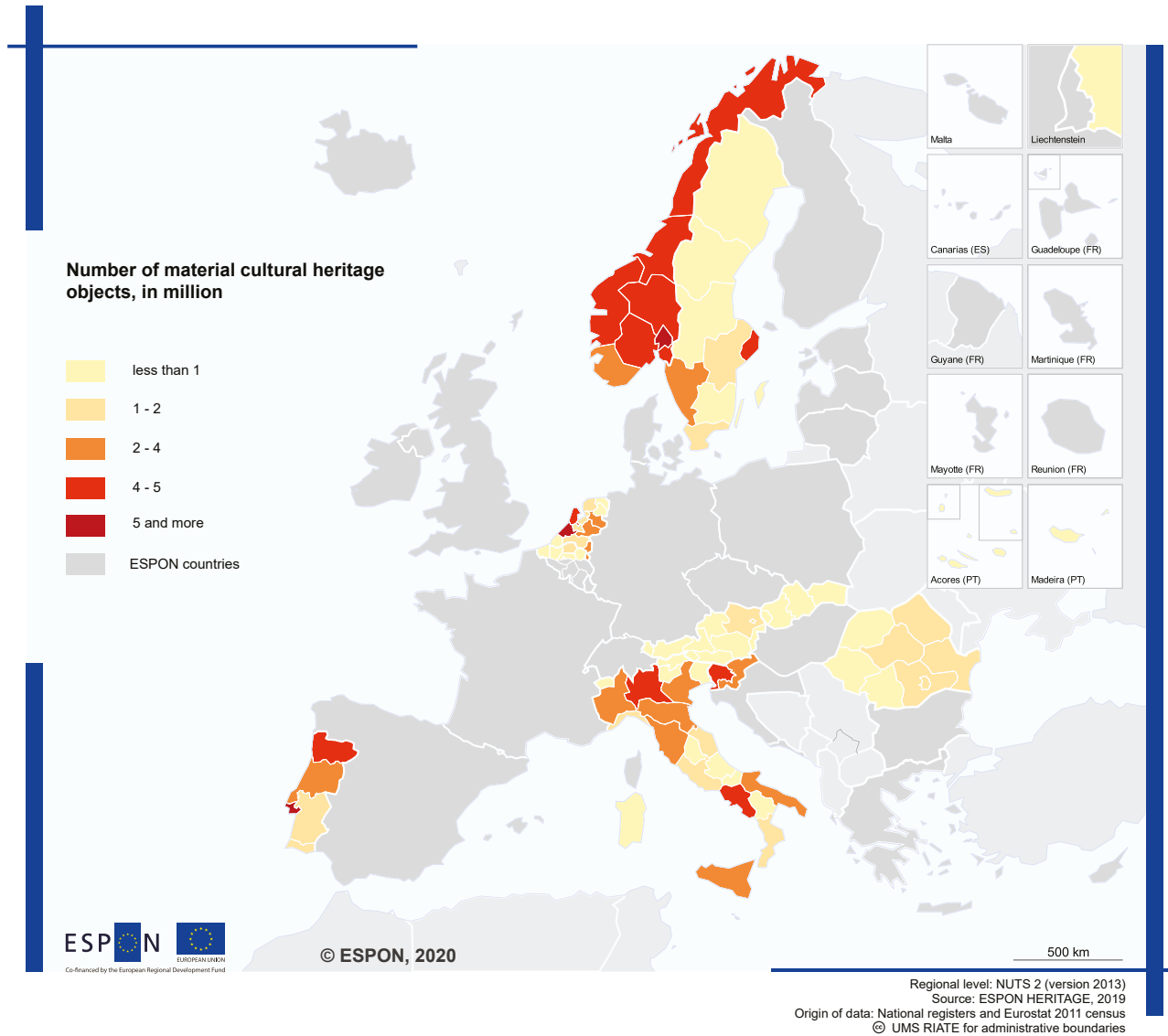
data during the ESPON HERITAGE project were collected via national registers and databases, except for the historical building stock, for which Eurostat's 2011 Population and Housing Census data were used.

17 See: <https://www.espon.eu/topics-policy/publications/espon-2006-programme/espon-atlas>

18 See: <https://www.espon.eu/programme/projects/espon-2013/applied-research/attreg-attractiveness-european-regions-and-cities>

Map 1

Total number of material cultural heritage objects (moveable and immovable) per NUTS 2 region in 11 stakeholder countries/regions of the ESPON HERITAGE project, 2016

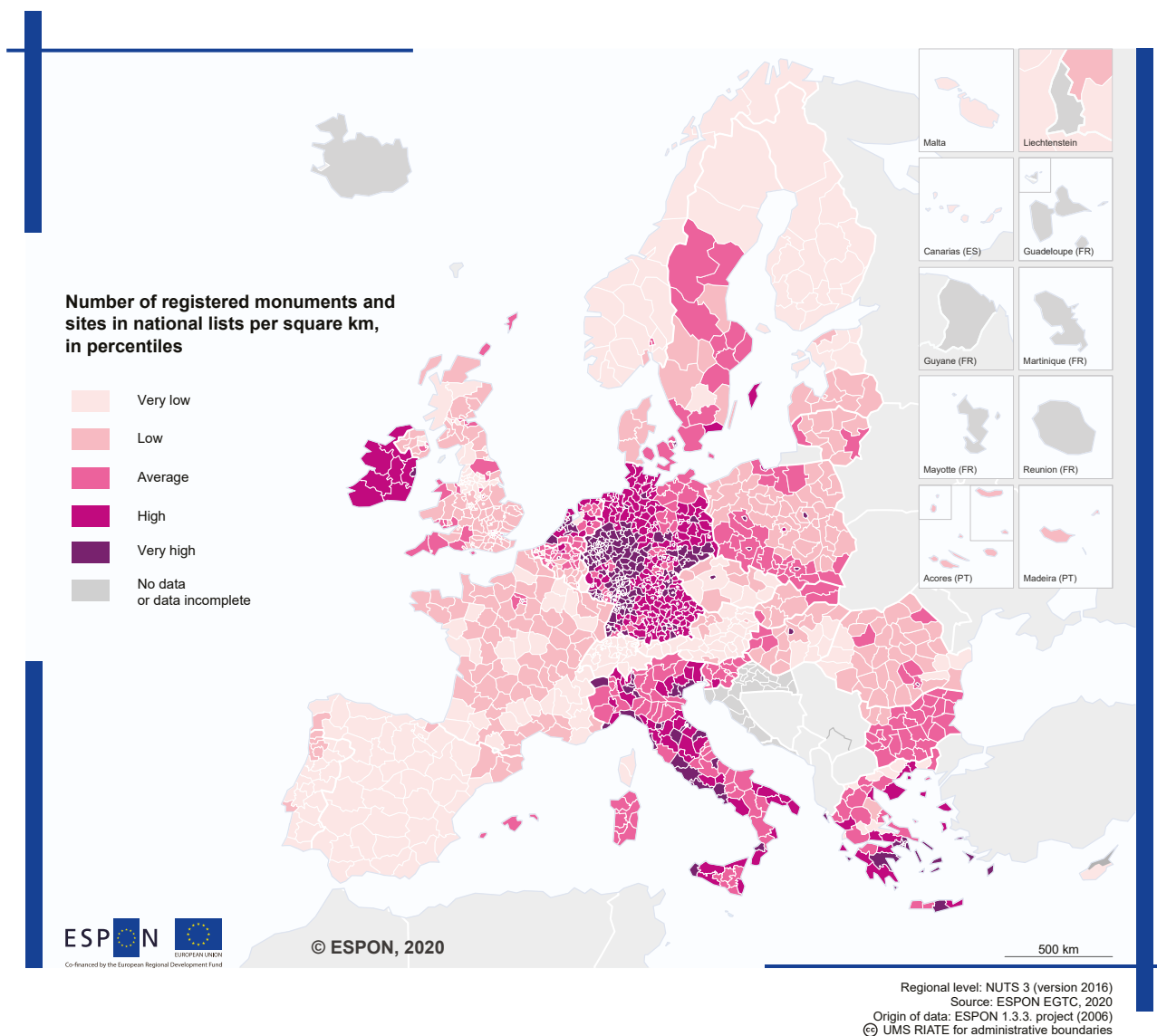


Source: ESPON HERITAGE project, 2019.

Map 1 shows that the regions with the most material cultural heritage are found in northern Portugal, Norway, parts of Italy and the (south-)west of the Netherlands, whereas the lowest numbers can be found in Sweden, Slovenia and parts of Romania. However, it is important to note that most data used for this map are based on various national databases and that some differences in the numbers may be explained by various standards of mapping and definitions used rather than by actual differences in the presence of material cultural heritage.

The ESPON's 2006 project **“The Role and Spatial Effects of Cultural Heritage and Identity”** engaged in a large-scale data collection on the presence of material cultural heritage in European regions. Results reveal that the density of monuments on the territory shows an important gap between Germany and Italy on the one hand and other nations on the other hand (see Map 2). The greater density of material cultural heritage on the Italian and German territories is tied to the institutional history of these two countries, and the protection and listing of the heritage assets is more exhaustive in these countries, which can partly explain the regional differences.

Map 2
Density of monuments in European regions, 2006



Source: ESPON 2006 project: “The Role and Spatial Effects of Cultural Heritage and Identity”.

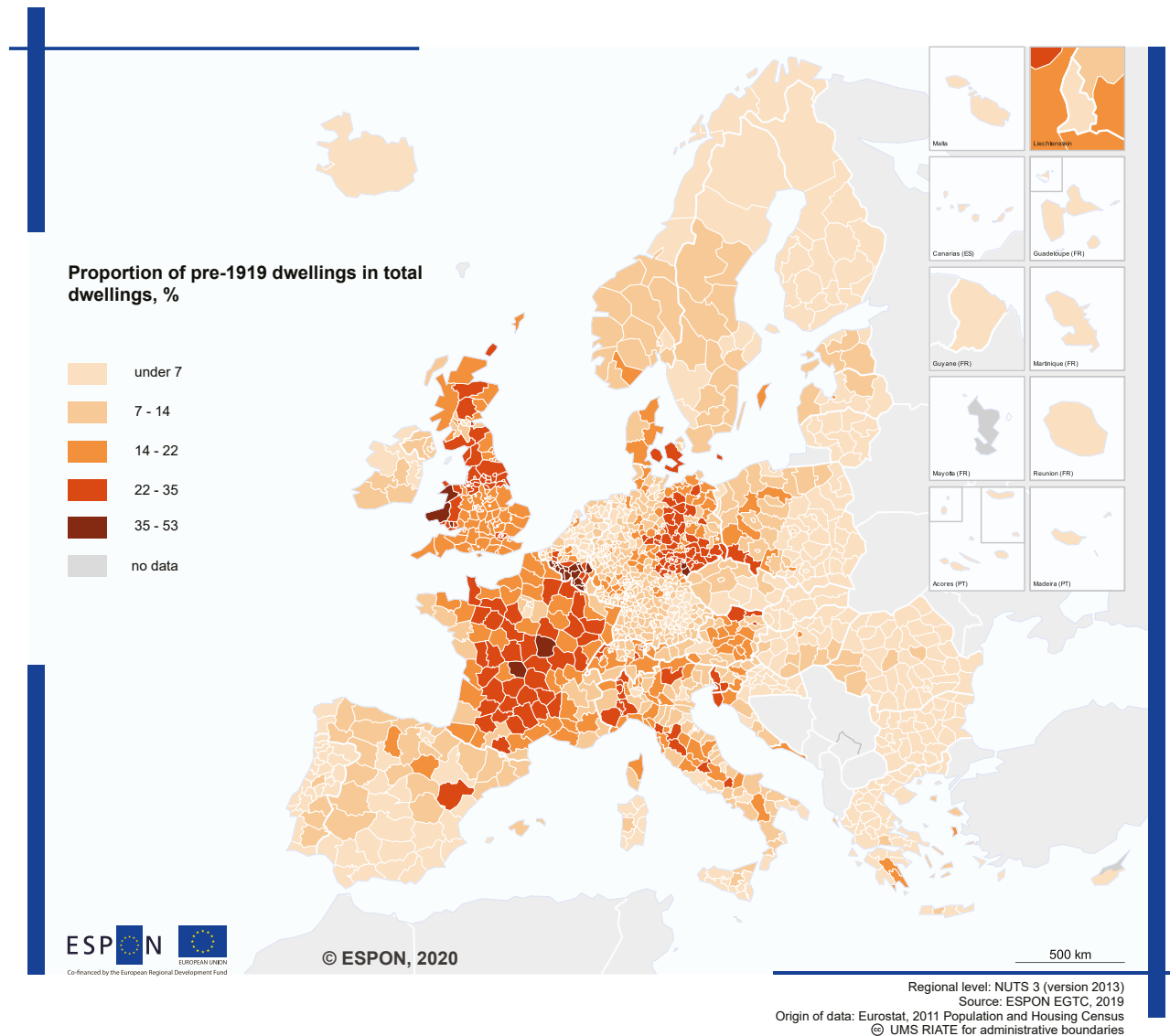
In terms of historical building stock, as there are no complete data on the stock of buildings, their age and types at the European level, the data on pre-1919 dwellings ⁽¹⁹⁾

from Eurostat’s 2011 Population and Housing Census data can be used as a proxy (see Map 3).

19 Buildings with some form of habitation.

Map 3

Proportion of pre-1919 dwellings in total dwellings, 2011



Source: ESPON EGTC, based on 2011 Population and Housing Census data from the 2011 Census Hub (20).

The data show that high proportion of pre-1919 dwellings are concentrated in France, Germany, the United Kingdom and Italy, where the proportion of pre-1919

dwellings varies between 22 % and 53 % of total dwellings. These countries have an older housing stock and potentially more heritage.

20 See: <https://ec.europa.eu/eurostat/web/population-and-housing-census/census-data/2011-census>

4. Cultural heritage and economic development

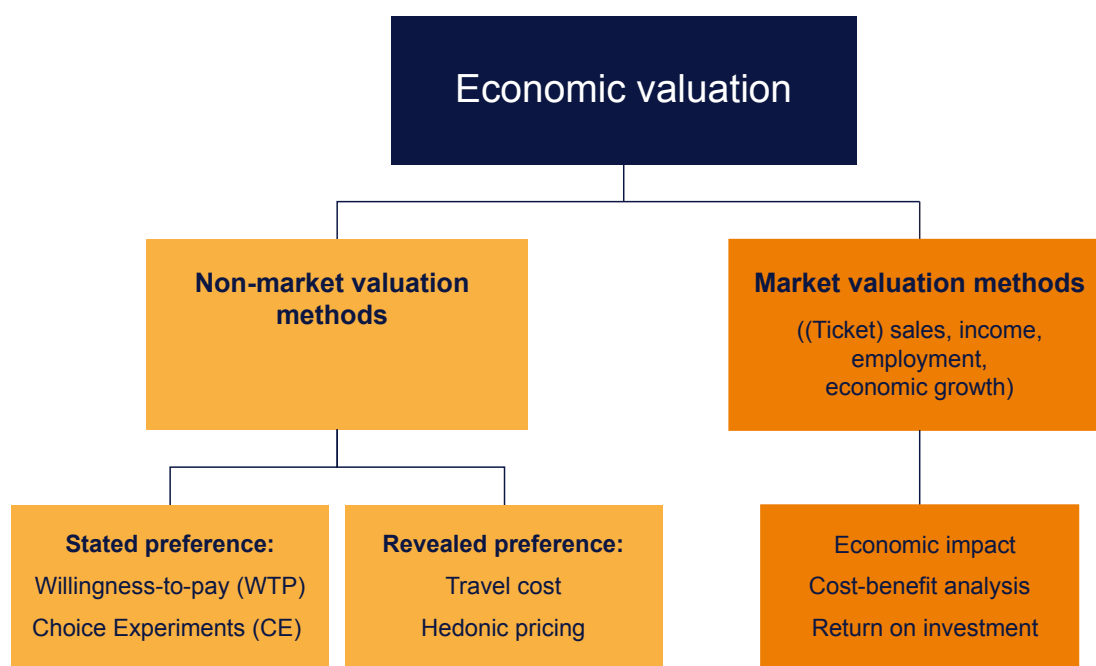
4.1 How to link cultural heritage with the economic development?

Cultural heritage has economic value because it is considered an asset which provides goods and services to people (Throsby, 1999). The part of the goods and services that are traded in markets generate economic value streams visible in employment, value added and other economic indicators. This is the so-called market valuation/impact of cultural heritage (see Figure 1). Since cul-

tural heritage exhibits public good characteristics, part of the goods and services it provides will not be visible in market transactions. Economic researchers have used non-market valuation techniques to estimate the value of these non-tradable goods and services. Together, market and non-market valuation techniques allow to assess the total economic value of or the total willingness-to-pay for cultural heritage.

The ESPON HERITAGE project is an example of a market valuation study.

Figure 1
Measuring the economic value of cultural heritage



Source: ESPON EGTC, adapted from J. Snowball (21).

Some of the ESPON HERITAGE project stakeholders have experience in economic valuation studies in the cul-

tural heritage field (see examples of Norway and Flanders).

21 Snowball, J.D. 2013. "The Economic, Social and Cultural Impact of Cultural Heritage: Methods and Examples". In Rizzo, I., Mignosa, A. (eds.). *Handbook on the Economics of Cultural Heritage*. Edward Elgar Publishing.

EXAMPLE

Measuring the value of cultural heritage in Norway



Using a hedonic pricing method (revealed preference), a study by Menon Economics (2017) ⁽²²⁾ found that in Oslo there is a higher willingness to pay to live in an area with many historic buildings/monuments than in areas with

few, and there is a higher willingness to pay to live in a listed building than in other buildings, all else being equal.

Source: Norwegian Directorate for Cultural Heritage.



EXAMPLE

Establishing a Heritage Satellite Account in Flanders



The Heritage Satellite Account is a framework for the analysis of the direct economic impact of cultural heritage. It can help answering questions like “Who is doing what?”, “Who is paying?”, “Who is gaining?” and “Who is working?” In 2019, the Flanders Heritage Agency elabo-

rated a conceptual framework for a Heritage Satellite Account ⁽²³⁾.

Financing of the cultural heritage-related activities (Who is financing what?). Example of a matrix to be filled in, depending on the national context.

	F1 Government	F2 Non-profit	F3 Profit	F4 Private persons	F5 Insurance	F6 Foreign countries
A1. Creation						
A2. Production						
A3. Distribution & trade						
A4. Exhibition & unlocking						
A5. Management & regulation						
A6. Research, education & training						

Source: Flanders Heritage Agency.

22 Menon Economics. 2017. *The Value of Cultural Heritage*. (In Norwegian with summary in English.). <https://ra.brage.unit.no/ra-xmlui/handle/11250/2468330>

23 Vanhoutte, C. 2019. *Satellite Account for Immovable Heritage of Flanders – Conceptual Framework*. (In Dutch.) Flanders Heritage Agency. <https://oar.onroerendergoed.be/item/5158>

4.2 ESPON's HERITAGE proposal

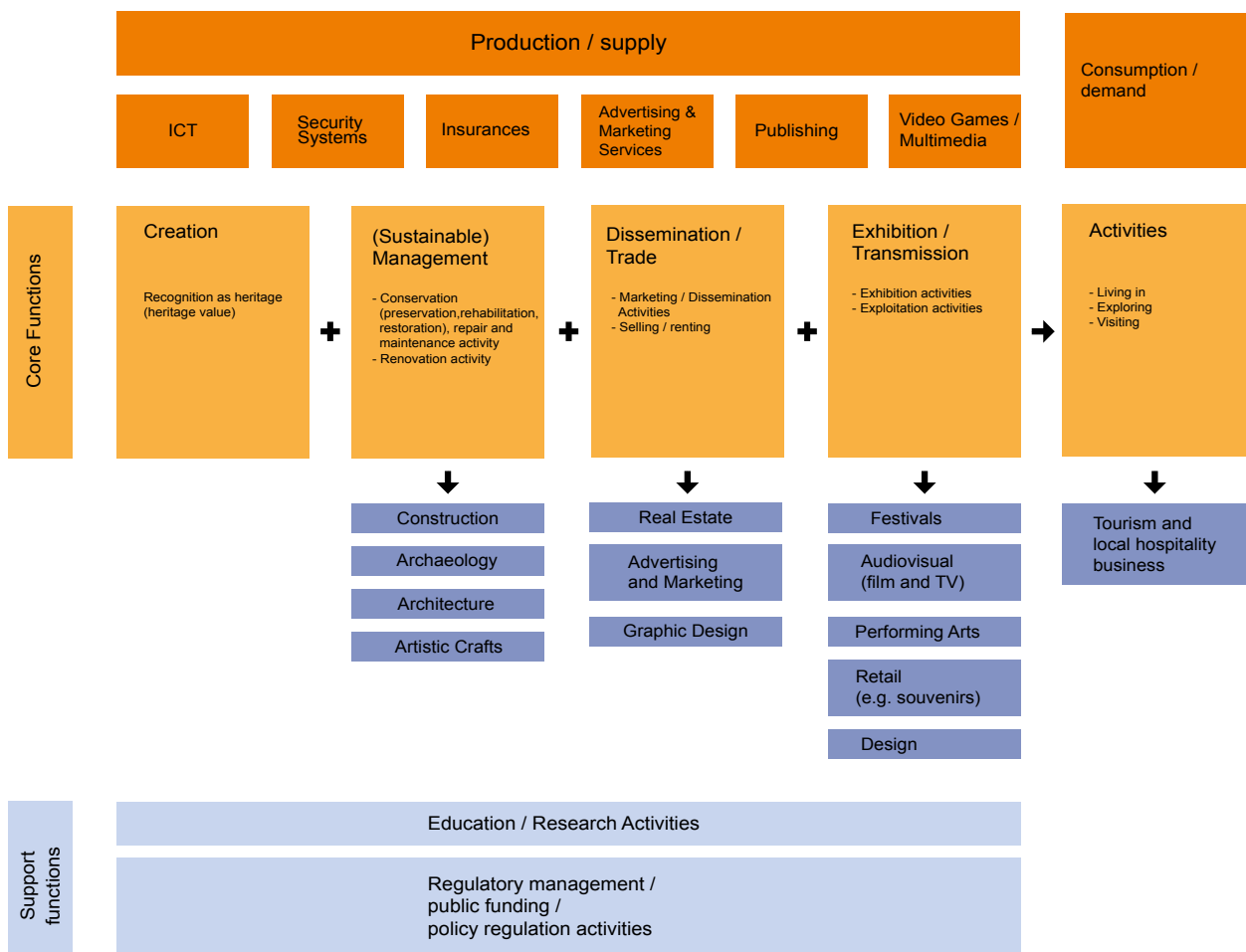
Material cultural heritage stimulates activities, which in turn trigger economic transactions, which have an impact on the local and national economy. Therefore, it is important to identify which economic activities are dependent on material cultural heritage, which economic impacts are being generated by the material cultural heritage and what the linkages with the wider economy are.

The value chain approach offers a theoretical background to these aims and it forms the basis for identifying the economic sectors/activities linked to material cultural heritage. A value chain can be defined as a sequence of activities during which value is added to a new product or

service as it makes its way from creation to final distribution. The value chain model is used as a framework to delineate economic sectors. This includes not only the identification of the steps in the value chain but also an in-depth analysis of the interrelations between actors that cooperate to create economic value.

The material cultural heritage value chain model proposed in the ESPON HERITAGE study consists of the four core functions (1) creation, (2) management, (3) dissemination/trade and (4) exhibition/transmission and the two support functions (1) education/research activities and (2) regulatory management/public funding/policy regulation activities, as well as ancillary goods and services (see Figure 2).

Figure 2
Material cultural heritage value chain and links to economic sectors/activities



Source: ESPON HERITAGE project, 2019.

4.3

The economic impact of cultural heritage in 11 ESPON HERITAGE stakeholder countries/regions

Through the value chain approach, the ESPON HERITAGE project identified the following eight economic sectors where the impact of material cultural heritage can be observed: (1) archaeology, (2) architecture, (3) museums, libraries and archives activities, (4) tourism, (5) construction, (6) real estate, (7) information and communication technology (ICT) and (8) insurance. In most cases, central statistical offices collect information on these sectors, but obviously the main challenge is to isolate the proportion attributable to cultural heritage. Only economic

activities of archaeology sector and museums, libraries and archives are fully related to cultural heritage, so no additional effort is required in order to gather data on employment, income and other impact indicators, as data can just be extracted from national statistical offices, registers or Eurostat.

In order to isolate the proportion of cultural heritage, the ESPON HERITAGE project expanded the proposal developed by T. Nypan, who has suggested using “keys” to “unlock” the statistical data (24). In principle, it means finding an appropriate proxy (indicator) that could be used to calculate the fraction of economic sector/activity related to material cultural heritage.

Table 1

Economic impact of material cultural heritage (MCH) – overview of “keys” and selected economic sectors in the ESPON HERITAGE project

Activity/sector	Relevant NACE code	“Key” (proxy indicator)
Archaeology	None	NO , fully related to MCH
Architecture	M71.1.1 – Architectural activities	YES , proportion of pre-1919 dwellings of total dwellings
Museum, library and archive activities	R91.0.1 – Library and archive activities R91.0.2 – Museum activities R91.0.3 – Operation of historical sites and buildings and similar visitor attractions	NO , fully related to MCH
Tourism	I55 – Accommodation I56 – Food and beverage service activities	YES , proportion of tourists travelling for leisure purposes
Construction	F43 – Specialised construction activities	YES , proportion of pre-1919 dwellings of total dwellings
ICT	J62 – Computer programming, consultancy and related activities J63 – Information service activities	YES , based on expenditure in the sector by MCH actors (website development and digitalisation of collections)
Insurance	K65.1.2 – Non-life insurance	YES , based on expenditure in the sector by MCH actors
Real estate	L68.1 – Buying and selling activities	YES , proportion of pre-1919 dwellings of total dwellings

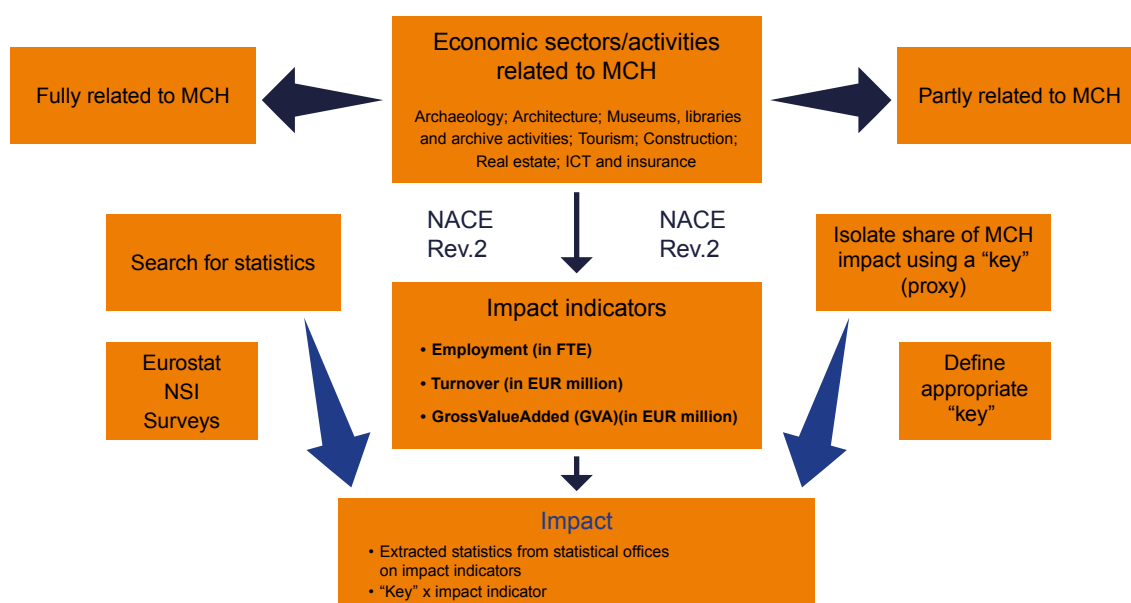
Source: ESPON EGTC, based on the ESPON HERITAGE project.

24 Nypan, T. 2016. “A Proposal for a Design to Develop European Statistics on the Socioeconomic Contributions of the Physical Cultural Heritage”. In Van Balen, K., Vandesande, A. (eds.). *Heritage Counts*. Garant Publishers.

Three basic indicators were selected to establish the economic impact of cultural heritage in each selected sector: employment (in full-time equivalents), turnover (in euro)

and GVA (in euro). The process of calculating the impact of material cultural heritage is shown in Figure 3.

Figure 3
Methodological framework for calculating the impact of material cultural heritage

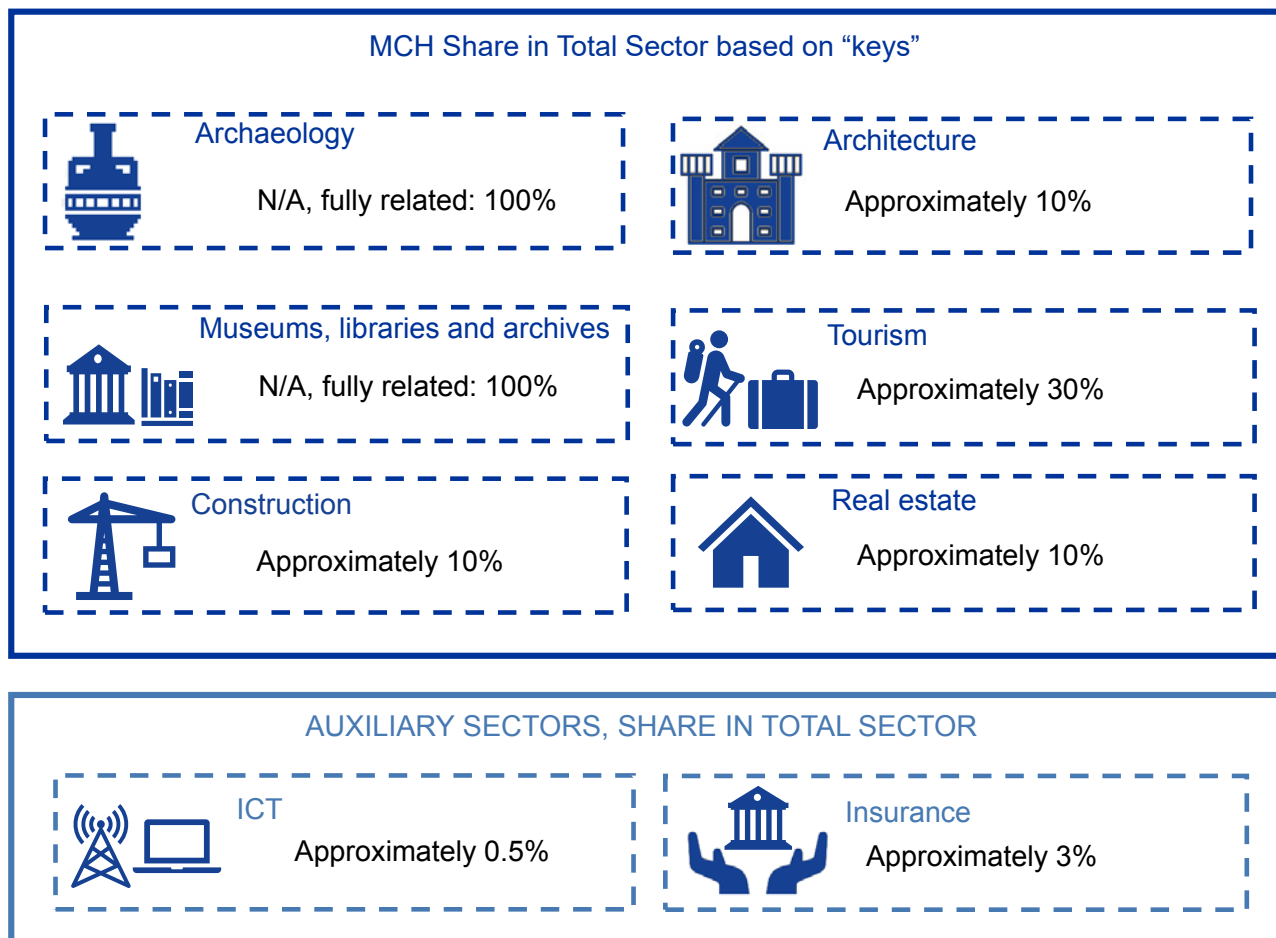


Source: ESPON EGTC, based on ESPON HERITAGE project.

It is important to note that ownership of cultural heritage is a mix of private and public; likewise, any cultural heritage-related activities are carried out by multiple actors, such as the government, entrepreneurs and non-profit organisations. Thus, any impact figures using the above-mentioned approach cannot fully capture the contribution of cultural heritage to the economy; only a heritage satellite account could potentially do that. Furthermore, the use of keys is based on assumptions and approximates, so "impact" in this case is just a reasonable estimate, which could differ if "keys" are tailored to a single country or region.

Economic activities of archaeology and museums, libraries and archives are fully related to material cultural heritage, so there is no need to use any "keys". As far as the tourism sector is concerned, the "key" relates to the proportion of leisure tourists to the total number of tourists, which is almost 30 %. For architecture, construction and real estate, the "key" relates to the number of pre-1919 dwellings in comparison with the total number of dwellings, and this proportion is approximately 10 %. For ICT and insurance, the "key" relates to the expenditure of museums, libraries and archives in these sectors and, consequently, these proportions are significantly lower, between 0.5 % and 3 % for all three indicators. See Figure 4.

Figure 4
Proportion of economic activities that can be attributable to material cultural heritage
(based on the application of “keys” in 11 stakeholder countries/regions)

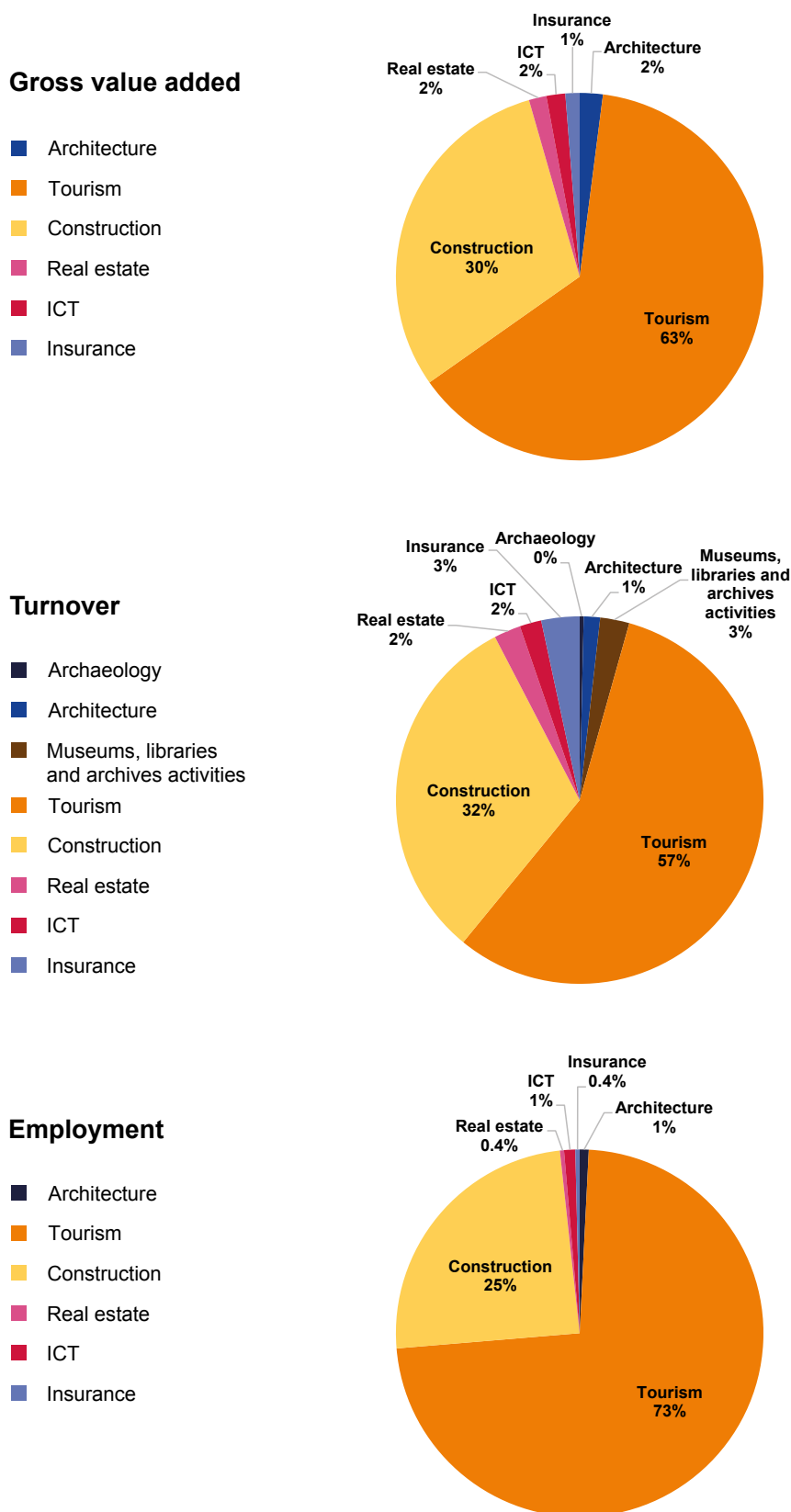


Source: ESPON EGTC, based on the ESPON HERITAGE project.

Considering the relative importance of each sector/activity on the total impact of material cultural heritage in 11 stakeholder countries/regions of the ESPON HERITAGE project, the largest impacts come from **tourism and construction** (see Figure 5). For instance, 73 % of total employment is generated by tourism and the construction sector has generated 25 % of total employment. For turnover there are comparable data for all sectors/activities: tourism provides more than half of the total turnover and construction provides just under one-third of the total turnover. The other six sectors/activities together provide 12 % of the total turnover; of these smaller sectors, insurance is the largest and archaeology is the smallest.

In terms of the impact of material cultural heritage on the wider economy, material cultural heritage, on average, generates 2.1 % of the total employment, 1.0 % of the total turnover and 1.6 % of the total GVA (except financial and insurance activities) in the 11 countries/regions that were researched. It is hard to judge whether or not that is a lot, but this provides a basis for continuing the research, as these are the first pan-European figures. In addition, material cultural heritage still secures thousands of jobs (549 003 full-time equivalents in the 11 countries/regions studied).

Figure 5
Proportion of each sector's contribution in total impact generated by material cultural heritage (11 ESPON HERITAGE stakeholder countries/regions, 2016)



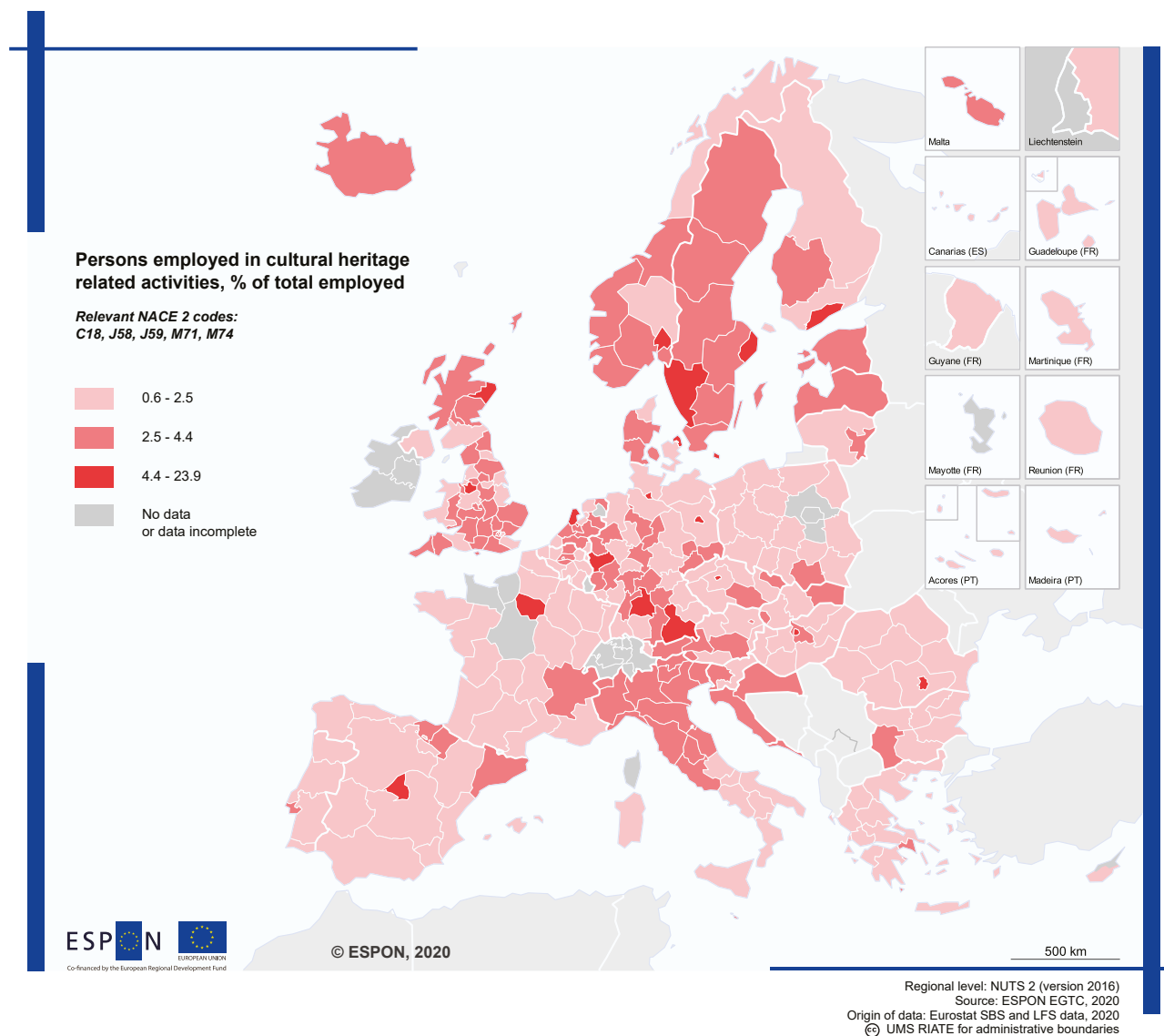
Source: ESPON EGTC, based on the ESPON HERITAGE project.

4.4 Economic impact of cultural heritage in European regions

At the national level there is a well-established framework for the collection and analysis of data related to culture and cultural heritage; Eurostat's 2019 edition (25) on culture statistics covers topics such as cultural employment, culture-related education, trade, cultural enterprises and government expenditure on culture. Unfortunately, data at the regional level are scarce and can be obtained on

only a very limited number of indicators, covered by the European Labour Force Survey, Structural Business Statistics and Business Demography statistics. Even then it is impossible to get a complete picture on the impact of culture and cultural heritage on the economy, because the NACE statistical codes that are allocated to cultural activities (26) do not fully feature in the available statistics at the NUTS 2 or NUTS 3 level. Because of this, the impact of cultural heritage is always either underestimated or overestimated and any analysis at a regional level can only be an approximation.

Map 4
Cultural heritage-related employment, 2017



Source: ESPON EGTC, based on Eurostat data.

25 Eurostat. 2019. *Culture Statistics*. <https://doi.org/10.2785/118217>

26 Eurostat. 2018. *Guide to Eurostat Culture Statistics*. <https://op.europa.eu/s/n2Q6>.

According to Eurostat ⁽²⁷⁾, in terms of employment, in 2018 there were 8.7 million people across the EU-28 working in a cultural activity or a cultural occupation, equivalent to 3.8 % of the total number of persons employed. However, proportions of cultural employment in total employment varied from 1.6 % in Romania to over 5.0 % in Estonia, Luxembourg and Malta.

At a regional level, Eurostat's Structural Business Statistics offers the most detailed information on cultural employment; however, statistics cover mostly culture and, to a limited extent, material cultural heritage. Cultural

employment is significant in central and northern Europe and regions of northern Italy (between 2.5 and 4.4 % of total employed) and least significant in regions of Romania and Bulgaria (less than 1 % of total employed). Regions with high proportions of people employed in cultural heritage-related activities are characterised with a high degree of "creativity" – or the capacity to elaborate cultural values into knowledge-based industries, such as Finland (telecom), Sweden (design, electronics) and the Netherlands (media, publishing).

5. Recommendations for improving the assessment of the economic impact of cultural heritage

There is a growing need to further explore the possibilities of acquiring data and evidence on the economic impact of cultural heritage. A lot is being done to utilise statistical data designed for other purposes; however, as put by a cultural heritage researcher: "This is heroic, but should not be encouraged beyond a certain point, and that point has been reached" ⁽²⁸⁾. This section summarises some of the key recommendations, mostly based on experience gained during the ESPON HERITAGE project. It is also important to note that, in terms of measurement, detection of impact will always be challenging and decision-makers will need to rely on expert opinions across economics, accounting, cultural and social disciplines ⁽²⁹⁾.

5.1 Definitions and concepts of cultural heritage

- Engagement is needed among the national heritage institutions, experts and cultural heritage practitioners to draw up a common definition of cultural heritage for statistical purposes, for instance through the Commission's expert group set up by the European Framework for Action on Cultural Heritage or the European Heritage Heads Forum.
- There is a need to encourage and support the dialogue between national statistics institutes (NSIs) and the agencies responsible for heritage inventories, to explore the possibility of establishing a common operational definition of material cultural heritage for statistical purposes, building on the definition drawn up during the ESPON HERITAGE project.

27 Eurostat. 2019. *Culture Statistics*. <https://doi.org/10.2785/118217>

28 Cicerchia, A. 2019. "Evidence-based Policy Making for Cultural Heritage. *SCIRES* Volume 9, Issue 1. <https://doi.org/10.2423/i22394303v9n1p99>

29 Ellwood, S. 2018. "Accounting for What We Treasure: Economic Valuation of Public Heritage". In Labrador, A.M., Silberman, N.A. (eds.). *The Oxford Handbook of Public Heritage Theory and Practice*. Oxford University Press.

5.2

Data collection

Explore the possibility for the European institutions, including Eurostat, in coordination with NSIs, to do the following:

- Propose amendments to the existing international statistical classifications to introduce or amend classification codes in relation to cultural heritage when a revision of these classifications takes place. For instance, a specific code for archaeological activities could be introduced in the current classification system for economic activities (NACE); more levels of detail can be set out in the occupational codes (ISCO), e.g. include the profession of archaeologist; the current classification system for public expenditure on culture (Classification of the Functions of Government – COFOG) could isolate cultural heritage expenditures, as currently it distinguishes only cultural services, of which cultural heritage expenditures form only a small part; and the Classification of Individual Consumption by Purpose (COICOP) could introduce household expenditures on maintenance/renovation of cultural heritage in the cultural consumption section.
- Improve coverage of data regarding non-profit employment and volunteering.
- Revise the current data collection scheme (including the sampling methods for surveys) to include additional indicators related to cultural heritage (e.g. percentage of tourists travelling for cultural heritage purposes).
- Discuss the possibility of collecting data at a higher level of detail for both NACE and NUTS and also make these data publicly available at these levels, to more precisely estimate the impact of material cultural heritage on regional and local levels.
- Reinforce the current cooperation with relevant stakeholders, such as the representatives of museums and other heritage institutions (e.g. the European Group on Museum Statistics – EGMUS – and the United Nations Educational, Scientific and Cultural Organization – UNESCO – Institute for Culture Statistics) to gather data on the contribution of cultural heritage organisations to the economy.
- Engage with cultural heritage organisations, non-governmental organisations, volunteering organisations and business and professional associations to address statistical gaps in official statistics, particularly in relation to employment and other economic data.

In relation to data collection, to map the population (stock) of material cultural heritage, it is suggested that the national heritage organisations, in coordination with NSIs:

- map the stock of material cultural heritage on a yearly basis and publish yearly overviews to keep track of the changes of the stock over time (if possible, in English);
- engage with national property registers to facilitate the collection of data related to heritage building stock (e.g. pre-1919 buildings).

5.3

Future research

- Explore the possibility of setting up a National Satellite Account (NSA) on cultural heritage to facilitate intensive data standardisation, timely monitoring and analysis of data to estimate the contribution of cultural heritage to the economy and society. Satellite Accounts capture the full contribution of economic activities/sectors to the economy and are especially useful for new and non-traditional sectors, such as cultural heritage. Another major advantage is that a Satellite Account allows reliable comparisons between countries/regions.
- Improve inter-country collaboration (e.g. under the leadership of the European Commission's Cultural Heritage Expert Group or the European Heritage Heads Forum) to explore the possibility of introducing a European Satellite Account for cultural heritage, under the aegis of Eurostat.
- Create an Open Method of Coordination (OMC) Expert Group, under the European Agenda for Culture, to exchange good practices and develop recommendations on measuring the impact of culture, including cultural heritage, on the economy and society.
- Explore the use of alternative sources for data collection, specifically the use of big data (e.g. social media, online purchase, the Eurostat pilot project on the use of Wikipedia page views on World Heritage Sites and the cultural gems app launched by the JRC).
- Ensure EU and national funding for future research in the field. Specific action lines within the upcoming programmes could be foreseen (e.g. within Horizon Europe).

6. References

- CHCfE Consortium. 2015. "Cultural Heritage Counts for Europe". <http://www.encatc.org/culturalheritagecounts-foreurope/outcomes/>
- Cicerchia, A. 2019. "Evidence-based Policy Making for Cultural Heritage". *SCIRES* Volume 9, Issue 1. <https://doi.org/10.2423/i22394303v9n1p99>
- Council of Europe. 2017. *European Heritage Strategy for the 21st Century*. <https://www.coe.int/en/web/culture-and-heritage/strategy-21>
- Ellwood, S. 2018. "Accounting for What We Treasure: Economic Valuation of Public Heritage". In Labrador, A.M., Silberman, N.A. (eds.). *The Oxford Handbook of Public Heritage Theory and Practice*. Oxford University Press.
- ESPON Atlas. 2006. *Mapping the Structure of the European Territory*. <https://www.espon.eu/topics-policy/publications/espon-2006-programme/espon-atlas>
- ESPON ATTREG. 2012. *Attractiveness of European Regions and Cities for Residents and Visitors*. <https://www.espon.eu/programme/projects/espon-2013/applied-research/attreg-attractiveness-european-regions-and-cities>
- ESPON HERITAGE. 2019. *The Material Cultural Heritage as a Strategic Territorial Development Resource: Mapping Impacts through a Set of Common European Socio-economic Indicators*. <https://www.espon.eu/cultural-heritage>
- ESPON Project 1.3.3. 2006. *The Role and Spatial Effects of Cultural Heritage and Identity*. <https://www.espon.eu/programme/projects/espon-2006/thematic-projects/impacts-cultural-heritage-and-identity>
- European Commission. 2017. *Special Eurobarometer 466. Cultural Heritage*. <https://doi.org/10.2766/576064>
- European Commission. 2018. *A New European Agenda for Culture*. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2018:267:FIN>
- European Commission. 2019. *European Framework for Action on Cultural Heritage*. Luxembourg: Publications Office of the European Union. <https://doi.org/10.2766/949707>
- European Commission. 2019. *Implementation, Results and Overall Assessment of the European Year of Cultural Heritage 2018*. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2019:0548:FIN>
- European Commission. 2019. *Study of Heritage Houses for Europe*. Luxembourg: Publications Office of the European Union. <https://doi.org/10.2766/636172>
- Eurostat. 2018. *Guide to Eurostat Culture Statistics*. Luxembourg: Publications Office of the European Union. <https://op.europa.eu/s/n2Q6>
- Eurostat. 2019. *Culture Statistics*. Luxembourg: Publications Office of the European Union. <https://doi.org/10.2785/118217>
- Menon Economics. 2017. *The Value of Cultural Heritage*. (In Norwegian with summary in English.) <https://ra.brage.unit.no/ra-xmlui/handle/11250/2468330>
- Monaco, P. 2019. "Exploring the Links between Culture and Development: New Challenges for Cultural Indicators in the European Union". In *Cultural Heritage in the European Union. A Critical Inquiry into Law and Policy*. Leiden, Netherlands: Brill–Nijhoff. https://doi.org/10.1163/9789004365346_008
- Montalto, V., Tacao Moura, C. J., Langedijk, S., Saisana, M. 2019. "Culture Counts: An Empirical Approach to Measure the Cultural and Creative Vitality of European Cities". *Cities* Volume 89. <https://doi.org/10.1016/j.cities.2019.01.014>
- Nypan, T. 2016. "A Proposal for a Design to Develop European Statistics on the Socioeconomic Contributions of the Physical Cultural Heritage". In Van Balen, K., Vandesande, A. (eds.). *Heritage Counts*. Garant Publishers.
- Snowball, J.D. 2013. "The Economic, Social and Cultural Impact of Cultural Heritage: Methods and Examples". In Rizzo, I., Mignosa, A. (eds.). *Handbook on the Economics of Cultural Heritage*. Edward Elgar Publishing.
- Urban Agenda Partnership on "Culture and Cultural Heritage". 2019. *Culture and Cultural Heritage*. Orientation Paper. https://ec.europa.eu/futurium/en/system/files/ged/cch_orientation_paper_-_final-public_version.pdf
- Throsby, D. 1999. Cultural Capital. *Journal of Cultural Economics* 23. <https://doi.org/10.1023/A:1007543313370>
- Vanhoutte, C. 2019. *Satellite Account for Immovable Heritage of Flanders – Conceptual Framework*. (In Dutch.) Flanders Heritage Agency. <https://oar.onroenderfgoed.be/item/5158>



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