SOCIO-ECONOMIC SUSTAINABILITY, REGIONAL DEVELOPMENT AND SPATIAL PLANNING: EUROPEAN AND INTERNATIONAL DIMENSIONS & PERSPECTIVES

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DEPARTMENT OF GEOGRAPHY,
UNIVERSITY OF THE AEGEAN

Touristification and the deepening EU core/periphery asymmetry*:*

a regional Composite Indicator Analysis

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PRESENTATION STRUCTURE

- Aim of research
- Conceptual Framework
- Methodological Approach
- Research Findings
- Contextualizing research findings

AIM OF RESEARCH

To **introduce an original composite index** comprising the aspects of tourism intensity, density and dependence

- *going beyond most relevant research that studies them independently*

To empirically study touristification **at the NUTS-2 level for all of the EU**

- *going beyond theoretically-informed research that is mostly based on case studies*

To **clearly define the research problem** through the concept of touristification and **contextualize results** through Geographical Political Economy and Evolutionary Economic Geography

- *going beyond atheoretical empirical analyses*

Ultimately, to contribute to the **bridging of Tourism Geography with Economic Geography**

- *repeatedly noted in literature*

CONCEPTUAL FRAMEWORK

Postwar decades / Postfordism

- Relatively **stable geopolitical order** and **deindustrialisation**
- Tourism becomes **key in capital accumulation**

Recent decades see further **financialisation trends**

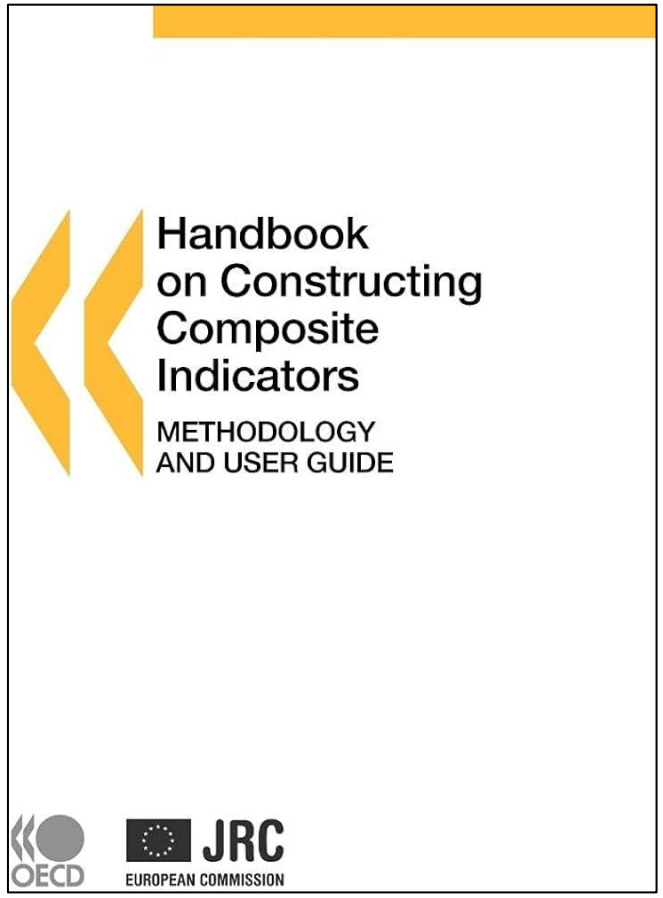
- Apart from hoteling, in the food and drink industry

International Division of Leisure: Diachronically unequal social relations around tourism

- (Northern European) tour operators arrange tourists' distribution across the EU
- However, a diversity of actors in supply of the tourism product

Steps of developing a composite index
Following the OECD & JRC methodology

1. Setting clear definitions and choosing the appropriate data.
2. Construction of appropriate variables.
3. Data normalization **(done through z-scores)**.
4. Check for correlations between variables **(done through Pearson's R)**
5. Check for redundant dimensions **(done through Principal Component Analysis)**
6. Composite Index calculation **(done through manually-set weights and linear aggregation)**
7. Check for results' correlations with other types of data (**done with urbanization levels and GDP)**
8. Backward decomposition **(looking into the index's variables separately)**
9. Sensitivity tests for the composite index results **(changing weights and replacing/deleting variables)**



DEFINITIONAL CONSIDERATIONS

Touristification: main use of the term in Urban Studies

- Usually describes something similar to tourism-led gentrification

But here we describe a broader process

1. Expresses an economy's **exceeding turn towards tourism-related activities**
   - Thus, reflected in the supply of tourism
2. Implies the **overdevelopment of a tourism market**
   - Thus, reflected in the demand for tourism
3. The tourism industry is **not just robust, but dominates** other sectors
   - Dependence in terms of output (GDP) and input (labour)

DIMENSION	VARIABLE	CALCULATION	WEIGHT	
Tourism's social pressure	(BEDS/POP) Intensity of tourism activity	Bed places per inhabitant	0,3	0,15
	(ARRIV/POP) Tourists' visibility	Tourist arrivals per inhabitant		0,15
Tourism's territorial pressure	(BEDS/AREA) Density of tourism activity	Bed places per square kilometer	0,3	0,15
	(ARRIV+POP/AREA) Spatial congestion in tourist destinations	Tourist arrivals plus inhabitants per square kilometer		0,15
Tourism monoculture	(EMPLI%) Labour markets' dependence from tourism	Share of workers in NACE I to total employment	0,4	0,2
	(TDGDP) Productive dependence from tourism	Travel and Tourism direct contribution to GDP as a share		0,2

TAIDD CI STRUCTURE

CORRELATIONS BETWEEN VARIABLES

2022	BEDS/POP	ARRIV/POP	BEDS/AREA	ARRIV+POP/AREA	EMPL %	TDGDP
BEDS/POP	1,00					
ARRIV/POP	0,93	1,00				
BEDS/AREA	0,22	0,32	1,00			
ARRIV+POP/AREA	-0,02	0,11	0,93	1,00		
EMPLI %	0,76	0,75	0,27	0,06	1,00	
TDGDP	0,38	0,37	0,15	0,03	0,58	1,00

Legend		
Very Weak	0.0 ≤ |R| < 0.2	
Weak	0.2 ≤ |R| < 0.4	
Moderate	0.4 ≤ |R| < 0.6	
Strong	0.6 ≤ |R| < 0.8	
Very Strong	0.8 ≤ |R| < 1.0	

CHECK FOR REDUNDANT VARIABLES

2022	Variance	Proportion	Cum. Proportion	BEDS/POP	TOUR/POP	BEDS/AREA	TOUR+POP/AREA	EMPL %	TDGDP
PC(1)	3,105	0,518	0,518	0,50	0,51	0,29	0,17	0,50	0,34
PC(2)	1,790	0,298	0,816	-0,22	-0,13	0,63	0,70	-0,16	-0,14
PC(3)	0,769	0,128	0,944	-0,34	-0,35	-0,01	0,04	0,11	0,86
PC(4)	0,227	0,038	0,982	0,28	0,32	0,00	0,01	-0,84	0,35
PC(5)	0,067	0,011	0,993	0,65	-0,68	0,28	-0,18	-0,05	0,00
PC(6)	0,042	0,007	1,000	0,29	-0,17	-0,67	0,66	0,04	0,00

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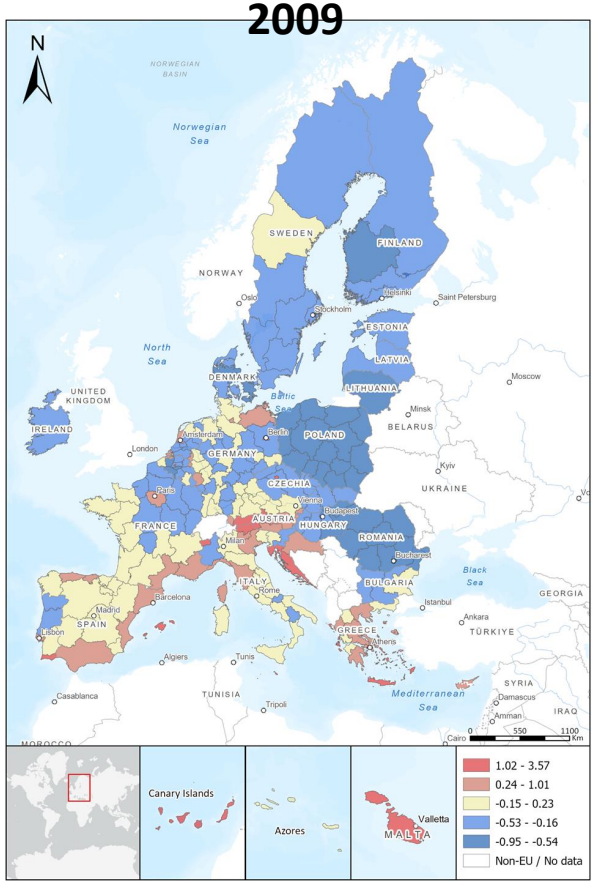
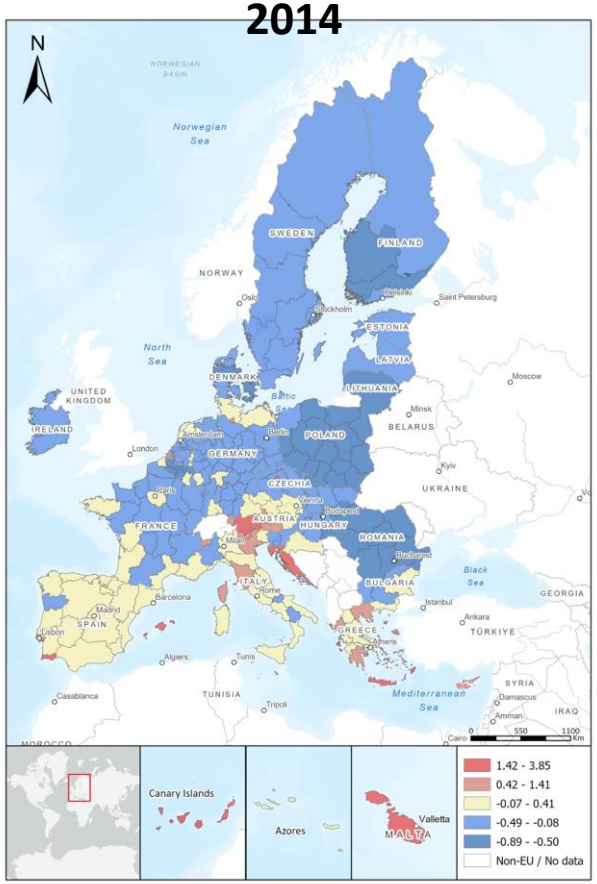
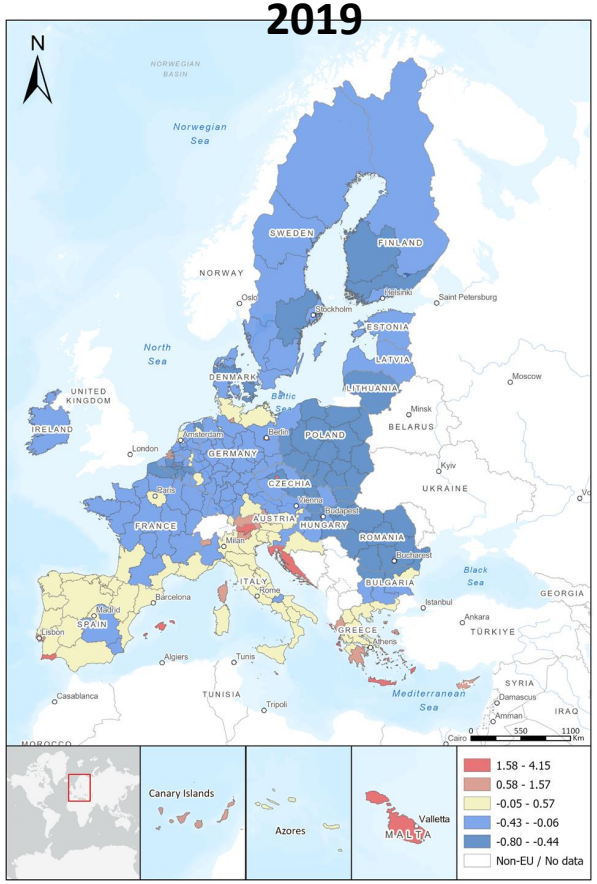
2009



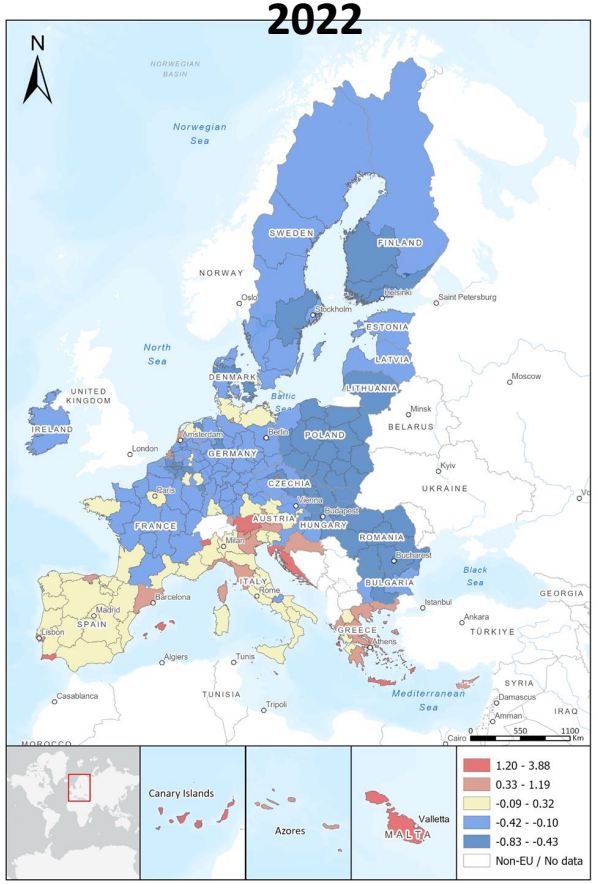
2014



2019



2022



MAIN TOURISTIFICATION ZONES IN THE EU THROUGHOUT THE STUDY PERIOD

The EU South is the most touristified throughout the whole study period

- *i.e., all Greece (especially insular regions), Malta, Croatia, Cyprus, insular and coastal Spain*

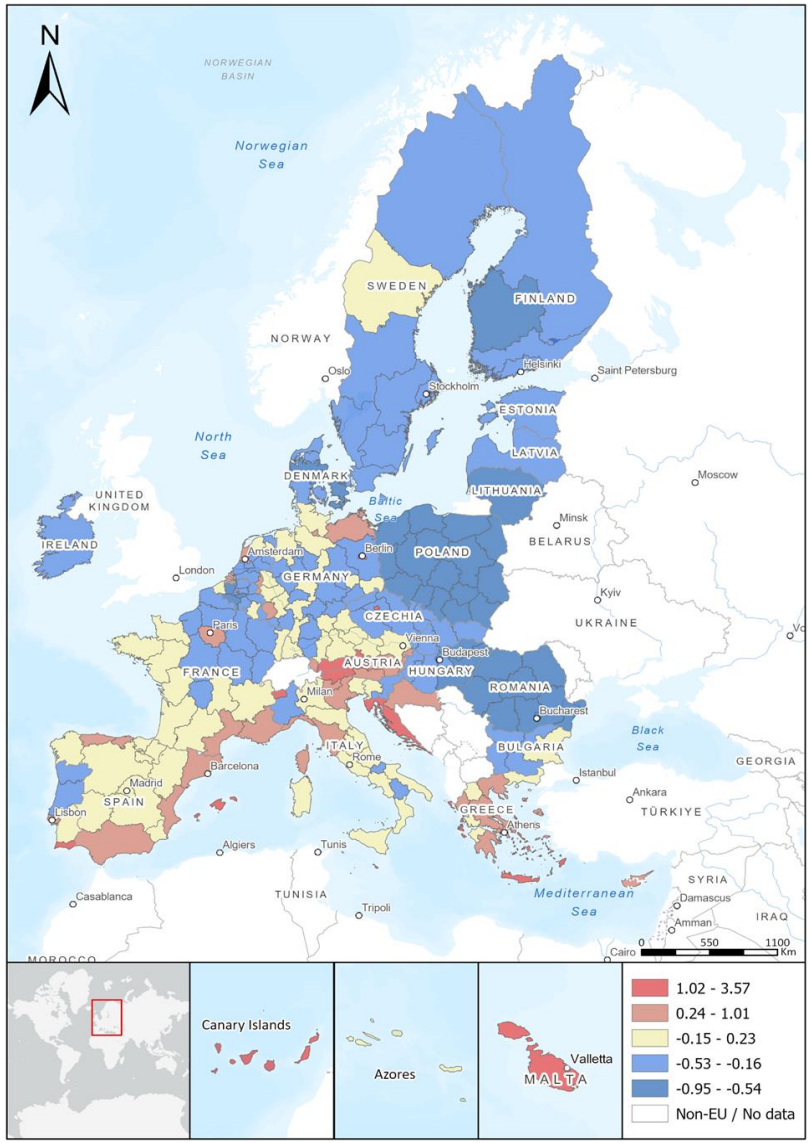
Alpine regions are almost equally touristified

- *i.e., northern Italy and Austria.*

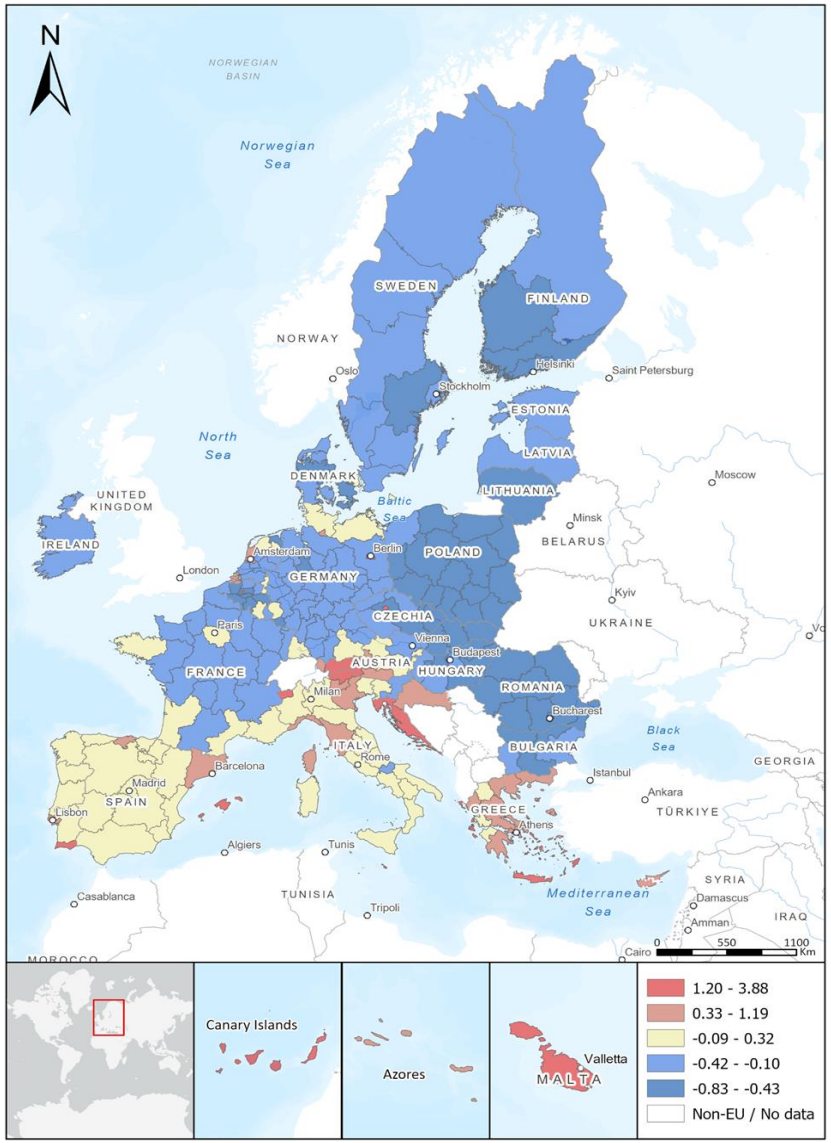
Certain metropolitan regions in Central/Northern Europe act as islands of touristification

- *i.e., Brussels, Wien, Prague, Berlin and Hamburg.*

2009



2022



THE (NOT SO) SUBTLE SHIFT OF TOURISTIFICATION FROM 2009 TO 2022

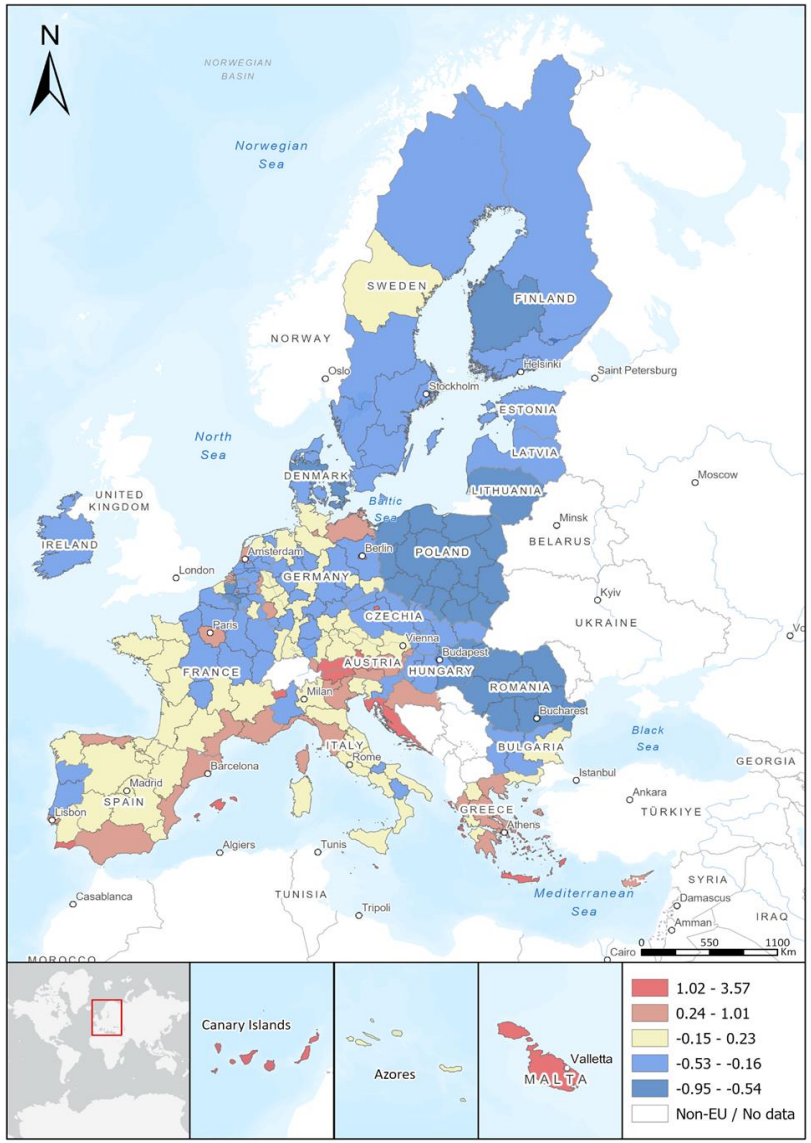
Certain zones of touristification **gradually lost their relative significance…**

- *Southern Spain, southern and western France*

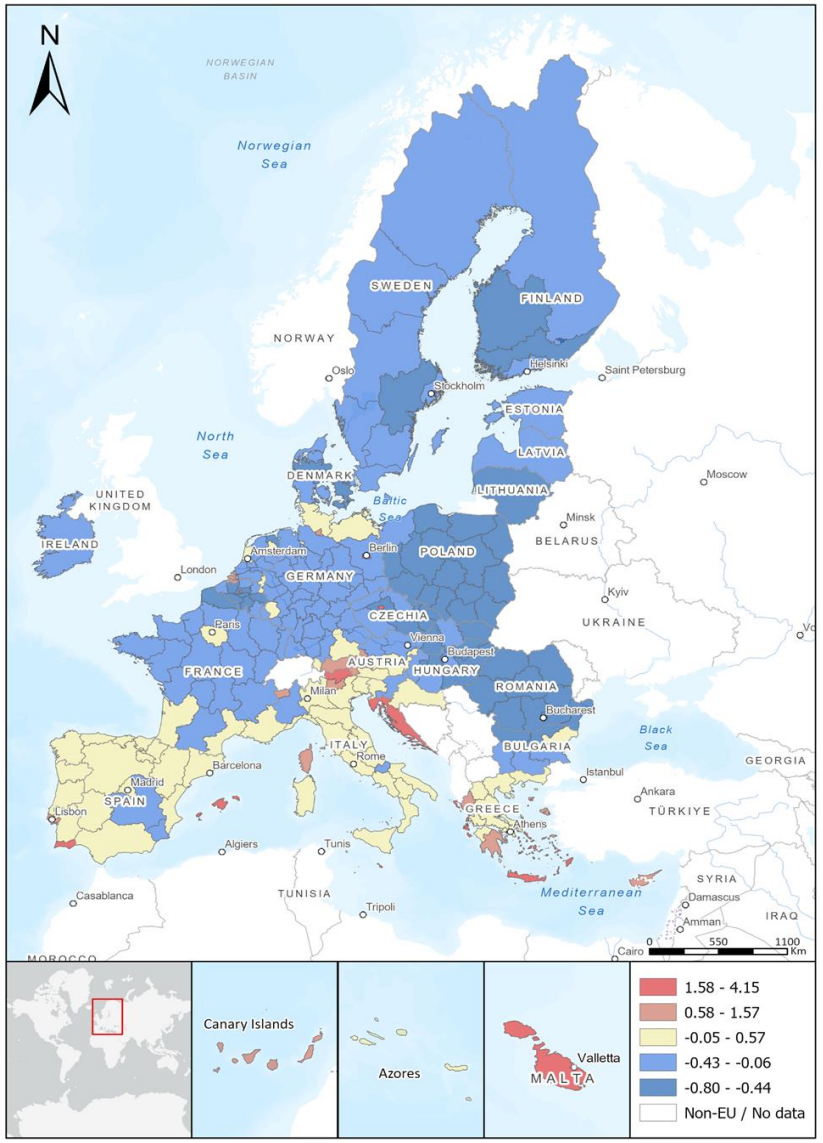
…as touristification further intensified in specific regions

- *Greece, Croatia, Malta, and Alpine Italian and Austrian Regions*

2009



2019



THE PEAK AND POLARISATION OF TOURISTIFICATION BEFORE COVID-19

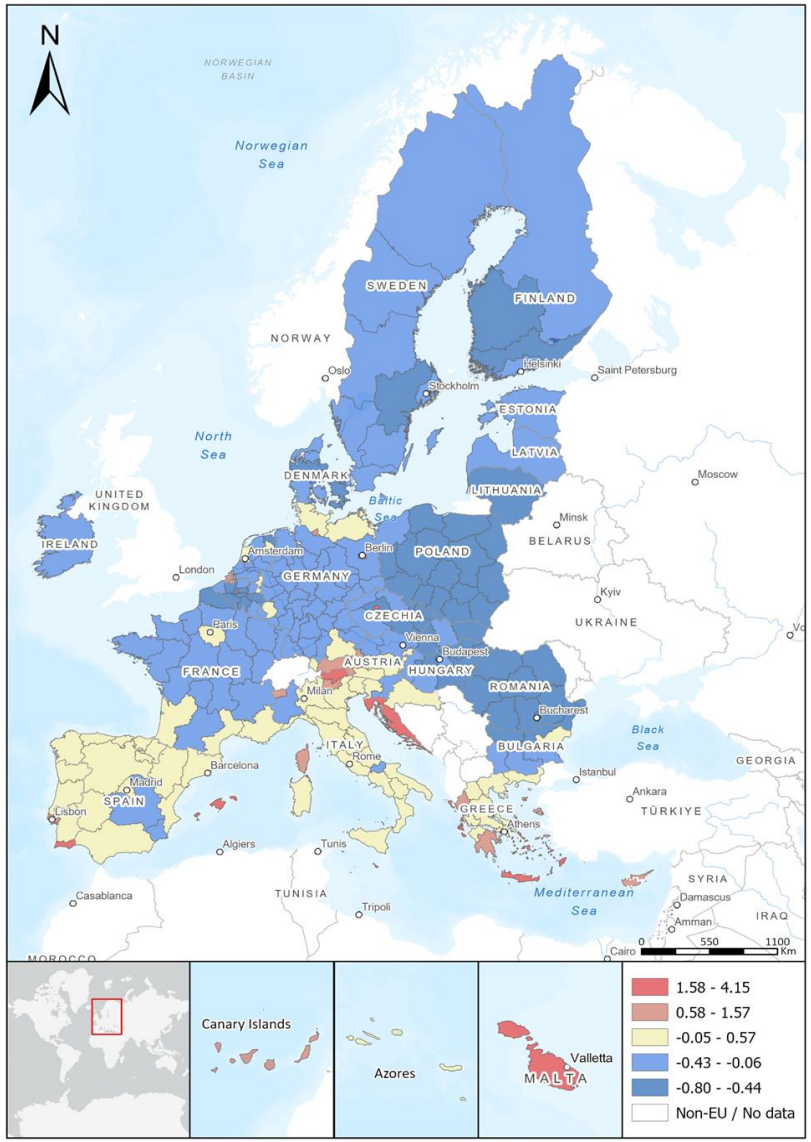
2019 appears as the peak of touristification

- *South Aegean's TAIDD CI score (4.15) is the highest value in all study years*
- *The average value of the top-25 scores is higher then (1.64) than in other years (1.63 in 2022, 1.60 in 2009).*

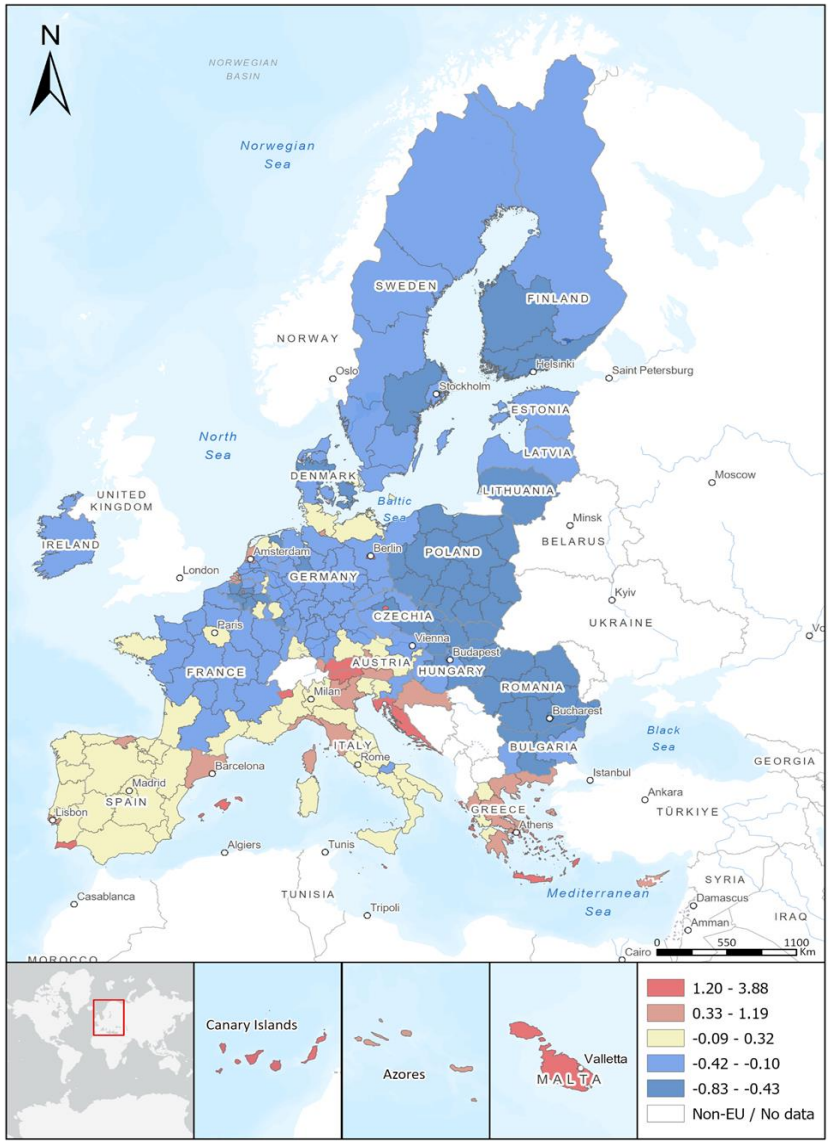
This **peak is coupled with a polarisation**

- Between the most touristified regions and the rest

2019



2022



TOURISTIFICATION THROUGH COVID-19

After receding during the mid-2010s, some **less touristified regions regained their significance and rebounded** after the COVID-19 pandemic.

- *e.g., Thessaly and Eastern Macedonia and Thrace in Greece, Barcelona in Spain*

Swedish regions advanced in the TAIDD CI for a brief time during the pandemic

- …although not visible on the map

CORRELATION BETWEEN TOURISTIFICATION AND LEVEL OF URBANIZATION

	TAIDD CI (2009)	TAIDD CI (2014)	TAIDD CI (2019)	TAIDD CI (2022)
URB(2009)	0,378	0,378	0,362	0,351
URB(2014)	0,380	0,379	0,363	0,352
URB(2019)	0,385	0,384	0,367	0,356
URB(2022)	0,386	0,385	0,368	0,357
URB(2009-14)	0,314	0,297	0,269	0,280
URB(2014-19)	0,282	0,236	0,188	0,187
URB(2019-22)	0,056	0,015	-0,027	-0,026
URB(2009-22)	0,276	0,235	0,189	0,194

TAIDD CI scores are loosely linked with urbanisation levels for all study years.

- *Pearson's R between 0.2 and 0.4*

Moreover, there are **no indications that this link consolidates over time**

- *Pearson's R in 2009 (0.378) is higher than in 2022 (0.357).*

The above can also be verified by looking at the rankings of the most touristified regions

- *Most positions are occupied by non-metropolitan regions.*

Nevertheless, **5 cities occupy top positions**

- *Wien in Austria, Brussels in Belgium, Prague in Czech Republic, Berlin and Hamburg in Germany.*
- *In addition, Lisbon in Portugal appears in this list but only after 2014.*
- *Amstedam is a bit lower*

TAIDD CI CORRELATION WITH REGIONAL GDP (TOTAL)

	TAIDD CI (2009)	TAIDD CI (2014)	TAIDD CI (2019)	TAIDD CI (2022)
regGDP(2009)	0,040	0,023	0,008	0,005
regGDP(2014)	0,023	0,002	-0,014	-0,018
regGDP(2019)	0,018	-0,001	-0,017	-0,023
regGDP(2022)	0,008	-0,010	-0,025	-0,032
regGDP(2009-14)	-0,358	-0,406	-0,435	-0,442
regGDP(2014-19)	-0,199	-0,196	-0,188	-0,200
regGDP(2019-22)	-0,266	-0,258	-0,241	-0,247
regGDP(2009-22)	-0,350	-0,369	-0,372	-0,383
regGDPpc(2009)	0,303	0,265	0,226	0,227
regGDPpc(2014)	0,212	0,165	0,121	0,120
regGDPpc(2019)	0,203	0,157	0,113	0,110
regGDPpc(2022)	0,179	0,135	0,095	0,091
regGDPpc(2009-14)	-0,426	-0,467	-0,488	-0,497
regGDPpc(2014-19)	-0,281	-0,265	-0,243	-0,255
regGDPpc(2019-22)	-0,256	-0,237	-0,209	-0,215

Touristified regions can be affluent or not

- *No strong links between the absolute volume of a region's output for a given year and its TAIDD CI score*

However, **the wider the output losses the more probable the touristification tendencies**

- *Strong negative correlations between TAIDD CI scores and regional GDP changes over time*

Specifically, **a region's touristification is strongly linked to its loss of regional GDP during the years of deep recession (2009-2014)**

- *GDP losses between 2009 and 2014 correlate with TAIDD CI values throughout the whole study period*
- *In fact, the 2009-2014 period affected the index's values in 2019 and 2022 more so than they did for 2009, 2014*

TAIDD CI CORRELATION WITH NATIONAL GDP (TOTAL)

	TAIDD CI (2009)	TAIDD CI (2014)	TAIDD CI (2019)	TAIDD CI (2022)
natGDP(2009)	0,059	0,015	-0,027	-0,033
natGDP(2014)	0,034	-0,014	-0,055	-0,063
natGDP(2019)	0,026	-0,022	-0,064	-0,072
natGDP(2022)	0,018	-0,030	-0,071	-0,080
natGDP(2009-14)	-0,418	-0,465	-0,492	-0,497
natGDP(2014-19)	-0,283	-0,285	-0,277	-0,286
natGDP(2019-22)	-0,311	-0,296	-0,267	-0,274
natGDP(2009-22)	-0,420	-0,438	-0,438	-0,447
natGDPpc(2009)	0,182	0,140	0,095	0,102
natGDPpc(2014)	0,089	0,039	-0,012	-0,006
natGDPpc(2019)	0,072	0,020	-0,031	-0,028
natGDPpc(2022)	0,042	-0,006	-0,053	-0,050
natGDPpc(2009-14)	-0,452	-0,491	-0,509	-0,517
natGDPpc(2014-19)	-0,306	-0,289	-0,268	-0,278
natGDPpc(2019-22)	-0,300	-0,276	-0,239	-0,247

Similar correlations can be observed when looking at changes in the national GDP (both total and per capita) vis-à-vis TAID CI scores

Regional trajectories of touristification were carved during the years of deep recession (2009-2014)

- These effects persist until today

The **effect of economic performance at the national level upon regional trajectories has been decisive**.

- Specifically, the correlations between changes in national GDP per capita and TAIDD CI scores are the strongest.
- An eloquent example is Greece, where even less touristy regions started exhibiting strong signs of touristification after 2009.

CONTEXTUALIZING RESEARCH RESULTS: TOURISTIFICATION AS A FORM OF SPATIAL FIX

A relatively stable geography of tourism within the three identified zones

- *Initial conditions—such as climate and landscape—are crucial for the emergence of tourism areas*
- *Agglomeration economies that emerge are equally crucial for the consolidation of tourism areas over time*

Strong correlations between TAIDD CI scores, diminishing industrial output and the Building Share

- *Touristification can be conceptualized as a spatial fix*
- *Closely tied to a renewed wave of deindustrialization*
- *In the EU South, tourism-dependent growth models came to replace extant construction-driven that were dismantled during the Great Recession*

Santorini, Greece.
Source: https://www.shutterstock.com//

CONTEXTUALIZING RESEARCH RESULTS: INTERNATIONAL DIVISIONS OF LEISURE AND REGIONAL/NATIONAL PATH DEPENDENCIES

A pronounced North/South divide reflected in the TAIDD CI

- *A deepening international division of leisure as Southern EU countries leverage tourism to offset declining economic output*
- *However, touristification is not correlated with productivity growth*
- *The EU South serve as an outlet for the investment of an increasingly mobile transnational capital*
- *Thus, touristification is correlated with productivity losses and an increasing labour precarity*

Significant variations between countries of the same cluster

- *Path dependencies at the national level are equally important as regional and extraregional assets playing out within regions – e.g., variated responses to recessive pressures*
- *E.g., Greece, Cyprus and Portugal initiate Golden Visa programmes to attract FDI, and differentiate from Italy and Spain, which in contrast seek to regulate short-term rentals more effectively*

Algarve, Portugal.
Source: https://www.algarve.eu.com/

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