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A Strategic Assessment of
The Higher Education Industry:
Applying the Porter’s Five Forces for Industry Analysis

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EXECUTIVE SUMMARY

The higher education industry is changing at a dramatic pace. Numerous trends are at work influencing this rapid change such as, population demographics, work force requirements, global competition and new higher education delivery methods. One additional and fortunate trend is that higher education is a growing industry. Industry incumbents, whether public, private, non-profit, or for-profit must constantly scan the competitive horizon for positive as well as negative structural changes to the industry. Michael Porter, a professor from the Harvard Business School, developed a very powerful industry analysis framework in the late 1970s and the key principles are introduced. The intent of this paper is to introduce these strategic concepts to the non-profit higher education segment, who can then utilize them in competitive strategy formulation and long term planning. If done successfully, the analysis could greatly strengthen the non-profit segment position especially in respect to the prosperous for-profit sector of the higher education industry.

Keywords: higher education industry, for-profit higher education, non-profit universities, higher education trends, Porter’s Five Forces, business strategy.

An Illustrative Education Story

Carol Keese graduated from the University of Virginia, with a B.S. in Business Administration from the McIntire School of Commerce. In the following years, she worked for several large publicly held companies in their investor relations departments, putting her marketing education and skills to work. Working for these well-recognized companies, she gained self-confidence and extensive experience in marketing and advertising.

She eventually made the decision to acknowledge her latent entrepreneurial dreams and goals, opened, and successfully managed her own marketing firm for over five years. “I was quite proud of the fact that we ran for five years, and made money, because most businesses fail within two years.” Carol indicated. She also added that it was very difficult at times being a small business and competing against the large agencies, “but it was exciting learning business from the real world business school.”

As the years passed, Carol noticed other personal goals starting to compete for her time and energy. “Family, life balance, income predictability and additional education goals started to cloud my managerial vision,” Carol said. The excitement and unpredictability of being an entrepreneur was beginning to wane. Carol laughed, “the challenge of making payroll each Friday had become almost drudgery.” She was 35 at this personal nexus and it was time to make some career changes that were complimentary with her life goals.
Carol went back to her undergraduate alma mater where she accepted a marketing position in the department of strategic marketing for the University of Virginia Health Systems. “It actually felt good working back on the client side after so many years,” Carol explained. At this point, she has worked in the department for over seven years and was originally hired because she had worn so “many hats at her own business.” She accepted an increasing progression of responsibility and today is the director of strategic marketing within the department. “I wanted to leverage my real world experience in the strategic marketing department, which I have done, and have been successful. But also I noticed that I was not getting all the credit.” What Carol meant was she was being “overlooked” at times due to the fact she did not have a Masters in Business Administration. She described being very frustrated at times, because she had extensive real world experience, but not the seemingly prerequisite academic credentials.

Carol began researching and evaluating graduate business schools. The University of Virginia has one of the top ranked business schools in the United States and she would most certainly been accepted based on her business background and her undergraduate degree from the University of Virginia. Carol pointed out that, “at the time, I had an extensive list of constraints about going back to school. UVA was a full time program and that just wouldn’t work.” Carol detailed the following constraints:

- No overnight travel because of new family responsibilities
- No moving
- No executive format
- No campus stay requirements

Carol maintained that most of all she needed flexibility with a program. Carol and her husband had a new born, and the responsibilities of parenthood were her top priority. A forced time restricted curriculum, even limited travel and leaving her career were not negotiable items as relating to education pursuits.

Carol continued her research and came across a U.S. News and Reporting article ranking for-profit and online business schools (http://www.usnews.com). The article discussed course content delivery options (such as complete online, or partial on campus), student satisfaction ratings, job placement services, and program costs. She was able to narrow down her search to an MBA program offered by the University of Phoenix. Although Carol was essentially searching for a completely online program, she was impressed by the fact that the MBA program offered by the University of Phoenix did have live classes she could visit if she wanted. This opportunity is possible because the University of Phoenix academic administration centrally designs and tightly controls the course curriculum, which provides consistency at any class location. Capella University was a close runner up despite the fact that, Carol was surrounded by excellent non-profit schools such as James Madison, Virginia Commonwealth and the University of Richmond.

Carol’s selection criteria for university options that met her previously described attendance constraints were:

- A proven online course delivery system
Team based learning and project development
Applied problem solving opportunities
Small class sizes
Standard MBA curriculum

Later she discovered additional benefits including a lock step program with courses taken one at a time, older adult students, 24/7 class availability, and actual real time class participation provided by a propriety collaboration system. The complete program tuition of $35,000 was half what the University of Virginia’s MBA program costs. For-profit universities do structure their tuition at a strategic price point, between the cost of a private college degree and the cost of receiving a graduate degree from a public university. “The decision all came down to a cost-time tradeoff. I was not going to Wall Street so why did I need a degree from a big name school,” Carol explained. She graduated from the University of Phoenix in 27 months and has continued to succeed and prosper in the business environment.

Current Impressions of the Higher Education Industry

The Carol Keese story is an example of current trends prevalent within the higher education industry. It is common knowledge that demand for higher education has increased significantly over the last decade. There is a Baby Boom Bubble in progress. The Baby Boomer’s children are now going to college, along with a greater diversity of students including adults, women, part-time students, commuters, international students and minorities such as Hispanics and Afro-Americans. These demographics have pushed demand for public higher education beyond most practical capacity limits (Stamats, Inc., 2007). New information technologies, outsourcing pressures, and specific skill set deficient, all contribute this rising demand (Shareowners, 2004). The for-profit sector has noticed these trends and marketed to individual such as Carol Keese, seeing very profitable growth opportunities targeting adults, women and part-time students. An additional interesting observation that is somewhat masked, is a trend of declining enrollment in full time residential undergraduate and graduate programs (Breneman, D., et. al., 2006).

These trends, on the surface, might sound contradictory to the casual observer. How can residential or traditional student enrollment be decreasing while total demand for higher education has outpaced supply? The for-profit sector has recognized these market changes and developed business strategies to take advantage of them, by offering numerous programs targeted at profitable niche markets. This increases supply, but concurrently, small private liberal arts colleges are closing their doors at an alarming rate, decreasing supply and leaving the public universities to act as a supplier of last resort (Van der Werf, M., 1999). One could argue that non-profit universities are keenly aware of these trends and have formally incorporated them into their long range planning, but are not changing their current business models and marketing strategies. Why you may ask? They do not have to, because they are “producing” at capacity.

Laureate Education, Inc. (www.laureate-inc.com), a leading for-profit provider of higher education, predicts all industry members stand to gain over the long run because demand for higher education will continue to increase. Laureate bases their prediction on a growing youth population, a growing middle class that understands that education is the key to social mobility, and global industry’s demand for a technically educated work force. Following that same line of thought, Richard S. Ruch, says in his book, Higher Ed, Inc., “the combination of public and
corporate dissatisfaction with traditional education, favorable demographic trends, and the
infusion of a new kind of endowment – private investment capital – into the for-profit segment
suggests that the for-profits will probably continue to take an increasing share of the education
market” (Ruch, 2001).

Higher Education Industry Definitions

Any analysis of an industry requires a description, with specific attributes, of its participants
or members. Possibly the key distinction within the higher education industry is whether a
university, college or other organization is a non-profit entity or a for-profit corporation.
Nevertheless, what do these terms actually mean? In the rapidly changing academic
environment, these lines of distinction between non-profits and for-profits are increasingly
blurred. According to Ruch, “the difference between for-profit and non-profit higher education
will eventually become so indistinct as to be largely meaningless to all but tax accountants”
(Ruch, 2001). For example, a controversial trend is public universities’ declining reliance on
state allocated support. Over the last several years, the percentage of University of Virginia’s
annual budget consisting of state appropriations has dropped from 28 percent to 8 percent.
According to a survey developed and managed by the Economist magazine, one university
president was quoted as saying, “his university has evolved from being a state institution to being
state supported, then state assisted, next state located and now state annoyed” (The Economist,
2005).

One effective method to defining an object or entity, with the goal of making the distinctions
easier to understand, is to compare and to contrast. The Futures Project conducted by Brown
University provides an excellent delineation of seven distinct functions or purposes of a non-
profit university and argues that these public purposes should be incorporated into these
organizations’ mission (Couturier, 2005). The Futures Project describes these functions as:

- Providing social mobility to students, faculty, employees, as well as the community
- Providing high quality teaching and learning
- Providing higher education in an efficient and value conscious process
- Conducting basic and applied research and scholarship in numerous fields
- Providing community outreach services to distribute knowledge and skills
- Providing assessable forums for open and equal debates
- Providing assistance and support to K-12 teaching and administrative curriculums

These are certainly admirable goals but in some respects, there is a risk the public could
construe them as overly conceptual and abstract. Fortunately, the Futures Project anticipated this
possible reaction and included metrics that are the observable results from the specific research
constructs. For example, social mobility could be measured by direct access to higher education,
which in turn is the result of adequate financial aid, diversity ratios, and graduation attainment
percentages. Teaching quality could be evaluated by accreditation board assessments, course
surveys, achieved learning objectives and the growth in the use of new instructional
technologies. Lastly, financial efficiency metrics, tuition level trends, and aggregate public
allocation as a percentage of budget, are examples of higher education fiscal measurements.

As a comparison, for-profit universities and colleges do provide social mobility, a quality
education product and follow efficient operating practices. However, they do not engage in the remaining four public functions. Generally, for-profit higher education institutions employ adjunct faculty to teach classes and contract these academic professionals on an as needed basis. Scholarship and research are not part of these adjunct faculty members’ job description. Community outreach, public forums, and most certainly K-12 education support, are far from the for-profit sector’s corporate mission.

**Strategic Industry Analysis**

Now that specific distinctions between for-profit and non-profit higher education segments have been described, it is important for the non-profit sector to acknowledge the reality that publicly traded or privately held for-profit higher education organizations are now mature, rationalized industry participants. Conducting a strategic industry analysis is a revealing method in understanding the mission and motivations underlying the for-profit sector and can result in additional industry insight. A classic business tool and probably the mostly widely used framework for strategic industry analysis is commonly known as Porter’s Five Forces. The framework is based on Michael Porter’s seminal work published in 1976 and recently updated in January 2008 (Porter, 2008). An industry member or security analyst, utilizing this framework, can model an industry with five controlling economic processes:

- Degree of industry rivalry and competitive intensity
- Barriers to entry into the industry
- Threats of available product or service substitutes
- Degree of buyer power to negotiate
- Degree of supplier power to negotiate

Although there are numerous facets associated with each industry force, for the sake of brevity I will illustrate each force by discussing only three characteristic factors.

**Degree of Industry Rivalry**

The following industry characteristics determine or at least influence the degree of rivalry between incumbent firms:

- **Industry concentration:** As the number of firms within an industry increases, competition and rivalry among these firms also increases as a result of protecting or to growing market share.
- **Cost structure of the industry:** An industry characterized by a high fixed cost structure requires firms to produce at maximum levels to obtain the lowest unit cost per product or service. Of course, firms must sell these large product inventories, which in turn increase competitive intensity.
- **Market growth rate:** In a slow growing or mature market, firms compete head to head for each tenth of a percent of market share. In comparison, in a rapidly growing market, revenue grows as a tangential effect of overall market growth.

**Barriers to Entry**

Barriers to entry act as protection for incumbent firms and operate by reducing the rate of new entrants. Typical barriers to entry are:

- **Patents, proprietary processes and knowledge:** A competitive advantage is encouraged by,
public policy and the enforcement of patent and copyright laws by the United State
government.
- Government policy: Government often enforces policies that preserve and increase market
place competition, but at times makes exceptions in the publics’ best interest, to allow or
mandate certain monopolies. Classic examples of government-sanctioned monopolies are
utilities, cable TV franchises, and the United States Postal Service.
- Economies of scale: In most industries, there exists a minimum level of production that
achieves the optimal cost efficiencies for that industry. The higher the level of minimum
efficient production, the more difficult it is for new entrants to reach that specific production
level. It is quite possible that new entrants will never reach this crucial economic level of
production and leave the industry (Porter, 2008).

Threat of Product or Service Substitution
The existence of economic substitutions highly associated with the availability and
competitive effect of products or services from other industries on the demand of incumbent
products and services. The number of economic substitutes influences competition by:
- The availability of price-performance alternatives: The existence of products and services
that are functionally equivalent increases consumer selection options thereby weakening any
competitive advantage accruing to an incumbent firm.
- Switching cost associated with other products and services: If switching costs, such as
relearning costs, termination fees, installation fees, and obsolete inventory costs are high,
consumers will be less motivated to change to a new product or service.
- Buyer’s propensity to substitute: The existence of generic alternatives as well as product for
product proxies influences a consumer’s propensity to substitute. Personality traits,
demographics, and cultural value are additional predictive variables (Walker, 2004).

Degree of Buyer Power
The aggregate buyer power within an industry is the extent of impact and the level of
negotiation this group has over an industry. Industry members can measure buyer power by:
- Buyer concentration: Buyer power is high when this group is concentrated and it represents
a majority market share.
- Available information: The more well informed consumers are the more asymmetrical
control they will have in any given exchange.
- Standardization of products: If an incumbent firm supplies a generic or commodity product
or service, buyer power is higher relative to other industries. Conversely, if unique features
and benefits differentiate the incumbent firm’s products or services, buyer power will be
much lower.

Degree of Supplier Power
Operating on the opposing side of the economic power scale from buyer power, supplier
power is the amount of impact the group has on an industry and characterized by:
- Supplier concentration: Suppliers will have greater control and power when there are many
buyers and few dominate suppliers.
- Threat of forward integration: Although usually difficult, suppliers can increase their
influence over an industry by vertically integrating and competing directly at the retail level
adjacent to their existing buyers.
Supplier importance to the industry: When the incumbent industry members are not essential customers of the supplier, then supplier power will be higher relative to other industries.

**Applying Porter’s Five Forces**

Although probably one of the most widely taught frameworks for industry analysis, Porter’s Five Forces still rarely leaves the business school domain and thus the need for the rather lengthy discussion. Each of the five forces will be applied to the specifics of the higher education industry.

**Degree of Industry Rivalry**

The U.S. higher education industry includes approximately 4000 degree granting colleges and universities. The adjacent pie chart illustrates the industry breakdown by sector. Although, higher education may appear fragmented with over 4000 competing entities, the industry is actually quite concentrated due to over 50 percent of the approximately 17.7 million students being enrolled in only 400 of these colleges or universities. The resulting consequence of this enrollment pattern is that 10 percent of the industry has over 50 percent of the market share (Hoovers, 2008).

In 2007, the industry’s combined revenue was approximately $200 billion (Hoovers, 2008). Although the for-profit sector only earned $13 billion, this sector represents the fastest growing segment of higher education and revenues for the top 10 for-profit universities are predicted to double over the next five years (Gallagher, 2004). This growth trend appears to be long term and predictable, with 17.7 million students currently enrolled in U.S. universities, and projected to grow to 19.5 million by 2014 (Gilde, 2007). As demand for higher education escalates, state supported universities and community colleges will most likely cap enrollments with the for-profit sector quickly responding to the increased demand with a corresponding increase in supply. The for-profit segment is much more flexible, agile to market conditions, and eager to accept change than the traditional state supported universities, essentially due to its governance structure (Ruch, 2001).

Generally, organizations within the higher education industry have an exceedingly high fixed cost to total cost ratio. This financial structure requires these organizations to operate at full or near capacity, as measured by enrollment, to have a chance of realizing competitive economies of scale. The for-profit segment is an exception here. Most of these organizations lease classroom space, do not provide residential accommodations, have limited library resources, and do not provide tenure tracks for faculty employees, so consequently, have substantially lower fixed costs.

**Degree of Industry Rivalry Assessment**

The higher education industry has a high fixed cost ratio and is effectively concentrated, which makes competitive rivalry predictably high. To some extent, the benefits of being a growth industry offset the high degree of rivalry. Overall rivalry is mitigated because large non-
profit universities have capacity enrollments, and are content seeing for-profit colleges satisfy growing demand by targeting niche markets. An overall competitive rivalry assessment is moderate.

**Barriers to Entry**

Public universities and colleges are usually very large organizations with extensive administrative operations, pervasive facilities and grounds, invaluable brands and a alumni base that can have a legacy well over a hundred years old. These characteristics, the capital and endowments required to support these long-term assets, including land grant entitlements, almost per se define large economies of scale, which certainly represent formidable barriers to entry. Federal and state governments also regulate the establishment of publicly supported schools based on policy needs and budget constraints.

While public sources of student loans continue to decline, one unintended consequence is mounting barriers to entry as related to the for-profit sector. Approximately 93 percent of for-profit institutions’ cash flow consists of tuition and fees. The crucial point is 64 percent of the tuition and fees consist of federally backed student loans. Please review Exhibit 1 in the appendix for details. As the federal backed student loan industry continues to spiral towards crisis, for-profit higher education firms have noticed weaker earnings, sporadic enrollment drops, and falling stock prices, all of which signal extreme caution to any potential new entrant (Value Line, 2008).

An additional barrier to entry, although tangential, is the existence of intellectual property and technology transfer offices within most university systems. These offices protect and monetize university research, which represents addition cash flow, and benefit from existing economies of scale and departmental synergies.

Probably one of the most controversial barriers to entry into specific areas of higher education is the requirements and restrictions imposed by accrediting associations. These organizations, while promoting curriculum standards, affinity group branding and visible education outcome metrics, also cleverly protect the incumbent members with an “accredited by” license. The success and reputations of business schools, medical colleges and law schools are critically interwoven with certification and accreditation (see [www.aacsb.edu](http://www.aacsb.edu) for example). Surprisingly, incumbent universities control most accreditation boards. An example of the control that an industry managed accreditation board has is where the Association to Advance Collegiate Schools of Business, the most influential business school accreditation board, will not accredit the business school of the University of Phoenix.

**Barriers to Entry Assessment**

A high fixed cost structure, extensive federal and state regulation, enormous economies of scale and restrictive curriculum accrediting processes, all act as higher barriers to entry and serve the incumbent schools well by protecting their current market shares.

**Threat of Product or Service Substitution**

At first, one may think that the options or alternatives related to earning a college degree or obtaining additional higher education would be constrained by location, level of income or
possibly cultural influences. Although possibly true 20 years ago, these limitations to higher education are significantly less relevant today. At present, the variety of educational “products” is extensive and continues to increase as influenced by the exponential advances in information technology. Classic economic theory classifies information technology as product compliment, because the existence of the product or service augments the features and benefits of an incumbent’s product offering (Walker, 2004).

An additional economic process that measures the threat of substitution is the availability of price-performing product alternatives. As an example, most state supported universities within a specific state have similar tuition rates and largely, the state tuition structure is equivalent for potential students. Thus, it essentially costs the same to attend Virginia Polytechnic Institute and State University as to attend the University of Virginia. Potential students or even transfer students could view these two universities as proxies (Heaven forbid!).

Switching costs between products and services are a concrete aspect of the abstract concept of product substitution. As an example, the process of transferring between universities or colleges is relatively fluid within the United States. More specifically, moving between one business school and another is an example where the tangible and intangible switching costs are low because of the availability of compatible curriculums. Obviously, one could get caught in the details of transfer credits, course descriptions, and degree requirements, but as compared to the cumbersome tasks of transferring to a new school in the EU (the positive benefits of the Bologna Process aside), U.S. students probably only have a slight emotional cost involved.

Not to over generalize but, younger adults are more disposed to change than older adults. Youth brings out the attitude of “what do I have to lose” as contrasted to the “anchors of age” associated with older adults. It is not a stretch to conclude that younger adults have a higher propensity to substitute than older adults do, within the same population of higher education students. Of course, these examples are hypothetical and best measured by transfer rates and graduation rates.

**Threat of Product or Service Substitution Assessment**

There are an estimated 4000 universities and colleges in the United States and that quantity alone would arguably indicate a wide variety of higher education options. Although the majority of students attend only 10 percent of the schools, it can be argued that the selection opportunities are high. This is in stark contrast to rapidly growing Middle Eastern countries where perhaps there is only one viable public or private university. Capacity limits and escalating admissions requirements do to some extent decrease the available alternatives.

Price points widely differ between the public, private and for-profit higher education segments. For-profit universities deliberately price their degree programs between the public and private tuition schedules. In economic terms, the for-profit sector overall, prices at the price elastic point of the higher education demand curve. However, this strategy does have some weaknesses, including the unintended consequence of effectively minimizing switching cost between a public university and a for-profit institution. In addition, since for-profit tuitions are high relative to public universities, the student is already price conditioned which makes transferring to a more expensive private school a realistic option. The overall assessment of the
threat to substitute is high and not beneficial to the industry incumbent.

Degree of Buyer Power
With roughly 17.5 million currently enrolled students in higher education institutions in the United States, without any specific target groups representing a majority market share, buyers are fragmented and diffused across the market. This buyer characteristic limits the effective power any one specific student may have in terms of negotiating tuition rates, admission requirements and other amenities. There is one acceptance to this observation. Public and private universities are targeting and aggressively recruiting the standout 15-25 percent of high school classes with the predictable, but unintended consequence of giving this market segment generous power to choose their options and to negotiate (Symonds, 2003).

In today’s information age, the contents of an undergraduate record of course descriptions is only a mouse click away. School search and evaluation data is a frictionless, symmetrical and essentially free process. Of course, this not was always the case. Twenty years ago, a high school student had to patiently wait weeks to receive an university record by mail to assist with college evaluations. It is axiomatic that the more information a buyer has, the more balanced the transaction or exchange will be.

Two additional components that influence the degree of buyer power are the rate of growth for the specific industry and the strategic value of the buyer to the industry as a whole. A growing market diminishes buyer power relative to a market with an average growth rate and along that same argument, the more distributed buyers are over a given geographic location, the less power they accrue (Walker, 2004).

Degree of Buyer Power Assessment
Buyers are widely fragmented across the market and in general, these potential students have limited influence on the higher education industry. As discussed previously, this observation does not hold for the top 25 percent of high school seniors graduating from the most respected high schools across the United States. Universities, whether public or private, feverishly recruit this target market in anticipation of sustaining high SAT, GPA admission averages, and consistent graduation rates, all of which enhance and distinguish their brand. In contrast, the for-profit sector heavily recruits from the underserved inter-quartile of graduating seniors and is generously rewarded for its efforts (Symonds, 2003).

The role of freely available and instantaneous information relating to course descriptions, college amenities, and school rankings most certainly shifts the information asymmetries of a generation ago, giving potential students more power of choice. This shift, to a degree, offsets the effect of market fragmentation and consequently gives buyer power an overall neutral assessment.

Degree of Supplier Power
The degrees of supplier concentration and supplier importance, in respect to the higher education industry are essentially the same side of the economic coin. If there are few suppliers to an industry and these suppliers sell an essential component or service to the industry, then supplier power will be high relative to other industries. A classic example of this principle is the
clout and influence Intel has over the personal computer manufacturing industry. There are effectively only two CPU manufacturers supplying the most important component to the industry. Within the higher education industry, there are numerous suppliers of a variety of products and services, fragmented across the industry. Even highly regarded textbook publishers, clamor for faculty time and compete for each text approval and unit sold.

**Degree of Supplier Power Assessment**

Universities and colleges frequently represent large stable contracts to vendors, so the ensuing competition for bids among these vendors is typically frenzied. Based on the observation of numerous vendors selling essentially generic products and services, and low motivation by these suppliers to vertically integrate into higher education “delivery,” suppliers’ ability to influence the industry is low.

**An Overall Higher Education Industry Assessment**

From the perspective of a higher education industry incumbent, a synthesis of Porter’s Five Forces is invaluable in gaining and maintaining an overall strategic plan. The analysis helps managers have a wider competitive horizon than a day-to-day myopic operational outlook. According to Michael Porter, “the extended rivalry that results from all five forces defines an industry’s structure and shapes the nature of competitive interaction within an industry” (Porter, 2008). Industry outsiders, attempting to determine the probabilities of a successful move into the industry, can also use this synthesis.

As illustrated in the adjacent diagram, industry rivalry is moderate meaning it represents a worry or nuisance to industry members. This moderate assessment is the result of the tradeoff between the disadvantages of industry fragmentation with the accruing benefits of a growth industry. The barriers to entry such as high capital and high fixed cost are quite high and act as the strongest protecting force for the higher education industry. Low supplier power, based on low concentration and fragmentation, is also beneficial to industry incumbents. The threat of substitution is high with numerous forms of higher education and from the incumbent’s perspective, it probably represents the most adversarial force to incumbents. Buyer power is neutral, which on the surface appears to be relatively benign, but buyer power is growing at a much higher rate as compared to the remaining competitive forces and over the long term will probably become the most threatening economic force for incumbents to monitor.

From the preceding industry analysis, based on the Porter’s Five Force framework, the overall assessment of the higher education industry for both the incumbents and potential entrants is neutral. While the overall higher education industry analysis may seem ambiguous and not of standout significance, by being in the middle of the competitive road, most industry strategist would argue that industries with a neutral competitive assessment represent some of the greatest challenges to managers. There are no clear road signs to follow while navigating the ever changing direction to sustainability and profits.
Appendix:

Exhibit 1:

**DIFFERENCES IN REVENUES AND SPENDING**

How income sources and spending vary among nonprofit and for-profit four-year colleges as a proportion of their overall budget.

**NOTE:** Samuel C. Wood developed this chart for a class at Stanford U using data on four-year colleges supplied by the institutions to the U.S. Department of Education, from corporate reports of higher-education companies, from various analyses of nonprofit and for-profit colleges conducted by consulting companies and Wall Street analysts, and from interviews with people in the industry. The model excludes revenues and expenses related to hospitals, and auxiliary services like housing and dining.
Exhibit 2:

**Profitability of Selected U.S. Industries**

<table>
<thead>
<tr>
<th>Industry</th>
<th>ROIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepackage Software</td>
<td>37.6%</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>37.6%</td>
</tr>
<tr>
<td>Adverting Agencies</td>
<td>28.6%</td>
</tr>
<tr>
<td>Semiconductors</td>
<td>27.3%</td>
</tr>
<tr>
<td>Higher Education</td>
<td>26.4%</td>
</tr>
<tr>
<td>Men's Clothing</td>
<td>21.0%</td>
</tr>
<tr>
<td>Corinthian Colleges, Inc.</td>
<td>21.3%</td>
</tr>
<tr>
<td>Malt Beverages</td>
<td>19.5%</td>
</tr>
<tr>
<td>Household Furniture</td>
<td>17.6%</td>
</tr>
<tr>
<td>Grocery Stores</td>
<td>16.5%</td>
</tr>
<tr>
<td>Snack Food and Cookies</td>
<td>15.6%</td>
</tr>
<tr>
<td>Wine and Brandy</td>
<td>15.0%</td>
</tr>
<tr>
<td>Engines and Turbines</td>
<td>13.8%</td>
</tr>
<tr>
<td>Book Publishers</td>
<td>13.4%</td>
</tr>
<tr>
<td>Soft Drink Bottlers</td>
<td>12.6%</td>
</tr>
<tr>
<td>Hotel Accommodations</td>
<td>11.7%</td>
</tr>
<tr>
<td>Catalog and Mail Order</td>
<td>10.4%</td>
</tr>
</tbody>
</table>

Source: Standard and Poor’s, Hoovers, and Porters, 2008 (see references)

Exhibit 3:

**The Top For-Profit Higher Education Companies:**

<table>
<thead>
<tr>
<th>Company Name</th>
<th>2007 Revenues</th>
<th>Market Cap</th>
<th>1 Year Sales Growth</th>
<th>Brands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apollo Group, Inc.</td>
<td>$2,723.8 M</td>
<td>$8,202.0 M</td>
<td>9.9 %</td>
<td>University of Phoenix</td>
</tr>
<tr>
<td>DeVry, Inc.</td>
<td>$933.5 M</td>
<td>$3,371.8 M</td>
<td>10.7 %</td>
<td>DeVry, Ross University</td>
</tr>
<tr>
<td>Corinthian Colleges, Inc.</td>
<td>$933.2 M</td>
<td>$760.4 M</td>
<td>(3.5 %)</td>
<td>Everest Univ., WyoTech</td>
</tr>
<tr>
<td>TIT Education Services, Inc.</td>
<td>$869.5 M</td>
<td>$2,301.4 M</td>
<td>14.7 %</td>
<td>TIT Technical Institute</td>
</tr>
<tr>
<td>Strayer Education, Inc.</td>
<td>$318.0 M</td>
<td>$2,580.0 M</td>
<td>20.6 %</td>
<td>Strayer University</td>
</tr>
</tbody>
</table>

Source: Hoover’s, Inc.
References:


