A THEORY OF THE FIRM IN IMPERFECT COMPETITION USING A RELATIVE MEASURE (MARKET SHARE) AND THE ENTIRE MARKETING MIX

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Abstract

Conventional microeconomic theory focuses on price as a determinant of demand and uses absolutes. The purpose in writing this paper is to present a theory of the firm that is more realistic because it uses all elements of the marketing mix and further uses relative measures such as market share which more readily recognize competitive relationships.

Introduction

The purpose in writing this paper is to propose a competitive model using relative measures of seller behavior and seller performance for the major areas of seller interaction. One aspect of this model will be the use of the four major areas of the marketing mix: product, price, place and promotion. Another aspect will be the use of relative measures such as market share, relative price, promotion share and so on. The third feature of this approach will be a theoretical method of looking at the non-price part of the marketing mix as a whole. One major point is that market share is a powerful analytical tool (Cooke, 1983b).

The Marketing Mix: It has been suggested (Cooke, 1983a, p. 266) that sellers sell and buyers buy a marketing mix, not just a thing or a product. This is a key aspect of the model being presented here, particularly since the elements of the marketing mix are highly interrelated and interdependent (Cooke, 1983a p. 266). The four major interrelated elements of the marketing mix are a package and it is the package that is marketed not individual elements of the package.

Demand: The demand for the product of a single seller in an industry is determined by two different sets of factors. One set of factors determines the demand for the entire industry. These factors are the average price of the product, the price of all other products (substitutes, complimentory and general price level--income effect), the income of the buyer and the buyer's taste toward the product. The other set of factors determines the demand for one seller in relation to the demand of all other sellers. These are the factors of product quality, availability, price and promotion of one seller in relation to that of all his direct competitors. To determine the demand of one seller in relation to his direct competitors it is desirable to use a relative measure such as market share rather than an absolute measure such as sales in physical units. Market share is the ratio of one seller's demand to total market demand, it is relative sales. The determinants of market share are <u>relative</u> product quality, availability, price and promotion. Market share of a given seller is a function of effective product quality expenditure <u>share</u> of the that seller, effective availability expenditure share, relative price, the effective promotional expenditure and lagged market share to account for the carryover effect. This is Kotler's fundamental theorm of market share determination (Cooke, 1982). The pitfalls of using an absolute measure of demand is illustrated in this simple example. There are two sellers in a market which is characterized by a highly inelastic total demand curve. One seller raises prices 10% and the other seller raises prices 20%. Buyers are otherwise indifferent to the marketing mixes of the two sellers and knowledge is perfect. Buyers will make their purchases from the first seller and will stop purchases from the second. If analysis is done on the basis of absolute sales an increase in price for the first seller results in increased sales which is inconsistent with theory. If analysis is done on the basis of share the observer will note an increase in market share (to 100%) for the first seller when <u>relative price decreases which is consistent with theory.</u> In markets with several sellers and different determinants of both total demand and a single seller's relative demand relative measures are more appropriate. Also common factors such as the state of the economy cancel out (Cooke, 1983b).

Dividing the Mix

It is possible to separate the marketing mix into two components, price and the rest of the mix. By holding the rest of the mix constant while varying price a relationship between price and market share is established for one seller if the total marketing mix of all sellers also remains constant. If this is done for all sellers (an experiment which requires all elements of the marketing mix to be held constant except for price which is varied for each seller at the same time), over a sufficiently wide range, it is possible to determine a price for equal market shares. This price at the market share which is equal for all sellers becomes a measure of the rest of a seller's marketing mix. Thus the seller who commands the highest price at this point has the mix of product quality, availability, promotion and image (including carryover), and the psychological aspects of price and place deemed most desirable by buyers as a group because they are willing to pay more for the non-price (which includes the psychological aspect of price) part of that seller's mix. Conversely, the seller whose mix becomes desirable to the buyers as a group only when its price is the lowest has the least desirable non-price part of the mix to buyers. If this measurement technique were valid it would permit measuring the effectiveness of the non-price part of the marketing mix since the expenditures for the non-price part are known. The difference between the value as determined by this technique and the cost as determined by the expenditures is a measure of the effectiveness of these expenditures.

References

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