Universidad Politécnica de Cartagena

Introduction to Economics

Unit 2

Concepts of Supply, Demand and Equilibrium Market

Grado en Turismo

Facultad de CC de la Empresa

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Contents

Bibliografía: Mochón, F. (2009): Economía y Turismo. Ed. McGraw Hill. Madrid.

1. Demand

- Demand is the willingness to purchase (intention)
- However, to purchase means to acquire (action)
- Demand Schedule: a table that shows the relationship between the price of a good and the quantity demanded. This relationship can be at an individual level or for the market as a whole
- Market demand: sum of individual demands
- Demand curve: graphic representation of the relationship between the price of a good and the quantity demanded

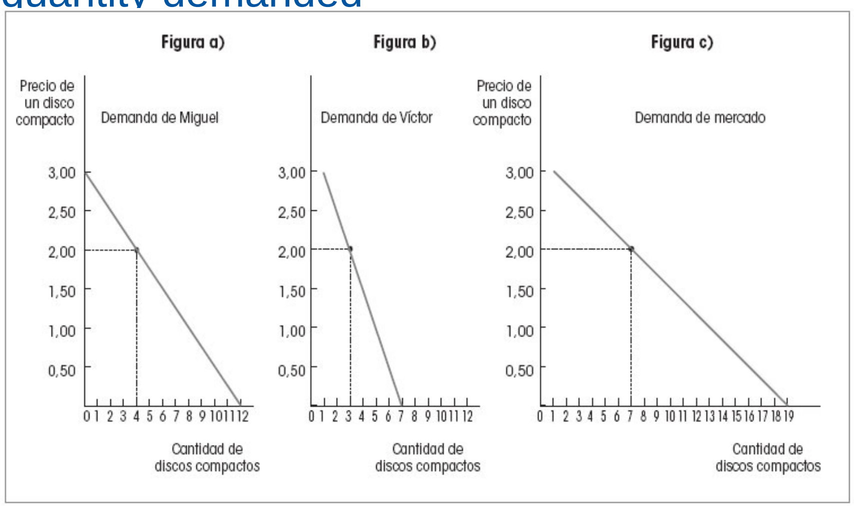

Figura 4.1 Curva de demanda individual y de mercado. La demanda del mercado es la suma de las demandas individuales. Las Figuras a), b) y c) muestran las curvas de demanda que corresponden a las tablas de demanda. La curva de demanda del mercado se obtiene sumando horizontalmente las curvas de demanda individuales, esto es, para hallar la cantidad total demandada a un precio cualquiera, sumamos las cantidades individuales que aparecen en el eje de abscisas de las curvas de demanda individuales.

Fuente: Mochón, F. (2009): Economía y Turismo. Ed. McGraw Hill. Madrid.

1. Demand

Law of demand: inverse relationship between the price of a good and the quantity demanded

Demand function: mathematical relationship between the quantity demanded of a good, its price and other variables

$$Q_A = D\ (P_A, Y, P_B, G)$$

Substitution effect: when the price of a good increases, demand decreases, leading consumers to buy substitute goods

Effect of a change in relative prices

Relative price: the price of a good relative to another good

Income effect: defined as the change in consumption resulting from a change in real income

Real income: nominal income divided by the price level

2. Tourism demand

- Total and marginal utility
- The goods and services consumed by a tourist during the time spent in a destination This depends on price, level of income, tastes, etc.
- “Tourism” service demand (complexity)
- Characteristics:

  - Different levels of choice: duration, destination, means of transport, type of accommodation, etc.
  - Travel required
  - High percentage on the total expenditure
  - Uncertainty: not all the information is available
  - Time elapsed between contracting and consumption (currently tends to be decreasing)

Changes in tourism demand: demographic and economic factors, shorter working hours, transport costs, information technologies → **shift in demand curve**

Changes in preferences: quality over quantity

2. Tourism demand

Tourism market segments

Subsets of consumers with similar characteristics

- Purpose of trip: Leisure and holidays, Business (MICE), Visiting Friends and Relatives (VFR), Health, Religious, Sports, etc.
- Socioeconomic and demographic variables: age, level of income, level of education, gender, size of family, etc.
- Place of origin
- Psychographic variables: lifestyle, interests, values (e.g. adventurers, lovers of luxury, etc.)
- Marketing channel used: travel agency, internet, reservations office

Knowing the segments allows us to manage supply properly

Tourism demand in Spain: 83 million people visited in 2019 (ranked second in the world in terms of arrivals and revenue)

3. Supply

- To offer is to be willing to sell. To sell means to actually do so
- Supply describes the producers' willingness to sell
- **The supply schedule** of a good shows the quantity offered at each price
- Market supply: sum of the quantities offered by all the producers at each price
- **Law of supply**: an increase in price results in an increase in quantity supplied

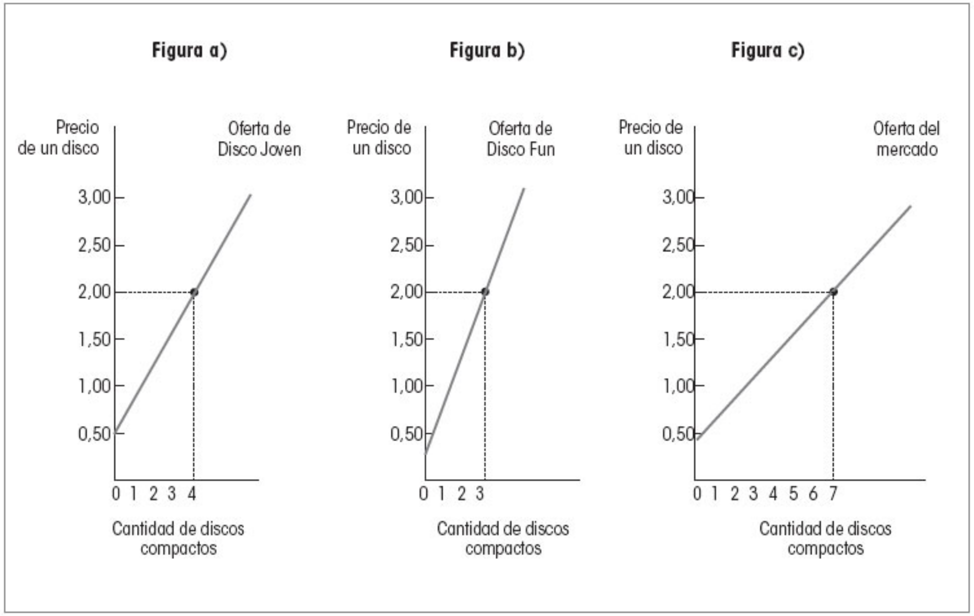

Figura 4.3 **Curvas de oferta individual y de mercado.** La curva de oferta del mercado se halla sumando horizontalmente las curvas de oferta individuales, en nuestro caso de los vendedores Disco Joven y Disco Fun.

Fuente: Mochón, F. (2009): Economía y Turismo. Ed. McGraw Hill. Madrid

3. Supply

- The **supply curve** is the graphical representation of the supply schedule
- It shows the quantity offered at each price, with the other factors which influence supply held constant
- It has a positive (upward) slope → Law of diminishing returns

- The **supply function** is the mathematical relationship between the quantity offered of a good, its price and other variables.

$$Q_A = 0\ (P_A, r, z, H)$$

Both supply and demand are flow variables: they refer to a period of time

4. Tourism supply

- Tourism supply consists of goods and services produced to satisfy the needs of the tourist
- Diverse and complex: accommodation, catering, transport, recreation, events, souvenirs, peripheral services of the private and public sectors, etc.
- Tourism product: all the elements involved in the tourist experience
- Tourism supply arises from the existence of attraction factors:
  - Natural resources
  - Cultural resources
  - Technology- or business-related resources
  - Recreational activities
  - Events

Tourism supply in Spain: sun and beach, cultural. Formal and informal supply. Overtourism in coastal areas

5. Supply and demand: market equilibrium

- Equilibrium: when the quantity supplied and the quantity demanded are equal; there is neither a surplus nor a shortage
- Equilibrium price: the price where the quantity demanded is equal to the quantity supplied

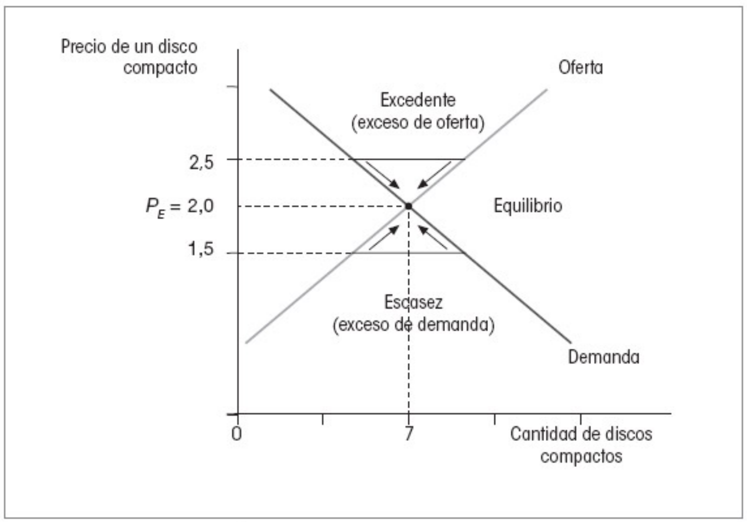

Figura 4.4 Determinación del equilibrio en el mercado. Dado el precio de equilibrio, cuando el precio es inferior hay un exceso de demanda (escasez), lo que tiende a elevarlo. Cuando es superior hay un exceso de oferta (excedente) y ello tiende a bajarlo. En un mercado libre, los precios tienden a desplazarse hacia el nivel de equilibrio.

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When the price is higher than the equilibrium price: excess supply or surplus, the quantity supplied is higher than the demand → the price will have to fall

When the price is lower than the equilibrium price: excess demand or shortage, the quantity demanded is higher than that supplied → the price will have to rise

(Movements along the curves)

Equilibrium → stability: there are no forces which provide incentives to change

6. Change in market conditions

Shifts in the demand curve: brought about by changes in variables other than price, such as income, the prices of related goods or by tastes

- Variations in consumer income
  - Normal goods: those goods for which the demand increases as consumer income increases
  - Inferior goods: those goods whose demand decreases when consumer income increases
  - Luxury goods: demand increases more than proportionately as income rises
  - Necessity goods: demand increases less than proportionately as income rises
- Variations in the prices of other goods
  - Substitute goods: demand is increased when the price of another good is increased
  - Complementary goods: demand is decreased when the price of another good is increased
- Changes in tastes

6. Change in market conditions

Shifts in the supply curve: brought about by changes in variables other than price, such as production costs, technological changes, expectations or the prices of other goods

- Shifts towards the right in the supply curve are caused by a decrease in production costs, advances in technology, favourable expectations, or by an increase in the price of competing products

- The opposite causes shifts towards the left

Changes in equilibrium

- Price and quantity will change depending on which curve is shifted and the direction of the shift

7. Price elasticity of supply and price elasticity of demand

Elasticity: measures the responsiveness of a variable to a change in another

Price elasticity of demand: the extent to which demand responds to changes in price

$$E_p^D = \frac{percentage\ change\ in\ demand}{percentage\ change\ in\ price} = \frac{\Delta Q/Q}{\Delta P/P}$$

Demand is elastic if the elasticity is greater than one, inelastic if it less than one, and unitary if equal to one

When demand is elastic, a reduction in price increases the total revenue, and when the price is raised, the total revenue decreases

When demand is inelastic, a reduction in price decreases the total revenue, and when the price is raised, the total revenue increases.

7. Price elasticity of supply and price elasticity of demand

Price elasticity of supply: measures the responsiveness to the supply of a good or service after a change in its market price

$$E_p^O = \frac{percentage\ change\ in\ amount\ supplied}{percentage\ change\ in\ price} = \frac{\Delta Q/Q}{\Delta P/P}$$

Perfectly inelastic supply (vertical), $E_p^O = 0$

Perfectly elastic supply (horizontal), $E_p^O = \infty$

For example, the supply of available hotel rooms is highly inelastic over the short run, but elastic over the medium and long run