

How a group of business students sold Enron a year before the collapse

By Gregory DL Morris

Wall Street lore says that no one saw the collapse of Enron coming. Chairman Kenneth Lay, CFO Andrew Fastow, COO Jeffrey Skilling and their band of brigands had done such a good job of fooling accountants, auditors, investors and regulators that the implosion was a shock to all. Like much conventional wisdom on Wall Street, this is not entirely true.

In May 1998 a team of students at Cornell University's Johnson Graduate School of Management (JGSM) in Ithaca, NY, selected Enron as the subject of their term project for Professor Charles M. C. Lee's course in finan-

cial statement analysis. At the time, ENE was trading around \$40/share and was widely touted by analysts as being the company best placed to take advantage of accelerating deregulation in energy markets.

To their own surprise, the team returned a "sell" recommendation based on the strict application of the fundamental tools Professor Lee had taught them. Although the team did note that the eight-variable Beneish model indicated possible earnings manipulation, their sell recommendation was based primarily on an intrinsic value of about \$35/share versus the then-current price of \$48/share in a 52-week range of \$35 to \$51.50/share.

Later that year JGSM started the Cayuga Fund, a live-money investment opened with \$650,000. The sell call on ENE had proved prescient, and the fund took a modest position in ENE in December 1998 at around \$27/share. A separate purchase in October 1999 at \$40/share gave the

fund a holding of 720 shares (including splits) at an average purchase price of \$29.40.

The very next year the sell call was taken up again, this time in greater urgency. A role in managing the Cayuga Fund is part of the required curriculum for second-year students. Two of them, Feidhlim Boyle and Tyger Park, were assigned the energy, mining and manufacturing sectors, including Enron. As Boyle and Park settled back into the class routine that summer of 2000, nothing was hotter than ENE, which was trading higher than \$90/share.

Boyle and Park were in Professor Lee's analysis course two years later, and were familiar with the 1998 evaluation. Again the recommendation was sell on ENE, but this time it involved real money. Boyle and Park stood in front of their class and made a case to sell one of the highest fliers on Wall Street.

The class accepted their argument, as did the faculty and staff supervisors.

The Cayuga Fund sold its entire position in ENE at \$67.38 on December 1, 2000, booking a return of 129%. To be sure, neither the 1998 team nor Boyle and Park saw at the time the enormity of the Enron fabrication. But their recommendations were hardly a lucky call. They didn't believe the hype, but they did do the math.

Exactly one year and one day later, December 2, 2001, Enron filed for bankruptcy.

Theory In Practice

Joe Thomas became dean of the JGSM in 2007, but has served on the faculty for more than 30 years. While exceedingly proud of the fundamental analysis done by the students, he is quick to note that there was no sense of clairvoyance at the time. "It was mostly a non-event," Thomas recalls. "There was some feeling that Enron was too good to be true, but no one was prescient enough to foresee what

actually happened. Our students simply did careful analysis that showed that what was going on with ENE was not sustainable. No one knew the level of fraud."

Doubling its money on Enron stock is certainly a point of pride, but it is just one of many good picks made at JGSM and at several of the other top B-schools in the country. Thomas says he and his fellow deans have explored the idea of monetizing the analysis that students, faculty and alumni do. "We've discussed it, and we've realized that it would take resources that we don't have."

Occasional interest has also come toward B-schools from Wall Street firms. Thomas says he cannot comment on any such feelers, but it is has approached JGSM, and sources in the financial sector and in academia suggest there have been several such contacts at other schools as well.

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The attraction is clear: pure, fundamental analysis that is essentially free from bias. But the devil is the details, most importantly how to insulate the schools from liability and maintain that objectivity, and secondly how to make reporting regular and consistent. "We can do the analysis," says Thomas, "and we have discussed selling the output. But it would have to be at arm's length. There would have to be legal protection." He adds that there is nothing along those lines underway at present.

known that at least one financial firm

Right: Cornell Business School student Feidhlim Boyle was part of the team that analyzed Enron and advised the class to sell the company's stock in 2000. Opposite and below: Photographs of Cornell's Parker Center.





Digital ticker in the Parker Center at Cornell University.

For the time being the only real money at stake is in the Cayuga Fund. Thomas stresses that the Cayuga Fund "is not just play money. We do seriously want to make money, and we are very proud of the return, especially as this is an educational fund and we don't use any leverage."

As of May 2009, the fund had assets under management of \$11.6 million, according to Lakshmi Bhojraj (BA '95, MBA '01), director of the Parker Center for Investment Research at JGSM. She is also a classmate of Boyle and Park. The center was established in 1998 concurrently with the creation of the Cayuga Fund and the school's move from a Modernist box on the edge of campus to Sage College, a lovingly restored Queen Anne complex in the very center of the university.

Bhojraj says that Parker Center is a state-of-the-art facility, comparable in capability, if not size to any trading floor on Wall Street. "We have cool data walls with live feeds. The software and analytical tools alone would cost \$1.8 million just for fees at a commercial operation. Some is

donated, most comes at a discount, and in return we help the vendors with their beta testing," she adds.

According to a recent survey by Brian Bruce, director of the Alternative Asset Management Center of the Cox School of Business at Southern Methodist University in Dallas, there are at least 275 schools that have student-managed live-money investments. Total assets under management were about \$340 million, but that was pre-recession. "It may be as low as \$250 million now," says Bruce. "That is why we are renewing our survey and hope to have results later this year."

Most B-school funds are quite small, with average assets under management of \$1.4 million and the median holding of just \$400,000. Ohio State and the University of Minnesota had more than \$20 million in the last survey, the latter split evenly between a growth and an income fund. Cornell and the University of Texas are the only other schools with more than \$10 million.

Bhojraj notes that Cornell is one of the few institutions to combine a fullscale trading floor and a live-money fund at a research university. "The University of Michigan is probably most comparable to us, but that is because it was modeled after us," she says. "The University of Texas at Austin also has a trading room and a fund."

She further differentiates among the educational funds. "I believe that many of the larger funds hold a lot of Treasuries and are managed more passively. We are among the largest actively managed." Bhojraj also notes that many educational funds handle mostly endowment money. "We have real investors. The endowment is one of them, but it is not a significant investor."

The Cayuga Fund uses both a quantitative and a fundamental approach, and a proprietary model to screen stocks. Screened stocks are passed to student sector managers for fundamental analysis. The faculty director and Parker Center director supervise and manage the risk of the portfolio all year. This includes taking positions as hedges and supplementing student recommendations with quant picks. They actively rebalance and manage

the portfolio when the students are not in session. The fund also has its own board of directors, while the dean and the faculty director are the designated managers (equivalent to general partners) of the fund.

JGSM is also host to the annual intercollegiate MBA Stock Pitch competition held the first week of November every year since 2003. Cornell placed highly in the first few years, but has not fared as well recently. "The winners are based on how convincing their pitches are, not on how their picks perform," says Bhojraj. "Our picks have done well on a performance basis, so starting this year we are going to track performance, and also back-test our picks for the last couple of years."

Bruce adds that intercollegiate stock picking and pitching competitions are growing. He notes the Texas Investment Portfolio Symposium is held every March, with the winners going on to the CFA Institute regional and global challenges. Doug Vieland, executive director of the Association of Collegiate Business Schools and Programs says his organization is looking into several different ways to raise the profile of the research conducted by students at member institutions. Those could include tracking and communicating the number and performance of student-managed funds as well as the various competitions.

Parsing the Red Sea

All that was years into the future when Partho Ghosht, Juan Ocampo, Lori Harris, Erik Simpson, Jay Krueger and Jay Vaidhyananthan put Enron's numbers to the test in Professor Lee's class. "For the capstone project of the class, each team selected a company and applied the tools," says Lee, now a visiting professor at the Graduate School of Business at Stanford University.

"Partho had an internship with an energy company, and I think was talking to Enron about an opportunity," says Krueger, now chief strategist for PMSI, a medical services and benefits management company for workers compensation, based in Tampa. "He had a passion for the energy business, and he was a second-year student, so seniority ruled in our company selection."

Krueger recalls that "Enron's core energy business was easily comparable, but we really struggled to find some way to compare the energy trading business. The company's business model was changing, and there was a great deal of complexity. There was a lack of clarity in the capital and trading unit."

The professor recalls that their findings were, "no biggie. They ran through their paces, made their presentation, got a good grade, and we posted the paper online. They did a nice job, but a lot of good work is done by students." Lee stresses that students don't have any incentive issues the way many professional analysts and asset managers might.

The following year Boyle and Park picked up the trail. Boyle's father Phelim is a professor of finance at Wilfrid Laurier University in Waterloo, ON, and clearly the apple does not fall far from the tree. The younger Boyle is today a principal at Tirgarvil Capital, a private asset management firm in Waterloo. Park is an asset manager with the large hedge fund Millennium Partners.

Boyle is quick to credit Lee with providing the tools and critical thinking skills to him and his classmates—although not without some stress: "those first few months were like drinking from a fire hose," says Boyle. By October of 2000 the students turned to run their analysis. "We saw weakening for ENE on the quant scores. As in the earlier analysis, the Beneish model showed likely earnings manipulation." Boyle recalls, "Also, we could not understand the footnotes in the annual report. We took them to Professor Lee, and he found them obscure as well."

Boyle remembered a comment from Benjamin Graham's disciple Warren

Buffet to the effect that if you can't understand the footnotes it is because management does not want you to. That led Boyle and Park to the Parker Center to take a closer look at the raw data feeds and histories. "I remember pulling up the insider trading chart for ENE and it was a sea of red. It was just crazy, unreal. I remember it very vividly. There were consistent multiple insider sales in large amounts. It was like an epiphany, it was so striking."

Those harsh red lights overshadowed the many positives for the company, Boyle says. "This was a highly admired company. Their managers were so bright, and they were in everything from natural gas to broadband to yak milk. Their valuation was 50 times earnings. But they had lots of debt, and they were not paying taxes because they had no cash flow. They had derivative contracts going out 25 or 30 years on interest rates. There were a lot of ways that things could go wrong. We were not convinced there was fraud, but it was clear the finances were very confused, and we were just not comfortable holding the stock. We pitched to the class selling 100% of the holding."

How did teams of B-school students see plainly what professional analysts, asset managers, and regulators missed? They did the math. "There are three lessons," says Krueger. "First is don't invest in anything you don't understand. Second, leverage can get you sideways in a hurry. And third would be diversify. All those people who lost everything when the stock became worthless—it's just a very sad story."

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