Elastic and Inelastic Demand

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Demand is either elastic or inelastic. If demand changes a lot when the price changes, it is considered to be an elastic demand. If demand does not respond much to price changes, it is considered to be an inelastic demand. If the percentage change in a quantity demanded is equal to the percentage change in price, it is considered to be unitary elastic demand. If price at a unitary elastic demand, it is considered to be maximized revenue.

It is not easy to set price at unitary elastic demand, however, it can be set closer to the unitary elastic demand by analyzing the market. In those cases, demand varies with price due to factors such as whether the market has more or fewer competitors, and whether the product is a necessity or not. Moreover, it is good to consider that whether the product price is a small percentage or large percentage of consumers' income, and whether the product is consumed frequently or infrequently.

Elastic Demand

Neutrogena sunscreen cream with a high Sun Protection Factor (SPF) by Johnson & Johnson Consumer Inc. is an example of a product with elastic demand. According to McDougall's study, Neutrogena is known for high scores in quality and trust (McDougall, 2012).

Recently, interests in sunscreen have grown in the world because of an increasing concern over skin cancer. Now, the sunscreen market is expanding. Research by Osterwalder, Sohn, and Herzog indicates that the sunscreen market has been forecasted to be €7.0 billion in 2014 worldwide (Osterwalder, U., Sohn, M., & Herzog, B., 2014). When using amazon.com to search for "sunscreen," it shows almost 64,000 varieties of sunscreen products. This is because sunscreen has so many different types depending on purpose. For instance, there are high SPF types, UVA protection types, and water resistant types. Furthermore, there are spray types, cream

types, and lotion types etc. Among them, high SPF products have grown a lot. According to Osterwalder, Sohn, and Herzog, almost 80 % of newly launched products between August 2012 and August 2013 were high SPF of greater than 30 SPF (Osterwalder, U., Sohn, M., & Herzog, B., 2014).

To summarize the above, there are so many substitutes for Neutrogena sunscreen cream with high SPF. When there are many other substitutes for a product, consumers will switch to other products due to price. Thereby, I concluded that the Neutrogena sunscreen cream with high SPF products faces an elastic demand which is sensitive to a change in price since the company has so many competitors. When price is in elastic demand, the revenue has not been maximized. Neutrogena sunscreen products can decrease price in order to maximize its revenue.

Concerns to Elastic Demand

It is easy to imagine that it is difficult to produce a product at a cheaper price if there are many competitors. The price needs to be considered with competitors' prices change all the time. Some companies cannot keep up with competitors' price due to cost of production. If a company cannot get enough revenue to sustain production for the product, the company faces the decision to withdraw from the market.

Inelastic Demand

Genetically modified organisms (GMO) corn seed by the Monsanto company is one example of a product with inelastic demand. Monsanto sells various GMO seeds. Among them, corn seed dominates a great share of its market in the US. According to Miller, "Monsanto's seed brands account for about one-third of sales of corn seed in the United States, with another competitor having about the same or larger share" (Miller, 2014). This means that Monsanto

does not have many competitors. When the market has fewer substitutes, price change will not affect the quantity demanded as much.

Moreover, Peng said that GMO corn seeds have been widely distributed in the US since 1996. And now, the adoption of herbicide-tolerant corn has reached almost 90 % of U.S. corn acreage (Peng, 2011). It can be interpreted that GMO corn seeds are a necessity for most U.S. farmers.

From this information, I concluded that GMO corn seed by Monsanto faces an inelastic demand which is less responsive to a change in price since the company has fewer rivals and it is a necessity for most U.S. farmers. When price is in the inelastic range, its revenue has not been maximized. Monsanto can increase the price in order to maximize its revenue.

Concerns to Inelastic Demand

As mentioned above, Monsanto can increase the price of GMO corn. However, some farmers are returning to conventional seed. According to Royte, farmers could save $81 per acre per season if they used conventional seeds (Royte, 2013). There are also increasing doubts about GMOs among consumers recently. There is no conclusive evidence as to GMO safety. As the demand for conventional seeds increases, so the demand for GMO seeds will decrease.

There is another concern with inelastic demand. If the market does not have many substitutes, suppliers can greatly increase prices. According to Harven, Turing Pharmaceuticals LLC has hiked up the price for the AIDS drug called Daraprim by more than 5,000% from the previous price this month and this immediately became the focus of public anger. In response to this, the company announced that they will reduce the price of the drug (Harven, 2015). Thus, market prices can be the subject of debates from an ethical point of view. These concerns need to be taken into account when we consider the price of a product.

Conclusion

It is not easy to set prices to maximize revenue. However, it can be set closer to unitary elastic demand by analyzing the market. For example, whether the product has more competitors or fewer competitors, or if it is a necessity or not must be analyzed. Depending on the product, it may need to be analyzed if such as a product's price takes up a small percentage or large percentage of consumers' income, or it is consumed frequently or infrequently. In addition to those factors, it is wise to consider the market behavior based on the reputation of a product, as well as considering prices from an ethical point of view.

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