Is Competitive Advantage *Intellectually* Sustainable?

By Marvin Lieberman

The notion of a competitor gaining advantage over rivals has a deep, almost visceral appeal in the human psyche. Such quest for "competitive advantage" may be genetically ingrained. It is perhaps most prominent in the profusion of activity devoted to competitive sports, where individuals or teams compete against each other, seeking to emerge as the winner.

Business competition is often viewed in a similar way. Firms strive to outperform their rivals. Within the field of strategic management, the notion of competitive advantage is taught in introductory strategy courses and is often invoked by researchers. Over the four decades since Michael Porter introduced the concept in his pioneering books (1980, 1985), it has remained central to the field.

The quest for sustainable competitive advantage is regarded by many as the holy grail of business strategy. But what is competitive advantage, exactly? Is it, at the most general level, about beating the other team? Beating the average? Winning the "game"? Earning large profits? Or something else?

This ambiguity of *competitive advantage* has been troublesome for a long time (e.g., Rumelt, 2003). As Postrel (2018) recently put it:

> One can never be sure what a finding about "competitive advantage" means unless one reads the "fine print" of a particular work's definition. … [W]hen people use the same term to mean many different things and/or call the same thing by many different terms, it is hard either to have a conversation or to efficiently present one's findings. As Oxley, Rivkin, and Ryall (2010, p. 379) have suggested, one criterion for a piece of theory in strategy to be high quality should be that "The theoretical claims [of the work] are unambiguous: interpretation of its terms, premises and conclusions does not vary from scholar to scholar." The strategy field is clearly failing to meet that test with respect to "competitive advantage." At least one scholar (Lieberman, 2010) has called for abandonment of the term in research settings for precisely this reason.

I have indeed argued for such abandonment, but few have been receptive. After 40 years, competitive advantage has become deeply imbued in the lexicon of strategic management. It provides the language we commonly use to talk about performance comparisons and appears prominently in countless research articles and textbooks. The term has, I admit, become indispensable. To banish it from continued use is too drastic a goal. My aim in this essay is to assert that *competitive advantage* is not a suitable topic for research or even for advanced courses, although it can serve as a legitimate overarching theme in strategy.

I have no objection to the notion that firms should seek to assess and improve their performance—this is central to strategic management. The use of a term such as *superior performance* is perfectly fine.[1] Unlike *competitive advantage, superior performance*

[1] As Postrel (2018) has noted, "It remains unclear why 'superior performance' is not an adequate term for describing superior performance, but perhaps its unadorned directness lacks the requisite touch of mystery."

immediately introduces the question of measurement. A firm can be seen to have superior performance *only once performance has been defined*. To say that Firm A > Firm B along a well-specified performance dimension is clear and unequivocal, and it provides a basis for empirical study and research. To identify and enhance the drivers of performance in a competitive context is fundamental to strategic management.

Given that the field aims to be relevant to business practice, we often introduce concepts before the underlying theory is ready. Arguably, this is a reasonable way to spur progress. However, after 40 years of ambiguity about competitive advantage, enough is enough. If we want to make headway toward clear and consistent ideas in strategic management, it is hard to do so with competitive advantage continuing to be viewed as a central concept in the field.

I believe it is time to move beyond competitive advantage, an ambiguous notion that can be defined in multiple ways. Some might claim that even though the strategic management field has long been full of ambiguities (for example, it lacks uniform definitions of "business models" and even what constitutes a strategy), such lack of precision has not impeded progress. While this is true, few would maintain that ambiguity about core ideas is a strength. Within business schools, strategic management often suffers by comparison with disciplines that are more precise, such as finance. On the positive side, the strategy field has reached a stage where we now deeply understand the sources of ambiguity underlying competitive advantage, as I point out below. We have a multitude of concepts and measures that fall broadly under the competitive advantage umbrella, as well as increasingly detailed awareness of how these interrelate. We have, in fact, a much richer understanding of business performance—and how it can be measured—than other fields within business schools. Sticking with competitive advantage robs the strategic management field of potential power and influence. Forty years after Michael Porter introduced the concept, it is time to move on. At this point, we can do better.

Too Many Definitions

So, what exactly is the ambiguity problem with competitive advantage? It is that multiple, alternative definitions have been proposed, with limited basis to rule them out. Authors have suggested that competitive advantage is represented by

- the **highest profit** in the industry.
- **above-average profit** in the industry.
- sustained **positive economic profit**.
- the **low-cost position** (in an undifferentiated product industry).
- a **gap between customer value and cost** that is larger than the gap of competitors.

Beyond the obvious divergence, these definitions raise many nuanced questions of measurement. One ambiguity relates to firm size (Levinthal and Wu, 2010; Wibbens and Siggelkow, 2020). Does highest profit (or above-average profit) refer to profit *rate* or *total amount*? For example, does a small retailer with a high profit rate have a competitive

advantage over a much larger, successful competitor such as Walmart? Porter (1985) finessed this problem by drawing a distinction between focused and broad-scope strategies, but today this seems arbitrary. Another problem relates to the timing of measurement. New entrants often grow rapidly and gain share from competitors, but such firms can take a decade or more before they demonstrate sustained profitability, in part because accounting profitability is depressed by firm growth. Do these firms lack competitive advantage in their early years?

Definitions of competitive advantage based on the concept of "value gaps" have become increasingly popular (Stuart, 2016; Postrel, 2018), but they raise a fundamental question: should advantage be defined at the level of a specific customer segment (where value gaps are defined) or in a more holistic way? If the latter, how should one aggregate across segments? Every viable firm in a market with differentiated products will enjoy a value-gap advantage with at least one segment.

Such confusion about competitive advantage is reflected in prominent strategy textbooks as well as the research literature. To cite just a few of the examples noted by Rumelt (2003) almost two decades ago:

- Although Porter never actually defines the term in his 1985 book, *Competitive Advantage,* he says that competitive advantage means having low costs, differentiation advantage, or a successful focus strategy. He also argues that "competitive advantage grows fundamentally out of value a firm is able to create for its buyers that exceeds the firm's cost of creating it."
- In their textbook, *Strategic Management*, Saloner, Shepard and Podolny (2001) state that "Most forms of competitive advantage mean either that a firm can produce some service or product that its customers value more than those produced by competitors or that it can produce its service or product at a lower cost than its competitors." (They also note, seemingly in reverse of Porter, that "In order to create and capture value the firm must have a sustainable competitive advantage.")
- *Economics of Strategy*, the textbook by Besanko, Dranove, and Shanley (2000: 389) defines competitive advantage based on performance relative to the average within a market: "When a firm earns a higher rate of economic profit than the average rate of economic profit of other firms competing within the same market, the firm has a competitive advantage in that market."
- Barney's textbook, *Gaining and Sustaining Competitive Advantage* (2002: 9) echoes Barney's seminal 1999 article: "A firm experiences competitive advantages when its actions in an industry or market create economic value and when few competing firms are engaging in such actions."

The introduction of value-gap concepts in recent years has added more definitions, arguably compounding these inconsistencies in the definition of competitive advantage. Thus, Rumelt's (2003) conclusion still applies: "The strategy area is in need of a clear definition of competitive advantage, or it needs to stop employing a concept that cannot be defined."

Perhaps competitive advantage can be legitimately defined in multiple ways; alternative definitions have strengths and weaknesses, and no consensus exists. Barney (2019) suggests that competitive advantage can be viewed as similar to the economist's notion of entry barriers, where different groups of scholars maintain different definitions. In economics, however, such alternative points of view are well recognized within the field, for example, the "Chicago School" versus the "Harvard School" perspectives of the 1970s. Such distinct intellectual schools have yet to emerge in strategic management.

Thus, with the notion of competitive advantage we have a problematic situation with multiple definitions, alternative measures, and in general, a lack of precision. What might be the solution, short of abandoning the term? I see two options.

The first option is for the field to broadly agree on a single definition (and a measurement approach), perhaps by finding a logic showing the single best way to define competitive advantage. Or, we could reach consensus on the definition via a vote of strategic management scholars.

The second option is to regard *competitive advantage* as a useful phrase and broad conceptual umbrella, but without a specific meaning. In effect, *competitive advantage* becomes a synonym for *superior performance.* Underneath this broad umbrella, scholars and practitioners could invoke a range of specific concepts and measures for comparing and assessing business performance.

In my opinion, Option 1 is unachievable. As I demonstrate below, there is no single defensible definition or measure of competitive advantage; thus, it seems highly unlikely that the strategy field can ever reach a consensus.

That leaves Option 2, which may seem unattractive to some. But I argue that this option allows us to organize the rich conceptual understanding and set of alternative measures accumulated by the field under the banner of competitive advantage. Creating such a conceptual umbrella—while fully recognizing that the term *competitive advantage* does not have, and most likely will never have, a clear and specific meaning—would allow the field to move forward.

Below, I go beyond the prior discussions by Rumelt, Postrel, and others by pointing out specific problems that make it virtually impossible to establish a single definition of competitive advantage. I focus on conceptual issues but come back at the end to briefly consider measurement.

A Deeper Look at the Problems

In strategic management today, the consensus is that the field should focus on economic value creation, and notions of competitive advantage that are linked to value creation are often perceived as legitimate. Barney (2019) builds upon the concept of economic value creation to provide the following definition of competitive advantage:

> A firm creates *economic value* when there is a positive difference between what its customers are willing to pay for its products or services and its costs for delivering those products or services. A firm has a *competitive advantage* when it generates more economic value (higher differences between willingness to pay and costs) than firms that sell similar products or services (e.g., are in the same industry). A firm has a *sustained competitive advantage* when its competitive advantage is not competed away through their strategies being imitated.

Barney thus defines competitive advantage in general terms based on the value gap between willingness to pay and costs, a common approach in the literature today. While Barney's definition is appealing, it lacks precision, and I demonstrate below how it can lead to confusion and inconsistency when applied in practice. But first, I lay out a series of conceptual examples to illustrate in detail the problems that arise with virtually all definitions of competitive advantage (other than narrow specifications that define it in a specific context, based on a clearly identified measure of performance). I build my discussion using the fundamental idea of economic value creation, starting with the case of homogeneous products, and moving on to differentiated products.

Homogeneous Products Examples

Consider the following example, with five firms competing in a homogeneous product industry. Each firm has capacity to produce one unit of output, but firms have differential costs. Firm 1 can produce at a cost of $2 per unit up to capacity. Firm 2 can produce at a unit cost of $4. Similarly, Firms 3, 4, and 5 can produce at unit costs of $6, $8 and $10 up to capacity. Arranging these firms in increasing order of cost gives the supply curve shown in figure 1.

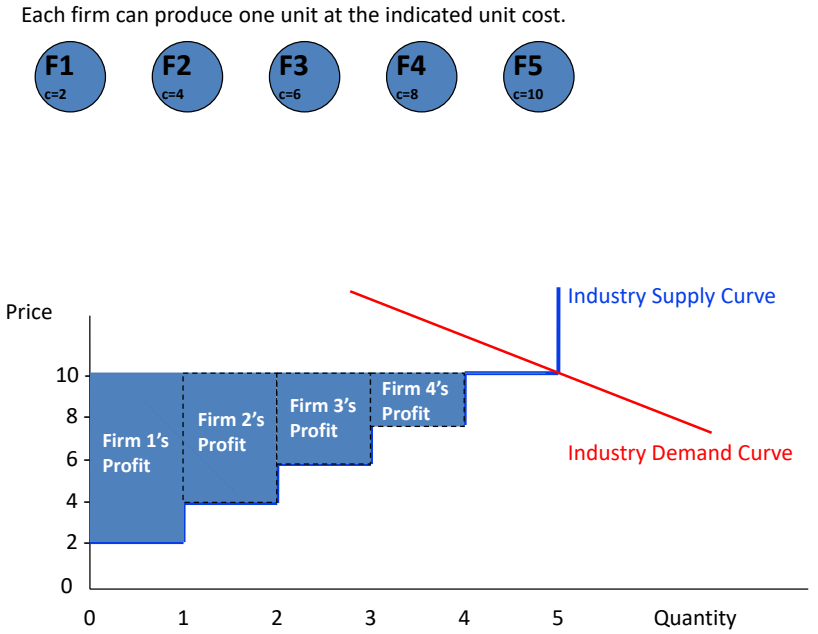


Figure 1.

Buyer willingness to pay defines the industry demand curve shown in the figure. Based on the intersection of the supply and demand curves, the price of the product is $10, and total industry output is five units. Firm 1 makes a profit of $8, Firm 2 makes $6, Firm 3 makes $4, Firm 4 $2, and Firm 5 ekes out incremental or zero profit.

Comparing these profits among the firms, we note that

- F1 has the highest profit in the industry.
- F1 and F2 have above average profit in the industry.
- F1, F2, F3, and F4 have positive economic profit.
- F1 has the industry low-cost position.
- F1 has a gap between customer value and cost that is larger than the gap of its competitors.

In this case, Firm 1 has an unambiguous competitive advantage in the sense that its advantage is based on all the definitions noted above. Firm 1 "generates more economic value (higher difference between willingness to pay and cost) than firms that sell similar products or services," so it satisfies Barney's definition. Firms 2, 3, and 4 may also have competitive advantage, depending on the definition that is applied.

Now, to modify the situation, let's shrink the capacity of Firm 1 while expanding the capacity of Firm 2, so that these two firms can still jointly produce two units of output (and each has the same unit cost as before), but Firm 2 now becomes much larger than Firm 1. Let's also raise the unit cost of Firm 3, from $6 to $8. These transformations yield the following graph:

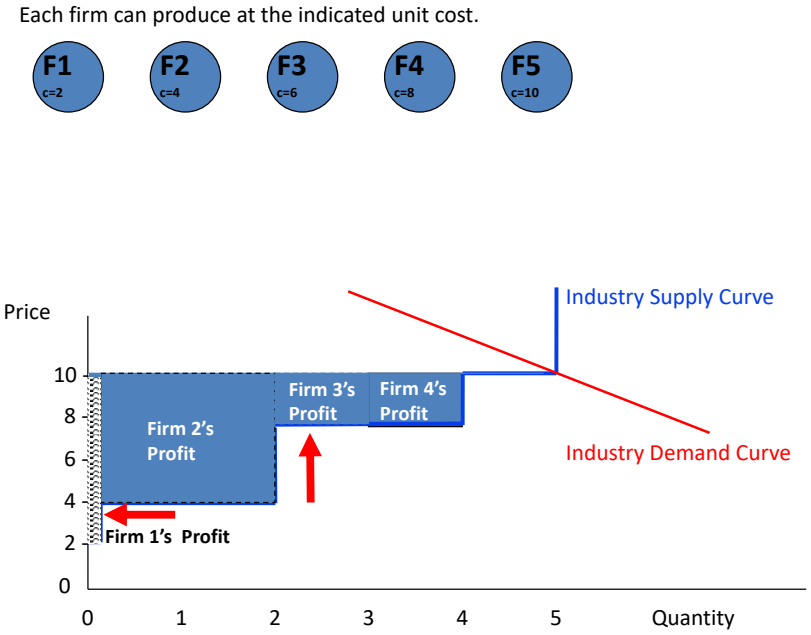


Figure 2.

Let's consider whether the previous statements on competitive advantage still hold.

- F1 has the highest profit in the industry. (?)
- F1 and F2 have above average profit in the industry. (?)
- F1, F2, F3, and F4 have positive economic profit. (Yes)
- F1 has the industry low-cost position. (Yes)
- F1 has a gap between customer value and cost that is larger than the gap of its competitors. (Yes)

Firm 1 continues to have the highest profit *margin* in the industry, but Firm 1 no longer earns the largest total profit. Firms 1 and 2 still have above-average profit margins, but if Firm 1's capacity is sufficiently limited, its total profit could be the smallest in the industry. Firms 1 through 4 still earn positive economic profit; F1 still has the industry low-cost position; and F1 still has a gap between customer value and cost that is larger than the gap of its competitors.

So, does Firm 1 have a competitive advantage in this case? Based on most of the definitions, the answer is yes. But if someone were to offer you the choice of one of the five firms as a gift, most people would choose to own Firm 2. Firm 2's costs are not quite as low as those of Firm 1, but its large size combined with relatively low costs makes Firm 2's position attractive. Among the five firms, Firm 2 earns the largest total profit. Does that mean Firm 2 has the competitive

advantage in this industry? More specifically, does Firm 2 have competitive advantage relative to Firm 1? Do firms 1 and 2 *both* have competitive advantage?

Michael Porter (1985) introduced the idea of generic "focus strategies" to deal with competitive advantages held by smaller, focused firms. Arguably, this was Porter's way to solve the problem we are considering. While the focus-strategy idea may be valid in differentiated product industries (focus on a small customer niche), it does not solve the problem of defining competitive advantage in Figure 2. It is a stretch to claim that Firm 1 has advantage as a focused competitor, whereas Firm 2 has competitive advantage with an industry-wide strategy. (For example, if the industry illustrated in Figure 2 was ore-based mining, Firm 1 might own a small but highly productive mine. Firm 1 would collect rents on its differential costs but without the ability to leverage its advantage by expanding.)

Let's return to the example of Figure 1, but now assume that the management of Firm 1 is able to capture (in the form of elevated salary and bonus) most of Firm 1's former cost differential. As a result, Firm 1's accounting profit now becomes the lowest of the first four firms; the bulk of Firm 1's efficiency differential now flows to the management team. (Alternatively, most of Firm 1's efficiency differential could be captured by unionized employees, who are able to raise their wages above those paid by the other firms.) Does Firm 1 still have a competitive advantage? Does it matter if Firm 1's efficiency differential can be attributed to the managers' firm-specific skills, as opposed to a situation where the managers (or the union) simply extract surplus value from the firm's owner(s)? Ongoing debate around such questions (Coff, 1999; Campbell and Coff, 2012) makes it hard to draw a definitive determination about competitive advantage.

This raises a general question of whether competitive advantage is about superior value creation or value capture. Moreover, it raises interesting questions about allocation of the surplus value that lies at the center of competitive advantage. Consider the two firms in the following table, Firm A and Firm B, both of which produce identical units of output. Assume that the two firms use identical equipment (e.g., computers) and employ identical workers, who we classify simply as managers. Each manager is paid a salary of S, which is identical to the unit price of the firms' output. Firm A requires three managers, and Firm B requires four managers, to produce five units of output. Firm A is thus more productive than Firm B and has twice as much profit (2S versus S).

	# Computers (capital)	# Managers (labor)	Units of Output	Unit Price of Output	Salary of Managers
Firm A	1	3	5	S	S
Firm B	1	4	5	S	S

In this situation we can conclude without ambiguity that Firm A has a competitive advantage. But since computers and managers are identical between the firms, what might give such an advantage to Firm A? The advantage is likely to flow from firm-specific resources or capabilities that are not market-traded (Barney, 1991). These could be technology (e.g., superior software

created by the firm's founder, who is now its shareholder), or superior organization or methods established by the founder. Managers at Firm A are unable to capture this value, because if they attempt to bargain with the owner/founder they could be fired and replaced.

As an alternative, assume that the superior productivity of Firm A comes entirely from its employment of higher-quality managers, who are paid higher salaries reflecting the value of their superior skills in the labor market. If these managers are paid 33% more than managers at Firm B, the profits of the two firms are identical, and neither has competitive advantage. The firm's productivity advantage comes entirely from market-based resources.

Now, assume that managers at Firm A had skills identical to those at Firm B prior to being hired (and identical salaries should they leave the firm). However, after being hired, managers at Firm A develop superior firm-specific skills (individually, or jointly as a team), which allows them to bargain with shareholders for higher salaries. In this case Firm A's superior productivity can be attributed to the skills of the management team, which may allow the managers to capture part of Firm A's profit. If the managers capture half of the total profit, shareholder returns at the two firms become identical, even though Firm A has superior value creation. Does Firm A have a competitive advantage if its surplus value flows to managers? Alternatively, what happens to competitive advantage if Firm A's shareholders choose to give part of the firm's output to charity, thereby reducing profits to zero?

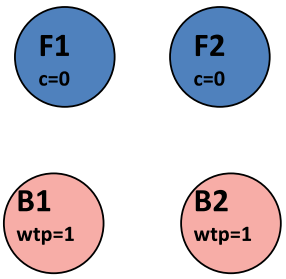
These are questions for which there is no consensus answer. They demonstrate the richness of current thinking in strategy on issues relating to value creation and capture that can be lost in simple definitions of advantage.

Differentiated Products Examples

In homogeneous product competition, such as the examples above, differences in buyer value do not play out. Now let's add heterogeneity in the products made by firms, and buyers' willingness to pay for them. This makes assessment of economic value creation, and the analysis of value gaps, more interesting and complex.

Let's begin with two identical firms producing identical (i.e., homogeneous) products, as depicted in Figure 3, and move toward a situation with differentiated products. For simplicity, assume that both firms can produce at a unit cost of zero, and there are two (identical) buyers, each able to consume one unit of the product, for which they are willing to pay at most $1.

Two firms, each able to produce "product" at cost=0 with no capacity constraints.



Value of product to buyer:

	Firm 1	Firm 2
Buyer 1	1.0	1.0
Buyer 2	1.0	1.0

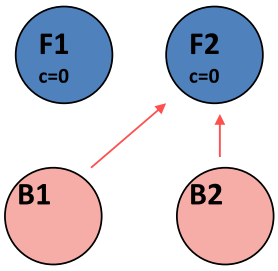
Two buyers, each able to consume one unit of the "product" and willing to pay at most $1. (i.e., the value to each buyer of consuming the product is $1.)

Figure 3.

In this case with no product differentiation, competition drives the price virtually to zero, and neither firm makes any profit. In general, it is hard to make money in a commodity product industry unless there are capacity constraints, differential costs, or collusion among producers. In this example, neither firm has a competitive advantage based on any definition.

Now let's assume that Firm 2 improves its product to enhance the willingness to pay of both buyers, who are now willing to pay $1.50 for Firm 2's product but only $1.00 for Firm 1's product, as shown in Figure 4.

F2 improves its product to increase buyers' willingness to pay:



Value of product to buyer:

	Firm 1	Firm 2
Buyer 1	1.0	1.5
Buyer 2	1.0	1.5

Buyers are willing to pay at most $1 for the product made by **F1**, and at most $1.5 for the product of **F2**. Each buyer can consume one unit.

Figure 4.

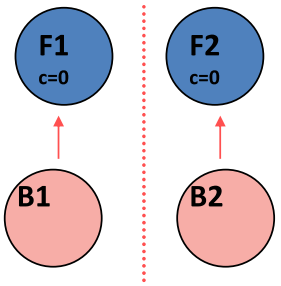
In this case, Firm 2 is able to charge a premium equal to the difference in buyers' willingness to pay. With competition in the market, Firm 2 charges $0.50 for its product. (If it raised its price further, Firm 1 would capture its customers.)

By most of the definitions laid out earlier, Firm 2 enjoys a competitive advantage. Firm 2 has the highest profit in the industry and enjoys a value-gap advantage in dealing with both buyers. Indeed, Firm 2's advantage is sufficient to drive Firm 1 out of the market.

These two examples are uncontroversial; competitive advantage is straightforward and comparatively well defined. But now let's turn to a situation where both firms have improved their products to appeal to different buyers, as shown in Figure 5. (Technically speaking, we move from vertical product differentiation in Figure 4 to horizontal product differentiation in Figure 5.)

Each firm improves its product for specific buyers:

Two firms, each able to produce at cost=0 without capacity constraints.



Value of product to buyer:

	Firm 1	Firm 2
Buyer 1	1.5	1.0
Buyer 2	1.0	1.5

B1 is willing to pay at most \$1.5 for **F1**'s product, and at most \$1.0 for **F2**'s product.
B2 is willing to pay at most \$1.0 for **F1**'s product, and at most \$1.5 for **F2**'s product.
Each buyer can consume one unit.

Figure 5.

In this case, each firm captures a different buyer "segment," and both firms can charge \$1.00 for their products without losing their buyer to the other firm. (If either firm attempts to charge more than \$1.00, the other firm will undercut.) Thus, the equilibrium market price rises to \$1.00 from \$0.50 in the previous case, and both firms earn a profit of \$1.00. The firms can capture two-thirds of the total economic value created. (The other third goes to the buyers.)

Compared with the situation depicted in Figure 4, industry prices and profits have doubled, and Firm 2 is no worse off even though it has lost half the market to Firm 1. The result is a pretty good outcome for both companies. But is there any competitive advantage in Figure 5? Both firms have positive economic profit, so based on that criterion both firms have competitive advantage. But neither firm has highest profit, above-average profit, or a gap between customer value and cost that is larger than the gap of its competitors. So, by those criteria neither firm has a competitive advantage.

Michael Porter would argue that Figure 5 illustrates the context of an "attractive industry." In such a view, firms' superior performance can be attributed to industry structure, rather than firm-specific advantage. By differentiating their products to appeal to different buyers, the two

firms have found a way to diminish the rivalry that drags down prices. Moreover, if the firms can prevent new entry (say, both firms have patents on the technologies used to differentiate their products), they may be able to enjoy sustained high profitability.

What would Barney argue about this case? Recall Barney's definition,

> A firm has a *competitive advantage* when it generates more economic value (higher differences between willingness to pay and costs) than firms that sell similar products or services (e.g., are in the same industry). A firm has a *sustained competitive advantage* when its competitive advantage is not competed away through their strategies being imitated.

By this definition, there is no competitive advantage in Figure 5, even though there is sustained high profitability (assuming that the firms can prevent imitative entry).

One might object that by setting the firms and their underlying buyer segments equal in size, I have artificially suppressed the existence of competitive advantage. So, let's relax the equality assumption; now assume that Buyer 2 corresponds to a customer segment ten times larger than the Buyer 1 segment. For simplicity, let's assume that price remains at $1.00.

Under these assumptions, Firm 2 enjoys total profits that are 10x larger than those of Firm 1. Many would consider Firm 2 to have a competitive advantage based on this fact. But the firms remain identical along many of the standard dimensions used to define competitive advantage. Both have identical profit margins and both earn positive economic profits. The gap between customer value and cost is identical for the two firms.

Of course, this example is stylized. Real firms that produce differentiated products typically sell to multiple buyer segments and have fixed as well as variable costs. Let's consider what happens to our ability to identify competitive advantage when we add such elements.

Adding fixed costs to the example just described (where the Buyer 2 segment is 10x the size of the Buyer 1 segment) removes some of the ambiguity about competitive advantage. Let's assume that Firms 1 and 2 must pay identical fixed costs to operate in each period. Because Firm 2 can split these costs over many more units, it now enjoys lower unit cost and higher margins (after accounting for the fixed costs) as compared with Firm 1. This leads to a clear differential in both margins and total profits. In this case with fixed costs, Firm 2 gains clear advantage. And if the fixed costs are high enough, Firm 1's economic profits will disappear.

Now consider what happens when we add more buyer segments. I won't do that formally, but in principle it is clear that (similar to what is depicted in Figure 5) each new segment will be captured by the firm that has the largest "value gap" with that segment. (See Stuart, 2016, for a formal analysis.) In other words, firms capture segments when they have a value-gap advantage with that segment.

This principle holds with many firms in the market. We get a mapping between firms and customer segments, with nonviable firms (lacking any value-gap advantage) knocked out. The idea of value gaps has caught on in strategic management and is now commonly taught in introductory courses, where the presentation generally assumes competition among single-product firms in the absence of fixed costs, which simplifies the analysis.

But value-gap advantage is not competitive advantage. Real firms in differentiated product markets tend to be multiproduct, multisegment firms, with fixed costs. Value-gap analysis becomes complex when fixed costs are considered, particularly when those costs are nonlinear and/or shared across products, which is normally the case in practice. Moreover, value gaps are defined at the segment level. This raises the question: how can one aggregate across segments to make an overall determination of a firm's competitive advantage? Note that every viable firm in a differentiated product market will have a value-gap advantage with at least one segment of customers. So, every viable firm will demonstrate some kind of value-gap advantage. In general, value-gap analysis provides an insightful tool that can be usefully applied in strategic management to assess competitive rivalry and sources of profitability, but it does not get us out of the conundrum of how to define competitive advantage.

Where Does This Leave Us?

The fundamental problem illustrated in the examples above is that we have multiple extant definitions of competitive advantage, and it is not clear how we should select among them. Should competitive advantage be defined by differences in profit rate, profit margin, value-gap margin, total profits, or surplus going to shareholders or other stakeholders? While the notion of value-gap advantage has gained support in recent years, it is a concept that applies at the level of customer segments rather than firms. As I have shown, depending on the definition, different firms may have competitive advantage, and any given firm may or may not have advantage depending on the definition applied. In a given market, a single firm or multiple firms may have competitive advantage, depending on the choice of definition.

Furthermore, competitive advantage cannot be assessed in the context of actual companies in the absence of an empirical approach. The question of how to measure firm performance is an important topic beyond the narrower question of defining competitive advantage. A large literature exists on performance measurement (see, for example, Richard, et al., 2009). It is not my intention in this essay to consider specific measures in any detail, but I will raise a few issues.

First, empirical measures of business performance denote returns after accounting for historical investments by the firm. However, the examples I have presented above are devoid of any investment component. Such a simplified analytical approach is standard in theoretical work in strategic management, given the complexity of incorporating a full-blown discounted cash flow analysis. With zero fixed costs, all profits are economic profits, making comparisons relatively straightforward. But real-world assessments of business performance need to consider returns

relative to investment costs. And as I have indicated for the value-gap theories, the introduction of fixed costs can radically shift any advantage that is identified on the basis of variable costs.

Moreover, firms invest with the expectation of future returns, but intertemporal elements of performance are seldom considered in the literature on competitive advantage. Most new firms suffer years of accounting losses or low profitability, even if they successfully gain substantial market share from established competitors. Among other factors, the financing requirements of corporate growth act to depress accounting profitability as conventionally measured. As a result, we often see a divergence between forward-looking, stock-market-based measures of performance, and historical accounting measures, particularly for successful young firms. (Consider Amazon and Tesla, for example.) Most of the extant definitions of competitive advantage apply best to mature firms.

Although comparisons of firm performance in strategic management have typically been based on simple, short-term ratios such as return on assets (Wibbens and Sigglekow, 2020), the field has become sophisticated when it comes to performance measurement. We are now skilled in applying a large toolkit of measures that have long been established. Various short-term measures such as *economic value added* attempt to identify economic profits, thereby supplementing ROA. Other measures such as Tobin's Q are based on stock market capitalization, incorporating expectations not only about profitability and its sustainability, but also about future growth (a critical dynamic element that is left out of my stylized examples as well as most discussions of competitive advantage).

Recently, there has been an outpouring of work in strategic management to develop innovative measures of performance that relate to issues surrounding competitive advantage. For example, Postrel (2018) introduces *transaction surplus superiority* (TSS), a measure that relates closely to the value-gap theory. Wibbens and Sigglekow (2020) introduce a *long-term investor value appropriation* (LIVA) measure that combines stock market capitalization with annual investment and financial return in a way that reflects the firm's objective of maximizing total economic profit. TSS seems promising for assessing and comparing firms' performance at the level of transactions, whereas LIVA captures overall firm performance better than standard ratios. Taking a broader perspective on performance measurement, my own work with Balasubramanian and Garcia-Castro (2017, 2018) aims to assess firms' total value creation and how it is distributed to key stakeholders of the firm.

Thus, we have been making great strides with respect to our ability to evaluate and compare firms' performance. The field of strategic management has become much more sophisticated, both theoretically and empirically, over the four decades since Porter introduced his ideas on competitive advantage. We now have a deeper understanding of performance issues as compared with scholars in finance, who remain locked into a narrow shareholder perspective. I see a bright future in strategic management if we extend this trajectory, refining and developing alternative measures of performance. By assessing and comparing multiple performance dimensions, we gain a richer understanding of firms' strengths and weaknesses. Perhaps such measures can be combined for teaching purposes into a strategic performance

scorecard, providing a toolkit for students and executives to assess competitive strength. In contrast, efforts to refine competitive advantage lead to a dead end.

In my opinion, only by abandoning the belief that *competitive advantage* represents a core concept can the strategic management field reach its potential. Again, I'm not suggesting that we need to drop the term entirely; it can be hard to talk about strategy without invoking those specific words. But we need to recognize that while *competitive advantage* serves as a useful rhetorical phrase and conceptual umbrella for performance comparisons, it lacks precise meaning.

We have broad consensus that strategic management should emphasize *performance comparison and assessment.* While I prefer this descriptor, arguably it lacks visceral appeal. *Competitive advantage,* by comparison, is a splendid phrase. Students and executives admire this beguiling term, which helps to draw them in. Competitive advantage therefore plays a beneficial role, despite the many ambiguities I have described. In short, *competitive advantage* is useful but intellectually unsustainable. So, I am willing to make a deal: if we collectively acknowledge that this "emperor" who has long reigned in the land of strategic management is wearing no clothes, I see no harm in letting him keep a title and continue to reside. But after 40 years, it is time get him down off the throne.

References

Barney JB. 2019. Keeping Competitive Advantage In. Unpublished manuscript.

Barney JB. 1991. Firm resources and sustained competitive advantage. *Journal of Management* **17**(1): 99-120.

Barney JB. 2002. *Gaining and Sustaining Competitive Advantage, 2nd Ed*. Reading, Mass.: Addison-Wesley.

Besanko D, Dranove D, Shanley M. 2000. *Economics of Strategy. 2nd Ed*. John Wiley & Sons, New York.

Campbell BA, Coff R, Kryscynski D. 2012. Rethinking Sustained Competitive Advantage from Human Capital. *Academy of Management Review* **37**(3): 376-395.

Coff RW. 1999. When competitive advantage doesn't lead to performance: The resource-based view and stakeholder bargaining power. *Organization Science* **10**(2): 119-133.

Levinthal DA, Wu B. 2010. Opportunity costs and non-scale free capabilities: profit maximization, corporate scope, and profit margins. *Strategic Management Journal* **31**(7): 780-801.

Lieberman MB. 2010. Competitive advantage: Theoretical challenges and insights from value-price-cost approaches. Presentation at the Academy of Management Annual Meeting, Montreal, Session 348.

Lieberman MB, Garcia-Castro R, Balasubramanian N. 2017. Measuring value creation and appropriation in firms: The VCA model. *Strategic Management Journal* **38**(6): 1193-1211.

Lieberman MB, Balasubramanian N, Garcia-Castro R. 2018. Toward a dynamic notion of value creation and appropriation in firms: The concept and measurement of economic gain. *Strategic Management Journal* **39**(6): 1546-1572.

Oxley J, Rivkin J, Ryall M. (2010). The strategy research initiative: Recognizing and encouraging high-quality research in strategy. *Strategic Organization*, 8, 377–386.

Porter ME. 1980. *Competitive Strategy*. The Free Press: New York, NY.

Porter ME. 1985. *Competitive Advantage*. Free Press: New York, NY.

Richard PJ, Devinney TM, Yip GS, Johnson G. 2009. Measuring Organizational Performance: Towards Methodological Best Practice. *Journal of Management* **35**(3): 718-804.

Postrel S. 2018. Transaction surplus superiority in canonical market segments: Using the profit map to guide positioning and investment choices across price-rivalry regimes. *Strategic Management Journal* **39**(6): 1573-1602.

Rumelt RP. 2003. What in the World is Competitive Advantage? UCLA Policy Working Paper.

Saloner G, Shepard A. Podolny J. 2001. *Strategic Management*. John Wiley & Sons, New York.

Stuart HW. 2016. *The Profitability Test: Does Your Strategy Make Sense?* MIT Press: Boston, MA.

Stuart HW. 2016. Value Gaps and Profitability. *Strategy Science* **1**(1): 56-70.

Wibbens PD, Siggelkow N. 2020. Introducing LIVA to measure long-term firm performance. *Strategic Management Journal* **41**(5): 867-890.