THE ECONOMICS OF TOURISM DESTINATIONS (A)

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

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Tourism Destination

- Location of tourism structures events and services as well as the place where travelers' needs are fulfilled

1. Lacks reference with the systematic nature of tourism

2. Tourism not necessarily a predominant economic activity in the destination

- Cultural district, town, administrative region, province, country
- Requires destination management body to coordinate the tourism supply and its promotion
- Embodies all elements of tourism product: gathers all businesses hosting tourism, offers all primary attractions, aims at satisfying a relevant share of tourism demand

Economics of Destinations

This course	Micro level: price and quantity of the elementary goods and services included in the tourism product
	Macro level: aggregate value of goods and services demanded by tourists, in a given period of time and a given economic system
This chapter	Intermediate level: relationship between the overall quantity of overnight stays in destination and its determinants (own price, changes in demand, evolution of the destination, etc.)

Chapter Outline

- Tourism demand and the elasticity
- Economic characteristics of the destination (coordination issue, completing tourism product through search for variety)
- Strategic goals of the destination: search for maximization of tourism expenditure (depends on elasticity of demand)
- Models to describe the evolution over time of tourism demand in destination (crucial for tourism policy & planning)

Tourism Demand

- Tourism product defined as basket of different goods and services offered at destination level
  - Territorial criterion: demand in terms of given destination, region, country, etc.
  - Typology criterion: demand in terms of type (beach-based, cultrual, rural, etc.)
- Demand function: q = f (p, […])

Demand for Different Types of Tourism at the Destination

1. $f_{i,r}$: $v_{i,r} \rightarrow N_{i,r}$ Demand for a type of tourism at destination: number $N_{i,r}$ of overnight stays of tourism *i*, at destination *r*, as a function of its daily price $v_{i,r}$
2. F_i: $v_i \rightarrow N_i$ Overall demand for a type of tourism: number N_i of overnight stays of tourism *i*, as a function of its average daily price v_i at different destinations
3. g_r: $v_r \rightarrow N_r$ Overall demand for a destination: number N_r of overnight stays at destinations *r*, as a function of the average daily price v_r of the different types of tourism offered at that destination

Monetary Income of Tourists

- Assume each destination is specialised in supply of only one type of tourism.

(1) $N_{i,r} = f_{i,r}\,(v_{i,r}, [\ldots, M_i, M_{tou}, \ldots])$ **where** $i=1,2,\ldots m$ **and** $r=1,2,\ldots,R_i$

(2) $N_i = F_i\,(v_i, [\ldots, M_i, M_{tou}, \ldots])$ **where** $i=1,2,\ldots m$

- M_i and M_{tou} are respectively amount of disposable income for tourism *i* and for all types of tourism at destination *r*.

Changes in the Demand Curve

- (1): movement along the curve

A variation in the tourism demand, measured by number of overnight stays that is due to a price change (relative to price of other goods)

- (2): movement of the curve

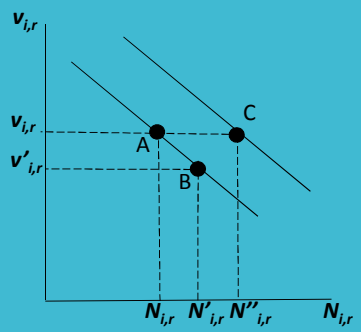
Change in the number of overnight stays due to other variables, such as disposable income or the share of income allocated to tourism activities

Price Effect and Income Effect

A → B : Change in price of tourism *i* in destination *r*

A → C : variation of disposable income for type of tourism *i*

A → C : variation in overall dispoable money for tourism



Examples of Change in Demand

- Destination Alpha specialised in beach tourism experiences a demand contraction, Why?
- Maybe due to increase in price of tourism at the destination (for example exchange rate in case of international tourism) → Loss in appeal for Alpha compared to other destinations
- Loss of interest for beach tourism in general
- Reduction in tourists' disposable income for tourism (decrease in income, or drop in households' propensity to travel), not depend on change in appeal for destination Alpha
- Shift in demand can also be due to non-price effects: Alpha no longer a popular destination, environmental damage, etc.

Examples of Change in Demand

- Increase in tourists' number of days in the mountain tourism destination Beta
- May be explained because of a lower price (movement along the curve)
- May be explained by tourists finding skiing a more appealing option (movement of the curve)
- May be a general expansion of the tourism market (more tourists visiting the destination.

The Elasticity of Tourism Demand

- Ratio between the % change of variable *y* and the % change of variable *x*, when *x* causes *y*: $\varepsilon = |\%\Delta y / \%\Delta x|$

Own-price elasticity: variation in tourism demand due to changes in price of tourism

Cross-price elasticity: variation in tourism demand due to price changes of other types of tourism or other destinations

Elasticity related to available money: variation in tourism demand due to changes in tourists' amount of money allocated to that type of tourism

Income elasticity of tourism expenditure: income explains changes in tourism expenditure

Own-Price Elasticity

- Consider general demand function $\boldsymbol{N_{i,r} = f_{i,r}(v_{i,r})}$
- Elasticity ratio between % change of quantity demanded $\boldsymbol{N_{i,r}}$ and the % change of price $\boldsymbol{v_{i,r}}$, which caused it.
- Concept of derivative can be used: $\varepsilon = \left| \frac{\partial N_{i,r}}{\partial v_{i,r}} \quad \frac{v_{i,r}}{N_{i,r}} \right|$
- derivate negative so in absolute value yielding $0 \leq \varepsilon < \infty$
- When $\varepsilon > 1$ demand elastic (% variation in price leads to large % change in demand for tourism)
- When $\varepsilon < 1$ demand inelastic (% variation in price leads to small % change in demand for tourism)
- When $\varepsilon = 1$ elasticity is unitary (changes identical)

Cross-Price Elasticity

- consider price of different types of tourism *i* and *j* at same destination *r*, or same type of tourism *i* at different destination k.
- Ratio between % change of quantity demanded $\boldsymbol{N_{i,r}}$ and the % change of price of another tourism $\boldsymbol{v_{j,r}}$ or another destination $\boldsymbol{v_{i,k}}$.
- $\mu_{(i,j)r} = \frac{\partial N_{i,r}}{\partial v_{j,r}} \cdot \frac{v_{j,r}}{N_{i,r}}$
- $\mu_{i(r,k)} = \frac{\partial N_{i,r}}{\partial v_{i,k}} \cdot \frac{v_{i,k}}{N_{i,r}}$
- $\mu_{(i,j)(r,k)} = \frac{\partial N_{i,r}}{\partial v_{j,k}} \cdot \frac{v_{j,k}}{N_{i,r}}$

Substitutes versus Complements

- If $\mu_{(i,j)r} > 0$ or $\mu_{i(r,k)} > 0$ then tourism *i* at destination *r* is substitute for tourism *j* at the same destination, or a different destination *k* for same tourism *i* because $\boldsymbol{N_{i,r}}$ increases as a consequence of raise in price of other types of tourism or destination
- Hotel versus B&B, or 2 similar sea resorts offering same tourism so that if price of one goes up tourists move to other destination

Substitutes versus Complements

- If $\mu_{(i,j)r} < 0$ or $\mu_{i(r,k)} < 0$ then tourism *i* at destination *r* is complementary to tourism *j* at the same destination, or a different destination *k* for same tourism *i* because $\boldsymbol{N_{i,r}}$ increases as a consequence of drop in price of other types of tourism or destination
- Visiting museum and theatre in cultural city: increase in cultural tourists in destination also increases tourists attending theatre.

Substitutes versus Complements

- If $\mu_{(i,j)r} = 0$ or $\mu_{i(r,k)} = 0$ then types of tourism or destination are independent: change in price of tourism in Palma de Mallorca has no effect in number of overnight stays in Rome.
- Sign informs us weather substitutes or complements or independent
- Absolute value tells us extent of such relation.
- Important micro aspect of tourism demand: measure cross-price elasticity (positive) between consuming meals at traditional restaurants versus change in price in fast food restaurants, or (negative) between taking a tour of archeological site of Pompei rather than visiting the nearby archeological museum of naples.

Elasticity Related to Available Money

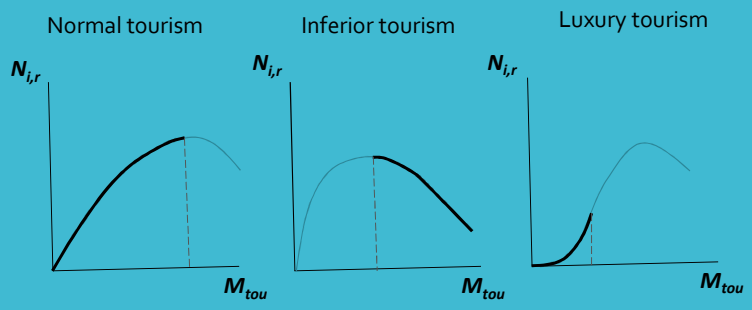
- How tourist's behavior responds to variations in the tourist's available income or amount of money allocated for holidays
- Ratio between % change in tourism demand measured by overnight stays $\boldsymbol{N_{i,r}}$ and the % change in money allocated to tourism $\boldsymbol{M_{tou}}$ (could also refer to particular type of tourism *i*, $\boldsymbol{M_i}$):
- $\rho_{i,r,M_{tou}} = \frac{\partial N_{i,r}}{\partial M_{tou}} \cdot \frac{M_{tou}}{N_{i,r}}$
- $\rho'_{i,r,M_i} = \frac{\partial N_{i,r}}{\partial M_i} \cdot \frac{M_i}{N_{i,r}}$

Elasticity Related to Available Money

- If $\rho_{i,r,M_{tou}} < 0$ then $\boldsymbol{N_{i,r}}$ decreases as tourist's money available for holidays increases.
- Inferior tourism: as income allocated to tourism increases, tourism *i* and/or destination *r* substituted for more exotic, higher quality destination/types of tourism (also hostels, 1-star hotels)
- If $\rho_{i,r,M_{tou}} > 0$ then $\boldsymbol{N_{i,r}}$ increases as available money increases: normal tourism.

- $0 < \rho_{i,r,M_{tou}} < 1$: inelastic (increases less than proportionally)
- $\rho_{i,r,M_{tou}} > 1$: elastic (+ more than proportionally: luxury tourism)
- $\rho_{i,r,M_{tou}} = 1$ unitary elastic

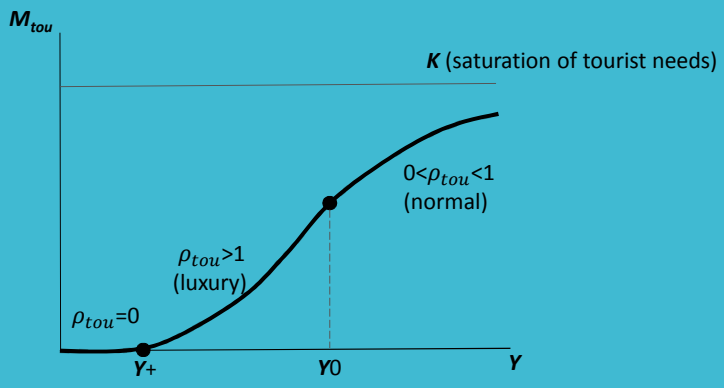
Figure: Engel Curve



Income Elasticity of Tourism Expenditure

- Relationship between tourism expenditure M_{tou} and per capita income **Y** : $M_{tou} = \mathbf{g(Y)}$
- Ratio between % change in tourism expenditure and % change in disposable income that generated it:
- $\rho_{tou} = \frac{\partial M_{tou}}{\partial Y} \cdot \frac{Y}{M_{tou}}$

Figure: Engel Curve



Destination: Core Element of Tourism System

- All destinations are amalgams: share same qualitative features and most be coordinated (elegant interiors of luxury hotel located in run-down area of town are clashing elements
- All destinations have a value: interesting and worth a visit, evolve to adapt quantitative and qualitative needs of tourist needs.
- All destinations are inseparable from consumption: consumed where produced, destination's product is perishable, cannot be transported or stored, hence suffer from tourism pressure
- All destinations are shared with non-tourists: existing structures and infrastructure contemporaneously serve tourists, day-trippers, residents, and workers (beach resort & fishing and navigation; farmhouse & agriculture; trains and stations)

Components of Tourism Destination

- The attractions: artificial, natural, cultural, event-related resources as main purpose of the trip
- The amenities: services, structures, goods (accommodation, food and beverage, shops, etc.).
- The accessibility: from/to terminals, efficiency of local mobility system, «reduce» distance between destination and origin. Also new alternative means of transport (shuttle bus, bike pathway)
- The auxiliary services:local tourism organization for tourist's and tourism firm's benefit (promotion, information)
- The Infrastruture: construction as base for activity such a s communication (internet,phone,tv), utility(electricity,water), services (hospital,police)