Columbia University
Graduate School of Business
B7313
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Professor Paul Johnson
Office Hours: By appointment and by telephone.
Office Phone: (212) 293-3402

Analysis of Competitive Advantage

For a long-term oriented investor, positive financial returns come from the long-term value creation of a company's underlying assets.

Value creation comes from the company's ability to earn a return, after all operating costs, that is greater than the capital deployed in the business, equity as well as debt. This excess return is what economists call "economic profits."

We defined "economic profits" as:

ROIC (return on invested capital) - WACC (weighted average cost of capital)

When a company earns more than its cost of capital, the company "creates value" for its shareholders as it will generate more cash than it consumes (including a charge for capital). Over time, the "value" of the company will increase because cash builds up that may be distributed to shareholders via dividends or share buy backs, or that can be reinvested back into the business at an equal or higher return on capital.

Bring on the Competition

However, economics 101 (and common sense) suggests that the existence of economic profits will attract investment into the sector from either existing vendors expanding capacity or from new companies attempting to enter the market. This additional investment will translate into increased supply and greater competitive pricing leading to lower profits throughout the industry. The increased level of competition may force the incumbent vendors to invest additional capital in the business as well, further exacerbating the problem. The increased level of competition will result in lower ROIC for existing firms (with both profits falling and capital increasing). Additional investments will only cease when the industry's ROIC equals its "WACC" (although it can easily fall below WACC for some time if excess capacity exists in the market). ROICs will recover only when the extra capacity is removed from the industry/market segment and rational pricing returns. Individual companies will fare no better than the rest of the industry unless they have a distinct advantage. Therefore, competition is the biggest challenge to a company's ability to create shareholder value.

The only way to maintain "economic returns," is for a company to be in a position to limit the entry or expansion in its markets. In reality, all forms of competitive advantage derive from barriers to entry.

The key to sustained excess returns:

Barriers to entry!

A company's ability to create value (ROIC > WACC) is dependent on its long-run competitive advantage. The period of time for which a company can maintain its barriers to entry is referred to competitive advantage period, or CAP.

Pricing Rivalry – The Wild Card

One primary spoiler in the game of competitive advantage comes from the potential rivalry between firms in the same market. Even with some competitive advantage, rivalry may ruin the game for all of the market participants if competitors decide to engage in price wars, turf battles, and ruinous competition. Therefore, although barriers are a necessity to maintaining competitive advantage, they are not sufficient. Ultimately the market participants must maintain some level of price collusion or market segmentation to sustain overall excess economic returns throughout the industry. However, remember these "agreements" are hard to maintain over time.

The Economic Argument

If competitive advantage is defined as a company's ability to maintain its

$$\text{ROIC} > \text{WACC}$$

Then the key measure of competitive advantage is ROIC.

We define ROIC as:

$$\frac{\text{NOPAT}}{\text{IC}}$$

Focusing only on NOPAT, we can do the following analysis:

$$\text{NOPAT} = \text{Revenues} - \text{Operating Expenses} - \text{Cash Taxes}$$

A company's competitive advantage must result in either higher per unit revenues or lower per unit costs than its competitors. As a consequence, the company's competitive advantage must be derived from one of two sources: higher revenues or lower operating expenses. (Taxes are rarely a source of sustainable competitive advantage between companies.)

Revenues – Demand

Revenues can be defined as the following:

Revenues = units * price

If, and only if, a supplier can offer its customers with product/services that rivals cannot match, can it charge customers more than the prices charged by its competitors. As a result of the product differentiation, the customer is captive, acting as a barrier to entry. It is the customer captivity that acts as a barrier to entry. The higher prices the company charges will result in greater profitability and higher ROIC.

Sources of customer captivity:

Buying habits
Switching costs (i.e. training costs)
Searching costs (i.e. brand names)

Operating Expenses - Supply

If a company has manufacturing/production advantages, it has a cost structure that other companies cannot duplicate. A company with a cost advantage will be more profitable than all of its rivals. If these cost advantages can be maintained, then the company may have a sustainable competitive advantage.

Proprietary Manufacturing
Operating expenses are a function of production costs and other variable operating expenses. Competitive advantage based on operations is a function of a firm's proprietary manufacturing capability, its access to lower cost inputs or other special manufacturing resources. It is the access to the unique production capability that provides the company with its competitive advantage.

Sources of manufacturing advantages:

Proprietary technology
Lower cost of inputs
Special resource/location

Economies of Scale

Economies of scale provide a company with a lower long-run average cost curve because of high fixed costs and greater production volumes than all other vendors. The company's advantage translates into a lower per unit manufacturing expense that other vendors cannot duplicate. For economies of scale to be in effect they must result in lower per unit manufacturing costs as volume increases.

Sources of manufacturing scale:

- Learning curve
- Economies of scale/scope
- Network effects

Governmental Influences

In addition to the two economically driven forces listed above (revenues and costs), an additional potential source of barriers to entry is governmental influences/regulation. Depending on the type of regulation, governments can effectively limit entry into specific markets. This barrier can help to provide the existing firms with a competitive advantage which would be sustainable for as long as the regulation stays in place.

Sources of governmental influences:

- Regulation (antitrust, zoning, environment)
- Patents
- Tariffs and quotas
- Subsidies and taxes
- Purchase preferences

Conclusion

For a company to have a competitive advantage it must be able to do what its rivals cannot. Therefore, it follows that competitive advantage is derived from four (and only four) types of barriers to entry:

- Consumer – captive customers/control over pricing
- Producer – proprietary production capability/manufacturing cost advantages
- Scale economies – lower long-run average costs
- External – government regulation

For a company to have a competitive advantage, the company must possess at least one of these economic forces. There appear to be no other sources of true competitive advantage. Long-run competitive advantages are extremely difficult to maintain and there are few businesses that have sustainable competitive advantage.

Characteristics of Competitive Advantage

The following are the primary characteristics, or evidence, of the presence of competitive advantage.

Profitability/Market Value

Sustained high profitability as measured by return on invested capital (ROIC)
Sustained high market value/book value (replacement value)
Significant, and sustained, differences between the profitability (ROIC) of various market participants.

Entry/Share Stability

High share stability over time (low change in average share among participants)
Few new entrants/failed entry
Local, long-term firm dominance

Other guides

High returns (ROIC) and:

high gross margins maps to consumer behavior advantage (demand)
usually combined with high Sales/Marketing expenses

low gross margins maps to cost/product advantage (supply)
usually combined with low Sales/Marketing expenses

Competitive Advantage is Often Fleeting

Because of intense competition, competitive advantages will dissipate easily for a company unless it actively responds to changes in consumer behavior, production technology, product innovation and government regulation. As competitive threats are relentless, incumbent suppliers need to respond aggressively to all competitive actions from all potential entrants.

Making matters more challenging, long-run competitive advantages are very hard to create from scratch, but companies may be able to develop them over time.

Be careful of definitions. Barriers are determined by markets, not by firms, and markets are defined by products or consumers, not CEOs.

Size and economies of scale are not the same thing. Economies of scale are defined by falling average costs with volume and economies of scale usually coincides with large market share.

Economies of scale come in various sizes: local, regional, national, and international. Local economies of scale are common, but generally do not scale beyond a small geographic territory or niche market. Regional economies of scale are prevalent and may be the biggest opportunity for "sustainable competitive advantage" of companies in the US. National economies of scale are rare and international economies of scale may exist in only a handful of companies (think Microsoft, Intel, and Boeing). Economies of scale must be maintained over time and cannot be assumed to be a static advantage and industry growth is the enemy of scale because it allows competitors to grow into their own scale economies.

There are very few synergies between disparate businesses and few identifiable advantages created by cross industry ownership. As such, most conglomerates do not have an advantage across products/industries and many do not have competitive advantage even within their various divisions. At best, most conglomerates have a single division (possibly two) with strong competitive advantage, while the rest of the businesses usually exhibit weak economics.

Mergers and acquisitions strategy must also conform to the "rules" of competitive advantage outlined above. As a consequence, because these rules are rarely a consideration in the genesis of the transaction, many M&A deals that diversify a company away from its core business are ill conceived from the beginning and, generally, do nothing to enhance a firm's overall competitive advantage. As a consequence, the theory we outlined above would suggest that most M&A transactions destroy shareholder value. Unfortunately the empirical data bares out the same conclusion!

Growth

Although the discussion is centered on competitive advantage, one ancillary question remains: How does a company grow revenues and profits in the competitive world of business when all other companies are not only trying to grow but are trying to enter businesses producing excess returns? The simple answer is that no company can grow profitably outside its core competitive advantage. Without an existing source of competitive advantage, a company CANNOT produce sustainable profitable economic growth!

Making matters worse, in industries that exhibit strong competitive advantage for each of the strongest market participants, it is difficult for any single company to capture market share from the other firms as each has a strong competitive advantage—by definition! In fact, share stability is one of the key characteristics of an industry within which the various companies have established competitive advantage. Therefore, ultimately, the revenue growth rates of all companies converge to the growth rate of the industry. In addition, as the industry matures, the industry growth rate converges to the growth rate of the GDP. As a consequence, generating long-term growth above the general rate of GDP is not a trivial exercise.

Entrant Competitive Advantages

So far the sources of competitive advantage articulated in this analysis refer primarily to incumbent vendors. A company generally needs to be established to possess proprietary manufacturing capability, captive customers, or scale economics. But, what about the emergence of challengers? For a challenger to have a fighting chance of developing a competitive advantage, it must introduce a discontinuity in the market place. This discontinuity must be driven by either a unique manufacturing process or product/service offering. However, the discontinuity must offer enough value to the consumer to convince them to switch their purchasing behavior. In addition, for the competitive advantage to become sustainable, the entrant then must develop the same barriers to entry describe above. The new vendor must become the incumbent. However, it is important to note that if the entrant has been successful getting customers to shift their purchasing behavior, the entrant may fall prey to the next entrant offering even a better deal for the customer. It is one thing for a new vendor to convince a customer to switch, it is another thing to convince them to stay with your new product or service. If the customer switched once, why will they not switch again? As a consequence, be careful of claims of "entrant competitive advantages."

Conclusion

I believe that a company's competitive advantage is sustainable, if and only if, the company possesses <u>TWO</u> of the above mentioned sources of barriers <u>AND</u> they implement constant vigilance in protecting these two barriers. The only sustainable competitive advantage appears to derive from companies that possess true economies of scale (as apposed to just being big) and some level of customer captivity. Therefore, when evaluating a company's competitive position, it is extremely important to understand the source of the advantage and its sustainability. Competitive pressures will always materialize – that can be counted on. Supply and demand forces may create competitive advantages for a company, but the company will need constant vigilance to sustain them.

In highly innovative industries, competitive advantage is nearly impossible to defend beyond the life cycle of the primary product providing the original competitive advantage (cost based or captive consumers). The new innovations will create too many opportunities for challenges to enter the market successfully. High tech industries are driven by innovation and competitive advantage is nearly impossible to achieve and maintain in those industries.

Final thoughts

1. Capital requirements are not a long-run barrier to entry – capital is always easy to obtain for demonstrably profitable business plans.
2. Very few high quality brands are a source of competitive advantage. Brands only work if they alter consumer behavior to create customer lock-in or can be used to create products/services that cannot be replicated. Therefore, brands by themselves are not a source of long-run competitive advantage.

History:

The theory of competitive advantage spawned from the economic analysis of monopolies. Prior to 1930, economists generally believed in the theory of perfect competition and, as a consequence, very few economists spent time on alternative theories. In this world view, there was no need for competitive strategy because it provided no benefit to companies operating in commodity markets.

The original impetus for the economic analysis of monopolies came from the desire to correct the limitations to the theory of perfect competition. Interest among economist gained momentum as a result of the merger waves originating in the 1920s and then again in the 1960s. It was the evidence that economics needed a more complete view of competition that was born out of the anti-trust activity that followed the merger waves (night following day). Monopoly theory became a full discipline in the 1970s/1980s as economists fleshed out a more complete view of competition and industry structure.

The most important breakthroughs in the history of monopoly theory were:

Chamberlain – *The Theory of Monopolistic Competition* (1933)
Robinson – *The Economics of Imperfect Competition* (1933)
Bain – *Barriers to New Competition* (1965)
Scherer – *Industrial Market Structure and Economic Performance* (1980)

As the body of economic theory began to coalesce, all economic analysis of industry structure, competition and monopolies fell under the rubric of "industrial organization theory." Competitive analysis is business schools is the equivalent of industrial organization theory in economics.

The big water shed in the theory of competitive strategy in business and business schools came in 1980 with the publication of Michael Porter's <u>Competitive Strategy</u>. Although the book was aimed at a business audience, its theory came directly from industrial organization theory in economics. It was written for business people, but the rigor is classic economics.

In the book, Porter proposes the following model:

Industry structure/profitability is determined by five forces:

barriers to entry
substitution
pricing power of suppliers
buying power of customers
rivalry

The primary strength of the Porter model lies with its simplicity, without being simplistic, and the model provides an excellent static view of an industry's competitive structure. The model offers a comprehensive method to aid in the analysis of the industry's economics and the overall competitive position of the various competitors. The primary weakness of the model is its static view. Businesses must operate dynamically and the Porter model does not allow for dynamic analysis. In addition, despite its elegance, and the general acceptance of the model, in reality, there is only one primary force to competitive advantage:

Barriers to Entry!

Therefore, in the end, Porter's model fails because its use becomes too complex in practice. The model places too little emphasis on the primary force of competitive advantage—barriers to entry—and too much emphasis on the lesser, or even unimportant, other forces. Interestingly, Porter does not pay much attention to economies of scale. However, scale, combined with at least some consumer captivity, may be the only sustainable competitive advantage offered to companies in a highly competitive world.

Some questions to consider when evaluating a company's competitive advantage

Consumer:

What locks the customer into buying this product?
Why will their behavior not change in the future?
Is the customer sophisticated?
Is variety important?
What are the switching costs?

Producer:

What is the underlying technology/knowledge based that has created the advantage?
How sustainable is this advantage?
Why will other firms not be able to duplicate this technology?

Scale:

Source of the scale?
Is the scale local, regional, national or global?
Primary fixed costs in the business?
Will growth undermine the current scale economics?

Government/External:

What is the source of barriers to entry?
Is this regulation changing in the future?

The GBS Model of Competitive Advantage:

Greenwald has proposed a simpler model which is based on one force:

Barriers to Entry

The economic forces he points to to support these barriers are the ones listed at the beginning of this essay:

Captive customers
Proprietary manufacturing capability
Scale economies

"**Greenwaldian**" Analysis follows the following steps:

1. Industry Map/Market Definition

2. List Players – to determine where company plays
   Value chain analysis

3. Evidence of Franchise/Competitive Advantage
   ROIC
   Share stability
   Failed entry

4. Source of Competitive Advantage
   Consumer – captive customers/control over pricing
   Producer – proprietary manufacturing/cost advantages
   Scale economies – lower long-run average costs

5. How sustainable is the Competitive Advantage?