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Capital Romance: Why Gordon Gekko Fell in Love With Higher Education

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Abstract

With about two initial public offerings a year, the number of publicly traded degree-granting providers of post-secondary education in the United States has grown steadily ever since the Apollo Group (University of Phoenix, College of Financial Planning, etc.) went public in December 1994. To sell to investors ownership in companies that compete against traditional providers favored by numerous tax and regulatory breaks, investment bankers and market analysts clearly must have "compelling" stories to tell.

This paper presents an inventory of the arguments typically employed as well as an attempt to quantify their relative importance through a questionnaire that was sent to analysts following the education industry. I find that the market analysts' arguments are reasonably congruent with modern economic and managerial theories of firms and markets and what I consider the relevant facts. Based on allocation recommendations of my correspondents, I speculate on the likely fate of publicly traded degree-granting providers of higher education.

"Greed is good." (The Gordon Gekko character in "Wall Street",
played by Michael Douglas and allegedly modeled after Michael Milken)

I. Introduction

The number of publicly traded degree-granting providers of post-secondary education in the United States has grown at a steady pace. Following the early example of DeVry, Inc. in 1991 and the Apollo Group, Inc. (University of Phoenix) in 1994, 10 degree-granting providers of post-secondary education have gone public over the past five years.[1] Most have grown at a brisk pace. At least 7 have already gone into the market for secondary offerings, and a couple for a third time. Together, these companies command 2 percent of the revenues flowing into higher education each year -- most of it originating from Title IV programs -- and about 10 percent of the campuses.

To sell to investors ownership in companies that compete against traditional providers favored by numerous and significant tax and regulatory breaks (Facchina, Showell, & Stone 1993; Shields 1998), investment bankers and market analysts clearly must have "compelling stories" to tell. This paper presents an inventory of the reasons that analysts typically give, as well as an attempt to quantify the relative importance of these arguments through a questionnaire that I sent nto analysts following the education industry. The merits of the arguments are then evaluated in light of modern economic and managerial theories of firms and markets. Drawing on portfolio recommendations of my correspondents, I also speculate on the likely fate of this emerging segment of higher education.

The paper is organized as follows: Section 2 briefly reviews the role of market analysts and then describes how I collected and evaluated the reasons that analysts typically give to persuade investors. Part Three summarizes the results of a questionnaire through which I attempted that evaluation. Part Four discusses how analysts' view of the fledgling for-profit segment of post-secondary education compares to modern economic theories of firms and markets. Based on analysts' allocation recommendation, I assess whether Wall Street still is, and is likely to remain, in love with post-secondary education. A conclusion follows.

[1] The Argosy Education Group [ARGY], Career Education Corporation Education [CECO], Computer Learning Centers [CLCX], Corinthian Colleges [COCO], Education Management [EDMC], EduTrek International [EDUT], ITT Educational Services [ESI], Quest Education Corporation [QEDC, formerly EDMD], Strayer Education [STRA], WIX [Whitman Education Group]. For details see (XXX) which is a cases study of these companies, as well as the Apollo Group [APOL] and DeVry [DV].

II. An inventory of the reasons that analysts typically give to persuade investors

The market for market analysts. As of Fall 1999, the education industry – although the second largest industry in the USA – was followed only by a small number of analysts. A *Wall Street Journal* article suggested that "half a dozen market analysts" (8/13/99 (A1)) track education companies.[2] So small is the set of analysts that the *Wall Street Journal*'s latest installment of its annual "All-Star Analysts" section does not even list the education industry -- the second largest industry in the USA -- as one of its 55 industry categories. (It did list hospitals and HMOs -- the largest industry in the USA and an industry which went through a process of privatization about a decade earlier that many consider a template of things to come in the education industry.)

What do market analysts do? Through the study of companies, managers, "business models", and the markets in which they are put to the test, market analysts try to identify likely"winners" and "losers".[3] The resultant "buy" and "sell" recommendations of various gradations are meant to help managers of mutual funds and pension funds to beat the market averages.

It is a well-established fact that an overwhelming number of mutual fund managers do not benefit on average from that advice (Carhart 1997), contributing to the wide-spread view that market analysts are glorified sales people who routinely paint too rosy a picture of the companies they promote.

Recent work by economists Keane and Runkle (1998), however, has contradicted the widespread view that stock market analysts' earnings forecasts and recommendations are too optimistic (e.g., Brown 1993; Loeffler 1998; Amir & Ganzach 1998; Chaney, Hogan, & Jeter 1999). Francis, Hanna, & Philbrick (1997) find, in addition, that

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[2] Indeed, according to *Multex.com* [www.multexinvestor.com], an average of 6 analysts follow the publicly traded degree-granting companies, ranging from one for smaller ones such as EduTrek International, Inc. to 14 for the Apollo Group, Inc., by all measures the largest one.

[3] While market analysts have somewhat different functions than those (of their colleagues) who engineer equity offerings or venture capitalists, it is likely that pros and cons of a particular proposition are more or less the same across these three groups of agents. The most important difference is that venture capitalists are the ones to come into the game early, and hence face a higher degree of uncertainty and risk which is reflected in venture capitalists' high hopes for returns: KnowledgeQuest (1999) reports that venture capitalists aim for 30-40 % returns.

stock market analysts do not seem to be easily swayed by management presentations, as these authors find no evidence that post-presentation forecasts are less disperse, more accurate or less biased than their pre-presentation forecasts. In light of Abrahamson and Park's (1994) finding that managers tend to conceal negative organizational outcomes, the skepticism reflected in stock market analysts' behavior seems appropriate.

Market analysts are often affiliated with security houses that are involved in initial and follow-up public offerings ("underwriters").[4] Such an arrangement puts market analysts in a conflict-laden situation as they may feel obligated to promote those equities in which their investment bank has a vested interest rather than those that they consider better bets. Indeed, Lin and McNichols (1998) find that three-day returns to lead underwriter analysts' "hold" recommendations are significantly more negative than those by unaffiliated analysts, suggesting that lead underwriter analysts' recommendations are affected by the moral hazard problem they face. Lin and McNichols also find that lead and co-underwriter analysts' growth forecasts and recommendations are significantly more favorable than those made by unaffiliated analysts. Interestingly, Lin and McNichols furthermore find that lead and co-underwriter analysts' earnings forecasts are not generally greater than, and post-announcement returns not significantly different from, those of unaffiliated analysts' recommendation. One possible explanation, well established for investment banks (e.g., Chemmanur & Fulghieri 1994; Nanda & Yun 1997; Clement 1999), is that reputation does constrain moral hazard in financial markets significantly.

Constructing the inventory of arguments. The inventory presented here was compiled through a content analysis of 15 interviews that the *Wall Street Transcript* [from now on *WST;* www.twst.com] conducted between May 1997 and April 1999 with a total of 10 market analysts, 8 on the "sell-side" and 2 on the "buy-side".[5] The arguments were then arranged in three sets: those related to the economics of the post-secondary education industry

[4] For example, Block (Nationsbanc), Cappelli (Credit Suisse First Boston), Gay (Thomas Weisel Partners, formerly Montgomery Securities), Locke (Banc of America), Peterson (US Bancorp Piper Jaffray), Soffen (Legg Mason Wood Walker), Stefan (ABN-AMRO).

[5] Cappelli, Gay, Hermann & Craig (Everen), Odening (Salomon Smith Barney, formerly Hambrecht & Quist), Saltzman & Stefan (ABN-AMRO), and Soffen from the sell-side and Ankrum (Janus) and Cheseby (T. Rowe Price) from the buy-side. Three of the market analysts (Cappelli, Gay, Odening) were interviewed twice, one (Soffen) thrice.

in general such as demographic and societal changes, those that suggest why one might want to invest in publicly traded post-secondary education companies, and those that suggest why investing in this fledgling segment of the education industry might not be such a hot idea.

Evaluating the relative importance of the reasons analysts typically give. One way to evaluate the relative importance of arguments meant to entice pensions and mutual fund managers to invest in for-profit education providers is to count how often the arguments in the inventory were mentioned by the analysts participating in the *Wall Street Transcript* interviews. However, a number of the interviews were conducted simultaneously, covered additional topics, and were semi-structured[6]; Frequency of arguments therefore could be a noisy measure of their comparative importance.[7] Since I was interested in getting a sense of the relative merits of the arguments, I sent -- during the second half of September 1999 -- a questionnaire containing the three sets of arguments in the inventory to a set of 10 analysts.[8] After brief introductory remarks that set the stage, the correspondents were told that "with this present questionnaire we are trying to quantify the importance of the factors [through the content analysis] identified as being responsible for making post-secondary education a promising investment." I asked the analysts to rate each reason on a 5-grade scale that runs from 1 to 5, 1 being "unimportant" and 5 being "among the 4 or 5 most important factors", with 2 = "less important", 3 = "important", and 4 = "more important". Cover letter and questionnaire are reproduced in the Appendix .

Eight of the 10 analyst correspondents returned the questionnaire, one of them anonymously.[9] The mean response was computed for all responses. On average all reasons listed in the questionnaire were considered to be somewhat important as the lowest mean was 1.9 (less important), the highest 4.3.[10] Given the relatively small number of correspondents and the range of individual responses, a ranking of the responses according to mean

[6] Among the multiple-participant-settings were two roundtables with four participants each and two interviews with two participants each.

[7] It turns out that a simple counting of arguments led to a similar assessment of their relative merits, especially as regards the first two sets of questions.

[8] Among these correspondents were all those sell-side analysts that participated in the *Wall Street Transcript* sessions. Since Saltzman & Stefan (ABN-AMRO) and Herman & Craig (Everen) were in the same firm, I sent them one questionnaire only. In addition, I sent a questionnaire to four analysts that I had become aware of during my research (Bloch, Locke, Paris, Peterson).

[9] Thanks are in order to Gregory Cappelli, Jerry Herman, Michael Locke, Alex Paris, Robert Peterson, Matthew Stefan, Scott Soffen, and the anonymous correspondent.

[10] It is easy to see from the raw data documented in the Appendix that the median would lead to similar results.

would suggest a degree of accuracy that the data do not warrant. However, the means fell into three easily separable classes suggesting the following classification. Arguments with means ranging from 3.8 to 4.3 are the "most important" ones and garner three stars, those with means ranging from 2.8 to 3.6 are "important" (**), and those with means ranging from 1.9 to 2.5 "less important"(*). Of the 26 arguments that I asked my correspondents to rate, 7 garnered triple, 13 double, and 6 one star distinction given this classification.

III. The relative importance of the reasons that analysts typically give to persuade investors

In the following, I integrate the arguments in a narrative that distinguishes the three sets of reasons that I identified through the content analysis. At the outset, it is interesting to note that almost all arguments concerned with the economics of (post-secondary) education and the reasons why one might want to invest in publicly-traded post-secondary education companies were rated "most important" or "important". In contrast, most arguments reflecting reasons why one might not want to invest in those companies drew a "less important" rating.

The economics of (post-secondary) education. The for-profit education industry has plenty of competitors in the fight for investors. Most prominently, there is the recent rush to settle cyber-space, which has attracted massive and well-documented capital flows and capital gains (and a whole industry to comment on them, e.g., Multex.com). What then qualifies the education industry, and in particular, the post-secondary education industry as a potentially attractive place for investments?

The analysts agreed that a major driver of the emergence of for-profits was the shift to a knowledge-based and technology-driven economy that pays an ever higher income premium to those with IT-related skills ("income premium"***). This income premium, and the underlying technological drivers, are seen as creating an increased demand for education on the part of adults ("career-oriented continued education" ***) and as contributing to the increased demand for post-secondary education on the part of students who just graduated from high school ("career-oriented education"***), with another driver of this development being the "baby boom echo" ("more education"**). These are indeed well-established facts.

The analysts agreed that one of the features that makes the education industry interesting are its very predictable revenues and earnings ("earnings visibility"***). That government funding is, and will be, a steady source of significant revenue was considered an important argument ("government funding"**). Even more important, in the eyes of the market analysts, is the widely held belief that the post-secondary education industry is essentially recession-proof, if not countercyclical, and therefore a play that might reduce the volatility of one's

portfolio ("a/countercyclicality"***). Analysts also believe that there is an increased need for IT-related skills internationally from which U.S. education companies could benefit ("international demand"**). These, too, are well-established facts.

Why one might want to invest in publicly-traded post-secondary education companies. The arguments so far suggest why the post-secondary education industry is likely to encounter favorable demand conditions for the forseeable future. Such a friendly environment, however, while positive for public and private non-profit higher education providers, does not necessarily translate in a promise that publicly traded companies will fare well. After all, not only do they have to deliver reasonable profits to please investors, they also face competition from heavily subsidized public and private competitors (XXX, Winston 1997, 1999).

Analysts work under the assumption that publicly traded companies are likely to have for the foreseeable future, in addition to their high earnings visibility, high revenues and earnings growth ("high growth"***). In the *Wall Street Transcript* interviews, one analyst predicted 6 - 8 % "same store sales" growth, and 12 - 16 % overall growth rates as sustainable for well-managed companies.[11] Other analysts seemed to agree with those estimates. Such growth would be, by all measures, a multiple of the growth of non-profit competitors. In the *Wall Street Transcript* interviews, another analyst suggested that a better performance measure of the underlying "business model" was returns on equity and that on those grounds the better players in the industry had done outstandingly well. In their questionnaire responses analysts confirmed that sentiment, qualifying "high returns" (***) as another of the most important reasons why one might want to invest in publicly-traded post-secondary education companies.

The strong expectations of higher growth and higher returns prompts the question: How is it possible that companies compete successfully in an industry populated with heavily subsidized competitors? Analysts suggested that for-profits understand, and understand better than their non-profit competitors, that the education industry is a service industry first and foremost, and that those who want to survive have to focus on students' and their prospective employers' satisfaction instead of alternative priorities such as faculty research ("focus"**). According to the analysts, this is expressed in courses that are offered at convenient times and locations ("flexibility"**) and in

[11] APOL has currently enrollment (revenue and earnings) growth of more than 20 % (nearly 30 %), with enrollment growth in its top five geographic markets being about 18 % and growth in its online division clocking in above 50 %. The other major players have similar growth rates in their brick-and-mortar operations.

the fact that for-profits pay attention to retention, graduation, placement, and referral rates ("attention"**), as reflected in for-profits' attempts to ferret out what prospective employers of their graduates want.

While "focus", "flexibility", and "attention" may increase revenue, they do not necessarily make good earnings which brings up the cost side. Analysts consider it to be important (**) that publicly-traded education companies operate under a "pricing umbrella" spanned by inefficiently run public and private non-profits which allows them to increase prices at or above the rate of inflation. It is clear from the context (e.g., "focus") that the use of the adjective "inefficient" here refers to faculty paying too much attention to their research instead of teaching.

The analysts in the *Wall Street Transcript* interviews had identified as two key supply-side advantages of for-profits the significant economies of scale in marketing, regulatory compliance, and other functions that can be centralized and the fact that those publicly-traded education companies who manage to navigate the regulatory environment successfully can rely on regulations as an effective barrier to entry for new enterprises. The questionnaire respondents agreed and considered these two arguments to be important reasons why one might want to invest in for-profit secondary education ("economies"**, "barriers to entry"**).[12] The argument that competition through new entrants is higher in the training segment of post-secondary education ("competition"**) was also considered important, and validated indirectly the claim that post-secondary education is, in important respects, different from other parts of the education industry.

The claim that working adults represent the primary market for distance education programs ("primary market "**) was also considered important, but the claim that distance education allowed publicly traded education companies to make end-runs around state education boards and accrediting agencies was considered less important ("end-run"*).

Why one might not want to invest in publicly-traded post-secondary education companies. It is in the nature of interviews and roundtables involving analysts that risk factors are featured less prominently. Still, several caveats were mentioned in the *Wall Street Transcript* interviews and I included them as a third set of arguments in the questionnaire.

[12] This poses the interesting question why these advantages are suddenly central drivers of growth. Three explanations come to mind. The most likely explanation is, as evidenced by the fact that most initial and follow-up public offerings have happened since December 1994, that proprietary providers have gained the critical mass that allows them to capture those economies. Second, it is quite possible that the advances in information technology that we witnessed over the past decade (e.g., McKinsey 1992, 1993) were a conditio sine qua non. Third, the public perception of for-profit education has clearly changed (KnowledgeQuest 1999); for-profits have won respect even in Congress (Burd 1998).

Surprisingly, market analysts considered as less important the argument that direct and indirect subsidies to private and public non-profits puts for-profits at a competitive disadvantage ("subsidies"*). Likewise, differential enforcement of regulations was considered less important ("stricter enforcement" *) as a source of competitive disadvantage. Seemingly inconsistent with that assessment, the argument that state education boards and accrediting agencies are typically populated by non-profit school officials and faculty who take a skeptical view of for-profit educational companies was considered important ("skeptical view"**).

Turning from external to internal problem potentials, analysts considered as important the fact that many degree-granting publicly traded post-secondary education providers have relatively short operating histories that complicate an assessment of the quality of the management ("short operating histories"**). That verdict is maybe not that surprising as it absolves the respondents to some extent from judgements that turn out to be mistaken. Seemingly inconsistent with analysts' assessments of the problems inherent with short operating histories, the fact that many for-profit managers have significant insider stakes was considered less important ("insider management and control"*), as was the often-heard argument that the overwhelmingly practiced business model of leasing physical plant and hiring temporary and/or part-time faculty could represent a significant "contractual risk" (*).

Discussion. The picture that emerges is, nuances aside, reasonably congruent with the kind of argument one typically finds in company documents. One key difference is the degree of emphasis on risk factors that pervades SEC filings but is not as highly rated by analysts.
Most likely, this reflects the differential institutional necessities that companies and analysts face.

IV. How do analysts' views compare to those of modern economic theories of firms and markets? And how do they match the facts?

> "Wall Street looks at profitability and earnings and that drives stock prices."
> (An anonymous education industry analyst in *The Wall Street Transcript* 5/18/98)

> "This money [aid programs that Ohio state legislators made available to students in for-profit colleges] is not necessarily going to educate more students or to improve education. It's a scholarship ultimately going into profits."
> (Roderick G.W. Chu, chancellor of the Ohio Board of Regents)

> " ... we are pleased to be reporting record revenues and earnings for fiscal 1998.
> It is particularly satisfying that our graduates continue to achieve high job placement rates and that their average starting salaries are increasing at substantially greater than the inflation rate. This is what our business is all about." (Robert B. Knutson, CEO, Education Management Corporation)

On Wall Street, we are told by one of the *Wall Street Transcript*'s interviewees, it is profitability and earnings that drive stock prices. It is the P-word that drives people like Chu bonkers. What Chu does not mention

is that state funds (and the substantial indirect subsidies through tax and regulatory breaks) go into something in non-profits too, quite possibly into activities that are not tied to the mission of non-profit colleges and universities or into outright wasteful activities (James 1978; Massy & Zemsky 1994; XXX). The possibility of profits poses the intriguing question of how earnings and profits can be generated by participants in an industry that is populated by heavily subsidized competitors. And it poses the equally intriguing question of how these new entrants can produce for the foreseeable future both high growth in revenues and high earnings.

One answer to that question is captured by the importance that analysts assign, in unison with most companies' SEC filings, to the two key supply-side advantages that for-profits are argued to have: the significant economies of scale in marketing, regulatory compliance, and other functions that can be centralized ("economies"**) and the fact that those publicly traded education companies who manage to navigate the regulatory environment successfully, can rely on regulations as effective barrier to entry ("barriers to entry"**). Analysts' belief that competition through new entrants is higher in the training segment of post-secondary education re-iterates the belief that those who have successfully hurdled the regulatory barriers to entry in higher education stand to reap significant advantages ("competition"**).[13] It is noteworthy, though, that, although analysts agree on the importance of economies of scale, they disagree on the importance of the barriers- to-entry argument, with ratings running the gamut from "most important" to "less important".

Knutson gives another important answer to the question why earnings and profits, and increasing earnings, get generated by participants in an industry that is populated by heavily subsidized competitors. The essence of his demand-side argument is that post-secondary education is an industry that is based first and foremost on quality and, since the nature of education does not easily allow for an assessment of actual quality, on expected quality or reputation. This is why placement rates and increasing starting salaries matter to Knutson.[14] Indeed, Knutson's

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[13] Two representative views:

"This industry by definition is one with very high barriers to entry. ... it's perhaps one of the most heavily regulated industries in the economy. ... If you want to talk about what keeps us awake at night, it's the concern about the shifting sand of this regulatory oversight and our ability to adapt to it and stay on top of it. ... If there's one thing that I really watch, that's the piece."
(David G. Moore, President & CEO Corinthian Colleges, Inc., in a *WST* interview on 6/4/1999)

"Regulation is both a benefit and barrier. There are significant costs and administrative burdens for being in this regulated industry. But by the same token, it also raises the hurdle rate for potential or would-be competitors to enter the market." (Jerry R. Herman, analyst, in a *WST* interview on 4/26/1999)

[14] Knutson's argument is prominently mentioned by most companies and their CEOs, e.g., Strayer's Bailey: "Producing satisfied graduates who have successful careers increases our referral rates and strengthens our reputation." (*WST* 6/4/1999). In fact, reading SEC filings and message boards it becomes quickly clear that it is management's lack of understanding of reputational issues that does in such companies as CLCX, EDUT, and WIX.

conception of what his business is about flies in the face of wide-spread and popular conceptions that others have proposed as rationale for the raison d'etre of higher education as we knew it (e.g., Winston 1997, 1999) and that also underlies the dominant rationale for the existence of private and public non-profits (XXX). In brief, the traditional view is that reputational equilibria can not work in markets where the quality of a good cannot be ascertained upon purchase because sellers of adjustable goods and services such as car repairs, organic fruit, education, and health, day, and elder care, could and would like to rip off consumers by promising goods and services of high quality, collecting a corresponding price, and then delivering goods and services of inferior quality (Akerlof 1970).

In a series of intriguing contributions, Hansmann (1980, 1996, chapter 12) suggested that the dire consequences of information asymmetries ultimately drove the emergence of entities that were constrained by a non-distribution constraint, that is, non-profits. Sellers of adjustable goods and services, Hansmann argued, were prevented by the non-distribution constraint and its side-kick, the reasonable-compensation constraint, from ripping customers off. Being constrained from distributing profits, managers of nonprofits would have no incentive to maximize profits by ripping customers of.

Akerlof's argument, and by implication Hansmann's, was countered by Heal (1976) who pointed out that the essence of the asymmetric information problem could be framed as a one-shot prisoner's-dilemma-type game. He also pointed out that the likely outcome of an indefinitely repeated prisoner's dilemma game was very different from that of a one-shot game. Indeed, seller-buyer interactions tend to be of the indefinitely repeated kind, such as buying organic fruit at the local farmers' market or grocery store. And even for cases such as car repairs, education, and health, day, and elder care where sellers typically interact on a less frequent basis with any one customer on a less frequent basis, Heal argued, markets would evolve effective means of reputational enforcement (possibly enforced by warranties and what not).[15] The ramifications of the argument are dramatic. As in the indefinitely repeated prisoner's dilemma game, it is now in the interest of the seller to provide the consumer with a product that matches her or his expectation. Heal's argument has become the corner stone of modern theories of firms and markets all of which are build on reputational enforcement in exact the kind of situations that allegedly require

[15] There is a wide-spread misconception that repeated games do not apply in a context in which people only invest in something like a college education. Game-theoretically it doesn't matter whether a firm plays against the same person all the time or a series of people (Kreps 1990a, pp. 66 - 72) – if, and that's an important conditional, the firm has a reputation to protect and the value of that reputation always exceeds the short-run gains it could obtain from sullying its reputation. I have argued elsewhere that this is indeed the situation in which many a higher education firm finds itself these days (XXX). One might object that it takes time to build a reputation. It is therefore interesting to note how quickly for-profits have managed to overcome the negative connotations that were attached to their enterprise until very recently (Burd 1998; XXX).

nonprofits to step in (Klein & Leffler 1980, Holmstroem & Tirole 1989, Kreps 1990; see also Ortmann 1999 for an analysis of the writings of an early contributor to that debate).

It is here where Knutson's sense of what his business is about comes into play. Increasing placement rates and increasing starting salaries beget more referrals which, in turn, reduce the costs of marketing and so on.[16] Educational institutions, in other words, are caught in repeated game scenarios and they better understand it, as reputational equilibria will be swiftly enforced, in myriad ways. The argument here is similar to the argument that applies to financial markets. Analysts or fund managers who underperform will soon find the demand for their services dwindle. Just as systematically overestimating earnings is not evolutionarily stable for market analysts, not providing promised quality is evolutionarily not stable for for-profit companies (Ortmann 1997). When analysts talk about "focus"and "flexibility" and "attention" as important arguments, then that is what they talk about implicitly. As Scott Soffen, succinctly put it, "When I'm trying to judge the quality of a company's product, one of the first data points I look to is the percentage of their new students derived from referral. ... I would emphasize the importance of referrals as being a low-cost, high-conversion method of obtaining leads." (*WST* 5/18/98) An obvious consequence is that those for-profit providers that do not play the reputation game successfully won't stand a chance to collect "buy" recommendations.

Even if they do, though, they are not home free, as investors react quickly and mercilessly to both real and perceived problems. To wit, many of the companies in the universe we are concerned with are way off their highs, some dramatically so.[17] One of the interesting aspects of the decline in the stock prices of for-profit providers of higher education has been that some firms have suffered more than others. Soffen sees the "tremendous flight to quality among the stocks" driven by reputations: "The stocks that have performed the poorest ... have a cloud overhanging them. The stocks that have performed the best ... are perceived by Wall Street to be clean as a whistle." (Lit.cit.) Greed, if correctly conceptualized in a repeated game context, is good indeed. A for-profit education company that does not understand this point is likely to learn that lesson the hard way, as evidenced by the events

[16] In their SEC filings the companies enumerated in footnote 1 typically claim that between one third and two third of their students come from referrals. See XXX for details.

[17] Had one bought one share of each of the stocks mentioned in footnote 1 at their 52-week high (in most cases early in 1999), one would have paid a grand total of $ 290. On January 21, this amount would have been worth $ 167, for a loss of approximately 42 % of the original investment ane not taking into account the opportunity cost of investing that money elsehwere.

urrounding Computing Learning Centers.[18] Even companies like Sperling's APOL and Knutson's EDMC (both which have stellar reputations among analysts, e.g., the off-record interviews published by *The Wall Street Transcript* on 4/26/99 and 5/18/98) are highly susceptible to attacks on their reputation.[19] Reputation is the name of the game. It's a point that market analysts, and most companies, seem to understand well.

In sum, based on my own research (XXX) and what I consider to be the essence of modern theories of firms and markets -- "focus", "flexibility", "attention" --, I believe analysts paint a reasonably accurate picture of threats and opportunities. There are three areas where I would squibble with analysts' view of things. First, I side with those analysts who believe that (regulatory) barriers-to-entry are an important issue.[20] Second, I believe that the contractual risk (in particularly as regards management and IT-faculty) is considerable and is not well-understood by analysts. Third, and related to the previous point, I believe that the well-documented imitative behavior of non-profits (Gose 1999; Mangan 1999; Morris 1999) is a serious threat which quite possibly has contributed to slowing revenue and earnings growth rates and declining stock prices already and will continue to do so.

V. Capital Romance: Is Wall Street still in love with higher education?

Until fall 1998 most for-profit providers of post-secondary education had seen steady and rapid growth of revenues, earnings, and stock prices. Since then, stock prices have moved south dramatically, undermining for-

[18] CLCX's travails started on March 10, 1998, when the Attorney General (AG) of Illinois filed a complaint against CLCX in Circuit Court asserting that the company had violated the Illinois Private Business and Vocational Schools Act und the Illionois Consumer Fraud and Deceptive Practices Act at its Schaumburg Learning Center. The news of the action cut the price of the stock by more than half. Three months later, on June 8, CLCX and the AG agreed on a consent degree. The price, by then even lower (in reaction to a flurry of suits charging that the CLCX insiders realized profits by trading their shares while in possession of material adverse information), rebounded sharply in June and July of that year, only to collapse in August in reaction to further bad news (e.g., lawsuits against learning centers in New Jersey, Texas, California, and Virginia). While some of these suits have been settled, CLCX's stock price (which in early 1998 was above $35) has languished below $5 for much of 1999, effectively preventing CLCX from issuing equity to finance its growth. CLCX's very public travails also negatively affected its student enrollment figures.

[19] As regards APOL, the undisputable fact that APOL's stock price is about 50 % off its high has been attributed to the two-year investigation that the Department of Education (DE) undertook. However, APOL's stock price did not recover significantly upon the news that the final program review determination letter essentially exonerated APOL: "(The DE) largely agreed with Phoenix that many of the university's problems in managing federal student-aid funds were the result of its rapid expansion of the past several years." (*Chronicle of Higher Education*, 8/13/1999, A43) As regards EDMC, it's stock got pounded after, in September 1999, it announced that 145 Houston-area students had brought a suit against the Art Institute of Houston, alleging they were defrauded by their school. EDMC's stock price (which in mid-1998 was above $35) fell, in late1999, and for several months was below $10.

[20] My view is supported by KnowledgeQuest's 1999 ranking of quality of management and regulatory environment as the highest risks. Note that this ranking is based on surveys of venture capitalists, i.e. people who put their money where their mouth is.

profits' ability to use Wall Street as their readily available endowment. To the extent that smaller companies got hit harder than larger firms, their ability to grow will be particularly affected. With the notable exception of APOL, DV, CECO, and COCO, I do not anticipate other providers of post-secondary education being able to replenish their coffers any time soon through follow-up public offerings.

The decline of stock prices has left many an analyst puzzled and experimenting with ex-post rationalizations that are in some cases in marked contrast to the rather optimistic price targets they predicted as late as April and May of this year. At loss for a clear explanation, market analysts refer to "sentiments" that have turned negative. Of course, sentiments have to have some underlying reasons. Among the reasons that market analysts parade is that stock prices are not supported by enrollment and earnings numbers and that run-ins with regulators or very public suits filed by former and present students took their toll (Blumenstyck 2000). Overall, the reasons for the decline seem poorly understood and opinions about their justification are quite diverse.

To better understand analysts' commitment to degree-granting providers of post-secondary education, I asked my questionnaire respondents two allocation questions. With one question I tried to figure out how they rated the prospects of publicly traded degree-granting providers of post-secondary education relative to other areas such as K-12 and education products. With the other question I tried to understand which publicly traded degree-granting providers of post-secondary education are still considered a good bet, and which not.

How analysts rated the prospects of publicly traded degree-granting providers of post-secondary education relative to other education areas. I asked the analysts to assume that composite stocks exist for four commonly distinguished categories, pre-kindergarten/child-care, K-12, degree-granting for-profit provider of post-secondary education, and education produhcts. On average our analyst respondents would invest exactly 50 % in degree-granting for-profit providers of post-secondary education, 33 % in K-12, with education products (11 %) and pre-K/child-care sharing the remainder. This allocation, interestingly, contradicts the actual flows of venture capital.[21]

[21] KnowledgeQuest's education venture capital index suggests that for the past three years post-secondary education companies have attracted insignificant amounts (less than 6 %, for a total of less than $ 40 million), while companies developing education products attracted close to 50 % of the venture capital (KnowledgeQuest 1999, p. 10). These numbers seem to reflect the fact that the viability of publicly-traded post-secondary education companies has been sufficiently demonstrated while the prospects of many technology-related ventures are less clear.

Which companies are still considered a good bet, and which not. The responses once again reflect three clearly separable sets. APOL, DV, and EDMC each garnered around 20 %, CECO, ESI, and STRA each garnered around 10 % with the other six candidates being distinctive also-rans (QEDC = 4 %, EDUT = 3%, COCO = 2 %, CLCX = 1 %, WIX = 1 %, and ARGY = 0 %).

VI. Conclusion

Market analysts' interpretation of the universe of publicly traded degree-granting providers of post-secondary education are reasonably congruent with both facts and modern economic theories. If one were to follow the recommendations of the analysts in our sample, then investing into these these companies would still be a good idea, especially since there price-earnings ratio have reverted to more "normal" levels in light of numerous problems some of these companies have encountered over the past couple of years. Analysts' advice, however, weighs the two major (and longest) players in the industry and EDMC (for reasons that seem to have to do with Knutson's sterling reputation) heavily and seems to discount the potential of more recent entries such as the Argosy Education Group. Time will tell.

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VII. Appendix: Questionnaire and cover letter plus raw data and means

[This is the complete questionnaire, as it was sent out, plus raw data, means, and comments. Additions to the questionnaire are in italics.]

September 1999

The following questionnaire addresses **an important part of the post-secondary for-profit education industry** -- the universe of **degree-granting and publicly traded companies** (i.e., APOL, ARGY, CECO, CLCX, COCO, DV, EDMC, EDUT, ESI, QEDC, STRA, and WIX.)

Many of these companies have done remarkably well with their IPO and thereafter. For example, adjusted for stock splits, the IPO price of APOL in December 1994 was $1.63. Presently, even though most of these companies are way off what their high was in Fall 1998, Multex.com's average consensus estimates indicates that 9 of the 12 are still rated a "buy" and none a "sell". This indicates that **as a group the set of publicly traded providers of degree-granting post-secondary education defined above is still considered a promising investment for the foreseeable future**.

A number of reasons are being given for this. Drawing heavily on research reports and interviews with market analysts between mid-1997 and mid-1999, **we have compiled a list of these reasons**. With this present questionnaire we are trying to quantify the importance of the **factors** thus identified as **being responsible for making post-secondary education a promising investment.**

In part I, we ask you to rate each reason on a 5 - grade scale that runs from 1 to 5, 1 being "unimportant" and 5 being "among the 4 or 5 most important factors", with 2 = "less important", 3 = "important", and 4 = "more important".

In part II, we ask that you provide us with two allocation recommendations.

This questionnaire has been sent to market analysts who we believe follow the education industry. If our information is erroneous in your case, we ask that you let us know. (You may keep the attached token of our appreciation.) The number of analysts that follow the education industry is rather small. Therefore, it is important we receive as high a response rate as possible. We appreciate your participation and **will make sure you will receive a copy of the paper we are currently working on,** as soon as possible. (A first draft should be available in October.) Please note the attached self-addressed envelope. **It will be very helpful if you return the questionnaire by ... .** Your answers will be treated confidentially. We appreciate you taking the time to fill out this questionnaire. **This research is being funded by the Alfred P. Sloan Foundation through a grant to [].**
When rating the reasons listed below, please use a 5-year perspective.
If you believe a reason does not apply, rate it as "unimportant".

Part Ia: Why one may want to invest in publicly-traded post-secondary education companies.
[All correspondents were asked to rate each argument on the following scale:
unimportant 1 2 3 4 5 most important]

[First set of arguments: The economics of (post-secondary) education.]

The shift to a knowledge-based and technology-driven economy generates significant income premia for those having the pertinent skills.

<"income premium"> *<Raw data: 3,3,4,4,4,5,5,5; mean: 4.1>****

The shift to a knowledge-based and technology-driven economy drives the increased demand for career-oriented education on the part of adults.

<"career-oriented continued education"> *<Raw data: 3,4,4,4,4,5,5,5; mean: 4.3> ****

The shift to a knowledge-based and technology-driven economy drives the increased demand for career-oriented education on the part of students who are high school students.

<"career-oriented education"> *<Raw data: 3,3,4,4,4,4,5,5; mean: 4.0>* ***

An increasing need exists for education on the part of students who are high school students.

<"more education"> *<Raw data: 2,2,3,3,3,4,4,4; mean: 3.1>***

An increased need exists for IT-related skills internationally.

<"international demand"> *<Raw data: 2,2,3,3,4,4,4,5; mean: 3.4>***

Revenues (and expenses) and therefore earnings are very predictable ("earnings visibility").

<"earnings visibility"> *<Raw data: 3,3,4,4,4,4,4,5; mean: 3.9>****

Substantial government funding is, and will be, a steady source of significant revenue.

<"government funding"> *<Raw data: 2,2,3,3,3,4,4,4; mean: 3.1>***

The post-secondary education industry is recession-proof, if not counter-cyclical.

<"a/countercyclicality"> *<Raw data: 3,3,3,4,4,4,5,5; mean: 3.9>****

[Second set of arguments: Why one might want to invest in publicly-traded post-secondary education companies.]

Revenue and earnings growth is high and likely to remain high for the foreseeable future.

<"high growth"> *<Raw data: 3,3,4,4,5,5,5,5; mean: 4.3>****

The majority of the companies listed in the first paragraph of the introductory remarks produce high returns on invested capital and are likely to do so for the foreseeable future.

<"high returns"> *<Raw data: 2,3,3,4,4,4,5,5; mean: 3.8>****

For-profits focus on their customers' satisfaction instead of other priorities.

<"focus"> *<Raw data: 2,2,3,3,4,4,4,5; mean: 3.4>***

For-profits offer their courses in a flexible manner (e.g., at convenient times and locations.)

<"flexibility"> *<Raw data: 2,3,3,3,4,4,4,4; mean: 3.4>***

For-profits pay particular attention to retention, graduation, placement, and referral rates.

<"attention"> *<Raw data: 2,2,3,4,4,4,4,5; mean: 3.5>***

Publicly traded education companies operate under a "pricing umbrella" spanned by inefficiently run public and private non-profits.

<"pricing umbrella"> *<Raw data: 2,2,3,3,4,4,4,4; mean: 3.3>***

The typical for-profit business model produces significant economies of scale in marketing, regulatory compliance, and other functions that can be centralized.

<"economies"> *<Raw data: 3,3,3,3,3,3,4,4; mean: 3.3>***

Publicly traded education companies who manage to navigate the regulatory environment successfully, can rely on regulations as effective barriers to entry.

<"barriers to entry"> *<Raw data: 2,3,3,3,4,4,5,5; mean: 3.6>***

Working adults represent the primary market for distance education programs.

<"primary market"> *<Raw data: 1,2,2,2,3,4,4,4; mean: 2.8>***

Distance education allows publicly traded education companies to make end-runs around state education boards and accrediting agencies.

<"end-runs"> *<Raw data: 1,1,1,2,2,2,3,3; mean: 1.9>**

Competition through new entrants is likely to be higher in the training segment of the industry.

<"competition"> *<Raw data: 2,3,3,3,3,3,3,5; mean: 3.1>***

A limited number of investable companies exist.

<"limited number"> *<Raw data: 1,2,3,3,3,4,4,4; mean: 3.0>***

Part Ib: Why one may not want to invest in these firms.

[Third set of arguments: Why one might not want to invest in publicly-traded post-secondary education companies.]

Direct and indirect subsidies to private and public non-profits put for-profits at a competitive disadvantage.

<"subsidies"> *<Raw data: 1,1,2,2,2,2,3,4; mean: 2.1>**

Enforcement of regulations is not as strict for non-profits, putting for-profits at a competitive disadvantage.

<"stricter enforcement"> *<Raw data: 1,1,2,2,2,2,3,3; mean: 2.0>**

State education boards and accrediting agencies are typically populated by non-profit school officials and faculty who take a skeptical view of for-profit educational companies.

<"skeptical view"> *<Raw data: 2,2,2,3,3,3,4,4; mean: 2.9>***

The short operating histories of many degree-granting and publicly traded post-secondary education providers makes the quality of their management difficult to assess.

<"short operating histories"> *<Raw data: 1,2,2,3,3,3,4,4; mean: 2.8>***

Many for-profits have family or insider management, as well as dominant control by insiders.

<"insider management and control"> *<Raw data: 2,2,2,2,2,3,3,4; mean: 2.5>**

Most currently practiced business models involve the extensive use of contracts. Thus there is significant contractual risk.

<"contractual risk"> *<Raw data: 1,1,2,2,2,2,3,4; mean: 2.1>**

Is there any reason you feel should be listed but isn't?

Analyst 1: floating market caps are too small/these stakes don't trade/the multiples (P/E and others) are too high -> means the stakes are still expensive relative to expected growth rates
Analyst 2: -
Analyst 3:
Analyst 4: -
Analyst 5: Barrier to entry created by accreditation and degree granting authority will diminish as corporate "universities" blur line between higher education and training.
Analyst 6: -
Analyst 7: Legal issues concerning students and quality of education
Analyst 8: -

Part II: If you had $ 100, 000 to invest ...

We would appreciate it if you would respond to the following two questions.
As mentioned above, your answers will remain confidential.

If you had $100,000 to invest, how would you allocate it among the degree-granting and publicly traded post-secondary education companies listed on the first page of this questionnaire?
(Please be as specific as possible. Tell us "I would allocate 1/12 of the total to each stock", or "I would invest in a weighted basket", or "I would put 50 % in stock X and 50 % in stock Y.")

If you had $100,000 to invest, how would you allocate it among stocks across the education industry.
(Please assume there are composite stocks for the following categories: pre-kindergarten/child care, K - 12, post-secondary as defined by the companies enumerated in the first paragraph of the introductory remarks, education products. Again, please be as specific as possible.)

Thank for your having taken the time!

We will send a copy of our report to everyone who has filled out the questionnaire.

---------- [your name]