



UNIVERSITY OF AEGEAN



UNIVERSITY OF MALTA
L-Università ta' Malta



CENTER FOR REGIONAL & TOURISM RESEARCH

The Development of the Islands European Islands and Cohesion Policy (EUROISLANDS)

Pr. Ioannis Spilanis – University of the Aegean – Greece

Tinos, 10 June 2011



EUROPEAN UNION
Part-financed by the European Regional Development Fund
INVESTING IN YOUR FUTURE

Objective of the Study

The objective of the study was:

- to **evaluate the level of divergence of islands from EU-27 average** as well as the national entities
- to **analyze the islands' future potential** from a European perspective
- to **analyze the policy option** that can be adopted in order to face Weaknesses and to exploit Strengths and Opportunities

Basic assumption

An area that is not (any longer) attractive for establishing (competitive) economic activities and attracting or retaining (active) population will witness a reduction of its socioeconomic base and its overall viability, and will diverge increasingly from EU and national goals for **sustainable development, as well as those for economic, social and spatial cohesion**

Islands are a characteristic region

Islands have **specific characteristics**:

- Small size (limited population, area, natural resources)
- Remoteness and isolation
- Particular, rich and vulnerable natural and cultural environment

Insularity is affecting permanently “classic” attractiveness as it influences negatively **production and living cost**. Islands –compared to the mainland- cannot have:

- economies of scale due to limited variety and quantity of resources
- good accessibility and low transport cost
- agglomeration externalities

General Conclusions (1)

- The **performance of the islands is generally lagging behind EU-27** considering most of the key development indicators^{*}; this low performance may be attribute to the **low attractiveness** of the islands
- **Islands' Attractiveness is directly influenced by insularity**: low Accessibility^{*}, low quality and high cost Public Interest Services^{*}, low external economies
- **Lisbon's strategy and EU 2020 goals are by far not met in islands as secondary effects of insularity** (employment rate, R&D expenditure, education attainment^{*}, ITC penetration, resource efficiency etc)

General Conclusions (2)

- **Vulnerability** is a characteristic of islands' economy (monoactivity/tourism – public intervention) and environment (low availability of resources - fragility);
- Attractiveness and performance is even lower for **small islands and archipelagos**; vulnerability is higher
- **Natural and cultural assets** constitute a prominent potential for a significant number of islands.

General Conclusions (3)

Insularity has to be considered as a **permanent, natural feature that affects negatively**, directly and indirectly, **islands' attractiveness** and subsequently places **obstacles** to their performance in terms of sustainable development.

Insularity creates unequal opportunities between these territories and the rest of the European Union).

EU has to stress on attractiveness parameters in order to **address the different characteristics the different costs of insularity** by a differentiated policy

Islands' strategy within a European perspective

| EUROPE 2020 Strategy | Islands 2020 Strategy |
|---|--|
| <p>1. Smart growth: developing an economy based on knowledge and innovation</p> | <p>1. Qualitative islands: focusing on qualitative products and services using local resources</p> |
| <p>2. Sustainable growth: promoting a more resource efficient, greener and more competitive economy</p> | <p>2. Green islands: diminishing the use and growing the reuse of scarce resources as water, land, energy in the production of goods and services</p> |
| <p>3. Inclusive growth: fostering a high-employment economy delivering social and territorial cohesion</p> | <p>3. Equal Opportunities islands: giving the same opportunities to insular companies and populations to perform as in European mainland</p> |

Policy Recommendations (1)

Principles to be respected:

- **Subsidiarity principle:** policy adaptation at different levels
- **Lisbon Treaty provisions:** mainly article 174 referring to regions with permanent natural or demographic handicaps
- **Equal Opportunities provision**
- **Proportionality Principle**
- **Sustainability of the territorial diversity**
- **Promotion of the endogenous development**

Policy Recommendations (2)

A. Adaptation and better coordination of European policies

- Design and implementation of integrated multi-sectoral and multi fund programs
- Ex-ante Impact Assessment for different territories
- A specific subgroup within the Inter-Service Group on Territorial Cohesion
- Use State and Attractiveness Indexes as a base for eligibility criteria for Cohesion Policy

Policy Recommendations (3)

B. Adaptation of European Sectoral Policies with an explicit spatial dimension

- Transport Policy (multimodal policy – maritime and sea corridors – financing fix and mobile infrastructures – territorial continuity principle)
- Energy Policy (energy efficient islands, green energy, connection with EU network)
- Environmental Policy (resource efficient islands, mitigation of climate change impact, valorization of natural assets)
- Rural Development Policy (quality and high value added products, reinforce LFAs' concept)
- State aid (given based on attractiveness index)

Policy Recommendations (4)

C. Compensation of insularity cost concerning:

- The construction and the operation of the General Interest Services
- The creation and the operation of (specifically the very small) insular enterprises
- The creation of permanent structures and networks
- The cost of living and acquisition of services for all the inhabitants
- The training and the life long learning system
- The traditional sectors and activities associated to island's particular characteristics and cultural identity

Thank you for your attention

ispil@aegean.gr

www.aegean.gr/lid

<http://geo-ellanikos.aegean.gr/espon>

User name: sc , password: obscureisles

Main issues of the analysis of islands' economy

- ***Islands have an average GDP/capita lower than the EU 27 average, as only few of them perform better (Aland, Illes Balears, Shetland and Kyklades). In general the economic convergence process is slower than for the rest of the EU regions.***
- ***Islands are lagging compared to their national entities (except Aland, Kyklades and Illes Balears)***
- ***In a significant number of islands (Nordic islands, Corse, Sicilia and Sardegna) GDP level and employment are sustained by an important public sector.***
- ***There is not a uniform trend of specialisation even if services are the most important activity; there are two main groups with competitive activities: (a) islands where tourism prevails, and (b) a few islands with agriculture and fisheries.***
- ***Long term development perspectives seem rather fragile, because of the predominance of low value added activities in an increasingly competitive international environment based on an excessive use of scarce natural resources.***

Main issues of the analysis on the social equity

- *After a general population decrease in the nineties, the **trend is rather positive** since the 2000s, mostly due to **migration flows**. But this is hiding an important and persistent decrease trend that characterises the smaller islands, especially in archipelagos.*
- ***Activity rate is significantly higher in the Nordic and the touristic islands.***
- ***Unemployment, especially of young and female, is rather high but there is no correlation with the level of GDP.***

Main issues of the analysis on environmental conservation

- **Population density** varies from very low, especially in Northern Europe and some Notio Aigaio islands, to much higher than the EU average.
- Some islands Malta, Gozo, Isle of Wight, Sicily and Lipari, Mallorca, Minorca and Bornholm show relatively high rates of **artificialization**, as well as a high rate of **artificial coasts**, together with Sargegna, and Cyprus.
- Nearly all islands face more or less serious problems of **fresh water** availability
- Mediterranean islands have a **very rich natural environment**, but this is under severe pressure from human activities.
- **Sea pollution** (caused mainly by non island activities), **desertification and landscape degradation** are also serious concerns for all islands, the problems being more acute in the touristic Southern islands.

Synthesis on the Sustainability State of Islands

Two indexes are proposed to summarize the findings on island regions:

- (a) A “**State index**”, for the situation of the islands in comparison with the member states they are located in and the EU;
The findings of the State index demonstrate clearly that the average of the island regions is lower than that of the EU-27, but also lower than the average of the States with island regions.
- (b) A “**Change index**”, capturing changes that have taken place during the last decade or so, depending on the availability over time of the series of the particular indicators used.
The findings of the change index underline a recent dynamism –a global trend for islands- as more island regions have better scores than the EU27 average but not as high as the Member States with islands. But, this performance was not strong enough to reduce the development gap between European islands and the mainland (as islands started from a comparatively low level).

Insularity and Attractiveness

Attractiveness factors are directly and indirectly influenced by insularity

| Attractiveness Parameters | Direct influence by insularity |
|---|---------------------------------------|
| <i>Accessibility</i> | --- |
| <i>Public and Private services to business and population</i> | -- |
| <i>Agglomeration economies</i> | --- |
| <i>Environmental and cultural heritage</i> | +++ |
| <i>Feeling of safety - Security</i> | ++ |
| <i>Natural and technical hazards</i> | +/0 |
| <i>Labour qualification</i> | No direct influence |
| <i>Information society</i> | No direct influence |
| <i>Research and Innovation</i> | No direct influence |
| <i>Social capital</i> | No direct influence |
| <i>Governance Quality</i> | No direct influence |
| <i>Employment opportunities</i> | No direct influence |

Accessibility

- *In terms of accessibility, **islands are in a less favourable situation compared to the continental mainland*** as far as the transport choice, travel time and costs are concerned.*
- ***The situation is aggravated in the archipelagos** where the permanent population of the very small islands needs to commute every day to receive basic services such as education, health, etc*.*
- ***Accessibility is even worse for small islands** as revealed by the case studies: more complex (need to use many different means of transport to travel out of the island); more costly; lengthier*.*

Services of Public Interest

- *In terms of **access to services**, islands are in a less favourable **situation compared to the continental mainland** as far as the distance from public and private services is concerned.*
- ***The size of the permanent population matters for the provision of services** (reduces the per capita cost); it is much higher for small islands but even in the middle sized islands as Kalymnos it is not common for full fledged services to be provided. The same holds for the networks.*
- ***The problem is more acute for the archipelagos islands*** since the existence of a service provision on an island does not have direct positive effects for the nearby ones. Consequently, basic public investments needed are huge leaving little room for other type of investments.*

Agglomeration economies

- ***Islands are lagging behind compared to European mainland cities in terms of agglomeration economies***, since due to the population size and the small size of the market, economies of scale cannot be developed, diversification of activities and services is low, cultural and social life remains limited and therefore, urban dynamism conditions that enable the creation of FUAs and MEGAs cannot be met.

Cultural and Natural Assets

- ***The existence of important cultural and natural assets specifically in the Mediterranean islands can be a very important advantage*** when an appropriate framework for these assets to be exploited in a sustainable way is developed.
Till now these assets are used as scenery for tourism development and often their preservation is considered as an obstacle for more intensive development. However their exploitation requires an adequate policy, suitable management and the corresponding human and social capital.

Information Technology & Research Activities

- *The **findings on ITC penetration follow a pattern with the Nordic islands performing better than the Mediterranean ones***. The "technology" gap causes lack of information and knowledge, factors that are necessary to achieve social equity and economic competitiveness.*
- ***All islands are performing very poorly in R&D***. This is due to:
(a) the lack of significant Research Institutions located on the islands (lack of infrastructure) and
(b) the low attractiveness of islands for highly educated and skilled people as they attempt to become part of the global knowledge economy.*

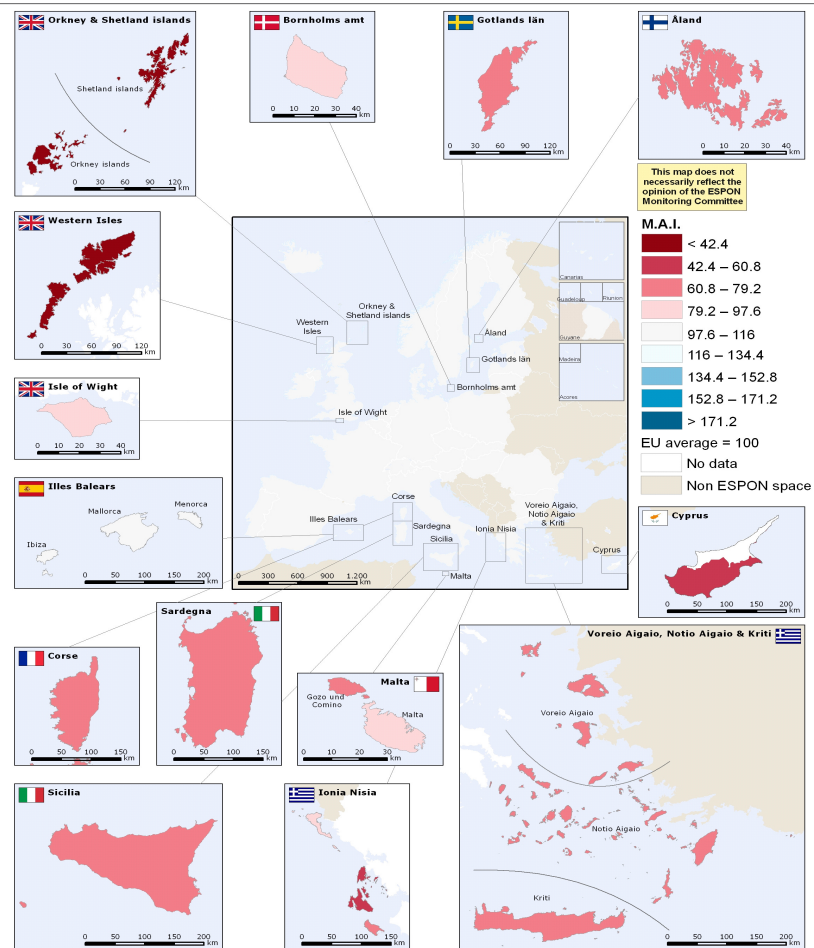
Among the Mediterranean islands, all of which are below average, Illes Balears, Cyprus, and Kriti perform better than the rest since these islands have Universities and research institutes, which are the incubators for R&D Development

Human & Social Capital - Governance

- *It appears therefore that there is **a shortage in the islands' human resources*** (e.g. competences, knowledge) mainly in the Mediterranean ones: the educational attainment level is particularly low (compared with EU27 averages and national results) even on islands with a high level of GDP per capita and despite the presence of a University (Sicilia, Sardegna, Malta). Low trends of lifelong learning make the situation worse, undermining their competitiveness. On Nordic islands, human capital is better prepared to face new challenges.*
- ***Nordic islands present higher scores in social capital than the southern ones***: higher levels of social trust and civic participation indicate more "connected" areas, therefore more enhanced productivity and level of cohesion.*
- ***Governance can explain some differences of the state of the islands**, as governance quality influences public policy and is linked to effective development. Aland, Illes Balears and Cyprus have the better scores*

Accessibility is very low

Multimodal Accessibility Index



No island region has accessibility over the European average even with ESPON Index that is based on air accessibility but doesn't take into account goods transport and the needs of local population for access to different services

Islands' accessibility for goods is low



Taking into account the time of terrestrial transport + waiting time + time of maritime transport

EURISLES
2002

Time and Cost of accessibility

Lipsi island: Accessibility to services




REGIONAL LEADER
 Partnership by the European Regional Development Fund
 INVESTING IN YOUR FUTURE

Regional level: NUTS 0 / 2005
 Source: ESPON 2005 DB
 Origin of data: EUROISLANDS TPG
 © EuroGeographics Association for administrative boundaries
 © DG REGIO for island boundaries

Legend

- Virtual distance
- NON ESPON space
- ESPON space

The cost of island accessibility: for 283km, 4 passengers + car

- from Lipsi to Pireas:

54,5 h and 323€

- on mainland:

4h and 34 €*

Accessibility and Travel Cost

Existence of Public and Private Services

| | Pharmacy | Hospital | Bank | Tax service/ Social Security | Tertiary Education |
|----------|----------|--|------|---------------------------------|--|
| Kokar | No | Only a Clinic. Need to travel to Mariehamn or Turku-Upsala | yes | No / Internet services | Nb. In Mariehamn-college Turku - Stockholm |
| Lipsi | No | Doctor + nurse. Need to travel to Rodos or Athens. | no | No / In Kalymmos | Nb. Anywhere in Greece |
| Samso | Yes | Small, threatened with closure. Need to travel to Aarhus | yes | Yes | Nb. Aarhus |
| Kalymmos | Yes | Yes | yes | Yes | Nb. Anywhere in Greece |

Cost of Archipelagos for Infrastructures

Table 6: Need in Basic Infrastructures in Notio Aigaio (2002)

| Type of infrastructure | Hypothesis of one island | Actual situation |
|--|--------------------------|------------------|
| <i>Transport infrastructure</i> | | |
| Ports | 3 | 50 |
| Marinas | 4 | 12 |
| Fishing Ports | 8 | 15 |
| Airports | 1 | 14 |
| Heliport | 4 | 23 |
| <i>Education infrastructure</i> | | |
| Primary schools | 90 | 211 |
| Secondary schools | 58 | 83 |
| <i>Health infrastructure</i> | | |
| Hospitals | 1 | 5 |
| Health centers | 10 | 11 |
| Local Dispensary | 0 | 37 |
| <i>Environment Infrastructure</i> | | |
| Waste Water Treatment Installations | 8 | 35 |
| Installations for Solid Waste Treatment | 4 | 18 |
| <i>Energy Infrastructure</i> | | |
| Energy Production Factories | 1 | 21 |

The presence and the quality of Public Interest Services

The cost of insularity is bigger in Archipelagos (infrastructure and operational cost)

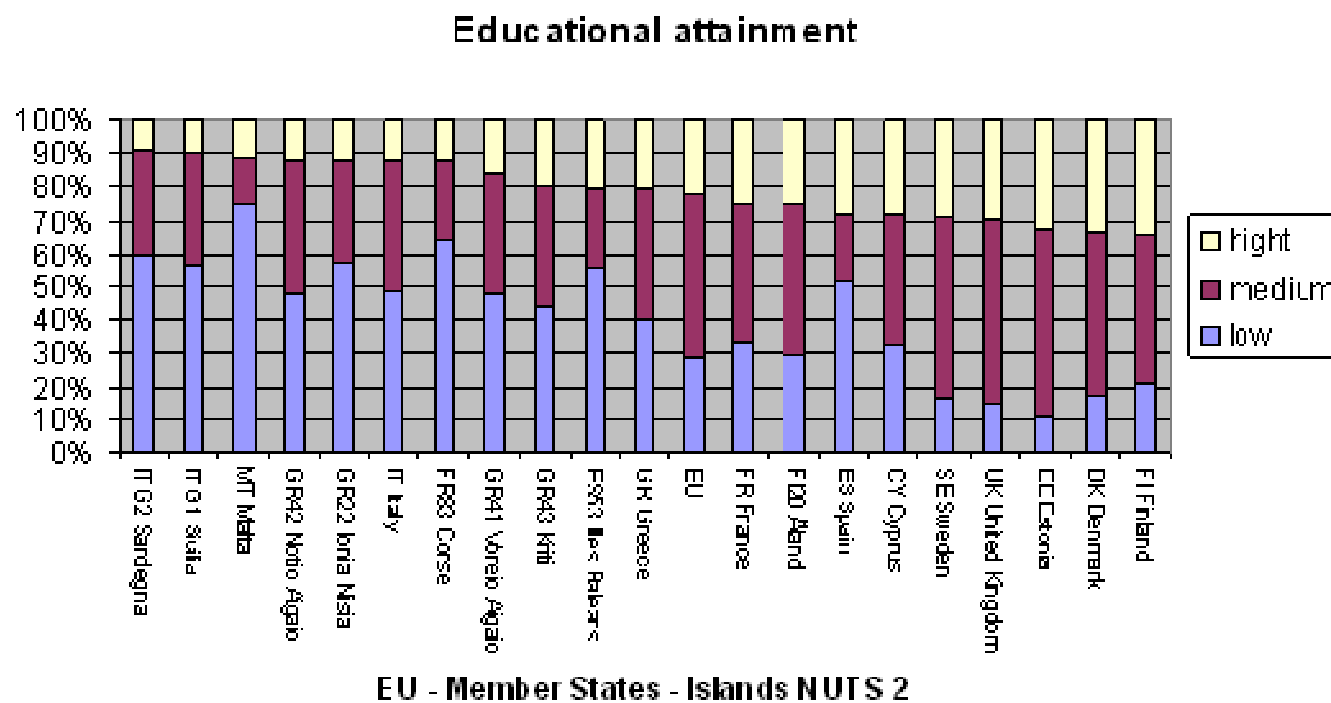
Privatizations and Budget Restrictions threaten the existing situation

Agglomeration economies are low

- Dynamic cities and urban regions are recognized as vital assets in regional development
- FUAs (Functional Urban Areas) are the basis of commuter relations and employment catchment areas with minimum population of 20.000 inhabitants
- Only 35 islands have a population over this minimum: 2 islands (Mallorca and Malta) have a weak MEGA; the big islands (Sicilia, Sardegna, Kypros, Kriti) have more than one FUA

Labour Qualifications is low

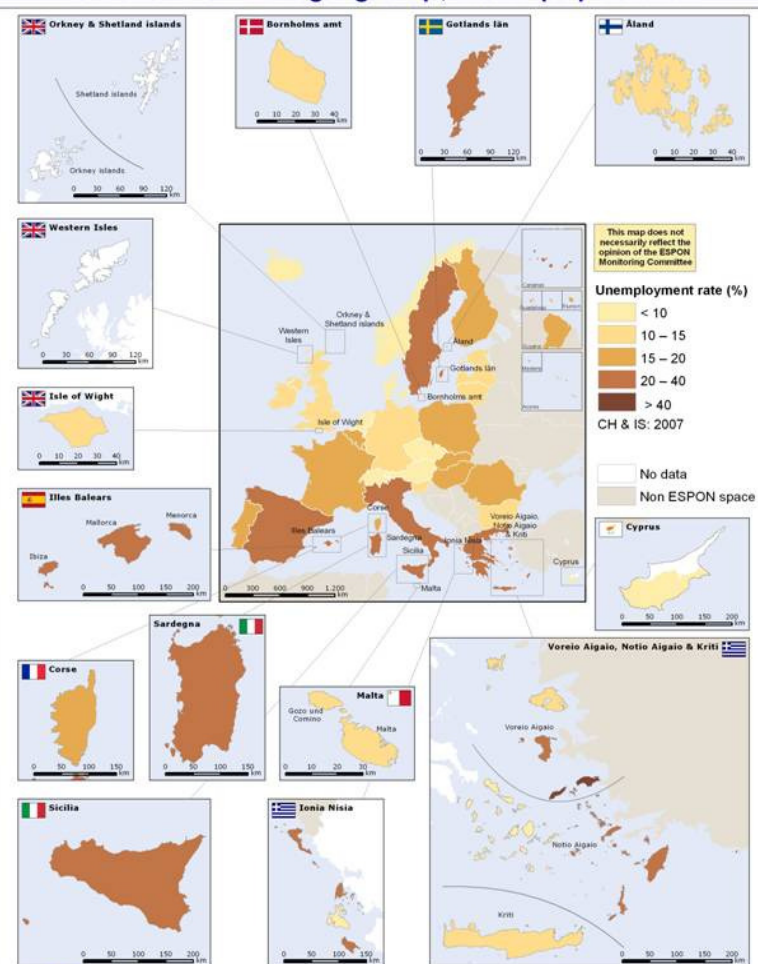
A clear diversification between Nordic and Mediterranean Islands; the first have a better performance than EU – 27, the later have a very low performance with the big islands as Malta, Corse, Sicilia, Sardegna having a particular delay



Only exception: Cyprus

Job & carrier opportunities are low

Unemployment Rate (%), 2008
for the 15 - 24 age group, total population



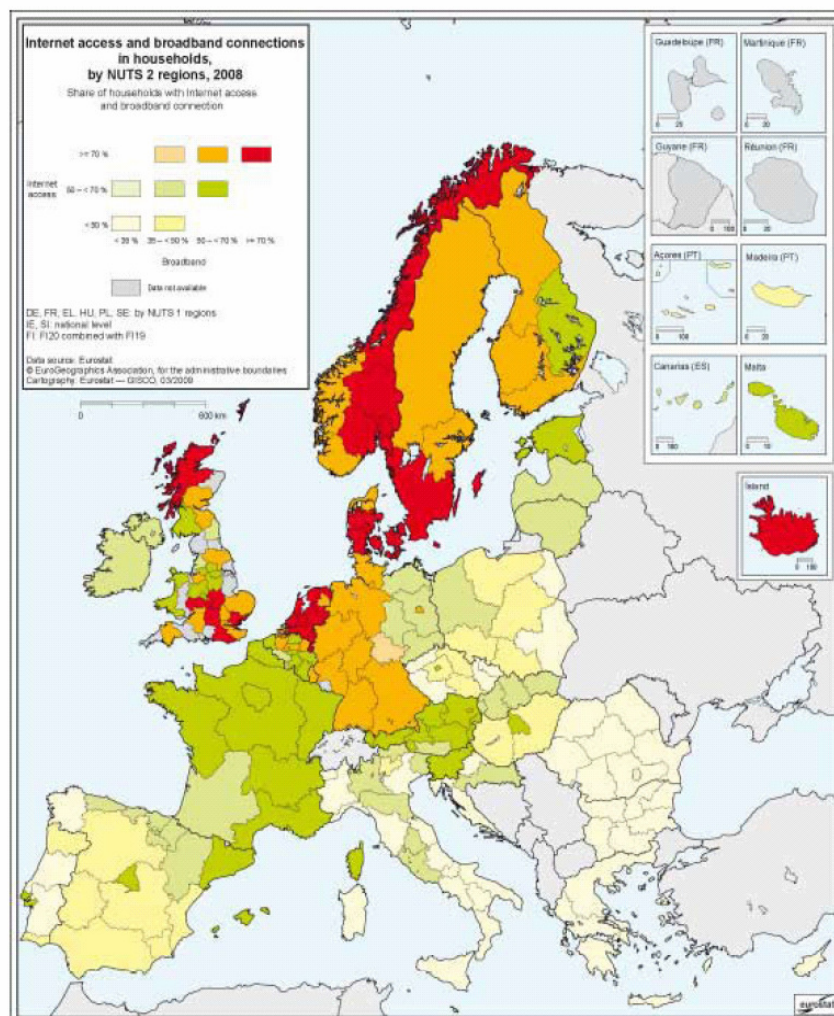
Consequences: departure of young qualified people

Activity rate specially for Women is lower active than on mainland

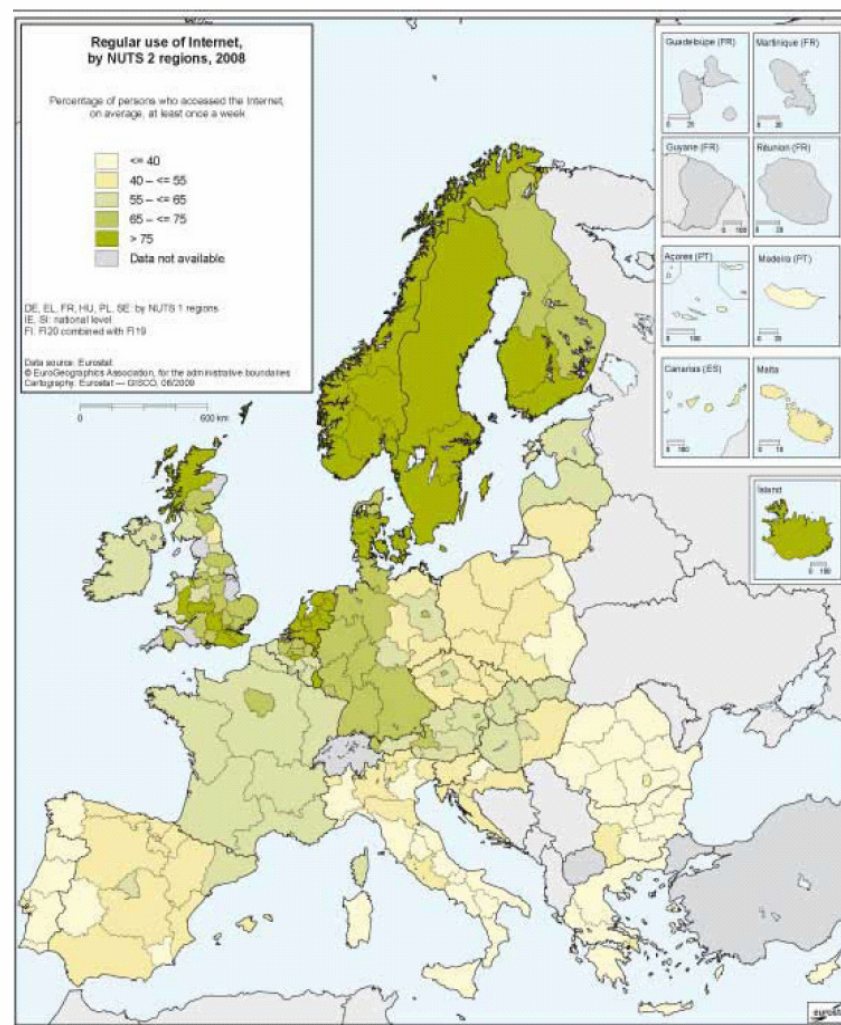
Female and young unemployment are higher on islands than on mainland

Information Society: a clear image

Map 7.1: Internet access and broadband connections in households, by NUTS 2 regions, 2008
Share of households with Internet access and broadband connection

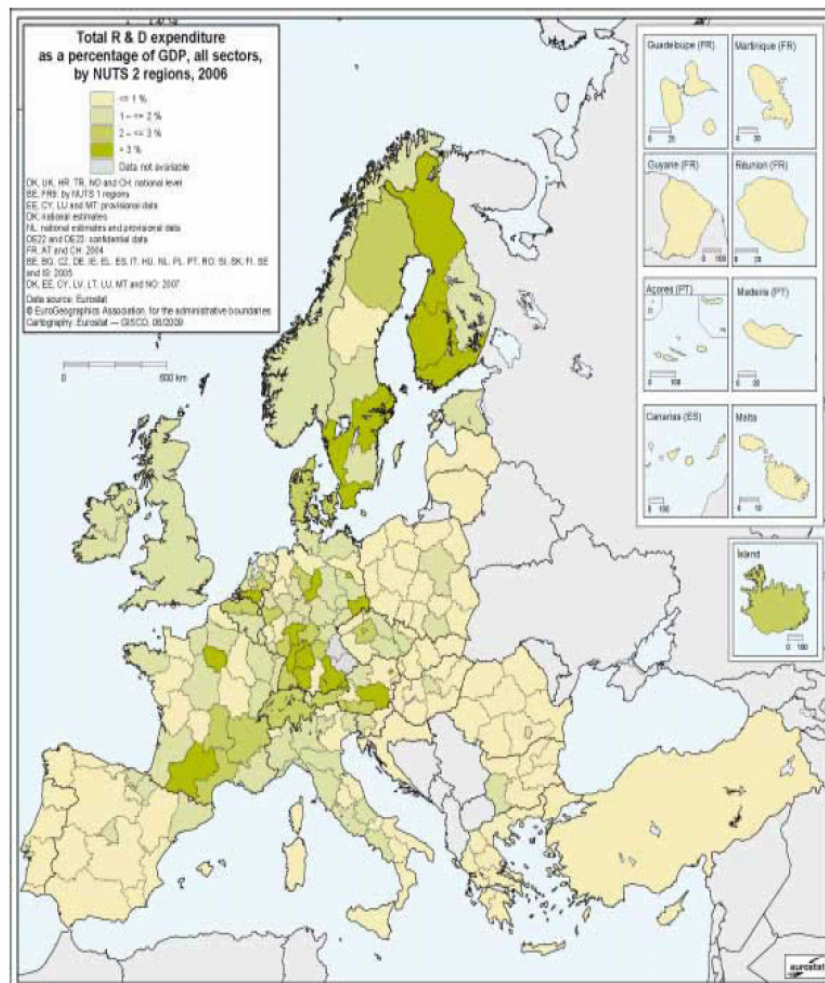


Map 7.2: Regular use of the internet by NUTS 2 regions, 2008
Percentage of persons who accessed the Internet, on average, at least once a week



R & D: the islands are absent

Map 8.1: Total R & D expenditure as a percentage of GDP, all sectors, by NUTS 2 regions, 2006



Even if Universities are present in a lot of island regions, R&D seems to be concentrate within the Pentagon + Scandivavian countries.

Better performance: Kiriti but the % of the regional GDP devote to R&D is only the half of the european average

Social Capital, Safety and Governance

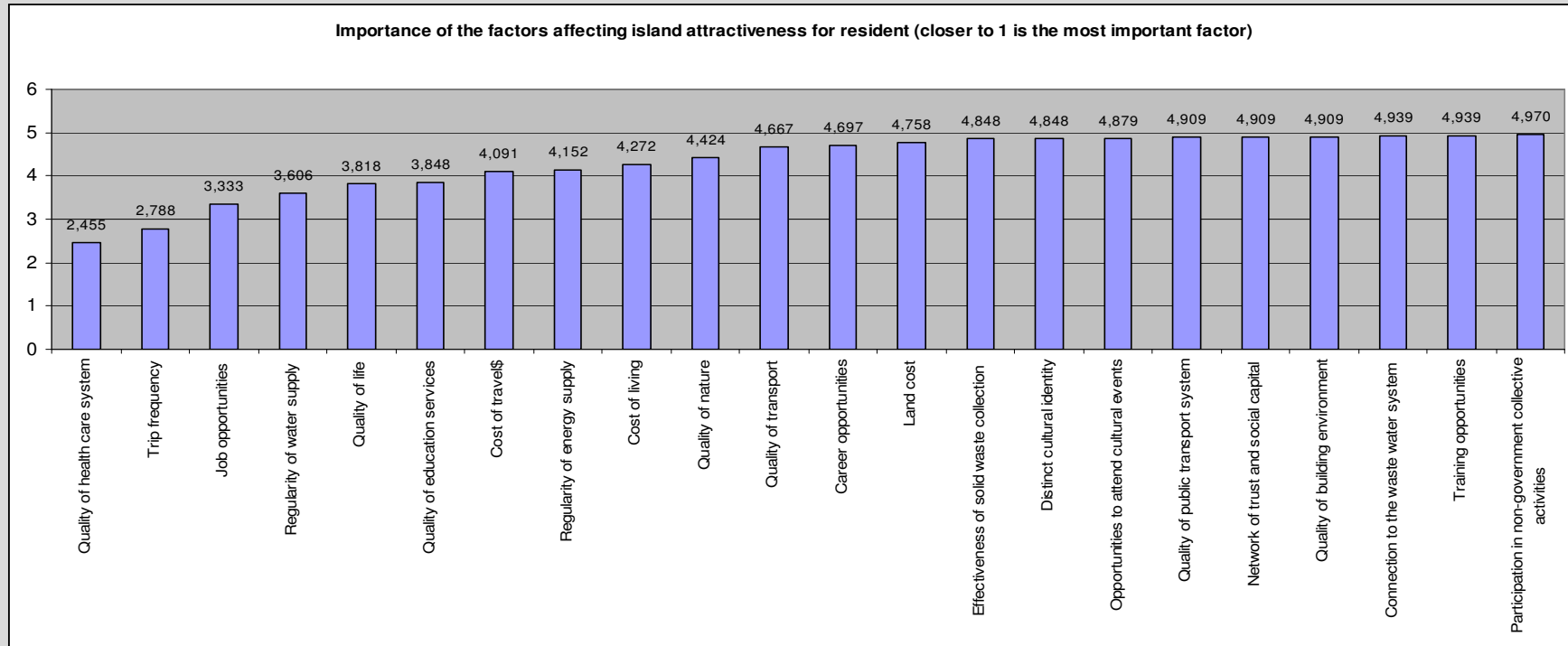
| | Social trust | Institutional trust | Member* | Volunteer* | Interest in Politics | Satisfaction with public issues | Feeling of Safety |
|------------------------|--------------|---------------------|---------|------------|----------------------|---------------------------------|-------------------|
| Ionian Islands | -1.30 | 0.53 | 0.18 | 0.00 | 3.44 | -0.96 | 2.05 |
| North Aegean | -0.87 | 0.16 | 0.41 | 0.10 | 2.98 | -1.26 | 1.35 |
| Sicily | -0.69 | 0.02 | 0.57 | 0.02 | 3.05 | -0.64 | 2.24 |
| South Aegean | -0.51 | 0.32 | 1.46 | 0.20 | 3.00 | -0.47 | 1.77 |
| Cyprus | -0.48 | 0.25 | - | - | 2.72 | 0.30 | 1.72 |
| Crete | -0.41 | 0.15 | 0.59 | 0.03 | 2.93 | -0.44 | 1.87 |
| Sardegna | -0.13 | -0.14 | 0.50 | 0.02 | 3.45 | -0.87 | 2.23 |
| Mediterranee | -0.05 | -0.47 | 0.89 | 0.32 | 2.64 | -0.58 | 2.18 |
| Scotland | 0.27 | -0.65 | 1.60 | 0.24 | 2.60 | -0.54 | 2.27 |
| Balearic Islands | 0.42 | -0.25 | 0.05 | 0.00 | 3.21 | -0.12 | 2.77 |
| Bornholms Amt | 0.59 | 0.15 | 2.14 | 0.79 | 2.64 | 0.48 | 1.43 |
| Southern Finland Eland | 0.61 | 0.02 | 1.58 | 0.18 | 2.61 | 0.44 | 1.78 |
| NORTH | 0.54 | -0.10 | 1.59 | 0.21 | 2.61 | 0.25 | 1.90 |
| SOUTH | -0.43 | 0.08 | 0.63 | 0.12 | 2.85 | -0.20 | 1.90 |

Nordic islands, as nordic countries, have higher social and institutional trust, higher participation in social networks and the higher interest in politics.

Safety feeling is related to the population; in smaller islands this feeling is higher.

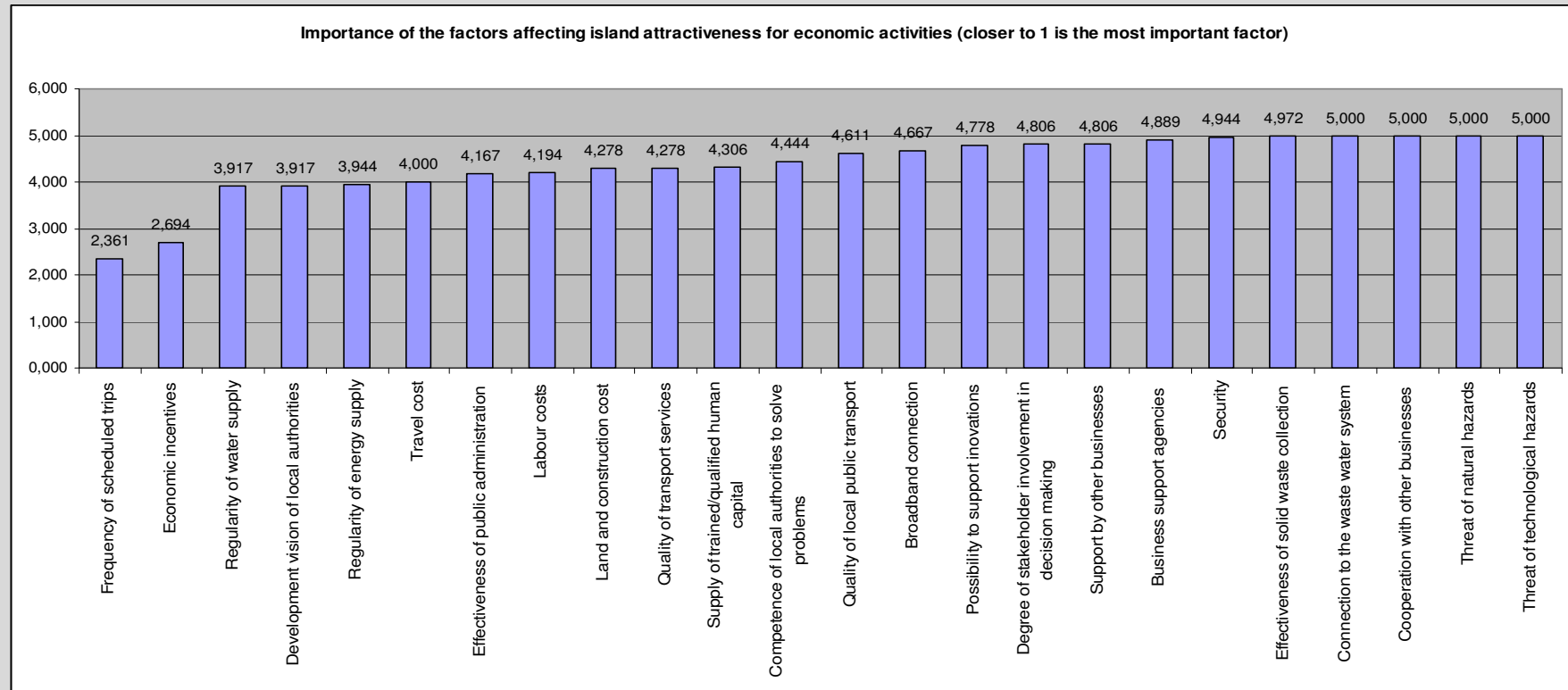
Governance quality measured by the intensity of interregional cooperation, voluntary elaboration of strategy plans involving stakeholders is a “nordic tradition”.

Islands' attractiveness for living



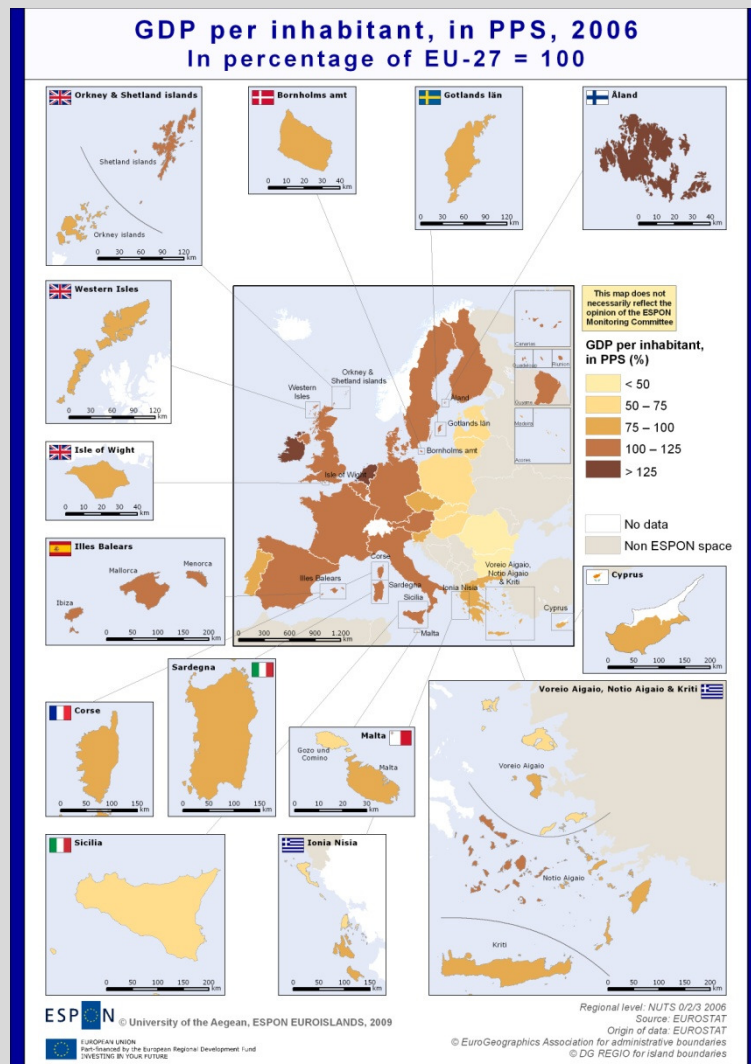
Local authorities' survey gives as main reasons: quality of health care system, trip frequency, job opportunities, regularity of water supply quality of life and quality of education services

Islands' attractiveness for business



More important factors: trip frequency, economic incentives, regularity of water supply, development of vision of local authorities, regularity of energy supply, travel cost

GDP per inhabitant in PPS

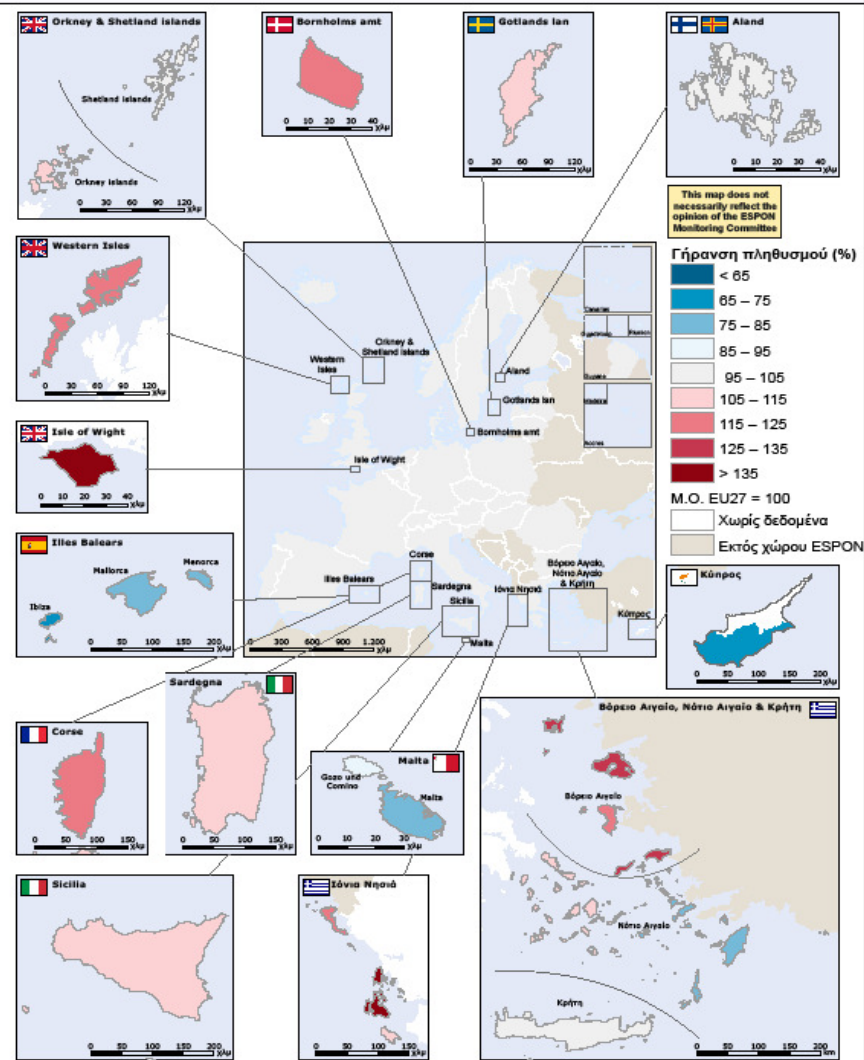


Islands have an average GDP/capita lower than the EU 27 average, as only few of them perform better (Aland, Illes Balears, Shetland and Kyklades). In general the economic convergence process is slower than for the rest of the EU regions.

Population over 65 years*

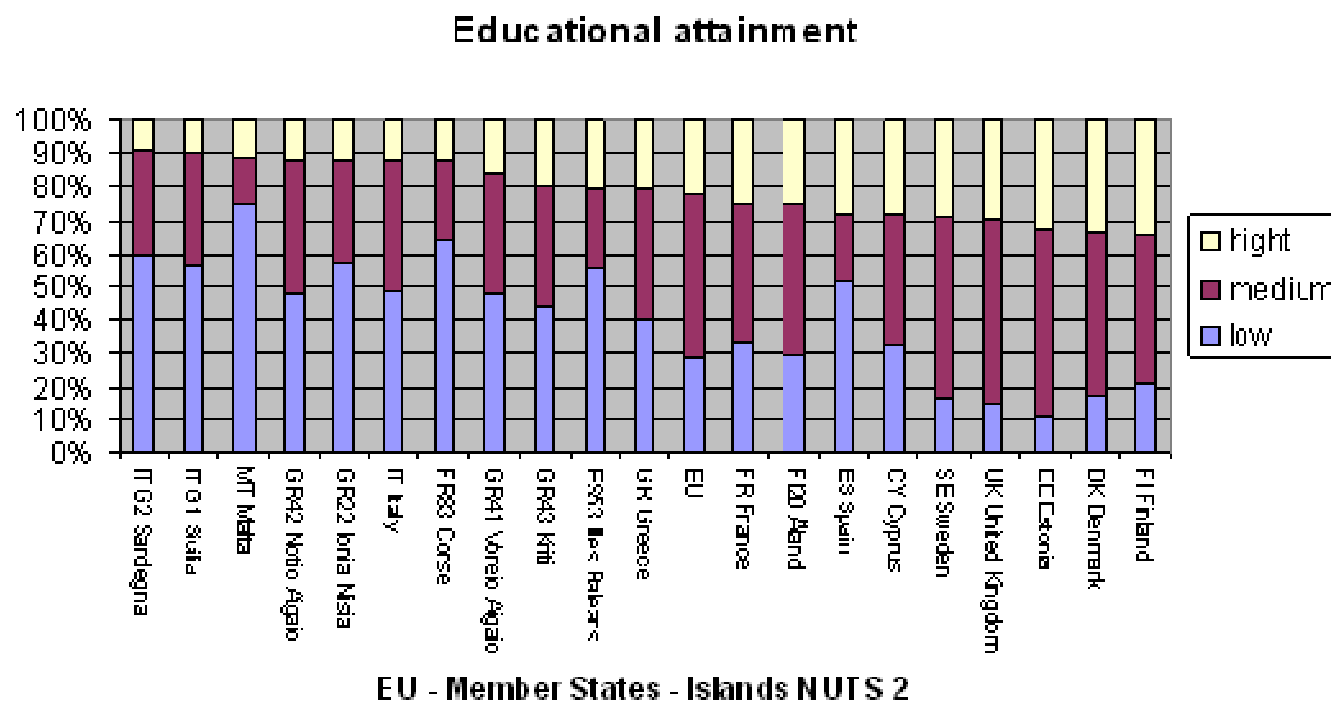
- In most of the islands NUTS 3 the population over 65 years old is higher than the European average
- Malta, Cyprus, Balearics Dodecanissos are the exception

Γήρανση πληθυσμού (>65 ετών) (%) 2007



Labour Qualifications is low

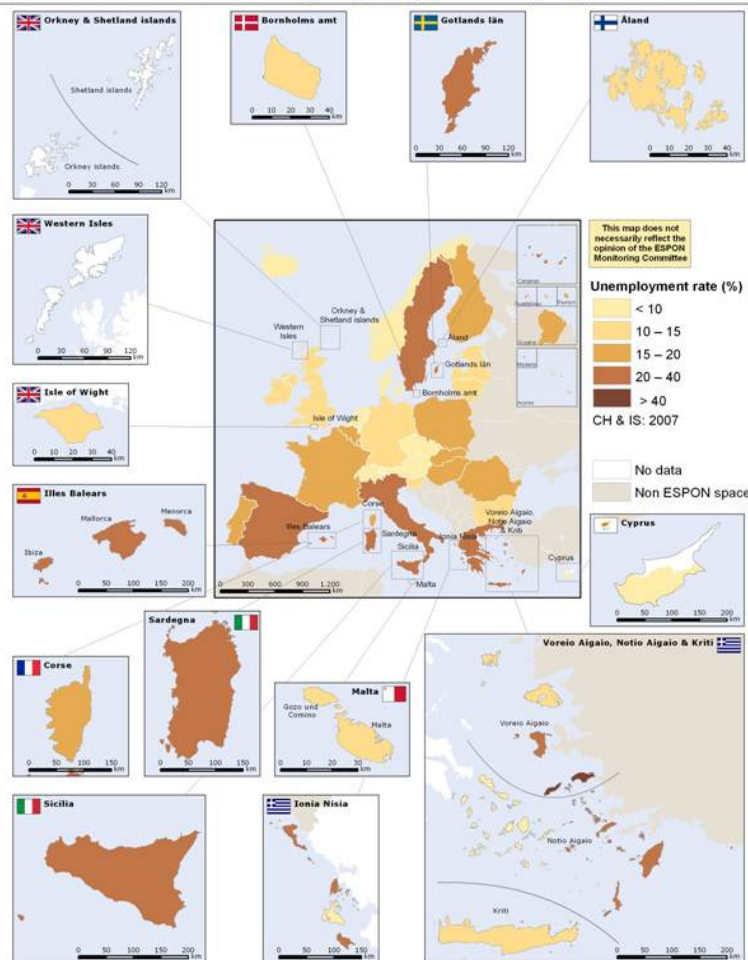
A clear diversification between Nordic and Mediterranean Islands; the first have a better performance than EU – 27, the later have a very low performance with the big islands as Malta, Corse, Sicilia, Sardegna, Illes Balears having a particular delay



Only exception: Kypros

Job & carrier opportunities are low*

Unemployment Rate (%), 2008
for the 15 - 24 age group, total population



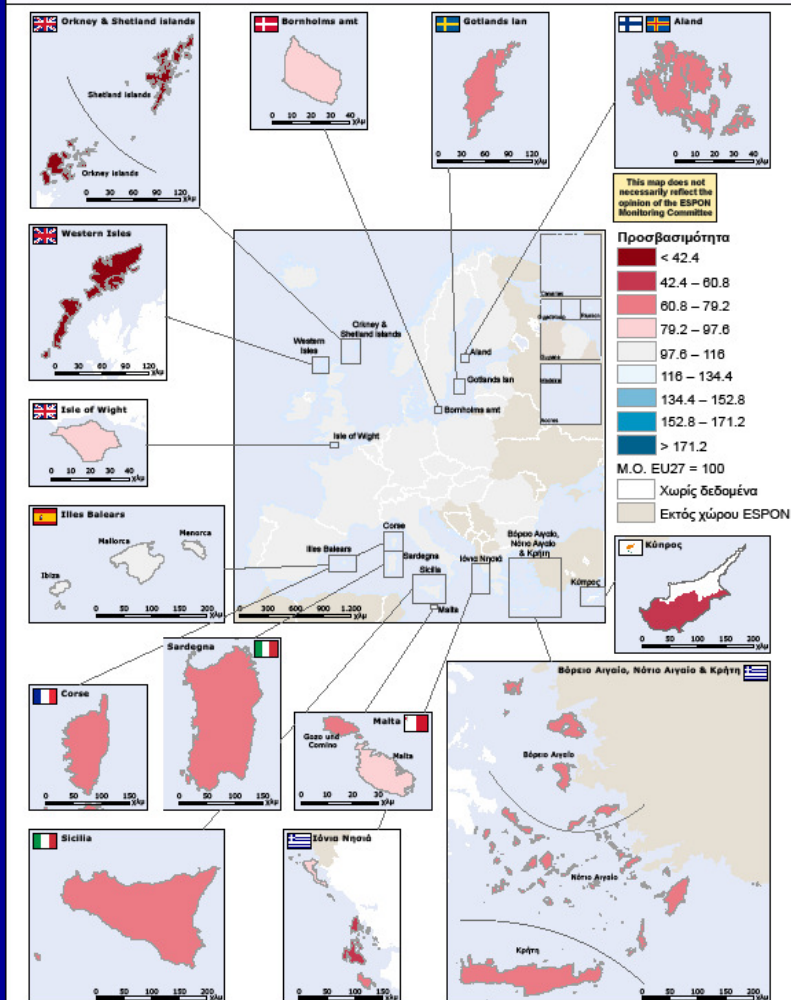
Consequences: departure of young qualified people

Activity rate specially for Women is lower active than on mainland

Female and young unemployment are higher on islands than on mainland

Προσβασιμότητα

Προσβασιμότητα των Ευρωπαϊκών νησιών



Λειψοί: Προσβασιμότητα στις υπηρεσίες

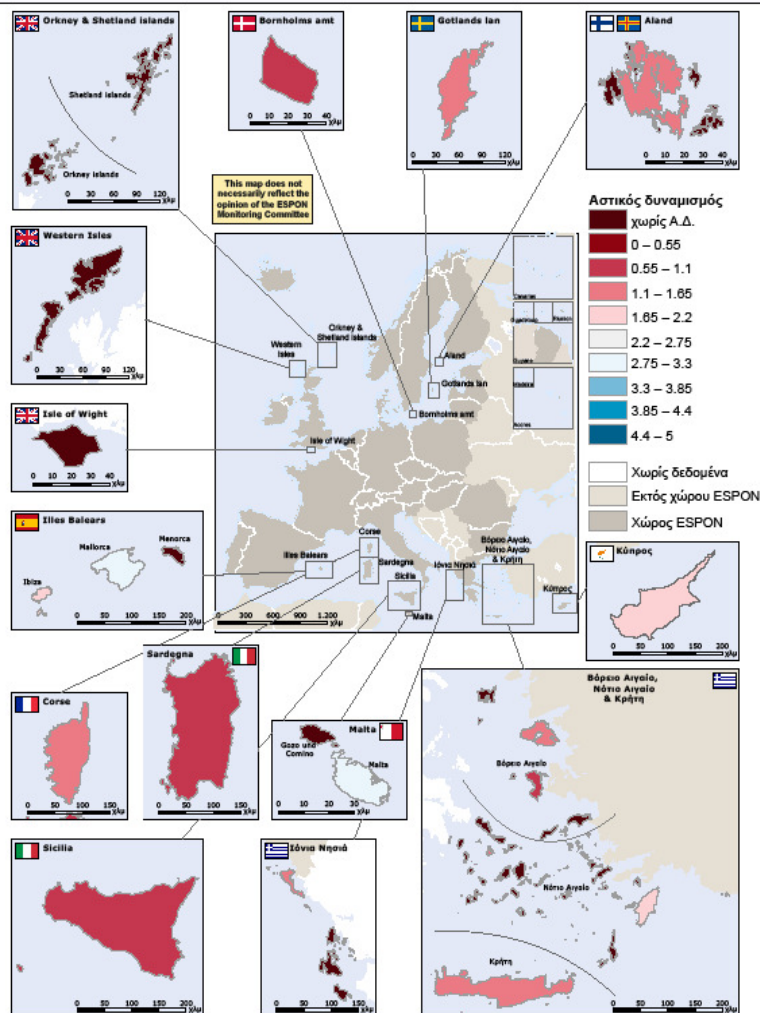


Υπόμνημα

- Εικονική απόσταση
- Εκτός χώρου ESPON
- Χώρος ESPON
- Περιοχή μελέτης περιπτώσεων

Δείκτες Ελκυστικότητας

Αστικός δυναμισμός



Άμεσος δείκτης ελκυστικότητας

