

*Proposition 3ii states that if  $\theta_h$ , the highest value of consumers' willingness to pay for the product, is sufficiently high, the expected profit of the MNC decreases with per unit shipment-cost 't'.*

The willingness to parameter value of the consumer  $\theta$  is distributed uniformly where  $\theta \in (\theta_l, \theta_h)$  and  $\theta_h - \theta_l = 1$ . A high  $\theta_h$  implies average willingness to pay for the product is also high. This demand side parameter plays a crucial role in the variation of the expected profit of the MNC with the change in the shipment cost of the intermediate good under Fragmented mode of entry. Whenever 't' is increased MNC needs to raise its price. For a rise in price the demand for original product and the profit of the MNC get reduced. However, for a rise in 't' the MNC has to cut the anti-copying investment level for maximizing its profit. This reduction in cost improves profit but overall expected profit falls due to increase in probability of copying of the product. At this juncture  $\theta_h$  the demand parameter or the willingness to pay parameter for the product plays an important role. As the MNC caters the need of the high  $\theta$  consumers that is consumers with higher valuation of the good a reduction in demand from consumers with high willingness to pay for the product makes the above demand side effect dominant and reduces the expected profit of the MNC for the a rise in 't'. A cut in demand when the consumer's willingness to pay is high adversely affects the total revenue, which cannot be compensated by a reduction in anti-copying investment, hence follows the result.

Secondly, For this same demand side effect social welfare under fragmented mode of entry may be inversely related with 't'. When  $\theta_h$ , the willingness to pay parameter value is high a fall in price due to a fall in 't' will raise the consumer's surplus for the buyers purchasing the MNC's product in a greater magnitude which outweighs the negative impact of the reduced profit of the pirate and consumer-surplus for the buyers of the fake product on social welfare. This occurs again because the MNC serves the consumers with greater valuation of the product. Hence as their consumer surplus is increased it raises social welfare for a fall in 't'.