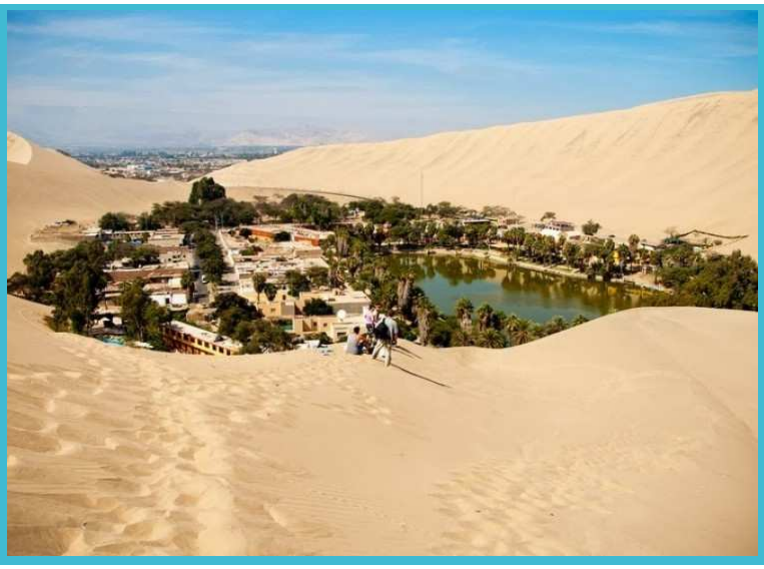
THE ECONOMICS OF TOURISM DESTINATIONS (B)

Candela and Figini (2012): The Economics of tourism Destinations



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Economic Fundamentals of Destination

- Search for coordination in destination (economically/logistically)
- Search for variety in tourism product to increase satisfaction
- Completion of tourist's product by supplying structures and infrastructure that tourism market unable to provide efficiently
- Tackling of externalities among different types of tourism, tourists and residents, current and future tourists
- Management and planning of overall tourism product
- Identification of a target market
- Use technolgy innovation to reach and maintain competitive standards of destination

Coordination of Activities in Destination

- Complete bundle of complementary goods and services produced by independent business (accommodation, transport, leisure, cultural activities, foods/beverages) supplied in coherent manner
- Example: two types of firms: Hotels (only lodging) and Restaurants (only meals). Tourist will not go if one unavailable or does not meet the requirements (luxury hotel and only fast food restaurant; one-star hotel and expensive gourmet restaurant)
- unique economic good, whose fragmented across different firms is known as anticommon. v= $p_h + p_r$ is unit (daily) price of tourism made of 1 unit of 2 complementary goods
- Tourist needs 1 unit accommodation, 1 food per day at price p_h, p_r
- Linear demand: *N=f(v)*, so that *N=a-v=a - p_h – p_r*, *elasticity* $\varepsilon = |v/N|$

Case A: Uncoordinated Firms in Destinatination

- v= $p_h + p_r$ is unit (daily) price of tourism made of 1 unit of 2 complementary goods
- Max $\Pi_h = p_h N = p_h(a - p_h - p_r)$
- $\frac{\partial \Pi_h}{\partial p_h} = a - 2p_h - p_r = 0 \rightarrow p_h = \frac{a - p_r}{2}$
- Max $\Pi_r = p_r N = p_r(a - p_h - p_r)$
- $\frac{\partial \Pi_r}{\partial p_r} = a - 2p_r - p_h = 0 \rightarrow p_r = \frac{a - p_h}{2}$
- $p_r^* = p_h^* = \frac{a}{3}$; $v^* = p_h + p_r = \frac{2a}{3}$; $\Pi_h^* = \Pi_r^* = \frac{a}{3}.\frac{a}{3} = \frac{a^2}{9}$

Case B: Coordination by External Authority

- Show free market solution not optimal for firm or tourist
- External authority coordinates tourism product by supplying combined package of accommodation and meals
- Centralized profit-maximizing destination.
- Max $\Pi = vN = v(a - v)$
- $\frac{\partial \Pi}{\partial v} = a - 2v = 0 \rightarrow v^{**} = \frac{a}{2}$, optimum number of stays $N^{**} = \frac{a}{2}$
- $v^{**} < v^*$, $N^{**} > N^*$: cooridnation decreases price, increases stays
- Authority will ask firms to set identical prices $p_h^{**} = p_r^{**} = \frac{a}{4}$
- $\Pi_h^{**} = \Pi_r^{**} = \frac{a}{4}.\frac{a}{2} = \frac{a^2}{8} > \frac{a^2}{9}$ so also profits increase (anticommon)

Case B: Coordination by External Authority

- Both hotels and restaurants make more profits with central coordination provided by destination management
- Together with more tourists at lower price it implies WIN-WIN so welfare improving
- Coordination provided with private association of tourist firms or by a public body

1. Coordinate with businesses supplying components of tourism product
2. Compute and post aggregate price of product (daily price of holiday in destination
3. Compute and post price of different services composing product

Case C: Coordination by Tour Operator

- Coordination provided endogenously to the market by means of tourism firm, typical tour operator
- Sells overall tourism product, package holiday, composed of single services that tour operator purchases from individual firms.
- Tour operator assumes insurance role against market risk, by paying a discounted price for tourism services purchased in advance
- Restaurants and hotels rationally decide to accept discounted price if profit higher than under no-coordination alternative (case A)
- Role of tour operator: replace market failure due to anticommon with decentralized market solution

Case C: Coordination by Tour Operator

- Tour operator purchases services from local restaurant and hotel
- Let (p_j – d) be price written on contract, where p_j is the unit market price for *j=h,r*, and *d* is discount identical for both businesses
- Coordinating firm maximizes own profits subject to participation constraints (PC) of restaurant and hotel: their individual profits must be higher than or equal to profit without coordination: $\frac{a^2}{9}$
- Optimization problem of tour operator:
- $\text{Max}_{v,d}\ \Pi = vN - (p_h - d)N - (p_r - d)N = (v - p_h - p_r + 2d)N$
  s.t $N = a - v$
  $(p_h - d)N \geq \frac{a^2}{9}$ (hotel PC), $(p_r - d)N \geq \frac{a^2}{9}$ (restaurant PC)

Case C: Coordination by Tour Operator

- Suppose out operator offers restaurant and hotel minimum profit for them to be willing to participate in contract: $(p_j - d)N = \frac{a^2}{9}$, $p_j = \frac{a}{3}$
- Optimization problem becomes:
- $\text{Max}_{v,d}\ \Pi = vN - \left(\frac{a}{3} - d\right)N - \left(\frac{a}{3} - d\right)N = \left(v - \frac{2a}{3} + 2d\right)N$
  s.t $N = a - v$
  $\left(\frac{a}{3} - d\right)N = \frac{a^2}{9}$ (hotel PC), $\left(\frac{a}{3} - d\right)N = \frac{a^2}{9}$ (restaurant PC)
- Replacing one constraint with other we get $d = \frac{a}{3} - \frac{a^2}{9(a-v)} = d(v)$
- $\text{Max}_v\ \Pi = v(a-v) - \frac{2a^2}{9} \rightarrow \frac{d\Pi}{dv} = a - 2v = 0 \rightarrow v^{**} = N^{**} = \frac{a}{2}$

Case C: Coordination by Tour Operator

- Same as coordination under local authority, but very important difference: We obtain d^* = a /9 and hence
- $\Pi_h = \Pi_r = \frac{a^2}{9}$ (not $\frac{a^2}{8}$) and $\Pi = \frac{a^2}{4} - \frac{2a^2}{9}$, also $p_j = \frac{a}{3}$ (not $\frac{a}{4}$)
- Distribution of net profit across firms depends on *d*.
- Existence of positive profit for tour operator creates distributional conflict no present under previous case.
- Sheds light on strategic role played by destination management, particularly in developing countries
- If ineffective, role of coordination left to foreign-owned operators, major share of profits generated by tourism activities exits country, no positive effect on domestic economy

The Variety in Tourism Product of Destination

- Product diversification: increase in available consumption opportunities as target for destination for tourist satisfaction
- Coordination Theorem: destination needs to create necessary network to facilitate access to all complementary services of tourism product
- Love for Variety Theorem: destination should respond to tourists' preferences to diversification by supplying great variety of local products
- Example: to increase tourists' satisfaction and willingness to spend, destination should have both seafood restaurants and pizzerias, etc
- Dixit and Stiglitz (1977) for tourism

The Variety in Tourism Product of Destination

- Utility function: $U = (h^a + X^a)^{1/a}$ with constant elasticity of substitution(CES) between *h* and *X*.
- Elasticity of substitution: how easy it is to substitute one good with another to maintain same level of utility.
- *a=0* not subst. (need both cannot take from *X* and add to *h*)
- *a=1* perfect subst. (linear: can easily reduce *X* and increase *h*)
- Utility defined over: (a) number *h* of overnight stays at hotel in destination, (b) quantity *X* of differentiated bundle of local goods, where x_i denotes good supplied by the *i-th* firm operating in destination *i=1,2,…,n*, (c) amount *y* of non-tourism goods.
- Tourism defined as bastket **T** which includes number of nights at hotel and different varieties of local goods, T=($h, \{x_i\}$), *i=1,2,…,n*

The Variety in Tourism Product of Destination

- Assuming idential firm setting the same price, we obtain
- $U_T = (h^\gamma + \boldsymbol{n^{\gamma/\alpha}} x^\gamma)^{1/\gamma} = U_T(n)$
- $U_Y = y$
- $U = (U_Y^\beta + U_T^\beta)^{1/\beta} = U(n)$

  β: degree of substitutability between non-tourism and tourism good
  γ: between *h* and *X*; α: between local varieties
- $\frac{\partial U_T}{\partial n} > 0$: Tourist utility positively related to variety within local tourism product.
- Shifts preferences towards tourism product and reallocates spending within tourist budget constraint (from non-tourism to tourism good).
- Demand (overnight stays) greater in destinations with more veriety

Limitation of the Variety Concept

- Demand for the variety produced by the *ith* firm decreasing in the degree of variety
- Economic limitation to the expansion of the variety of *X*: production costs facing firms in destination
- Tourism bundle also includes natural and artificial resources as public good: development of destination depends both on variety of the local production and resources available there.
- Justifies existence of both tourism destination that rely on natural resources but limited local variety (costal areas of Sardinia or Corse) and those that count on great variety but limited natural resources (Rimini in Italy or the cost of Benidorm in Spain)

Destination Mangaement

- *Management of Network of firms operating in destination*: make services demanded by tourists available efficiently (coordination theorem, love for variety theorem)
- *Management of services shared between tourists and residents:* conflict can arise if tourists exceed in consumption of resources that are also in interest to local population (manage carrying capacity in peak season both socially and environmentally)
- *Management of destination competitiveness*:
  - Pricing policy (match features of supply with those in demand)
  - Quality policy (make destination welcoming and liveable)
  - Promotion policy (web portal, marketing, territorial brand)
- *Management of Evolution, Territory, Crisis* (Economic, Terrorism)

Success of Destination Mangaement

- Degree of Coordination between different administrative levels in charge of tourism management (local, regional, national)
- Coordination with destination marketing
- Promoting tourism destination through cultural and sport events or as film location
- Development of an effective brand for destination

Destination Marketing

- Destination needs to define and characterize itself among competing destinations
- Destination must behave identically to any firm trying to sell product
- Identify target market and positioning with respect to competing destinations
- Destination branding: develop strong brand for identification and promotion of territory (brand of Spain, whose logo is inspired by the combination of colors and shapes that recall work of well-known Spanish artists like Miro).
- Brand also helps identify characteristic features of types of tourism that can be experienced in destination

Marketing Economic Issues

- Public good nature → free-riding behavior by activities located in territory
- Business located in destination may try to avoid paying share of marketing costs by claiming that activity does not generate advantage
- If all do same little or no private contribution to cover overall marketing cost, hence destination marketing does not take place
- 1. Make destination marketing directly by public authority (Tourism Minister or Tourism department) which finances its costs via tax
- Individual businesses should be called to contribute proportionally to the benefits received from marketing policy
- 2. Private consortium involving all business at destination to internalize externalities associated with creation of destination brand

Marketing Promotional Issues

- When destination marketing overlaps with marketing of tourism product.
- Not a problem in case destination is a «monoproduct» because no difference between destination and type of tourism to promote
- Complication arises in case of «multi-tourism» destination, where strategies below can be used:
- A) to promote destination but not the different types of tourism
- B) to implement a different strategy for each of the different types of tourism on which the destination builds