

# **“AIRLINE SERVICES IN INDIA: ANALYZING THE INDEPENDENT AND DEPENDENT VARIABLES TO DEVELOP MODEL FOR DEMAND ANALYSIS WITH RESPECT TO DOMESTIC AIRLINE PRICES.”**

**TRIPTI PANCHAL**

*GARGI COLLEGE, UNIVERSITY OF DELHI*

---

Demand Analysis means analyzing demand (for a service) with respect to factors affecting demand for the service itself.

**Factors affecting demand for a particular service can be summarized as follows:**

1. Price of the service itself.
2. Price of substitute service.
3. Consumer disposable income.
4. Consumer's expectations.
5. Consumer taste and preferences.
6. Promotional efforts devoted to the service.
7. Weather conditions.
8. Emergency.
9. Ignorance of prices of services.

**This research limits the factors affecting demand for airline services only to:**

1. The price at which airline service is offered and
2. The promotion expenditure that an airline operator incurs to provide services.

## **Assumptions of Demand Analysis of Airline Services**

1. There is monopolistic competition in the market i.e.
  - many firms and differentiated services
  - control over prices depends upon the degree of service differentiation -goal of profit maximization
  - perfect knowledge of demand and cost
  - selling efforts are undertaken
2. Ordinal Utility: The consumer can state definitely whether the utility derived from a service or combination of services is greater, less or equal to the utility derived from another service or combination of services. The consumer can rank all the services he consumes in the order of his preferences.

3. Rationality: The consumer is assumed to behave in a rational manner. He is guided by the objective of maximizing his total satisfaction given his money income and prices of services. It is also assumed that he has full knowledge of the market.

4. The purchasing power of the consumer is constant.

5. For demand analysis target customers have been divided into 3 groups:

- Upper class
- Middle class
- Corporate or Business class

6. Demand analysis is based on customer survey only.

### Prices at which Airline services are available

Before analyzing demand with respect to price, take a look at the price level at which air services are offered by different airline operators and travel agencies:

#### INDIA TIMES TRAVEL

From Delhi	One-way	Return
Mumbai	2225	4450
Chennai	3115	6230
Kolkata	2225	4450
Bangalore	3586	7172
Goa	4346	8692
Hyderabad	2780	5560
Lucknow	926	1852
Pune	2700	5400
Jammu	1545	3090
Srinagar	1544	3088

#### SPICEJET

From Delhi	Starting Fares
Varanasi	1025
Guwahati	1799
Kolkata	1099
Mumbai	1199
Hyderabad	1499
Bangalore	1925
Goa	2599

Chennai	2999
Ahemdabad	1099
Pune	1399
Jammu	1199
Srinagar	1299

### CLEAR TRIP.COM

From Delhi	Starting Fares
Ahemdabad	1280
Bangalore	3025
Chennai	3080
Hyderabad	2580
Kolkata	2480
Lucknow	880
Mumbai	2000
Pune	2580

### AIR DECCAN

From Delhi	Starting Fares
Ahemdabad	74
Raipur	65
Goa	1974
Bhubaneswar	1474

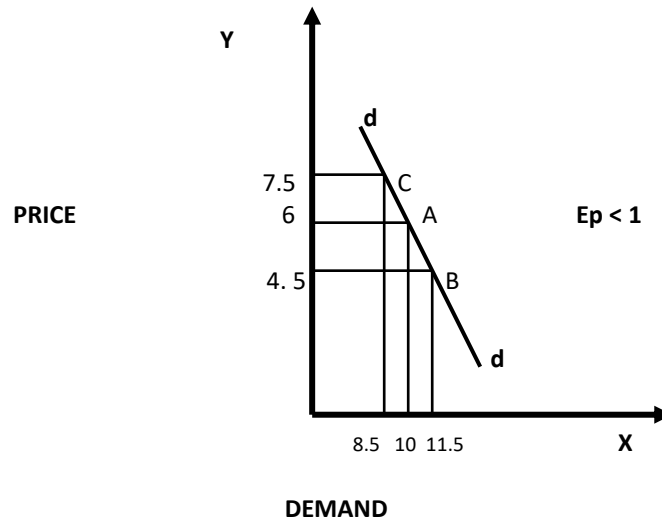
### Demand analysis with respect to price when other things remain constant

#### 1) Upper- Class Section

Upper-class people demand airline services is less than unit elastic i.e.  $D < 1$ . This is because upper-class people are hardly affected by the changes in the price level of airline services as they can easily afford the price.

This class gives importance to the quality of services provided i.e. caring, individualized attention provided to them, the appearance of physical facilities, equipments, personnel and communication material, the ability of the staff to perform the promised service dependably and accurately. Therefore, they are also ready to pay extra for better services.

**Let us understand it graphically:**



### **Movement along the Demand Curve**

In the above figure, dd shows the demand curve for airline services when the price of the services is Rs.6 and the demand is 10 that can be seen at point A on dd curve Expansion of demand (point B)

If the price of the airline services falls from Rs, 6 to Rs.4.5, the demand for the service expands from 10 to 11.5, which can be seen by the movement of point A to point B along the dd curve. But the percentage change in quantity demanded of airline services i.e. 15% is less than a change in its price i.e. 25%.

Contraction of demand (point C)

If the price of the airline services rises from Rs.6 to Rs.7.5, the demand for the service contracts from 10 to 8.5, which can be seen by the movement of point A to point C along the dd curve. But the percentage change in quantity demanded of airline services i.e. 15% is less than the change in its price i.e. 25%.

When a proportionate change in prices of airline services causes less than proportionate change in demand it can be concluded that the demand in the upper section is less than unitary elastic ( $E_p < 1$ ).

It can be summarized as follow:

POINT	PRICE	DEMAND	% $\Delta$ PRICE	% $\Delta$ DEMAND
A	6	10	---	---
B	4.5	11.5	25	15
C	7.5	8.5	25	15

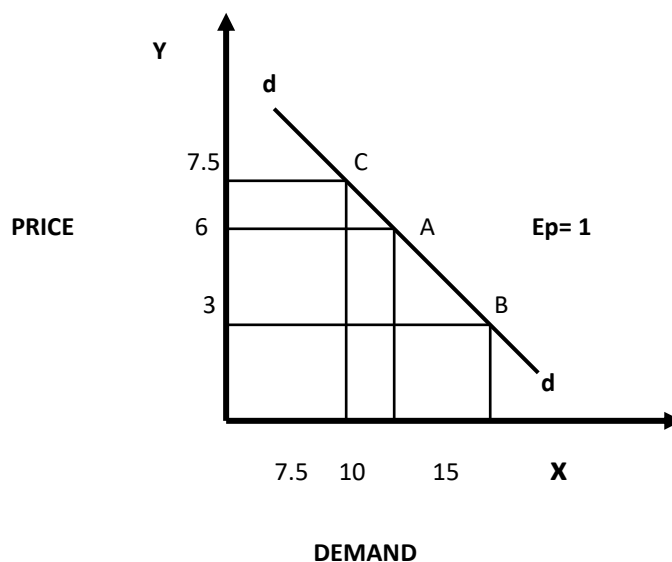
## 2) Middle-Class Section

For middle-class people, price plays an important role, as this section is price sensitive section. With the changes in the price level of airline services, demand for these services by middle-class people also changes. With the increase in prices of airline services, demand for services falls and vice-versa.

The middle-class section is very price-conscious as they often inquire about the amount of refund they will be getting in case of cancellation of flight or if they cancel the tickets.

Thus, demand for airline services by middle-class section is price elastic, as they have to pay price out of their own pockets.

Let us understand it graphical:



### Movement along the Demand Curve

In the above figure, dd shows the demand curve for airline services when the price of the services is Rs.6 and the demand is 10 that can be seen at point A on dd curve. Expansion of demand (point B)

If the price of the airline services falls from Rs.6 to Rs.3, the demand for the service expands from 10 to 15, which can be seen by the movement of point A to point B along the dd curve.

The percentage change in quantity demanded of airline services i.e. 50% is equal to the change in its price i.e.50%.

Contraction of demand (point C)

If the price of the airline services rises from Rs.6 to Rs.7.5, the demand for the service contracts from 10 to 7.5, which can be seen by the movement of point A to point C along the dd curve. The percentage change in quantity demanded of airline services i.e. 25% is equal to the change in its price i.e. 25%.

When a proportionate change in the price of airline services causes an equal and proportionate change in demand, it can be concluded that the demand in the middle-class section is equal to unitary elastic ( $E_p = 1$ ).

It can be summarized as follow:

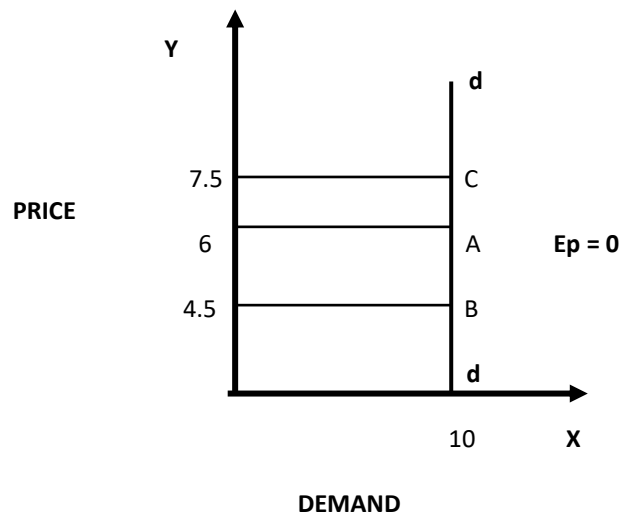
POINT	PRICE	DEMAND	% $\Delta$ PRICE	% $\Delta$ DEMAND
A	6	10	---	---
B	3	15	50	50
C	7.5	7.5	25	25

### 3) Corporate or Business class Customers

The corporate class consists of the customer who uses the air transport for business purposes (meetings, touring etc.) and any delay may cause loss of huge amount to the company. Travel time frequency of flights is a factor that they consider the most important. So, it is better for a company not to indulge in losses even if they have to pay extra price. That extra price does not affect them in any way. This section gives a lot of importance to facilities provided by airline services and are ready to pay a premium if better or more facilities are provided. This section usually carries their return tickets also.

Thus, a change in the price level of airline services does not affect the demand (by corporate customer) in any way. Hence, corporate customer's demand for airline services is inelastic.

Let us understand it graphically:



In the above figure, dd shows the demand curve for airline services when the price of the services is Rs.6 and the demand is 10 that can be seen at point A on dd curve.

If the price of the airline services falls from Rs.6 to Rs.4.5, the demand for the service by corporate class do not change which can be seen at point B along the dd curve.

If the price of the airline services rises from Rs.6 to Rs.7.5, the demand for the service by corporate class do not change which can be seen at point C along the dd curve.

The percentage change in the price of airline services i.e. 25% does not bring any change in the quantity demanded in both cases.

When a proportionate change in the price of airline services do not bring any change in quantity demanded, it can be concluded that the demand by corporate class section is perfectly inelastic ( $E_p = 0$ ).

It can be summarized as follow:

POINT	PRICE	DEMAND	% $\Delta$ PRICE	% $\Delta$ DEMAND
A	6	10	---	---
B	4.5	10	25	0
C	7.5	10	25	0

### **Promotion tools used by Airline Operators**

Before analyzing demand with respect to promotion tools, take a look at various promotion schemes provided by different airlines or travel agencies.

- Advance Purchase Scheme by all airline service providers. “Book early for lowest fares”.

#### **Sahara Airlines**

- A unique 16-page booklet brought by Sahara giving discount on various things you buy. India Times Travel
- Book online and get 5% back on lowest fares.

#### **Go Air**

- Hot beverages available on early morning flights.
- 10% discount for students, senior citizens, armed forces personnel and government employees.
- On the occasion of 1st Anniversary Go Air is offering 1,00,000 free tickets (with some conditions) across all sectors. Offer is valid up to 15th November 2008.
- Get 1,50,000 tickets with fares ranging from 499 to 999 as a part of the 1st celebration offer. Book early to avail this offer. Offer valid for travel till 31st March 2009.

#### **Indian Airlines Limited**

- Indian Airlines “seven return tickets-get your return international ticket free” and “10tickets-get your two return tickets” scheme. Holiday in Goa has come as a bonanza to the travelers.

#### **Jet Airways**

- Jet Gold card members have been offered separate counters for check-in, special lounge at the airport, close to the security hold, complimentary snacks and drinks in the lounge and above all, confirmed economy class booking even at the last time.
- For business class customers, Jet offered an augmented in-flight service when it introduced the trolley service on the metro routes. The trolley service offered the customers an a-la-carte menu from pre-selected food items.
- Business class customers and Jet Privilege customers can also customize their drinks and meals.
- Jet introduced in-flight shopping under the name Jet Mall. It offers the customer the luxury of shopping of much the same way as one would in an international flight.
- In-flight mail order shopping offers premium products at discount.
- On longer flights, passengers are pampered with non-alcoholic drinks, cold towels, and a three-course meal.
- A fare discount (25%) is offered on flights departing after 10 pm.

#### **Kingfisher**

- Gourmet meals – featuring six different vegetarian and non-vegetarian options, apart from low sugar, low fat and Jain meals.
- Kingfisher would offer satellite TV, besides personalized valet service that is already available.
- Refund of Rs.1000 to customers to metros, if he returns on the same day.



- Kingfisher hands out one King Saver Booklet (that has six coupons for Rs.26,999) free on the purchase of two booklets. This way the airline is effectively offering a fare of Rs.3000 for all the 12 cities it flies.

### Air Deccan

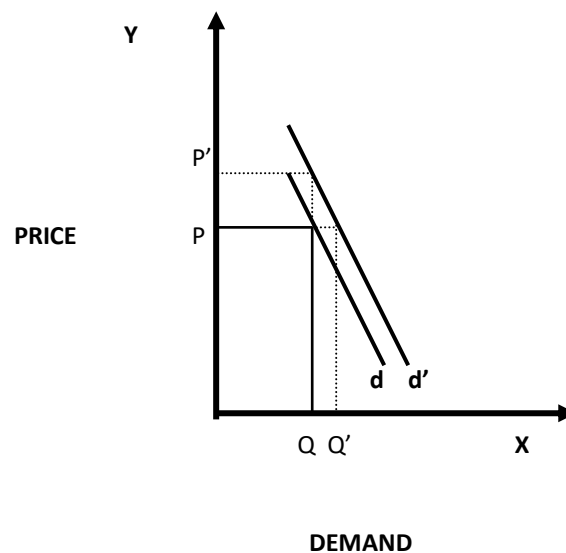
- For travel in April, May and June 2007 Air Deccan is offering 3,00,000 tickets starting from Rs.9.Booking opened on 12th November 2006 at 8 am for travel up to June 30th, 2007.This coming summer vacation, avoid the heat, beat the rush and save time by flying Air Deccan.

### Demand Analysis with respect to Promotion when other things remain constant

#### 1) Upper-Class Section

For the upper-class section, the demand for airline services is less than unit elastic with respect to the promotion offered by airline operators. They do not give much importance to promotional tools and discount of 5%-10% hardly make any difference to their purchasing capabilities. Thus, demand for airline services by upper class is less than unitary elastic with respect to promotion tools.

Let us understand it graphically:



The upper-class section does not have much influence of promotional tools on their demand. Thus, dd curve shirts from to d'd', which is not a significant change.

## 2) Middle- Class Section

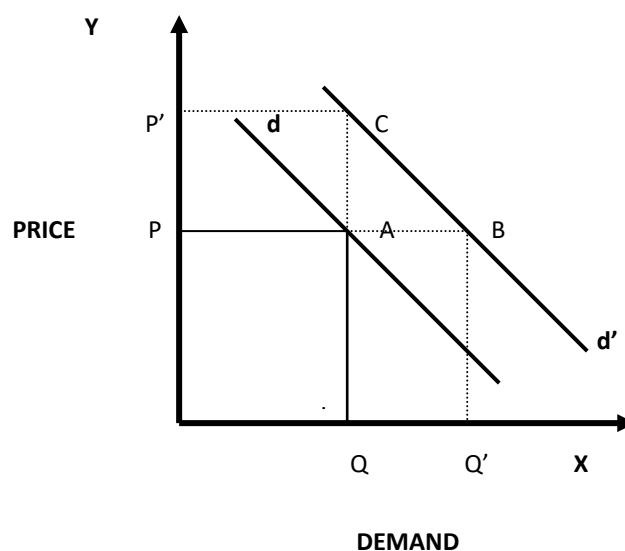
While purchasing airline services middle-class customers do give importance to promotional schemes offered by various airline operators and their demand is also affected by these promotional offers. As this section is price sensitive so they want to gain maximum benefit with their limited purchasing power through promotional schemes.

This is the section that uses Advance Purchase Scheme the most, as they get heavy discounts if they book early.

For example: If train fare from Delhi to Mumbai is Rs.1000 and airfare for the same route starts from 1099 under Advance Purchase Scheme, then the customer can easily opt for traveling by air if they book early.

Thus, demand for airline services by the middle-class customer is unitary elastic.

**Let us understand it graphically:**



Initially, we are at point A, where quantity demanded is OQ and price is OP.

Now, due to increase in promotional activities, the quantity demanded increases from OQ to OQ' (without any change in price) and dd curve shifts to d'd', which can be seen at point B.

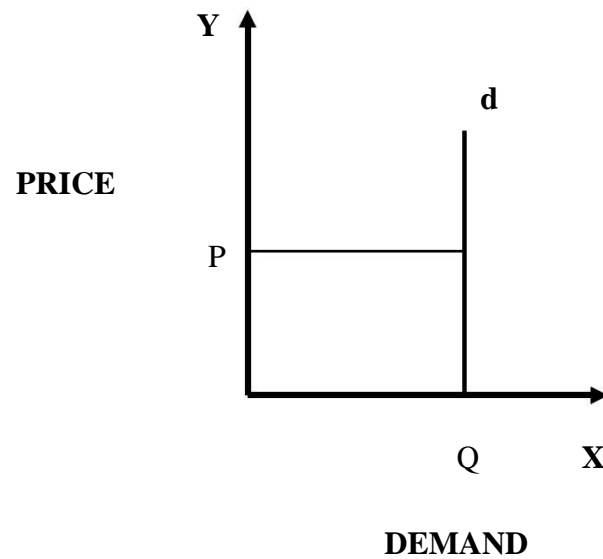
Also, it is possible for the firm to increase the price from OP to OP' and sell the initial quantity i.e. OQ, which can be seen by point C. Thus, for middle-class section demand increases with increase in promotional efforts and vice-versa.

## 3) Corporate or Business Class Customers

Demand for airline services by the corporate customer does not change with the change in the promotion schemes offered by airline operators. The reason is that this section uses air services only for business purposes. They give importance to travel time and frequency of flights while purchasing airline services because any delay can result in huge losses.

Thus, the demand for airline services by the corporate customer is inelastic with respect to promotion schemes offered by airline operators.

Let us understand it graphically:



Promotional tools used by the airline operators do not have any effect on the demand curve of the corporate customer.