Answer on Question # 76392, Economics -Microeconomics:

Question: Demand Estimation:
Choose a product of your interest to determine the most important determinants of its demand. You need to develop this into a generic demand function of the form

$$Q_x = a_0 + a_1 P_x + a_2 I + a_3 P_y \ldots$$

Explain the:
i. Significance of each of the selected variable (include industry specific variables).

ii. Sign of each of the coefficients (expected/estimated use some secondary data evidence to support this).

iii. Impact/size of each of the coefficient (expected/estimated use some secondary data evidence to support this).

Solution: The generic demand function is given by,

$$Q_x = a_0 + a_1 P_x + a_2 I + a_3 P_y \ldots\ldots$$

i. Here, variables are P_x , P_y and I.

P_x is price per unit of product x

P_y is price per unit of related product y.

I is consumer income.

ii. Here, co-efficients are a_0 , a_1 , a_2 and a_3 .

a_0 is positive.

a_1 is negative.

a_2 is positive.

a_3 is positive.

Example: $Q_x = 400 + (-5)P_x + 2I + (1)P_y \ldots$

iii. Co-efficients a_0 , a_1 has high impact on the generic demand function but a_2 and a_3 has low impact on generic demand function.

Answer: i. P_x , P_y and I.

ii. a_0 is positive.

a_1 is negative.

a_2 is positive.

a_3 is positive.

iii. a_0 , a_1 has high impact but a_2 and a_3 has low impact.