# Michael Porter's "Five Forces" Model



Summary and interpretation by Prof. Tony Lima February 25, 2006

Prof. Michael Porter teaches at the Harvard Business School. He has identified five forces that determine the state of competitiveness in a market. The forces also influence the profitability of firms already in the industry. These five forces are summarized in the above diagram. (The fifth force is the degree of rivalry that currently exists among firms already in the industry.) Here are a few additional details about Porter's model.<sup>1</sup>

#### 1. Barriers to Entry

*Economies of scale* mean larger firms can produce at lower cost per unit. This tends to lower the number of firms in the industry and reduce competition.

*Proprietary product differences* are the characteristics that make a product appeal to a large market segment. But only those characteristics that cannot be copied at low cost by competitors ("proprietary") will be a barrier to entry.

*Brand identity* is the extent to which buyers take the brand name into account when making purchase decisions.

*Capital requirements* are the total cost of acquiring the plant and equipment necessary to begin operating in the industry.

Figure 1: Porter's Five Forces From Michael Porter, Competitive Advantage, Simon & Schuster, New York, 1985, p. 5

<sup>&</sup>lt;sup>1</sup> This material is a summary drawn from Porter's *Competitive Advantage* (1985). The material in question is on pages 5 - 8.

### 2. Bargaining Power of Suppliers

*Differentiation of inputs* means that different suppliers provide different input characteristics for inputs that basically do the same job. The greater the degrees of differentiation among suppliers the more bargaining power suppliers have. *Presence [and availability] of substitute inputs* means the extent to which it is possible to

switch to another supplier for an input (or a close substitute). The greater the number and closeness of substitute inputs the lower the bargaining power of suppliers.

*Supplier concentration* is the degree of competition among suppliers. Usually the more concentrated the industry, the fewer suppliers and the more control suppliers have over the prices they charge. Greater supplier concentration often means greater supplier bargaining power.

*Cost relative to total purchases in the industry* refers to the amount your firm spends on inputs from a particular supplier compared to the total revenue of all firms in the supplier's industry. Lower expenditure usually implies more bargaining power for the supplier. The buyer's bargaining power falls as spending with a particular firm falls simply because the buyer's business isn't as important to the supplier.

## 3. Threat of Substitutes

*Relative price performance of substitutes* is the price of substitutes for your output compared to the price you are charging. If the price of substitutes is lower, the competitive threat increases as the price differential increases.

*Switching costs* refers to the cost to the buyer of switching from one seller to another. The greater the switching costs the lower the threat of substitutes because buyers have a stronger incentive to stick with a single supplier.

*Buyer propensity to substitute* is the extent to which buyers are willing to consider other suppliers.

#### 4. Bargaining Power of Buyers

*Buyer concentration versus firm concentration* refers to the extent of concentration in the buyer's industry compared to the extent of concentration in your industry. The more concentrated the buyer's industry relative to your industry the greater the bargaining power of buyers.

*Buyer volume* is the number of units of your product the buyer purchases from all sources. The greater buyer volume compared to the quantity purchased from you, the greater the bargaining power of buyers.

*Buyer information* is the state of information buyers have about your industry. The more information buyers have about your industry the more bargaining power buyers have. *Substitute products* means the number and closeness of substitutes available for your product. The greater the number of available substitutes the more bargaining power buyers have.

*Price of your product relative to total expenditures on all products.* This is the fraction of total expenditure buyers spend on your products. The greater the fraction of total expenditure the greater the price elasticity of demand and the more bargaining power buyers have.

*Product differences* refers to the degree of differentiation between your product and other products in the market. The greater the differentiation of your product, the lower its price elasticity of demand and the less bargaining power buyers have.

*Brand identity* is the extent to which your brand name is recognized and sought out by buyers. The stronger your brand identity the less bargaining power buyers have.

## 5. Rivalry Determinants [with other firms in the industry]

*Industry growth* is the speed at which the market is growing. Rapidly growing markets provide less incentive for firms to aggressively compete with each other.

*Intermittent overcapacity* is the amount demand fluctuates during a year (or over a business cycle) and the impact lower demand has on how efficiently the firm is able to use its plant and equipment. In some industries a decrease in demand leads to significant idle productive capacity, while other industries are not as susceptible to this factor. More intense rivalry is likely to be fostered in an industry in which firms face either large amounts of unused plant capacity or face frequent idle capacity.

*Concentration and balance* is the number of firms in the industry and their relative size. An industry in which a few firms supply most of the output is likely to not be very competitive because the large firms will control the market.