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Economic resilience and tourism destinations: **eco** and cultural responses to **turbulence contexts** in **coastal areas**

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Abstract | Since 2007, the economic recession has had a significant impact on European regional economies, particularly the tourism sector. The combination of increasing oil prices and the reduction of purchasing power created a vast reduction of both foreign and domestic tourists, as well as lower spend from tourists, across Europe. Destinations focusing on standardised products were especially affected. This paper will stress the role of innovative coastal tourism activities to overcome the tensions caused by economic turbulence. Due to the unequal distribution of tourism across the EU, locations where tourism is socioeconomically significant to the region will be compared, using the cases of coastal tourism in Wales (UK), Algarve (Portugal), and Province of Huelva in Andalusia (Spain). Data from these regions was collected through the Atlantic Area KIMERAA project. For each case study, semi-structured interviews were conducted with SMEs, policymakers and Universities. These interviews, and further secondary source analysis, provided evidence that these regions were recovering from the economic resilience shock through diversifying their tourism markets particularly focusing on ecotourism and cultural tourism.

Keywords | economic turbulence, resilience, sea cluster, coastal tourism, ecotourism.

Resumo | Desde 2007, a recessão económica teve um impacto significativo nas economias regionais na Europa, em particular no sector do turismo. A combinação de preços crescentes do petróleo com a redução do poder de compra originou uma redução de turistas estrangeiros e nacionais, bem como um menor gasto médio por turista, por toda a Europa. Destinos baseados em produtos padronizados foram especialmente afetados. Este artigo irá destacar o papel de atividades turísticas costeiras inovadoras para superar as tensões causadas pela turbulência económica. Devido à distribuição desigual do turismo em toda a União Europeia, territórios onde o turismo costeiro é socioeconomicamente significativo para a economia regional, serão comparados. A análise utiliza os estudos de caso do País de Gales (Reino Unido), do Algarve

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(Portugal) e da Província de Huelva, na Andaluzia (Espanha). A recolha de dados nestas regiões foi efetuada no âmbito do projeto Espaço Atlântico KIMERAA. Para cada estudo de caso, foram realizadas entrevistas semiestruturadas com PMEs, decisores políticos, universidades e centros de investigação. Estas entrevistas e a análise de fontes secundárias, fornecem evidências de que estas regiões estão a recuperar do choque à resiliência económica, através da diversificação dos seus mercados, particularmente, através do ecoturismo e do turismo cultural.

Palavras-chave | turbulência económica, resiliência, cluster do mar, turismo litorâneo, ecoturismo.

1. Introduction

The recession, which largely started in 2007, has been labelled several different ways; however, its impact is uniform, characterised by high unemployment, currency devaluation and unstable economies. This is particularly evident in the global tourism industry which has seen increasing losses stemming from late-2007 to the current time (Little, 2009)1. Unlike other industries, the tourism industry is demand-driven which makes a global economic crisis even more difficult to recover from as it is based on consumers' needs. According to Little Consultants, "with its global implications and the fact that it directly affects people's financial ability to travel, the current global economic downturn could become the most severe crisis the industry (tourism) has ever seen" (Little, 2009: 1). While this quote may seem presumptuous, Figure 1 demonstrates the changes to global tourism over time, considering major, historical disruptions based on war, terrorism, other economic crises and extreme weather which highlights the significance of the current recession in the industry.

In providing this historic overview, Figure 1 demonstrates that the current tourist industry reduction is less about combined shocks and more about the extent of the shock. 'Shock' is referring to exogenous shocks that can affect an economic system. There are three kinds of sudden shocks that can affect a system, in this case a region: those caused by macroeconomic events such as an economic recession, those caused by industry-specific shocks (when the industry is prominent in the region) such as movement of major firms out of the region or increased competitiveness, and those caused by natural disasters in the region (Hill et al., 2011). While many regions are confronted by more than one shock, particularly relating to climate change or peak oil, for the purposes of this article, when discussing shocks, we will be referring to the sudden, macroeconomic events such as the economic crisis.

The scenario presented thus far has been at the global level with an all-encompassing definition of tourism. A breakdown of what will be specifically reviewed in this article is needed. The regional level will be considered due to the geographic similarities of the Atlantic Area cases – South West Wales (SWW), Algarve and Huelva (Andalusia) – and the ability of the region to adapt and change more rapidly than at the national or global level. 'Tourism' as an industry is more complex than what people do when they are away from home. This complexity is based on the types of tourists, the destinations and the reason for travel. In dealing with the economic crisis, long range destinations are performing the worst due to increased flight fares and short range destinations are performing the best due to public transport or car travel options (Smeral, 2010). In addition, the latter option is preferred as the tourists are less likely to be surprised by conditions at their destination such as weather and language use (Smeral, 2010).

¹ Due to travellers booking their trips in advance, it is estimated that the impact of the recession was delayed 6-9 months in the industry thereby affecting it in late-2007, although many other industries would have started to experience problems earlier in the year.

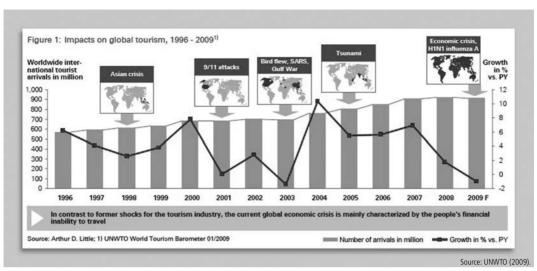


Figure 1 Impacts on global tourism (1996-2009).

As the focus of this article is on coastal tourism, the tourist profile we will be analysing is a leisure tourist that is either foreign (long- or mid- distance) or domestic. While it is understood that domestic tourism will rise given the economic conditions, the foreign tourist market will also be analysed due to its economic impact on the region. The activities the tourists partake in will be narrowed in proceeding sections.

This article will continue as follows. Having identified what we mean by 'coastal tourism'; and briefly describing the impact of the economic crisis on the industry as a whole and at the regional level; and establishing the presence of a coastal tourism cluster in each region, the article will consider the impact of the crisis on the clusters in an effort to strategize how the regions can recover from this substantial exogenous shock. The next section will highlight the Regional Economic Resilience (RER) literature focusing on its potential applications in three distinct regions as presented in the case studies. The RER literature will be discussed in the Evolutionary Economic Geography (EEG) context. By adding the evolutionary aspect, the future 'innovative coastal tourism activities' that will lift the regions' out of recession, which were mentioned in the abstract, can be considered through the existing regional strengths. This will be particularly useful in the following section which will discuss the individual cases in relation to their particular contexts and review potential future activities. The final section will provide a brief review of the article and concluding remarks.

2. Economic resilience and regional development

The economic significance of the cluster to the region in each case is based on the history of the clusters and their importance to the region. Due to the combined economic and historic significance, the regional economic resilience literature will be discussed in relation to its evolutionary capacity focusing on EEG concepts. According to Simmie and Martin (2010), there are three main kinds of RER: engineering, ecological and path dependence. Engineering resilience is based in physics through its reliance on system elasticity but also has roots in economics. This theory considers resilience as the capacity of the system to return to or resume a state of equilibrium after an external shock. The faster the system returns to a state of equilibrium, the more resilient it is to external shocks. Ecological resilience is an extension of engineering resilience but differs due to the system's ability to have multiple equilibria which is more conducive to the ecological sciences. In having multiple equilibria, ecological resilience is the ability of a system to absorb the shock before it is destabilised and transitions to another regime of behaviour. Simmie and Martin (2010) aptly note that the resilience of this system is measured by its ability to remain the same or 'absorb' an extreme shock. This elasticity aspect of ecological resilience ties it closer to engineering resilience than any evolutionary-based theories. Lastly, path dependence focuses on the regional economy to be 'locked in' to a particular path. To further explain, the region is locked-into a certain method of economic development which is reinforced by significant returns to the local economy (David, 2005). If the regional economy, that is locked-in to a specific path, is impacted by a shock then the resilience of the region can be gauged in the region's capacity to return to that path. Although some words have changed (regional economy instead of system, lock-in instead of equilibrium), this account of path dependence theory appears to be in line with engineering resilience (Simmie and Martin, 2010).

Simmie and Martin (2010) consider the relationship between path dependence and evolution through theorising new path creation. In creating the new path, which could be based on the old paths as they provide the skills and competences for development, the system (regional economy) demonstrates the evolutionary side to path dependence theory and also shows how the system can adapt or 'break free' from lock-in in response to the shock (Martin and Sunley, 2006; Simmie and Martin, 2010). In understanding EEG, path dependence, as an evolution-based theory which addresses the aforementioned equilibrium question, will be discussed in its relevance to the adaptation of resilient regions. However, it should be mentioned that there are also evolutionary economic geography theories that have also gained academic support in terms of regional economic resilience: panarchy and complex adaptive systems. All three RER (based in EEG) theories are intended to be applied ex post or after the fact.

Substantial research has been completed focusing on path creation with contradictory findings that paths are created at random or they are shaped by old paths (Martin and Sunley, 2006). Using the evolutionary perspective, the latter finding will be explored further as a form of regional adaptation which could promote post-shock recovery. According to Martin and Sunley (2006), possible EEG-based scenarios for escaping path lock-in include: branching and related variety. 'Branching' or 'regional branching' is when industries, both mature/going into decline and new/ developing, work together to innovate another, technologically-based industry (Boschma and Frenken, 2011). This takes into account the related variety of industries already present in the region as well as the capacity for technological relatedness. Through the utilisation of knowledge transfer methods, the new industries can connect with existing industries to support innovation and growth. Regions that evolve in this way are traditionally characterised by low regional innovation and low variety (Cooke, 2010).

'Variety is the evolutionary fuel of regional development: too little will stifle the creativity and innovation that gives firms and regions their competitive edge; too much will result in cognitive dissonance and the inability to fruitfully interact among firms and organizations like universities, research hospitals and stand-alone public laboratories' (Cooke, forthcoming: 18). By juxtaposing regional innovation and variety, or Schumpeterian and Jacobian virtues, Cooke has effectively explained the other, non-lock-in options while providing the framework for additional regional development options (e.g. transversality). Due to the similarities between transversality and the coastal tourism industry as a whole namely the demand-driven nature of the industry, early path dependence and co-evolutionary transition, transversality will be discussed further in the next section.

In terms of path dependence and resilience, the regional system is able to adapt due to the exercise of transversality as regions and firms will seek innovation by stimulating information flow and knowledge appreciation among unlike kinds of cluster. This knowledge transfer can be organic and market-based between geographically proximate industries or clusters or it can be the work of regional development agencies (RDAs) to facilitate this strange attractor interaction. An example of the former could be farmers working with automobile manufacturers to innovate new biofuels, i.e. two actors that are completely unlike and 'strange' to one another coming together to create a radical innovation (Cooke, 2010). The foundation for this is the proposed regime shift away from carbon-based living to a green economy; however, the transversality concept can be used beyond this application. The role of the RDAs is prominent in this case in the wider European context through examples from Lower Austria, where this type of policy is considered to have started, and the Bayern region in Germany. While some of the cases discussed in this article will be discussed in terms of their green credentials and eco-innovation capacity other options for regional recovery will also be explained such as cultural tourism, even if discussing transversality.

3. Methodology

The data was gathered using qualitative methods, namely secondary source analysis and semistructured interviews with key actors in the region. The secondary source analysis reviewed the background information on the regions to compose an economic, sociologic, and geographic profile for each area. While gaining a better understanding of these elements at the regional level, this was also how the coastal tourism cluster was identified as being either socioeconomically significant to the region or having growth potential. In all three cases, the coastal tourism cluster was identified as being socioeconomically significant to the region as mentioned above. Based on the actors identified through the secondary source analysis which included a review of policy, semi-structured interviews were carried out with key actors in the cluster in each region. These actors were from: government, SMEs, large firms, university or intermediaries (consultants). The interviews provided a better understanding of the core issues and the main knowledge transfer activities through openly engaging with the actors. The interviews were conducted face-to-face and, if needed, over-the-phone. From the project, each partner was expected to complete at least ten interviews in their specified cluster, for coastal tourism Wales provided ten, Southern Portugal provided thirty and Southern Spain provided seven. This article is based on the findings from both phases of the methodology which was completed during late 2010.

4. Economic resilience in the case study regions

4.1. Algarve case

The coastal tourism cluster is in a period of turbulence due to the impact of the recessionary shock which has reduced both the number of domestic and foreign tourists. The latter, particularly British tourists, is more prominent in relation to the decline in numbers and the economic contribution to the region. As one of the interviewed economists underlined "it is a very small and open economy, the external shocks impact strongly, for the better and for the worse". Economic turbulence postpones expenses, investments, collaborations within the cluster so any collaborative projects using tourist companies that are being launched are surrounded by uncertainty. According to the regional knowledge transfer office, the promotion of coastal tourism innovation is done mainly in existing firms through collaborative R&D projects focusing on the reduction of environmental impacts and energetic rationalization in tourist activities. Despite this interest, sub-products like nautical activities or gastronomy are central but remain unexploited. Even ecotourism in the protected areas like Ria Formosa, need to have more information available about the constraints of the activities. Several stakeholders underlined that coastal tourism needs to be more cooperative, with a less prohibitive and more supportive legal environment, the supply needs to be more innovative, qualified and oriented to new demands, adding value to Sun and Sea. While this is the case for coastal tourism, one of its sub-industries, golf tourism, is doing exceedingly well despite the recession. This is motivated by the profile of the golf tourist that may suffer less with the recession shocks. This could be due to the multitude of options that golf tourists have in that their golf vacation is right next to a beach providing 'something for everyone'. Alternatively, as is the case with sailing and yacht building, the recession is not impacting these industries as much as others due to the socioeconomic status of their customers, which could also be the case for golf tourism.

In the long term, the best way to increase regional variety and innovation is through transversality as discussed above. To some extent this is already occurring organically with the birth of several ecotourism-based firms, as well as the renewable energy emphasis in University R&D through blue biotech, wind energy and solar energy firms in the region. The next step would be further cluster-to-cluster collaboration, the more unlike the better, to innovate into new fields in the region.

Nevertheless some advanced firms, focusing on ecotourism, emerged in the last years, integrating "traditional" coastal tourism activities with research and science communication. This can be the beginning of the regime shift from carbon-based innovation to post-carbon- based innovation. Through the general public's growing knowledge of the benefits of sustainability, non-renewable energy and green tourism the social mindset of the cluster and the region can change. This would have a massive impact on the economy and has started to happen, to a certain extent, with meeting the demand of upper class individuals that are less affected by the economic crisis. One stellar example is Martinal, an ecotourism resort, which arose from the drive to encourage higher end clients to visit Algarve by developing the Western most section of the region. While this objective was achieved with this resort, it does not take into consideration why other, smaller, ecotourism firms have arisen closer to the typical tourist populations.

However, to succeed in the long run, ecotourism cannot be a business catchphrase but must be supported by serious eco-credentials as the aforementioned firms demonstrate. For example, golf courses will often describe their eco-credentials and explain that they are sustainable tourist resources; however, it is commonly known that the only thing green about golf is the colour of the fairway. Due to the high amount of fertiliser and water used to keep the course in suitable condition, the golf industry does not really have any eco-credentials. While golf is a major sub-industry within the coastal tourism cluster, if branching into ecotourism, it must be kept separate.

4.2. South West Wales case

The actors involved in the coastal tourism cluster in South West Wales are largely SME owners and government that are involved in formal networks in the region. There is knowledge transfer occurring but it is not for the purpose of innovation; rather, it is with the aim of conservation and increasing tourist numbers. For the former, the majority of tourists come to West Wales due to the scenic coastline, remoteness and the natural environment. Understanding their customers' demands, and the significance of the tourism industry to the regional economy, the actors in the cluster are interested in cooperating, with their competitors in some cases, to conserve their environment in order to have a sustainable business based on their natural surroundings. One way which this conservation is achieved is through the Marine Code Group, facilitated by the Pembrokeshire Coastal Forum.

Out of all the cases discussed in this article, the SWW region, and the coastal tourism cluster it contains, are the most inclined to adopt 'sustainable living' practices due to the social transformation that has already occurred. The SWW region as a whole is extremely forward thinking in regards to eco-innovation which is demonstrated by the extensive use of clean technology in the region. This is mainly in the form of biomass conversion, solar panel innovation, marine energy and wind energy which is researched, produced and utilised in the region. Combining the work done in this field, with the local emphasis and the knowledge of the benefits of sustainable living, the region as a whole is much more able to completely transition to ecotourism than the other cases. This eco-based position is somewhat odd given the economic importance of the non-renewable energy firms in the region; however, this presence could be considered the catalyst for the heightened sense of green living.

Nonetheless, the transition has already started, with the oldest ecotourism firms being from this case, with the award-winning BlueStone resort as well as smaller tourism SME's that are sustainable and teach sustainable practices to guests. BlueStone is a resort located in the SWW region that is a pillar within the coastal tourism cluster as well as being a best-practice example of ecotourism. The resort is comprised of tourist cottages, a water park (Blue Lagoon) and a spa, all of which utilise renewable energy. The resort has been in business for 15 years, which lends itself to the understanding that this region is advanced in terms of the sustainable thinking. For example, the heat for Blue Lagoon, which is substantial as the pool water needs to be heated, is generated in an

on-site energy centre, housing two 28-tonne boilers which burn a blend of energy crops (biomass) grown by local farmers, and woodchip. This equates to an annual saving of 3000 tonnes of CO2 compared to if the Blue Lagoon used oil. The eco-credentials of BlueStone extend beyond the Blue Lagoon through the use of biomass, solar panels, and sustainable living standards throughout the resort. Furthermore, through heating the Blue Lagoon with biomass the local farming community receives tens of thousands of pounds every month.

In regards to regional economic resilience, what can be taken from this case? From the examples provided, it is clear that the economic recession has not been the catalyst for the ecotourism concentration in the region. Due to the history of the region, which increased in population in the 1960's and 1970's with an influx of alternative thinkers and 'hippies', the conservation and sustainability aspect evolved from that. Taking this into account along with coastal tourism at the time, which promoted other activities beyond the 'sun & sea' due to the poor weather conditions in the region, the need to conserve and sustain was transferred to the coastal tourism industry. Over time, these social and economic veins within the region formed the coastal tourism cluster with an ecotourism emphasis. There are tourist focused firms in the region that are not adopting these principles; however, most are as they realise the reason the tourists continue to come to the area is for the natural beauty which can only be sustained through conservation efforts. This is the reason that the marine code group works well and that knowledge transfer is based on conservation instead of innovation. While this explains the presence of ecotourism firms in the region, it does little to explain the effect of the most recent macroeconomic shock on the coastal tourism cluster. To that extent, based on the seemingly positive or unchanging effect the shock has had on the region due to increased domestic tourism numbers, albeit only day-trippers (indicates the unchanging nature), it will not be considered a shock for this case.

4.3. Huelva case

This is also indicative of the changing demands of tourists given the economic crisis. While the original profile for the region had tourists focusing on sun and beach activities, the coastal tourism cluster in the region also promotes golf and cultural tourism which are essential diversifications during this economic crisis. In regards to diversifying through golf, the region is similar, although not at the same level, to Algarve; however, the other aspect, the cultural emphasis, is new and will be explored. Tellingly, 93% of "sun and beach" tourists never leave their resort (Junta de Andalucía, 2007) to visit any of the 6 world heritage sites or a flamenco performance. These adjacent industries are often not prepared for these visitors: for instance, very few sherry wineries have suitable facilities, skilled custom-facing personnel or organize tours at all. Contrast this with the vast tourism industry around wineries in Napa and Sonoma valleys in California and you can begin to understand the difficulties associated with cultural firm placement and marketing in the region.

There are several inter-cluster collaborations between Fishing and Coastal Tourism Cluster, because Tourism and gastronomy are very connected, and Huelva's gastronomy is based in fishing, and cause, due to the economic crisis, some fishing enterprises are diversifying their activity and working in both sector. Although the cluster in Huelva is not actively pursuing ecotourism, the foundation is available through the successful co-evolution of the fishing and coastal tourism. This supports the argument that the more diverse the region, the more likely it will be able to partake in transversal activities. However, the region can use this same co-evolution to focus on cultural tourism. Cultural tourism is different to ecotourism in its supply characteristics which makes it harder to provide a 'best-practice example' like the other cases reviewed. For example, a hotel can clearly be labelled as sustainable and making conservation efforts or unsustainable. While there are some grey

areas such as hotels that only wash towels when requested, for the most part the difference in standards, towels vs. biomass, is noticeable. However, for cultural tourism, beyond the restaurants that serve authentic food or the street dancers that perform flamenco, it is difficult to commoditise a specific product, or a specific set of standards, to consumers. Rather, the marketing of the historic attributes of the region, namely the culturally significant sites, museums, and artwork serve as the lure to tourists and the tourist market (hotels, restaurants, souvenirs, tour guides) capitalises on the population of tourists. Based on this, there are no specific best practice examples as the list of popular sites in Huelva has been provided but further marketing is needed to increase the demand as the supply is readily available with local restaurants and historic sites.

In summary, the Spanish and Welsh coastal tourism clusters have significantly more share of demand from domestic tourism than the Algarve case. This is one of the reasons that Algarve has disproportionately suffered during the recession when domestic tourism would increase as foreign tourism decreases. Even with the economic problems faced at the national level in Spain, domestic tourism to the Andalusia region is significant and to the Western part of the region, surrounding Huelva/Cadiz, this is also the case.

5. Conclusive remarks and policy implications

The crisis has exposed the vulnerability that developed countries may suffer as a consequence of the economic turbulence. The different capacity of territories and clusters to adapt, change and evolve in economic terms without breaking social and institutional arrangements is what we can understand as economic resilience.

Economic resilience is a complex feature of economic systems that require further research in

order to highlight the factors that induce a greater adaptive capacity to external shocks that induce change that often is not positive and encompasses different types of tensions. These tensions emerged mainly because of dichotomic visions regarding competitiveness and cohesion that subsist in advanced economies and tend to value market-driven solutions as the more efficient and effective that can be obtained.

In this paper, we have explored three different territorial contexts with clusters of similar size to understand in depth the economic resilience of the analysed regions. Studying the coastal tourism, a branch of the Sea cluster that is determined by market pressures and who felt the intensity of the economic downturn, it was possible to illustrate different adaptive capacities for Algarve, Huelva and South West Wales to answer the questions posed through the reduction of tourism numbers.

It was advocated in the analysis that clusters that are less diversified, with less knowledge content and a lack of entrepreneurial dynamics may be more easily left behind in scenarios of crisis. In this way, it was evident that one of the answers towards additional economic resilience in coastal tourism is the preparation of a set of new tourism products that diversify the destination offer. We have stressed the importance of ecotourism and cultural products as a means of exploring and exploiting new opportunities that respond to the demands of new tourists and simultaneously create a diversified product with knowledge incorporation, more value added and linked with other economic activities in the destination.

Being very different in their resources, the analysis has evidenced that these three Atlantic regions present resources that can be engaged to foster a more resilient coastal tourism cluster. A collective engagement for detecting and actively exploring new opportunities requires active governance that is attentive to strategic possibilities and latent potential; but, attention to strategy is scarce in times of austerity.

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