

Strength in numbers

Kellogg students count on their analytical finance skills to solve real-world business challenges

BY REBECCA LINDELL

By the time Matt Demaray had graduated from the Kellogg School in 2004, he had become well versed in the theories of analytic finance.

But Demaray had gained something else that went beyond the résumé of the typical finance major: an attention-getting paper on risk measurement for hedge-fund portfolios that still draws industry interest.

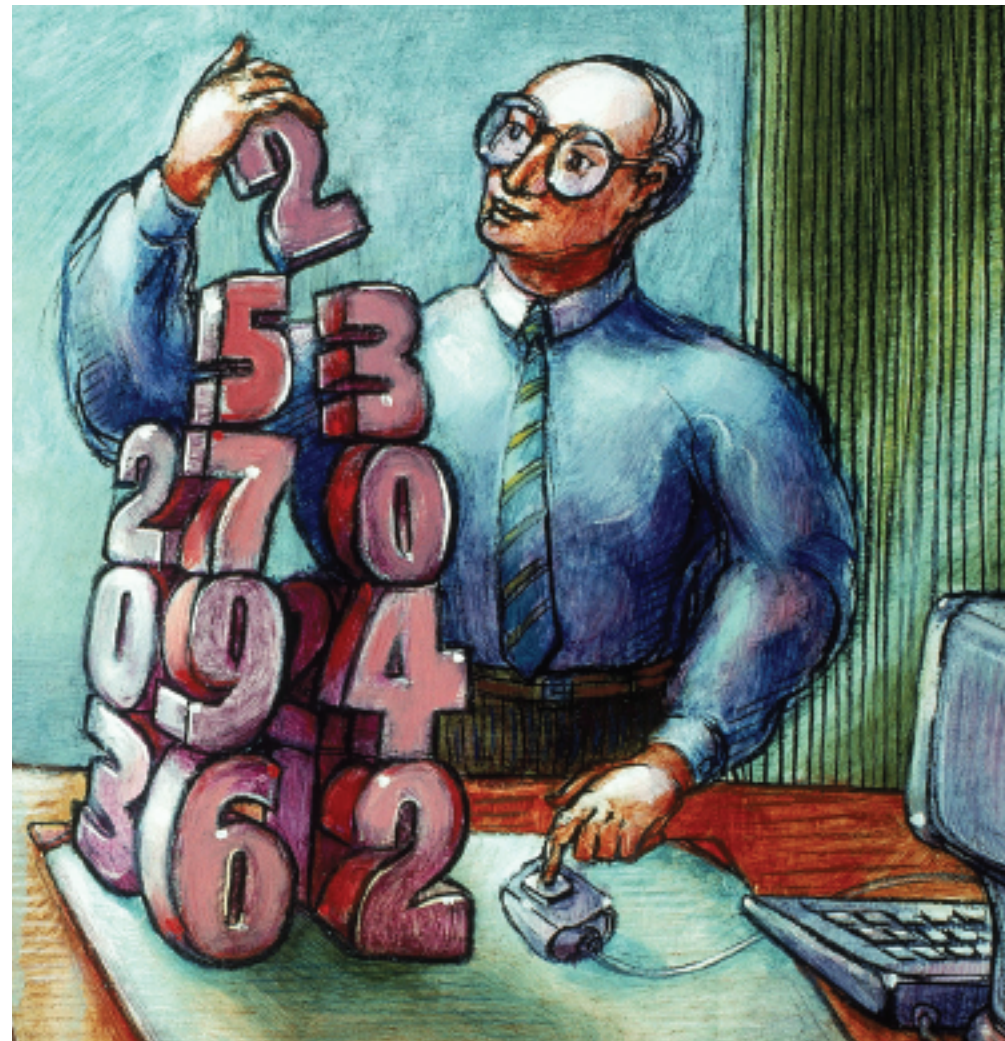
For Demaray, the project helped bridge the abstract learnings in his finance classes and the questions he faced as a senior analyst at Huizenga Capital Management.

"It's beneficial to the students and to the school when Kellogg sponsors projects like this," Demaray says. "If you can't apply theory in a real-world setting, it doesn't do you a lot of good."

Demaray's work was a product of the Kellogg *Practicum in Analytical Finance*. An experimental course, the class was designed to give top-level finance students the chance to apply their skills to a practical finance problem before graduation.

Through the course, students evaluated new lines of business, assessed portfolio allocations and explored risk-management strategies. More than a dozen banking, investment management and consulting firms offered projects to the class.

"The goal was to help the companies and give the students something to think about. In the best projects,



both things happened," says Robert McDonald, the Erwin Plein Nemmers Distinguished Professor of Finance and the course's co-founder.

"It worked out very well," adds Ravi Jagannathan, class co-founder and the Chicago Mercantile Exchange Distinguished Professor of Finance. "The idea was that the project should pull together what students had learned and help them apply it. It helped them integrate everything."

HEDGE FUNDS: A BETTER RISK METRIC

Ideas for projects surfaced both through student research and faculty interaction with practitioners. The challenge was then to distill these ideas into a project that a student team could tackle in 10 weeks. "The framing of the problem was most important," Jagannathan says.

The projects were geared toward analytic finance majors who had already taken at least a half-dozen

finance courses and were eager to put their skills to work. McDonald says he was "astonished" by what many of them accomplished.

"These were very high-caliber finance students," says McDonald. "It's not just their IQs. They have an intellectual seriousness coupled with talent. They felt they'd gained a powerful set of tools, and they really wanted the chance to bring them to bear on a project."

Demaray, a graduate of the Kellogg part-time Managers' Program (TMP), used his project to explore an issue he had pondered during his day job at Huizenga Capital Management. Demaray sought a better way to measure and manage the risks of investing

try, and there's no easy answer," he acknowledges.

More than a year after completing the project, Demaray says he continues to receive calls from other hedge-fund managers interested in his findings.

"It was a fun experience, because it was a project I would have done anyway and it was nice to bring in some academic resources," Demaray says. "It brought additional energy to the process and helped motivate me. We came to a much better place than I would have had I been on my own."

EFFICIENT MARKETS PUT TO THE TEST

Eric Mason '04 also was eager to gain hands-on experience in analytical finance before joining Lehman Broth-

"We're taught that in an efficient market, an analyst recommendation shouldn't have an effect in the aggregate. [Our research] was showing that it did have an effect. We weren't supposed to get the results we did."

ers' rotational program this fall. Mason was part of a team that sought to determine what impact a change in stock analysts' ratings would have on the price of a stock.

Project sponsor Mellon Capital Management handed 15 years of data on the Dow 30 to Mason and teammates Andy Cantwell '04, Jon Goldberg '04 and Ryan Heslop '04. The students reviewed the price of the stocks, the change in their ratings and the price the subsequent month.

"Our project was basically to see if analysts could have an effect on the price of a stock," Mason says. "Most of the time their impact was negligible. But there was one area where they had a major effect. If a stock had gone down, and the analysts upgraded it during that month, that stock tended to perform very well."

The findings were statistically significant — a result which surprised Mason and his teammates. "We're taught that in an efficient market, an analyst recommendation shouldn't have an effect in the aggregate. This was showing that it did have an effect. We weren't supposed to get the results we did."

The findings were statistically significant — a result which surprised Mason and his teammates. "We're taught that in an efficient market, an analyst recommendation shouldn't have an effect in the aggregate. This was showing that it did have an effect. We weren't supposed to get the results we did."

Further research with a larger sample is needed to confirm the findings, Demaray says. "It's an up-and-coming area in the hedge-fund indus-

To explain their findings, the students researched some theories in behavioral finance, an area the group found fascinating, Mason says. It all added up to a uniquely rewarding experience.

"It was interesting to do something of this magnitude," Mason says. "I'd never really dealt with that much data before. And it did give us more understanding of the issues from a practical perspective."

'SOMETHING TANGIBLE TO SHARE'

Barclays Global Investors has commissioned several projects to Kellogg students, including a study on the drivers of stock and bond correlations.

Dimitri Delis and Parag Dixit, both current TMP students, were among those researching that issue for BGI, along with teammate Steve Cotter '04. "It was better than just taking a course," says Delis. "You're doing original research."

The trio's assignment was hardly an unexplored topic. Many researchers have tried to explain the correlation between stock and bond returns, without reaching a consensus.

The Kellogg students proposed that three factors drive the correlation: the 30-year mortgage rate, the 10-year bond minus the three-month T-bill spread and the historic S&P volatility. These factors can be interpreted as proxies for the risk-free rate, the growth of the economy and the uncertainty in the market, respectively.

"Portfolio allocation could be improved based on a manager's view of these factors," the students concluded.

The students' findings have been distributed to BCI managers and have become "part of the mix of everything we look at" while making decisions, says Ken Kroner, managing director of the global markets group at Barclays Global Investors. He adds that he welcomes the chance to partner with Kellogg students on such issues.

"We get some new, creative insights on problems we've often been working on for some time," Kroner says. "The diversity of views is very beneficial for us, and they attack the problems in a really fresh way. This is a great way to bring students out of the ivory tower and research issues of relevance to the real world."