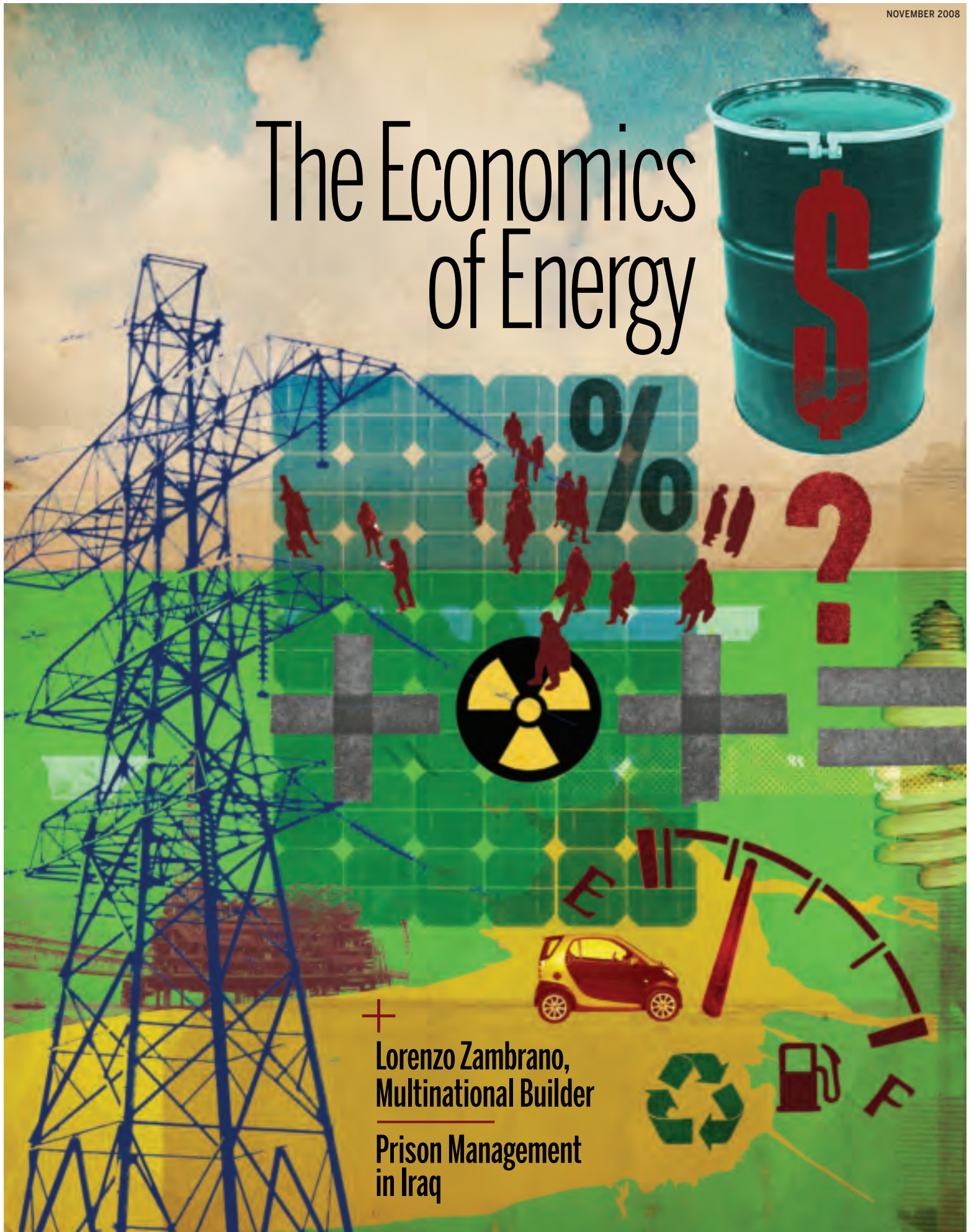


The Economics of Energy



+ Lorenzo Zambrano,
Multinational Builder

Prison Management
in Iraq

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—By DIANE LINDQUIST



Alejandro Castillo and sons Alejandro and Christopher, outside of their future home near Ensenada, Mexico. A program funded by Cement manufacturer Cemex provided the materials and extended affordable credit.

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Douglas Stone, Sloan '92, a former high-tech entrepreneur, applies his experience to running military prisons.

—By MARGARET STEEN

ON THE COVER: Illustration by Michelle Thompson/agoodson.com.

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What's Your Dream for the GSB?

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About This Issue

Dynamic Leadership

STANFORD BUSINESS

A QUARTERLY PUBLICATION
FOR ALUMNI/AE OF THE STANFORD
UNIVERSITY GRADUATE SCHOOL
OF BUSINESS

ONLINE VERSION

stanfordbusiness.stanford.edu

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Prepress Assembly, San Francisco
Allen Press, Lawrence, Kan.

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STANFORD BUSINESS magazine is published quarterly (February, May, August, November) by the Stanford University Graduate School of Business (ISSN 1094-5423). © 2008 by the Board of Trustees of Leland Stanford Junior University. All rights reserved. Printed in the United States. Periodicals postage paid at Palo Alto, Calif., and at additional mailing addresses.

CONTACTS *Stanford Business* magazine, Graduate School of Business, Stanford University, Stanford, CA 94305-5015; EMAIL: gsb_newsline@gsb.stanford.edu

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www.gsb.stanford.edu/contact.html

SUBSCRIPTIONS For nonalumni—\$10/year in the U.S. and U.S. possessions and Canada; elsewhere \$12/year. For faster delivery outside the U.S., add \$14 per year to subscription.

POSTMASTER Send address changes to editorial office: *Stanford Business*, News and Publications, Graduate School of Business, Stanford University, Stanford, CA 94305-5015
PHONE: 650.723.3157



STANFORD GRADUATE SCHOOL OF BUSINESS
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AS THIS MAGAZINE was about to go to our final proofreader, Dean **Bob Joss** announced that he intends to step down as School dean at the end of this academic year, which is next summer. He will be following a long tradition among Stanford Business School deans to take the reins for a decade and then “re-pot,” as former Dean **Ernie Arbuckle** expressed it. That generally means staying active in the School, and Dean Joss will continue to teach and be involved in the Stanford Challenge campaign that aims to keep Stanford in the lead for this century. During his 9-year tenure as dean so far, the School has developed a new MBA curriculum and launched construction of a new campus aimed at supporting a program that will serve MBA, PHD, and Executive Education students as well as some graduates and undergraduates from the rest of Stanford. In his column on page 5, he summarizes only a small but important fraction of the academic transitions he has overseen—the steps to globalizing the curriculum and research.

On page 11, you can read a little about the “virtual” groundbreaking of the new campus held on Alumni Weekend. It will include eight buildings around three quadrangles, a campus which is expected to achieve the highest level LEED Platinum certification for environmental sustainability from the U.S. Green Building Council. If you want more detail, you can see architectural drawings or watch the construction proceed on webcams of the construction site by going to www.gsb.stanford.edu/knightcenter.

There is much more we could highlight from the dean's tenure, and we will most likely do that in future issues, but in the meantime, I draw your attention to other exciting leaders covered in this issue, including tours into the unconventional minds of **Lorenzo Zambrano**, MBA '68, and **Douglas Stone**, Sloan '92.

Zambrano turned a modest family business in Mexico into a successful global corporation. He told our writer Diane Lindquist, who covers Mexican business at Mexbiz.com, that he was helped by his time in Business School classrooms, where he learned that “you had to innovate to grow.”

Marine Major Gen. Stone, who was tapped last year by U.S. Gen. David Petraeus to supervise post–Abu Ghraib detention facilities in Iraq, tells us about the similarities in top layers of military and high-tech leadership. “Counterinsurgency demands that you engage with citizens,” he told our writer Margaret Steen shortly after returning from Iraq. Similarly, high-tech leadership demands engaging with engineers in the company and customers, he said, so that “by the time [an idea] got produced, it was not my idea.”

Leadership comes in many flavors among our alumni, students, and faculty. On page 14, we have tried to capture some of their ideas for addressing the impact of a greater worldwide demand for energy. The winds of change are all around us this autumn, which is why we need to keep learning how to lead organizations. Dean Joss has brought that lesson home to many in his time at the School's helm.

EDITOR



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alumni career services
AT STANFORD GRADUATE SCHOOL OF BUSINESS

On the Road to a Globalized Curriculum

IN SOME WAY, most of us have probably had a “road to Damascus” experience: a realization that prompted fundamental change. In the biblical story, Saul was on his way to Damascus to persecute Christians when he said he saw a flash of light and heard the voice of God. He converted and eventually became St. Paul.

When it comes to global programming, we’ve been on our own road to seminal change at the Business School. There hasn’t been a single revelatory moment, but a variety of efforts and our new curriculum have dramatically increased global content and activities.

First, the faculty has become more diverse. For a time, economist **John Roberts**, a Canadian, was a self-described voice in the wilderness for teaching global content. When he arrived at the Business School in 1980, there were a handful of non-U.S. professors. Now 40 percent of our full-time faculty were born abroad or took their first degree outside the United States. Thanks to Roberts’ persistence, urging from our Advisory Council members experiencing the complexity of global management firsthand, and growing faculty interest, we took important steps.

In 2002, we set up the Global Center for Business and the Economy, which created a critical mass of activity. From 2006 to mid-2008 the number of global cases increased 100 percent with 46 published last year, including 6 new China cases. Another 23 global cases are in the pipeline.

Then came the MBA curriculum, launched in 2007. We integrated global content through cases and the required course *The Global Context of Business*. Putting it in the first quarter says right up front to students: This is one of the things we think is most important. Students told us our first run at the global course needed work, so Professor **Bill Barnett** led the retooling to help students understand the opportunities and challenges involved in global business. The course also includes more operations content and new cases like Hyundai, the globalization of NetApp, and Taobao vs. eBay China.

Increasing numbers of study trips have had a more personal “road to Damascus” effect on faculty and students. Professor **Garth Saloner** has said that his passion for global issues was reawakened after he led a student trip to India in 2005. A native of South Africa, he was so energized by the experience that he championed the global experience requirement in the new curriculum. It drove the number of student study or service learning trips from 11 in 2006 to 22 this year. Students research and travel to a country they have not lived in with a diverse group of classmates—about 35 percent of our MBAs hold non-U.S.



We are building the relationships that are the basis for new global cases and courses.

passports. Students from Brazil and Bulgaria shared their different perceptions of a common experience in China, for example.

The exploding number of faculty trip opportunities is fueling interest in and providing new avenues to sources of global datasets, a critical ingredient for quality research. As Barnett has said, “You end up with relationships that become the basis of

case development, curriculum development, data acquisition, and an understanding of the business context.” After leading two other trips to East Africa, Saloner returned with plans for a course on entrepreneurship in developing economies. And in the *Strategic Leadership* course, he replaced an old Bic Pen case with an Equity Bank case on microfinance in Kenya.

Interest is surging in study trips just for faculty. Signups for our second one, to India this December, were well ahead of enrollment for the 2007 China trip that led to cases on Lenovo and Baidu.

Research is always important. Roberts, with faculty from the University economics department and the Law School, received \$250,000 from Stanford’s Presidential Fund to examine why, on average, poor management persists in Indian companies compared to those in China. If India is going to grow, it needs competitive manufacturing. This sort of research can make a difference to real people in real economies. Going global may not be a singular event like St. Paul’s conversion, but I have faith that we are on the road to a globalized curriculum. ●

PHOTO BY ROBERT HOLMGREN

THE STANFORD CHALLENGE

Annual Giving Powers Innovation.

Annual giving campaign goal: \$85 million
Progress to date (as of 8/31/08): \$61.4 million

Every gift to the GSB counts toward The Stanford Challenge.
For more information, see www.gsb.stanford.edu/giving

Spreadsheet

* WHAT'S UP: NEWS ABOUT THE GSB AND ITS GRADUATES



She Spreads Seedlings by the Seashore

"I was completely in the dark about this kind of lifestyle," says **Deborah Guillory Emery**, MBA '90.

She is talking about life in Alert Bay on tiny Cormorant Island off the coast of Western Canada. There she and her husband, Roland Emery, run Bivouac West, which contracts with lumber companies to reforest and repair recently logged areas. The two live in a onetime houseboat, retrofitted for land, and share the neighborhood with another 1,200 to 1,500 people, "depending which census you believe," she says.

Deborah was working in Los Angeles and Roland was living in Canada when they met at a wellness spa in San Diego in 2001. Three years later she moved to British Columbia and became the chief administrative officer of his company.

At Bivouac, planting season begins in January. The crews start at sea level, then work inland and upward as the snow melts. After a six-week summer break they return to check the seedlings, remove brush, and, when the weather turns cool, burn undergrowth.

"Work areas are mostly remote and involve the use of boats, water taxis, barges, float and amphibian planes, helicopters, and airplanes to transport crews, cooks, mariners, and captains, as well as trees, trucks, fertilizers, and other equipment," says Guillory Emery, who handles the logistics.

But if her job requires a mountain of planning, the perks are incomparable. "Often, a helicopter picks us up at home and takes us to the work area, where we have the company of black bears and cougars, or wildlife like eagles, herons, and

Deborah Guillory Emery on northern Vancouver Island, B.C., with a crew reforesting recently logged areas with hemlock, balsam, and yellow cedar.

otters, with orca and other marine life nearby."

Guillory Emery always wanted to work in a socially responsible, environmentally supportive company, she says, but she never counted on the changes it would bring to her life, and adds, "If I'd known about it sooner I'd have signed up!"

Credit Crisis Lessons

As Congress and the public were reacting to the unraveling of securities and credit markets in late September, Stanford faculty in economics and finance gathered at the Business School to share their perspectives with students.

The origins of the current crisis read like the syllabus of

Professor **Jim Van Horne's** corporate finance course, said finance Professor **Peter DeMarzo**. "It begins with agency problems— incentive misalignment on the part of mortgage issuers who, as we know, didn't have incentive to worry about the quality of loans they were issuing. And then leverage on Wall Street amplifying that shock."

Credit default swaps and layers of complex derivative products written against mortgage loans exacerbated the problem, said finance Professor **Darrell Duffie**. "If you want to take a lot of risk it's really easy with derivatives, which is what a lot of financial institutions did."

"Where the daisy chain ends, nobody knows," added Van Horne, who counted 16 credit crises in U.S. history, all marked by speculative excesses followed by a peak in bankruptcy filings and sometimes a collapse in commodity prices. Macroeconomists debate whether the financial sector should be permitted to suffer through a cyclical business decline without government intervention, said economics Professor **Monika Piazzesi**. Most "work with models where the financial sector is just like any other sector," she said, but a "small group" that includes Federal Reserve Chairman Ben Bernanke thinks "the financial sector is special."

They believe "the financial sector is the valve through which liquidity to producers and consumers flows," Duffie said. "If you want to improve the life of Americans, according to this hypothesis, then we have to start by making this valve unclogged."

For the future, law Professor **Joseph Grundfest** said he is working on a new form of credit rating agency not funded by the institutions whose products are being rated. He likened the existing rating system to "people who

own the restaurants paying the restaurant reviewers to issue reviews. It's only a question of time before you get a bad meal."

Alumni can view an online video of the Sept. 25 panel discussion at www.gsb.stanford.edu/news/headlines/teach-in-Sept.html.

Vermont Comedian with Side of Egg Rolls

Vermont. Fresh air, fabulous foliage, awesome ice cream. What more do you need? Well, comedy clubs, for one.

"Vermont has literally no clubs that produce comedy," says stand-up comedian and Vermont legislator **Jason Lorber**, MBA '95, who moved to the Green Mountain State in 2002 and started producing his own shows wherever he could find an audience.

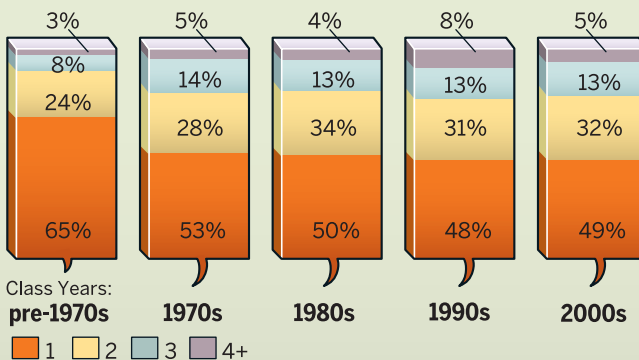
Lorber's most unlikely venue so far is the Chinese restaurant where he has produced an annual Christmas dinner show called Moo-Jew Comedy. His shtick? Since Jews don't celebrate Christmas, on Christmas Eve they go out for Chinese food. "Moo-Jew Comedy thus presents comedy in Jews' natural habitat," he says. Lorber also has performed on stage, film, television, and radio, where he hosted the 90-minute show *So ... Jew Live in Vermont?*, which he describes as "just like the *Tonight Show*. Only Jewish. And Vermonty."

Vermont state legislator Jason Lorber is a stand-up comic in his spare time.



Alumni Snippets

Number of Languages MBA Alums Speak



Alums who use non-native tongue in business:

- 8% of Bay Area alums
- 13% from the rest of the U.S.
- 66% of those outside U.S.

SOURCE: 2007-2008 MBA reunion class surveys

Can you guess...

what percentage of GSB alums have sued or been sued?



(Answer on page 9)

Lorber was running his own consulting firm in San Francisco and doing occasional stand-up when his partner was offered a college faculty position in Vermont. "Who knew?" he says. "I moved to Vermont and my life changed. I became this entertainer-politician. I'll be totally honest—when we first moved it was a little bit scary. I spent most of my life in California, having not even lived in weather before."

Lorber may never get used to weather, but he's definitely becoming Vermonty. In 2004 he ran for a seat in the state legislature and he is running for a third two-year term. As a representative, he has concerned himself with prison reform, the

minimum wage, election reform, and health care. Perhaps his biggest accomplishment is the passage this year of a bill he coauthored that provides alternatives to incarceration for non-violent offenders by investing in drug and alcohol treatment programs, transitional housing, and community-based solutions.

"It's just awesome to be able to pass meaningful legislation that changes people's lives," Lorber says. "Vermont is such a small state. If we can make significant change here, it can have a ripple effect across the country."

And he's not kidding.

Meet Jason the entertainer at jasonlorber.com. Vermont Representative Lorber is at friendsofjason.blogspot.com.



Eric Hemel met SPELL student Nguyen Thi Ngoc No on his third trip to Vietnam.

He Brings School to Rural Vietnam

Philanthropy in developing countries can mean more than just writing a check, says **Eric Hemel**, MBA '77, PHD '80.

In 2003 the financial analyst and his wife, Barbara Morgen, a corporate lawyer, took a walking trip that opened their eyes to the extreme poverty of rural Vietnam. Since then, the program they founded has helped almost 5,000 poor Vietnamese youngsters continue school beyond the second grade.

Following a year of due diligence, in which the couple

returned to Vietnam to meet with representatives of five charitable groups, they settled on the East Meets West Foundation of Oakland, Calif., as the umbrella organization for their program. Hemel joined the foundation's board, and in 2004 the couple launched EMW's Scholarship Program to Enhance Literacy and Learning, or SPELL, with 1,500 students. Each child receives tuition, fees, books, uniforms, stationery, and even a bicycle if he or she lives more than a mile and a half from school. Students also get tutoring and a promise of funding through the 12th grade.

The current cost of the program is about \$50 per child per year, and almost all of the funding comes from Hemel and Morgen plus four other families.

For the Record



First-year students **Pana Tegos**, **David Golde**, and **Abdullah Assal** sign up for social dinners as part of orientation in September.

MBA Class of 2010 Profile

GENERAL		UNDERGRADUATE MAJORS	
Total Applications	6,575	Humanities/Social Sciences	46%
New Students	370	Engineering/Math/ Natural Sciences	35%
Women	36%	Business	19%
International (includes permanent residents)	34%	TOP 5 INDUSTRIES	
U.S. Minority	24%	Investment Management ¹	30%
Advanced Degree Holders	15%	Consumer Products (manufacturing & services)	24%
YEARS OF WORK EXPERIENCE		Consulting	17%
Range	0-11	Nonprofit/Government	11%
Median	3.9	High-tech (manufacturing & services)	9%
SCHOOL/GEOGRAPHIC REPRESENTATION		¹ e.g., Investment Banking, Hedge Funds, Private Equity, Venture Capital.	
U.S. Institutions	77	SOURCE: MBA Admissions Office as of September 2008.	
Non-U.S. Institutions	71		
Countries (including the U.S.)	53		

Graduation Pomp Heard 'Round the World

Of all the Hallmark moments you don't want to miss, the graduation of a loved one is near the top of the list. Last June, nearly 1,000 relatives and friends, located in more than 200 places far from campus, witnessed the commencement of Stanford Business School's Class of 2008.

The entire ceremony, from "Pomp and Circumstance" through the granting of honors and degrees, was presented simultaneously on the web, and people who couldn't make the

trip because of health, age, money, or national security were able to cheer their favorites in real time.

"My family watched from Brazil as if they were at Frost Amphitheater. They even screamed my name when I walked on stage!" **Thiago Borges**, MBA '08, wrote in a thank-you note to the School.

"In Jacksonville, Fla., my mom donned her Stanford T-shirt, and my granddad stayed up the latest he had in years," wrote **Leah Hodge**, MBA '08. "There were at least six other close family friends watching in other locations, and they all called home when they

saw me cross the stage."

Classmate **Rong Zhang's** family watched from Beijing. "They were very excited to see me, my wife, and our two boys from 6,000 miles away," he wrote.

Puru Vashishtha, MBA '08, called the webcast no less than "a lifesaver." His family could not make it to the United States from India because of passport problems, but they still felt a part of this special event. And MBA classmate **Steffen Gnegel** came home graduation night to an email from Germany that exclaimed, simply, "We were there, live!"

Commencement 2008 can still be viewed at videogsb.stanford.edu.

Waiter, May We Have 12 Separate Checks?

As the holiday season approaches so, too, do the relatives: the uncle who claims your deceased Dad owed him money, the brother-in-law who gave you a stock tip and now wants a piece of the profit, the sister who sold Mom's engagement ring on eBay. How does a reasonable person sit down at the Thanksgiving table with people like these?

In their 2008 book, *Isn't It Their Turn to Pick Up the Check?*, *Money* magazine columnists **Leonard Schwarz**, MBA '78, and his wife, Jeanne Fleming, who earned a Stanford PHD in sociology, examine the uncomfortable financial issues that arise among family and friends.

As far as holiday giving goes, Schwarz and Fleming suggest answers for two opposing situations: when your brother gives your child a comic book even though you always give his kids nice stuff, and when your father-in-law, who lives on a far smaller income than yours, insists on presenting you with an outsized check.

Schwarz and Fleming say you should feel no qualms about toning down your gift giving to approximate your brother's. "Unless he's told you he doesn't want to exchange expensive gifts, your brother has no business reaping the benefits of your will-

ingness to do what he won't—spend money on other people."

But in the opposite situation, with you as the beneficiary of your overly generous father-in-law, consider what a gift means. "Gift giving is an expression of one's role in the family—in your father-in-law's case, as paterfamilias," Schwarz and Fleming write. "So relax. Accept your father-in-law's checks with the gratitude and warmth they deserve. Then treat yourself to something nice, and tell him how much you enjoyed it."

Business Skill Boosts Three Kiwi Scientists

In an attempt to expand New Zealand's pool of science entrepreneurs, a foundation financed by that country's government sent a recent PHD graduate and two doctoral students to the Business School's Summer Institute for Entrepreneurship.

Tony Cardno, **Benjamin Matthewson**, and **Daniel Crabtree**, were among 72 non-business graduate students who took part in the four-week program, focused on business fundamentals.

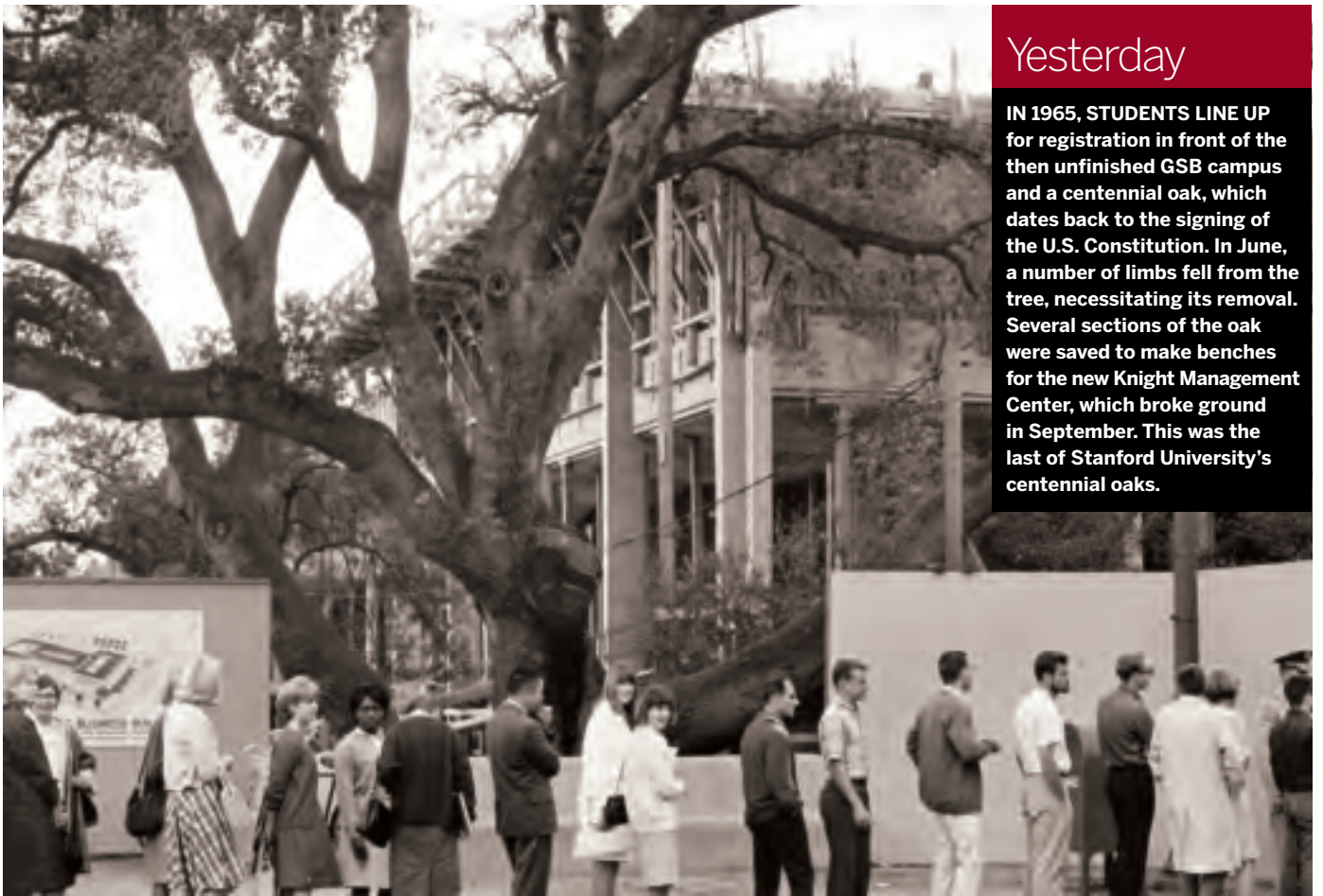
The three-year-old program draws mostly Stanford graduate students in engineering, medicine, or science, but students from other universities can also apply.

Cardno, who patented a low-cost assay test for HIV research,



New Zealand scientists at the GSB last summer are, left to right, **Benjamin Matthewson**, **Daniel Crabtree**, and **Tony Cardno**, who came for a four-week entrepreneurship course.

IN 1965, STUDENTS LINE UP for registration in front of the then unfinished GSB campus and a centennial oak, which dates back to the signing of the U.S. Constitution. In June, a number of limbs fell from the tree, necessitating its removal. Several sections of the oak were saved to make benches for the new Knight Management Center, which broke ground in September. This was the last of Stanford University's centennial oaks.



is exploring whether to license the product or bring it to the marketplace himself. The Stanford program “helps me talk with these commercial people about business plans and venture capital,” he said.

Crabtree and Matthewson are PHD students at Victoria University in Wellington. Matthewson, a chemistry student, is researching proteins that serve as “building machines” inside seashells. Crabtree, a computer science student, has created several small web-related companies. “Since I never had any formal background in business,” Crabtree said, “this seemed like a perfect opportunity to cover all of the bases in quite a short period of time.”

Goods Made in China, Why Not in India?

India’s phenomenal economic growth is missing the poor, says Nobel Prize-winning economist Amartya Sen. “When I look at my desk, I have a little handheld calculator made in China, I have paper clips made in China, I’ve got a stapler made in China, I’ve got a little clock on one side made in China—and these



Nobel winner Amartya Sen says India focuses too much on technology and not on manufacturing.

generate a lot of employment and income.”

Instead of having entrepreneurs in fields that create jobs, India has too many of its brightest in a few areas, such as technology. “One of the reasons why they’re concentrated is because our schooling is so bad compared to China’s,” Sen explained at an informal lunch sponsored by the Global Management Program and SAIL, the School’s student exchange program with the Indian Institute of Management.

Increasing literacy, improving child mortality rates, and providing basic health care are among

the major concerns of the 73-year-old economics and philosophy professor.

Despite his concerns about the overall economic system, Sen said it is important for government and citizens not to be so frustrated by problems that they stop trying to make India better.

“The easiest rhetoric in politics,” he said, “is to say the rich are getting richer, the poor are getting poorer, we’re pouring money in, nothing much is happening—it’s all a waste. But none of this is true. What is true is we can pour more money in, and none of it will be wasted.”

Gene Doping Fears Go Beyond Athletes

From baseball and football to swimming and cycling, it’s hard to name a sport whose stars have not been charged with using performance-enhancing drugs. But, according to **Warren Strudwick**, MBA ’90, team physician for the Oakland Raiders and the U.S. track and field team, the worst is yet to come.

Appearing at the San Francisco Commonwealth Club in a panel discussion about sports and ethics,

Strudwick was asked what he thinks will be the biggest issues facing sports in the next 10 to 15 years.

“From a medical perspective, one of the most fantastic things that’s happened in the last decade is the defining of the human genome. As a result, the manipulation of the human chromosome is becoming more and more sophisticated,” he said. “I bring this up because the issue of performance-enhancing drugs is going to pale in comparison to gene doping.”

Strudwick predicts that the manipulation of human chromosomes will be used not only by athletes to produce stronger bodies with specifically designed skills, but also by society at large to influence the gender and appearance of their offspring.

The ethical considerations are enormous. “We’re going to have some very, very serious questions to answer,” he said. Not the least of which will be in sports, “where gene doping is going to be visible—and undetectable.” ●

And the answer is: **13%**

Two Views on New Orleans' Comeback

I certainly don't want to rain on the recovery parade, but there is a lot to be skeptical of in **Michael Hecht's** August 2008 article, "The Big Easy's Business Comeback." While there is much to applaud, statements such as "the immediate metropolitan region was back to close to 90 percent" fly in the face of recent news reports in which the Brookings Institution has been criticized in the media for finding a 70 percent return rate while other estimates hover in the 55 to 65 percent range.

On my visit in June I spoke with many friends, some of whom remain committed to the city and its recovery while others despair of being able to stay in the longer term because their companies have moved from the area to safer places. Indeed, the concern that the levee protection system needs more time and funding to be made right underlies the anxieties of many who have altered the city's nickname to "The Big Uneasy."

While Hecht's positive message is a good one to get in front of the public, it should be tempered by the understanding that there is more left to be achieved than has been accomplished thus far.

— **Ed Strong**, MBA '69, PHD '72
Professor Emeritus,
Tulane University
Bristol, R.I.



Congratulations to yourselves and Michael Hecht for the article "Recovery: The Big Easy's Business Comeback." How refreshing and encouraging at last to come across information that is so positive and upbeat concerning real progress in Louisiana and New Orleans in particular.

Sadly, the impression in Canada, and I believe in much of the world, is that the initial response to the tragedy as a result of [Hurricane Katrina] was incredibly inadequate, considering that the USA is one of the richest and most powerful countries in the world.

How about more reports in the future of Stanford's involvement in such basic human issues?

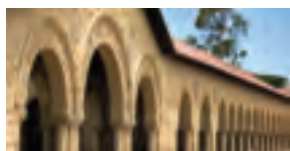
— **J. Darg Bell-Irving**, MBA '57
Vancouver, British Columbia

San Francisco: the Anti-American City?

In an issue whose lead article was about preventing corruption [August 2008], it was ironic that there was also a report describing [San Francisco Mayor] Gavin Newsom addressing a GSB audience on the lack of leadership in politics. This from a man who leads a city that has regularly broken the law and engaged in activities that are clearly anti-American, if not downright criminal.

— **Gerald Clough**, MBA '64
Fountain Hills, Ariz.

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Change lives. Change organizations. Change the world.

Cranes, Cheers, Crowds at New Campus Fête

THE BUSINESS SCHOOL'S new Knight campus will be a marvel of technology and engineering—12 acres covered by buildings fitted with up-to-the-minute features—so it is only appropriate that its construction should get some 21st-century online attention.

A webcam and online video trace progress as the School's new home rises across from the Schwab Residential Center.

A “virtual” groundbreaking celebration on Oct. 10 during Alumni Weekend was visible to alumni around the world via a live online broadcast and is still visible online along with images posted every 15 seconds from two web cameras trained on the construction site. See www.gsb.stanford.edu/knightcenter.

Dubbed “First Night at Knight” and emceed by **Tad Glauthier**, MBA '02, in a huge tent on what will become the north end of the new campus, the celebration was the first campuswide event hosted on the site. The hour-long broadcast was set against scenes of alumni, students, faculty, and staff enjoying food and music. It included interviews with **Philip Knight**, MBA '62, and **Robert Bass**, MBA '74, both major donors to the campus, and Stanford Business School Alumni Association President **Duane Wadsworth**, MBA '63, several faculty and other members of the Business School community.

In late August and September a webcam captured the action as large oak trees on the site were dug up, shored up in large wooden crates, and trucked off the site to be stored until they can be replanted or moved elsewhere on campus. The webcams recorded existing buildings on the site being leveled with their components separated for reuse and will follow the excavation for a three-story-deep parking garage beneath the main part of the campus. The \$350 million campus will include a 600-seat auditorium, a student center, a lounge, an information center building that is the visual centerpiece, and an array of classrooms in different sizes, plus smaller collaborative spaces for use by the School's academic programs. ●



More than 500 GSB students, alumni, faculty, staff, and friends gather for the October 10 kick off party at the construction site of the Knight Management Center, a 350,000-square-foot complex of eight buildings scheduled for completion in 2011.

Tad Glauthier, MBA '02, far right, interviews **Kathleen Kavanaugh**, program director for the new campus, during a live webcast of the celebration, which now can be found on the School's website.



The night gets a kick start from the Stanford Steppers, an undergraduate student performance group.

Stone Brings Reforms to Prisons in Iraq

AS A MARINE and entrepreneur, **Douglas Stone**, Sloan '92, has never shied away from risk. But taking over the U.S. military's detainee detention system in Iraq in April 2007 was a big one. The prison system, which holds about 22,000 detainees, was known to most Americans primarily for the horrifying treatment of prisoners at Abu Ghraib.

"I had great concern about the impact of detention operations on the Multi-National Force's initiatives," admits Major Gen. Stone. When he took charge of detention, Abu Ghraib was closed, but the system still had significant problems. Insurgents were using its two main camps, Cropper and Bucca, to strengthen the loyalties of their members, and riots were frequent. Stone came in, according to Gen. David Petraeus, commander of U.S. forces in Iraq, and "revolutionized the way we perform detainee operations in Iraq."

Stone has spent his career moving between the military and civilian worlds, alternately leading Marines and software engineers. He sees many parallels between these two spheres and often draws on lessons learned in one place when he's in the other.

High-level management in either business or the military "calls for creative and much more generalist thinking," Stone said in a recent interview with *Stanford Business*. Both are "organizations with a clear mission who often function in a very ambiguous and uncertain world."

Understanding culture also is critical to both, he said. "If you don't want to speak the language of the software engineer, you will not get a solution that works, just as if you walk into Iraq and speak the language of an American in an Arab nation, you will not come to a reasonable solution."

The holder of advanced degrees from Pepperdine University, the U.S. Naval War College, and the University of Southern California in addition to Stanford, Stone quotes with equal facility from the Quran

Stone's goal was "to find a pragmatic solution that still honored the values of our nation and achieved the objectives of the force"

and the Declaration of Independence. He is a man of "big ideas," Petraeus said during a June ceremony in which Stone handed over responsibility for the detainee system to his deputy commander. Stone's "biggest idea," Petraeus said, "was counterinsurgency inside the wire [of the detention facilities], because that was where the enemy was conducting its insurgency as well."

Stone's reforms included review panels with detainee participation, which informed detainees why they were being held and expedited the release of those no longer deemed security threats. He instituted education and job training with the goal of offering classes to every detainee before release, though not all are taking them yet. Religious education by moderate religious leaders is also a key component. Stone told the *Financial Times* that religious discussion groups were helpful in identifying the true extremists, who were then separated from the rest of the detainees.

Interrogations also helped clarify motivations of detainees believed to be involved in insurgent activity. Mostly, as it turned out, the moti-

vations were economic or related to intimidation by others. And the communication was not just one way. "These conversations are remarkably important, because they give our country an opportunity to express what we're doing and why we're doing it," Stone said.

At the June ceremony, Stone pointed out the detention system is not intended to punish. "What we do here in Detainee Operations is not perfect. But we are building toward long-term security. It is not simply detention; it is engagement. It is not retribution; it is reconciliation."

He likens detention to the way police in the United States quell riots: They bring in many people for questioning; ultimately many are released without charges, but the system allows the police to stop the disturbance, and determine who the leaders are and what caused the problem in the first place. "On the battlefield, when nobody's wearing a uniform, you don't know who is identified with a counterinsurgency. And in Iraq there are multiple insurgencies—it's not just one thing."

There is a key difference between the detention system in Iraq and the U.S. system, of course: Those held in Iraq can be detained indefinitely without a trial. A U.N. mandate gives coalition forces the right to detain people who are security threats, which means they don't have to be charged with a crime. This is a frequent criticism from human rights organizations, though according to press reports, human rights watchers say conditions in the camps have improved significantly.

STONE GRADUATED FROM the U.S. Naval Academy in 1973 and served five years' active duty with the Marines. He then served in the reserves while working for tech companies and nonprofits.

His corporate career included heading PCAD, a software engineering company he sold to IBM in 1990. He was president of California Leadership, a nonprofit leadership development organization, before entering the Sloan Master's Program with the Class of '91.

"He was a very impressive applicant," said **Jenifer Renzel**, the Sloan director at the time. "He had a wonderful 'can-do' attitude and, it seemed to me, a commitment to the broader good." Midway through the year, Stone was called to active duty in the first Persian Gulf War. He returned to complete the pro-

gram with the Class of '92 and afterward became president and CEO of GammaLink, a fax technology company that merged with Dialogic in a public offering.

Stone returned to active duty in 2003 as a brigadier general and served as senior U.S. defense representative to Pakistan for 14 months. It was a "very interesting assignment," he said, which involved frequent conversations with then-President Pervez Musharraf. While in Pakistan, Stone learned Arabic as a way to help himself learn Urdu, which he was finding difficult. He is now able to read the Quran in Arabic.

In 2007, Petraeus chose Stone to serve as his deputy commander with responsibility for U.S. interrogation and detention. The timing made him a key member of the "surge" team in Iraq. The surge doubled the prison population, making the situation even more challenging.

To turn the U.S. detainee operations into something that would help rather than hinder U.S. efforts in the country, Stone looked for an ethical approach that would use group dynamics to his advantage.



During the recent military surge in Iraq, Douglas Stone, shown at Camp Bucca, was responsible for housing 22,000 prisoners at a time.

“At the feet of the United States is a very serious burden to still comply with our own beliefs about confinement,” he said. His goal was “to find a pragmatic solution that still honored the values of our nation and achieved the objectives of the force”: to gather intelligence, keep the bad guys off the streets, and not engender more insurgency.

He drew on the Declaration of Independence to help make his point: “What are the grievances that our forefathers had? These guys said, ‘We don’t want our citizens taken offshore and confined without any charges.’”

These principles cannot be violated to serve the United States’ short-term goals, he said. “It’s really hard in a counterinsurgency, when your friends are being killed. But at the end of the day, many things in life are very hard. We just have to make sure we don’t violate the fundamental principles on which we stand.”

Stone used the detention of Iraqis as an opportunity to find out why they were motivated to act against U.S. and Iraqi security forces. “Counterinsurgency mandates that you engage with citizens,” he said. “If they had other alternatives, they would find a different solution.” In the end, he said, “some prior al-Qaida members were working with me to come up with other techniques.”

This mirrors how he approached problems in the business world: He might come up with what seemed like a good idea, but he would discuss it with customers so that “by the time it got produced, it was not my idea.”

If detainees are treated with respect, he said, and “if they genuinely believe that good civic behavior is consistent with their belief structure and their self-interest, they are likely to change their behavior.”

It’s not clear how easy it will be to change the values of large numbers of Iraqis. Some academics are skeptical, but research shows that people are very susceptible to the values of the group they belong to. Stone said he thinks both arguments are correct—societal norms can change, but only if the leaders adopt the new norms and incorporate them into the value structure so that people who want to go along with the group will follow them.

In the end, Stone said, just as a business leader cannot say with certainty that he has found the best or only way to reduce costs for a customer, it may not be possible to predict how widespread the changes in Iraqi society will be due to the reform of the prisons. Military statistics indicate that re-arrests have been reduced in the past year, but in the short term the best measure of success may be this: “It works at the moment, it is better than it was, it is consistent with our belief structure, and it is pragmatic,” Stone said. “My strong belief is that you comply with those fundamental human rights laws, with the precepts of our nation, the freedoms under which we live. If you don’t, if you aren’t cautious, you will change your own nation.”

Stone’s new challenge is leading the Marine Forces Reserve and Marine Forces North. The position is responsible for almost 100,000 reservists and for the Marines’ response to incidents inside the United States. Marine Forces North was created after the attacks of Sept. 11, 2001, to handle terrorist threats inside the country, though it also responds to natural disasters.

Stone said he is approaching the new challenge as he did the detention system in Iraq: “You walk in, find out what’s not working, and then change the pieces. Or find what is working and improve on it.”

Because of his move to his new job with the Marines, Stone has not yet had a chance to test how the corporate world will view his service in Iraq. But he said he no longer fears that people will view his work with the detention system as a negative: “I think it’s been just the opposite,” he said. ●



Managing Energy Constraints

Today's energy supply and demand equation forces businesses to rework their operations and provides added opportunity for innovators. *By Bill Snyder*

Illustration by MICHELLE THOMPSON

S

TART IN SANTA BARBARA, CALIF., and drive north along the twisty coastal highway to San Luis Obispo. Turn right and head east to the hot, grassy Carrizo Plain an hour or so away. In the span of an afternoon's drive you'd see three very different visions of the world's energy future: off-shore drilling rigs, a massive nuclear power plant, and the site of a soon-to-be-built solar energy farm that will cover a full square mile.

The dizzying spike in oil prices this year has focused the world's attention on energy like no event since the supply shock of the mid-1970s. But unlike the relatively brief oil embargo that forced Americans to wait in gas lines, this crisis is having a more profound effect on global business and causing significant suffering in both the developed and underdeveloped worlds, as the cost of transportation and even food soars out of reach for some.

Like most economic shifts, the oil shock offers significant opportunity along with massive challenges. "Companies that are nimble will find ways to cope and ultimately outdo their competitors," says Business School Professor **Hau Lee**, one



of the foremost experts on supply chains. Indeed, the energy price run-up has sparked a burst of creativity as global business adapts and investors pour money into a panoply of new, energy-related technologies.

One of the most active “clean-tech” investors, **Vinod Khosla**, MBA ’80, confidently predicts that biofuels made from agricultural waste (he’s the backer of a startup that will do just that) will push the price of oil down to \$35 a barrel by 2030. He argues, however, that politically popular ideas like driving hybrids (which he does) or putting solar panels on the roofs of homes in foggy San Francisco won’t make a dent in global warming or the energy shortage. “Anything that requires people to change their habits has a low probability of success,” he said in a recent interview with the *San Francisco Chronicle*.

Meanwhile, major enterprises are reconfiguring operations to cut fuel costs. Some changes are as simple as more efficient routing of delivery drivers or redesigning packages so more can be carried on a single pallet. Others businesses, though, are undertaking the complex task of moving manufacturing resources from Asia to sites closer to domestic markets in the United States and Europe.

“I guarantee that every major international [company] is working on this,” says **Michael Marks**, who for more than a

decade headed Flextronics, one of the world’s largest contract manufacturers, and is now a lecturer at the Business School. “Some manufacturing will move closer to end markets, and areas like Mexico and Eastern Europe will be the beneficiaries,” he says.

Tesla Motors, for example, a maker of electric cars backed and briefly headed by Marks, had planned to build batteries in Thailand, ship the 1,000-pound units to the United Kingdom for installation and then ship the cars to the United States. But with shipping costs out of control, the company has decided to make the batteries and assemble the cars in California, according to a report in the *New York Times*.

Agribusiness is being challenged as well. Faced with sharply rising costs for diesel fuel and fertilizer, farmers in the American West are turning to “no-till” technologies to minimize the number of times they run heavy equipment through fields, even as demand for ethanol pushes commodity prices higher and consumes perhaps 20 percent of the U.S. corn crop.

Severe as it was, the oil shock of the 1970s had a fairly simple origin: A group of producing countries drastically cut production as a means of political leverage. The causes of today’s crisis are far more complex.

Economic growth in Asia has increased demand for oil at a time when world oil production is approaching a peak, and pressure to halt global warming presents policy makers with contradictory priorities. “If tomorrow there were no global warming problem, I would say the price of oil would come down quite a bit within six months,” says Professor **Frank Wolak** of Stanford’s Economics Department. “We have the technology to turn coal into liquid fuel, but people cannot make the investment not knowing whether they will be punished down the road for the carbon.”

Think Local

TESLA’S DECISION TO RECONFIGURE its manufacturing and supply chain seems radical, but manufacturers now pay \$8,000 to send a freight container from Shanghai to ports on the East Coast of the United States, compared with \$3,000 eight years ago when oil sold for \$27 a barrel, according to a report by analysts Jeff Rubin and Benjamin Tal of CIBC World Markets. Should the price of crude hit \$200 a barrel, shipping the container would cost \$15,000.

Reports like that of the Canadian investment bank have prompted speculation that years of globalization may be reversed and that we could even see a massive return of industry to the United States. That would be an exaggeration, says Stanford’s Lee, who consults with companies on their supply chains and directs the University’s Global Supply Chain Management Forum. “The U.S. no longer has the labor force or the network of second- and third-tier suppliers,” he says.

Instead, what Lee calls a mixed strategy—in which a company builds a bare bones or base product in one location close to existing suppliers, and then ships it to a second location for final assembly—is gaining ground. Consider the garment industry: Dyeing and weaving are expensive, but cutting and sewing garments together is relatively cheap. “It’s the low-cost steps in the process that will move closer to the markets,” he says.

EMC, a \$13 billion seller of network storage equipment and related

With shipping costs out of control, Tesla Motors decided to make the batteries and assemble the cars in California.

Managing Energy Constraints

software, has embraced that ethic, says Trevor Schick, the company's vice president for global supply chain management. "Fuel is a big driver, of course, but we also want the flexibility of building products closer to the market," he says. That flexibility leads to faster turn-around and lower overall inventory in the supply chain.

EMC's contract manufacturing in China has been scaled back, with some of that work now performed at plants in Mexico, Hungary, and the Czech Republic, Schick says. The changes are likely to be permanent, although the company will always shift resources back and forth as market conditions change, he says. Computer maker Dell also has added plants in Poland, Brazil, and North Carolina to be closer to customers.

Running on Empty

YOU DON'T HAVE TO BE A CARD-CARRYING GREEN to be pessimistic about the chances for a quick, meaningful increase in the supply of oil. Nor is there a fast way to increase the refining capacity for oil we do have. Consider these talking points from the National Petroleum Council, which advises the U.S. secretary of energy:

- The world currently uses about 86 million barrels per day of oil—40,000 gallons every second.
- New, large oil discoveries can take 15 to 20 years from exploration until production begins. The Thunder Horse platform, for example, in the U.S. Gulf of Mexico cost \$4 billion and is not yet operating eight years after discovery and has a capacity of 0.3 percent of world oil demand.

What's more, the popular preconception that higher oil prices will lead to a fall-off in demand, which in turn will lower prices, is overstated, says Professor **Jim Sweeney**, director of Stanford's Precourt Institute for Energy Efficiency. "The oil market has only small elasticity of demand," he says. How small? About 0.1 percent, which means that every 10 percent increase in price reduces demand by just 1 percent. If, as some experts argue, the market is twice as elastic as Sweeney

"The popular preconception that higher oil prices will lead to a fall-off in demand ... is overstated."

estimates, price increases would still be 5 to 10 times as large as the reduction in demand, he says.

Sweeney also is skeptical of another popular notion: that the price of oil has risen much faster than demand because of speculation by hedge funds and other large players in the markets. "The fundamentals are doing better to explain why prices have [increased so fast]. It doesn't seem out of line in terms of classic supply and demand theory."

Increased demand in Asia has undoubtedly pushed up prices, but uncertainty in the minds of investors is also a powerful element, says **Ehud Ronn**, PhD '83, a professor of finance at the University of Texas at Austin. "Stated differently, when nervousness or uncertainty is high, energy prices are elevated due to the risks of a shock—almost always, a supply-side shock—which would cause prices to spike," he says. "That high-risk premium implies that if the source of risk goes away, the risk premium would decline and so would prices."

There's no doubt, Ronn says, that the oil market was pricing a good

deal of risk into the commodity during the summer of 2008, when prices escalated rapidly. What's less certain is the source of the risk. One possibility he raises (with the caveat that he is not a political scientist): fears that the Bush administration in its waning days will strike Iran when the president no longer has to fear electoral consequences.

Geopolitics aside, higher energy prices have the effect of making new oil exploration and production technologies economically feasible. **Tony Meggs**, Sloan '90, the former head of British Petroleum's technology arm, recently founded Carbon Storage PLC, which is exploring the use of carbon dioxide generated as an industrial byproduct to rinse out oil trapped in old wells. Many natural gas reservoirs contain large amounts of carbon dioxide that is released into the atmosphere when the wells are tapped. Capturing it and using it to scour old wells would address both global warming and the oil crisis, he says.

Meggs worries that global warming will take a backseat to the oil shortage. "Six months ago," he said in August, "I would have said that CO₂ legislation will be here in two or three years. But in this hot political season, as people realize they are spending 20 percent or 40 percent of their income on energy, legislation will be hugely watered down."

The double whammy of global warming and an energy crisis has made the building of new nuclear plants in the United



Better Place's network of plug-in and battery-swapping locations is designed to keep electric cars charged and on the road in Israel and Denmark by 2011.

States once again thinkable, even to some environmentalists who had seemed implacably opposed to the idea.

"The political climate has changed; concerns over global warming have been a rejuvenator for our industry," says **Mayo Shattuck III**, MBA '80, CEO of Constellation Energy, which is seeking clearance to build a nuclear plant in Maryland. Constellation would use a new and arguably safer reactor design now being installed in plants in France and Finland. Given the uncertainties, Constellation won't issue a public estimate of the plant's cost, but documents on file with the Securities and Exchange Commission indicate that \$9 billion is in the ballpark. Meanwhile, the \$21 billion company, with a helping hand from regulators, is encouraging its customers to use less energy.

Decoupling, a regulatory tactic long favored in California, but now gaining wider currency, changes the structure of



U.S. Senate Majority Leader Harry Reid at the grand opening of Austra's Las Vegas solar mirror manufacturing plant in July.

utility rates by separating profits from the volume of sales to consumers. In effect, companies like Constellation subsidiary Baltimore Power & Light are repaid for the fixed costs of power transmission (plus a reasonable return for investors) but make no extra profit for selling additional energy. “It gives us the incentive to push conservation,” Shattuck says. Early results indicate that when consumers are given the means to do things like shift energy use to off-peak hours, and are given a reasonable break on price, they will use substantially less power, he says.

Fair enough. But what about transportation, which accounts for some two-thirds of the petroleum used in the United States (less in the rest of the world)? While Khosla makes an interesting point when he says that driving a hybrid doesn't do much to reduce energy use, it's worth noting that a good deal of thought—and capital—is being directed at improving today's still relatively inefficient green automobiles.

GSB lecturer and former Intel Chairman **Andy Grove** notes that new technology can become a disruptive force as it develops, even though its first iterations are often less than satisfactory. Witness the first rudimentary personal computers that, within a relatively short time, transformed the economy. The automobile industry, however, has been waiting for advances in battery technology to appear before making a serious effort to produce electric cars, he wrote in a recent issue of the *American*. Grove suggested temporary tax breaks and deep electricity discounts to spur enterprising owners of existing gasoline guzzlers to convert to dual-fuel

systems. “We must accelerate conversion [of automobiles] to electricity in a major way,” he said.

One company that isn't waiting for better batteries is Better Place, a venture-funded startup with an innovative twist on the electric car concept. Here's the idea: Customers will purchase a specially equipped car from a Better Place auto manufacturing partner (so far Nissan and Renault have signed up) and buy a subscription plan. The plan is analogous to cellular phone service, “but instead of selling minutes, we're selling the number of miles you expect to drive,” says **Josh Steinmann**, Sloan '07, who heads the young company's business development efforts.

Better Place uses batteries with a range of about 100 miles, well short of what Steinmann calls “the 500-mile ideal, but plenty good enough to start.” When Better Place goes into full commercial operation in Israel and Denmark in 2011, customers will be able to charge their cars at a network of thousands of parking-meter-sized charging stations. For trips that exceed 100 miles, they will stop at depots (100 or so in Israel) to swap batteries.

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Food vs. Gas

THE WORLD BANK DROPPED A BOMBSHELL last spring by blaming the use of corn-based ethanol for as much as 75 percent of the recent spike in world food prices. The controversial report said that successive droughts in Australia, thought by some to be a significant driver of higher grain prices, had only a marginal impact. Instead, it argued that the drive for biofuels by the United States and the European Union had by far the biggest impact on food supply and prices. The Bush administration, by contrast, put the ethanol-related increase at about 3 percent.

The World Bank estimate may be high, but it's clear that “the agri-

Continued on page 32

New technology can become a disruptive force as it develops, even though its first iterations are often less than satisfactory.

Cement, the Stuff of Dreams



A YEAR AGO WHEN BEATRIZ GUTIERREZ LEARNED from a client in the Ensenada beauty salon where she works that Mexican cement company Cemex offers a plan to help low-income people build and expand houses, she and her husband, Ricardo Higuera Lopez, a fisherman, signed up.

Under the program, called Patrimonio Hoy, or Private Property Today, the couple pays about \$18 a week for \$960 in cement blocks, rebar, and other building materials. Currently, they are working on the first phase of a six-room house on the hilly outskirts of the Baja California port city 65 miles south of San Diego. Today most of the walls are up and the roof is next. Gutierrez takes pride showing which room will be which, especially the one that soon will become her own beauty salon.

“Before we were saving, but we didn’t think we would have enough for a house,” she said. “This is easier, and it costs a lot less. You know what you want. You see it in your dreams, and Patrimonio Hoy has helped us realize it.”

Patrimonio Hoy is one of several ground-breaking programs introduced by Cemex Chairman and CEO **Lorenzo H. Zambrano**, MBA ’68, whose integration of social responsibility, green practices and conservation, worker education, and technological advancements in company operations are redefining corporate success in global business circles.

Since 1985, when he took control of the regional cement firm that his grandfather founded little more than a century ago, Zambrano has transformed Cemex into a global powerhouse, one of the first corporations from a developing country to become a major international player.

“On a global stage, Lorenzo stands out among CEOs as one of the

deepest and clearest strategic thinkers today,” said **John Roberts**, a Stanford Graduate School of Business professor who has undertaken several case studies of the company.

Cemex headquarters sits on a lush, green campus in Monterrey, an industrial city surrounded by picturesque mountains about 150 miles south of the Texas border that is so influenced by U.S. business practices it’s sometimes called the “Chicago of Mexico.” Zambrano’s cousin and Cemex CFO Rodrigo Treviño recalls that after taking the reins of Cemex, Zambrano told a group of local executives that the little cement firm soon would surpass their own companies. They scoffed, he said.

“He meant it as a joke, but it’s happened,” Treviño said. “I’m sure he has surprised a lot of people over the years. He’s been determined and committed, but he’s got a lot of energy to get it done. He might even have surprised himself.”

Despite Zambrano’s family ties to the founder, he toiled 18 years in virtually every part of Cemex before wresting the position of chief executive from the board of directors. He took control just as Mexico was opening its domestic market to foreign firms, thus ending the profit-guaranteeing protections that Mexican producers had long enjoyed. To survive, Zambrano shed Cemex’s non-building materials operations, took the firm public, and embarked on an ambitious strategy of international expansion.

Rebuffed initially by allegations that he was dumping product at artificially low prices when he tried to branch out north of the border into the United States, Zambrano turned elsewhere: first to Spain, then across Latin America, Asia, and elsewhere in Europe and, later through

CEO Lorenzo Zambrano revolutionized Mexico’s Cemex corporation, turning his firm into an agile, global competitor.

By **Diane Lindquist**

Illustration by SEAN McCABE



acquisitions, finally into the United States. When in 2005 he bought out RMC Group, Britain's largest cement company, the *Economist*, noting Mexico's recent status as a European colony, suggested that Queen Victoria "would not have been amused." Last year, the company added controlling interest of Australian ready-mix concrete and aggregate firm Rinker, making Cemex the third-largest cement producer and the largest building materials supplier in the world.

While the recent housing downturn has not been good news for Cemex, revenues have grown from about \$1.7 billion when Zambrano became chief executive to \$30.3 billion in 2007. Once focused solely on Mexico, the company now operates in more than 50 countries. Eighty-eight percent of its 67,000 employees are natives of countries other than Mexico.

In an interview in his modern-appointed office, Zambrano said that initially critics "didn't think we could pull it off. We were supposed to fail time and again. Not only have we grown in other developing countries but also in the industrialized world. It's a team effort with highly qualified persons who have worked very hard to get Cemex where it is. Now we are treated just like any other company."

Zambrano, 64, a cordial, genteel, and witty man whose personal and family worth is estimated by *Forbes* magazine at \$1.5 billion, shuns much

“One of his principles is meritocracy. Being a Zambrano doesn't mean a thing. It's very unusual in corporate Mexico.”

of the ostentatious lifestyle favored by other Mexican executives who have become fabulously wealthy as growth fueled by opening the economy propelled the country into the tier of industrialized nations.

He is single, has never married. Cemex executives, however, joke that Zambrano is wedded to the company and the Instituto Tecnológico y de Estudios Superiores de Monterrey, more commonly known as ITESM or El Tec, where he earned a bachelor's degree in mechanical engineering and which he now serves as chairman of the board.

While he enjoys vacations in Cancun and New York City, much of his leisure time is spent at a small country house 2 1/2 hours from Monterrey, an "oasis," he said, where he watches movies, reads voraciously, and enjoys long lunches and dinners with family and friends.

Neither Zambrano's sister nor his surviving brother works for the company, a situation that differentiates his company from others in Mexico in which nepotism is a standard practice. Although the workforce includes some relatives, such as Treviño, a former top Citibank executive, they got their jobs because of their abilities.

"One of his principles is meritocracy," said Javier Treviño, the company's senior vice president of communications and corporate affairs (and no relation to Rodrigo Treviño). "Being a Zambrano doesn't mean a thing. It's very unusual in corporate Mexico."

Zambrano's engineering background and an affinity for mechanics seem to have influenced his interests as well as his approach to life. Among his passions are old cameras and tech devices. "I used to get all the latest gadgets—until I got tired of changing every three months," he said.

He has collected a fleet of antique cars that includes Ferraris from the 1950s and '60s. He races them with a group of friends every year at Pebble Beach. In the interview, he declined to reveal how many he owns but described the vehicles as a hobby as well as an investment:

"You like the cars you dreamt about when you were young. I just drive them. But with old cars half the fun is locating them. Prices have done very well. They're more difficult to find now. If I started to collect right now, my collection would be very small."

His engineering background also influences Zambrano's fine-tuning management style. He insists on meticulous studies and each month assembles top executives and country managers to discuss reports that he studies beforehand. Company executives spoke of being thoroughly grilled. "It's like coming in for a professional exam," said one.

Soon after becoming chief executive, Zambrano introduced advanced technology to every aspect of the operation. It revolutionized the firm, transforming it from a lumbering basic industry into an agile and responsive entity. Cemex ready-mix now is delivered around the world in about the time it takes to get a pizza. The technology spread a "Cemex Way" of doing business to each new acquisition and keeps Zambrano abreast of whatever is happening. Whether at the Monterrey headquarters or on the road, he can check kiln temperatures in Bali or cement sales in Spain with a laptop or BlackBerry. If he has questions, he ignores the chain of command to surprise employees with email queries.

"He's in touch all the time. Anyone who gets an email from him, you know you're going to have to have an answer before the day ends," said Treviño, the senior communications vice president. "He is very impatient. He wants the results now—not tomorrow, today."

CEMENT MANUFACTURING is hardly earth-friendly. About 1.6 tons of raw materials are required to produce 1 ton of cement. Mountains are mined to extract the limestone that is cement's primary ingredient. Manufacturing requires heavy machinery and equipment that use large amounts of heat and energy in some 80 production steps.

Yet Zambrano has made it a responsibility that starts with the board of directors and top executives to reduce waste in every part of the process. To mitigate the extraction process, quarries in Colombia, Venezuela, the Philippines, the Dominican Republic, Costa Rica, Mexico, and elsewhere have been converted to lakes or buffered by green zones. One such area in Spain has become a vineyard.

One undertaking that is unrelated to the bottom line is a recent collaboration with the Mexican government and four international conservation groups to establish El Carmen, a nature reserve of nearly 500 square miles adjacent to Big Bend National Park in Texas. Cemex owns and manages the wilderness area and has made strides in preserving and reintroducing species of mammals, birds, reptiles, and amphibians, as well as vegetation. (See sidebar on page 23.)

In May, the Stanford Business School Alumni Association honored Zambrano with its annual Excellence in Leadership Award at a lavish, candlelit event attended by men in tuxedos and women in gowns and diamonds at the architecturally recognized Museo de Arte Contemporáneo de Monterrey. Zambrano, who owns an extensive collection of 20th-century Mexican art, sits on the museum's board and his sister, Nina, is its executive director. The event raised corporate contributions for the Business School and a School scholarship fund for business students from Mexico.

In the interview before the event, Zambrano recalled his days at Stanford. "I'm very proud of being part of the Class of '68," he said. The

Right: Beatriz Gutierrez surveys the first phase of construction on what will be her family's six-room home in Ensenada, Mexico. The building materials, and their financing, are part of a housing development program called Patrimonio Hoy, which is supported by Mexican cement manufacturer, Cemex. Patrimonio Hoy employee Eunice Rodriguez, center in lower photo, works with applicants in the organization's Ensenada office. The program is offered in many areas of Mexico.



“Education diminishes the differences in wealth distribution. You reward those who work hard and have talents.”

year was marked by upheaval in Mexico and the United States, and on the Stanford campus. Although he admitted to being too busy studying to take part in demonstrations, he credits the atmosphere for instilling in him an enduring out-of-the-box way of thinking.

“The sport then was to challenge assumptions. When you’re young you might not go about it in a mature way. But I would say I was influenced in the right way. When you challenge the, quote, Establishment, unquote, you’re really looking for other ways to do things. That was something I learned at Stanford—that you had to innovate to grow,” he said.

Monterrey Tec also shaped his thinking, and when he was asked to become its chairman, he thought deeply about what role he could play.

“Frankly, what I did was push the throttle down and make it move a little faster,” he said. “Education is very important in any country but especially in a country that wants to grow and is a developing economy.

Education is a way to diminish the differences in wealth distribution. Education is where you reward those who work hard and have talents and make life a better one.”

In a close collaboration with El Tec system President Rafael Rangel, the institution has become a leading technological school offering virtual classes around the world, and is adding a biotechnology center that is spawning some of Mexico’s first pharmaceutical patents. The institution has grown to 33 campuses across Mexico and elsewhere in Latin America, with offices in Europe and Asia.

“We are making many dreams come true for young people in the remotest parts of Mexico,” Zambrano said. “And where you have in a country voices that are calling for the easy solutions, the short-term answers to problems, then we have to work extra hard for those who have the wish to persevere over the long term to better themselves.”

Zambrano has made education an important part of employee development, too. One Cemex program helps workers in any of the countries where the company operates to complete elementary and high school. Another funds scholarships so workers can earn advanced degrees at some of the world’s most prestigious universities, including the Sloan Master’s Program at Stanford. And there are internet-based courses completed in an hour or less that teach workers something they can use in their jobs. Several dozen Cemex managers from around the globe also take intensive higher-level, short courses in a customized year-long program that begins with two weeks of executive education at Stanford, followed by online coursework and projects, two more weeks at INSEAD in France, and a two-week finale at El Tec, where participants present plans for Cemex projects that they have tested.

When Zambrano attended the Stanford Business School, he was the only Mexican in attendance, but now Mexican nationals usually are in every MBA and Sloan class. And Stanford Business School graduates are sprinkled through every aspect of the company’s worldwide operations.

As a Cemex employee, **Juan Préstamo Elizondo**, MBA ’94, was among the first to earn his degree with Cemex’s help.

“The program consisted of Cemex paying our tuition, our housing, and we still received our monthly salary. It was a very nice deal,” said Préstamo, who worked seven more years for Cemex—in Spain, the United States, and Asia as well as Mexico before starting his own business, Mextile, a manufacturer of quality concrete roof tiles for the Mexican and U.S. markets.

Continued on page 22

“I still remember when I went to thank Mr. Zambrano for all that he and Cemex had given me,” Préstamo said. “He told me that he was happy for me and that he thought that I had made the right decision. He told me that things are difficult when you start your own business and that things could go wrong and it would not necessarily be because of me if that happened. And he finally told me to call him first if something was not going well or if I had second thoughts.”

Cement, notes Zambrano, is a basic building block—the “stuff of dreams.” Over the years, Cemex’s global expansion has put the company’s building materials in the hands of major developers who have used it in the Oresund Bridge between Denmark and Sweden; highways in Poland; L’Hemisfèric, the planetarium in the arts and sciences complex in Valencia, Spain; and El Cajón Dam in Mexico. While some in Mexico complain that Cemex charges too much for its building materials, the company has introduced creative-lending programs that make it possible for those at the lowest income levels to build, expand, and improve houses.

“When I was at Monterrey Tec,” Zambrano said, “I had several professors who told us we were part of only 1 percent of the population, that we were very lucky growing up in a privileged situation in which we were able to get a higher education, and you have to give something back to society.”

The Patrimonio Hoy program organizes neighbors and friends into groups of revolving loan recipients to enable them to buy just the right amount of material for the project they are undertaking. Cemex architects and engineers provide technical assistance.

Construmex helps Mexican immigrants in the United States route money for building supplies to families back home.

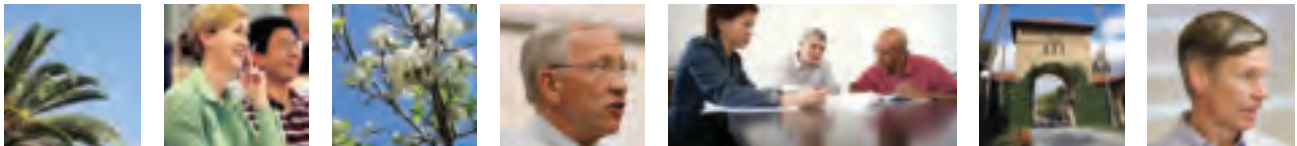
At first, participant Rosa Maria Cruz of Ensenada says her family and friends were skeptical of the program. “They said it was a fraud. My sister asked, ‘With 163 pesos a week [\$15], what can you do?’ When they finally saw the house we are building, they went to the program, too.” Cruz and her spouse are building a two-story house for their five children.

Another Cemex program, Construmex, helps Mexican immigrants in the United States route money for building supplies to their families back home through Cemex, thus avoiding more costly cross-border money transfers. Still another program has replaced dirt floors with antibacterial cement in several countries where Cemex operates. “Lorenzo’s been a tremendous leader in making the business socially responsible at the same time he’s been successful,” noted Stanford Business professor Roberts.

By tapping a market usually dismissed as too difficult and too

Cardinal Rule:

A flat world requires a dimensional education.



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unprofitable to access, the effort has proven that innovative business practices can benefit both company and consumers, Zambrano said. “We enhance the way of living in the communities where we work. Not only do we make profits, but we make profits the right way.”

In the past, Cemex’s success has mainly been achieved by pursuing acquisitions, Zambrano said. Another effort focuses on fostering internal growth. To address the company’s market as well as its supply chain management, Cemex has established partnerships with some of its largest distributors in Mexico to create a national chain of supply stores under the name Construrama. Distributors gain regional and national advertising and access to insurance programs and financing in return for conforming to a set of formalized practices, such as wearing the same uniforms and maintaining a reliable inventory. The stores are required to offer Cemex cement but they can provide other products, such as rebar, from any supplier regardless of whether Cemex offers the product. A particularly useful element is a series of Cemex instruction brochures offering simple, step-by-step instructions for tasks such as plumbing, electrical, or concrete construction projects.

“I feel like a partner with Cemex,” said Jorge E. Valenzuela, who owns four Construrama retail outlets in the fast-growing border city of Tijuana. “It was a good opportunity for us. They helped us be more professional, to be part of a new era of selling materials but also have a view for what is going to happen in the future.”

Cemex also manages inventory for builders with on-site warehouses for projects such as housing complexes. The company does the materials planning and updates inventory according to the construction progress. It saves storage, working capital, and provides security for the contractor.

“If we cannot grow in markets where we already are, we cannot grow,” Zambrano said.

Acquisitions, however, remain the most important element of Cemex’s future expansion plan, he said. They require greater judgment, research, and planning, and also can present unexpected challenges, such as Venezuelan President Hugo Chávez’s decision to nationalize Cemex operations in Venezuela. (In a May interview, Zambrano was reluctant to discuss the Venezuela situation since negotiations were ongoing. He said only that he was “surprised and sad.”)

“Acquisitions are more challenging,” Zambrano said. But they are more profitable, he added. “If they aren’t, we will make them so.”

Asked what his grandfather might make of his namesake’s handling of the company, Zambrano speculated that he would be proud. Still, he said, it’s too early to judge the impact he has had on Cemex.

When he studied successful companies at Stanford, Zambrano said, he learned an important lesson.

“At Stanford, the business executives we admired—some well known, others unknown—were those who were able to sustain their businesses,” he said. “Success cannot be measured while you are managing the business. You have to concentrate on only if it can grow and meet the new challenges.

“The true measure of a business leader,” he said, “is if the company lasts through time.” ●



Cemex Expands Nature Preserve

UNDER THE LEADERSHIP of Lorenzo Zambrano, Cemex has made an unusual commitment to conservation on a collaboration to protect and restore one of the richest ecological regions in Mexico.

Called El Carmen, this nature reserve lies south of the Rio Grande River. Together with the adjacent Big Bend National Park, Big Bend Ranch State Park, and Black Gap Wildlife Management Area in Texas and Cañon de Santa Elena and Maderas del Carmen protected areas in Mexico, it is part of a binational mega-corridor sanctuary in which animals are free to roam and native plant species are being restored.

The entire area is a rugged, 40-mile stretch at the northern end of the Sierra del Carmen range with peaks more than 5,000 feet above the Chihuahuan desert floor. Cemex owns nearly 500 square miles and controls another 240 through agreements with other owners. The company works with the Mexican government, university biologists, and some local residents to reintroduce mammals, reptiles, and amphibians to habitats of desert, prairie, forest, and mountains. So far, one of the most successful rewilding efforts has been bringing back bighorn sheep. Vegetation and water sources first had to be re-introduced to support them.

“We’re going slowly to make sure we put back species in a good order,” said Armando J. Garcia, Cemex executive vice president for development, who has covered much of the territory on horseback. (Zambrano likes to visit also, but he cannot come often, Garcia said, because “the area doesn’t have a good internet connection.”)

The area is inhabited by a few villages and *ejido* farming communities, but the intent is to minimize the human footprint, so visitors need permission from owners to visit. Cemex provides facilities for student groups, for example.

“We want sustainability in everything,” Garcia said. “If we are clever enough to do business, we should be clever enough to do conservation.”

Asking Is Hard, Giving Is Easier

Many are afraid to seek help. But those who ask get more help than they expected.

IMAGINE YOU'RE A MANAGER WHO has put out a hearty welcome for supervisees to come by any time for help—yet few, if any, tend to take you up on your offer. Do you conclude that people don't need or want your assistance? Do you pull back and make less of an effort to be inviting?

If you answered yes, you're probably missing an important insight about human behavior: People hate asking for help. It makes them embarrassed, guilty, and fearful that they will look incompetent. My research with Vanessa K.B. Lake, a doctoral candidate in psychology at Columbia University, shows that because potential helpers do not take this into account, they consistently overestimate the likelihood that others will solicit them for assistance.

Conversely, our work also shows that people grossly underestimate how likely others are to agree to requests for assistance. This means individuals are more willing to help than you think—and that can be important to know when you're trying to obtain the resources you need to get a job done.

The same mechanism underlies both situations. People feel pressure to offer help as well as to refrain from requesting help. Yet neither side realizes these conflicting motivations exist. The result? Most managers and their direct reports are missing out on huge opportunities for efficient collaboration.

In one field study, we found that student peer advisors overestimated by a whopping 66 percent the number of students who would come to them for help by the end of the semester. Teaching assistants overestimated this figure by more than 20 percent. This is particularly significant given that peer advisors had been advisees a year before, and many teaching assistants had prior experience. Yet their experience did not lead them to make more accurate predictions of others' help-seeking behavior.

A follow-up experimental study revealed that those randomly assigned to the role of teaching assistant in a hypothetical scenario tended to underestimate how uncomfortable students felt about asking for help. This pinpoints why help givers tend to miscalculate how many others will come to them for assistance—they simply don't recognize the social awkwardness people feel about doing so.

The best way to encourage employees to seek help when they need it is to reassure them explicitly that soliciting help won't put them in a bad light. We confirmed this using an experimental design in which participants were randomly assigned to the role of a new hire or a mentor in an organization. They were asked to read a memo encouraging new hires to seek help from their mentors. Those assigned to the new hire role were more likely to seek help from a mentor when they

read a memo telling them not to feel embarrassed about seeking help. A memo simply emphasizing the positive benefits of getting help was not nearly as effective. However, those assigned to the role of a mentor predicted that *the opposite would be true*.

For those who need help or support, we have found that the old adage "Ask and you shall receive" works like a charm. In a series of field experiments in which people solicited favors in campus settings—borrowing strangers' cell phones, requesting individuals to fill out questionnaires, even asking students to escort them to the campus gym—our participants consistently overestimated by 50 percent the number of people they'd have to ask to get a certain number to agree with a request. In other words, people were much more likely than expected to offer help.

The results were replicated even more dramatically in a real-world field study involving volunteer fundraisers for the Leukemia and Lymphoma Society. Once again, participants predicted they would have to approach 50 percent more people than they actually needed to reach their fundraising goals—and they significantly underestimated the average donation they would receive. Just saying no is much harder for people than you think.

Our work also indicates that for any request, the direct approach



PHOTO BY JONATHAN SPRAGUE

works best—a point borne out in a final field study: Individuals were more likely to respond to requests to fill out questionnaires when asked directly, as opposed to being handed a questionnaire with a written invitation. This was the case whether the questionnaire was one page long or ten. However, help seekers predicted that the opposite would be true—people would be much more reluctant to fill out a longer questionnaire and wouldn't care as much about how they were asked (flier vs. face-to-face). These results highlight a misunderstood fact about getting help—how you make your request is likely to be more significant than the magnitude of what you're asking.

Taken together, these complementary effects are fascinating. Cooperation in organizations often doesn't occur because people misconstrue each other's motives. In short, employees don't ask for help because they wrongly assume they won't get it, and managers don't encourage employees to ask for help because they wrongly assume that the employees will ask for it if they need it. The outcome of all this may be reduced levels of mentorship and resource sharing that are mistakenly attributed to a lack of concern rather than a lack of understanding.

Francis J. Flynn is associate professor of organizational behavior and codirector of the Center for Leadership Development and Research at the Stanford Graduate School of Business. His courses focus on leadership issues; particularly, how young managers can learn to navigate complex political environments and build interpersonal influence.

>Faculty Research

Corporate Governance Ratings Lack Validity, Study Finds

A STUDY BY STANFORD law and business scholars casts strong doubt upon the value and validity of the ratings of governance advisory firms that compile indexes to evaluate the effectiveness of a publicly held company's governance practices.

Enron, WorldCom, Global Crossing, Sunbeam. The list of major corporations that appeared rock solid—only to founder amid scandal and revelations of accounting manipulation—has grown, and with it so has shareholder concern. In response, a niche industry of corporate watchdog firms has arisen—and prospered.

These advisory firms compile indexes that evaluate the effectiveness of a publicly held company's governance practices. They claim to be able to predict future performance by making detailed analyses of many variables culled from public sources, especially records of the U.S. Securities and Exchange Commission. The firms' evaluation formulas differ, but the ratings and proxy recommendations they give are watched closely by the financial press and generally are seen as quite credible. Indeed, board members of rated firms spend significant amounts of time discussing the ratings and attempt to bring governance practices in line with the standards of the watchdogs.

Institutional Shareholder Services, or ISS, the best known of the advisory companies, was sold for a reported \$45 million in 2001. Five years later, ISS was sold again; this time for \$553 million to the RiskMetrics Group. The enormous appreciation in value underscores the importance placed by the investing public on ratings and advisories issued by ISS and its major competitors, including Audit

Integrity, GovernanceMetrics International (GMI), and The Corporate Library (TCL).

But a study by scholars at the Rock Center for Corporate Governance at Stanford questions the value of the ratings of all four firms. "Everyone would agree that corporate governance is a good thing. But can you measure it without even talking to the companies being rated?" asked **David Larcker**, a study author and the codirector of the Rock Center, a joint project of the Stanford schools of Law and Business. He is also the Business School's James Irvin Miller Professor of Accounting. "There's an industry out there that claims you can. But for the most part, we found only a tenuous link between the ratings and future performance of the companies."

The study examined more than 15,000 ratings of 6,827 separate firms from late 2005 to early 2007. (Many of the corporations are rated by more than one of the governance companies.) Besides Larcker, the researchers were **Robert Daines**, the Pritzker Professor of Law and Business, who holds a courtesy appointment at the Business School, and **Ian Gow**, a doctoral student at the Business School. They looked for correlations among the ratings and five basic performance metrics: restatements of financial results; shareholder lawsuits; return on assets; a measure of stock valuation known as the Q Ratio; and Alpha—a measure of an investment's stock price performance on a risk-adjusted basis.

In the case of ISS, the results were particularly shocking. There was no significant correlation between its Corporate Governance Quotient (or CGQ) ratings and any of the five metrics. Audit Integrity fared better, showing "a significant, but generally substantively weak" correlation between its ratings and four of the five metrics. (The Q ratio was the exception.) The other two governance firms fell in between, with GMI and TCL each showing correlation with two metrics. But in all three cases, the correlations were very small "and did not appear to be useful," Larcker said.

Previously academics have attempted to develop reliable rating systems, and there have been studies examining the relation between corporate governance choices and performance. However, the Stanford study appears to be the first objective analysis of the predictive value of the work of the corporate governance firms.

The researchers also examined proxy recommendations that ISS, the most influential of the four firms, makes to shareholders and found essentially no relation between its governance ratings and its proxy recommendations on issues of corporate policy, equity compensation plans, or the makeup of boards of directors. "This is a rather odd result given that [ISS's ratings index] is claimed to be a measure of governance quality, but ISS does not seem to use its own measure when developing voting recommendations for shareholders," the study says. Even so, the shareholder recommendations are influential—able to swing 20 to 30 percent of the vote on a contested matter, Larcker says.

Despite the differences in methodology, one would expect that the bottom line of all four firms' ratings—a call on whether a given corporation is following good governance practices—should be similar. That's not the case. The study found that there's surprisingly little correlation among the indexes the rating firms compile. "These results suggest that either the ratings are measuring very different corporate governance constructs and/or there is a high degree of measurement error (i.e., the scores are not reliable) in the rating processes across firms," the researchers wrote.

Given these results, the time and money spent by public companies on improving governance ratings does not appear to result in significant value for shareholders. ●

—BILL SNYDER

Want Strong Results? Follow Weaker Message

IN MARKETING, context can be as critical as content. Entertainers, politicians, and public speakers instinctively know that a good act is tough to follow. Recent research by one of the Business School's marketing faculty reveals that the same is true for anything designed to persuade—be it a TV ad, public service announcement, speech, or information campaign.

Specifically, investigators have found that messages are perceived as more powerful when they are preceded by *other* messages that appear to have relatively less substance, or come from spokespersons with relatively less credibility. In other words, if you want your message to look particularly good, place it after something not so good. It's like having an opening act that sets the bar low, making the main event seem much better by comparison.

In two papers published in 2007, **Zakary Tormala**, associate professor of marketing at the Stanford Business School, and coauthors Richard Petty of Ohio State University and Joshua Clarkson of Indiana University detail the results of six studies they conducted on how the context in which a message appears affects its influence and perceived credibility.

"Whereas past persuasion research has studied the effects of messages delivered in isolation, our research takes an initial step toward understanding persuasion as it unfolds in the real world," Tormala said. "In the real world, people tend to receive persuasive messages in the context of other messages about different objects or issues. For instance, people might be exposed to back-to-back ads for different products or brands while watching television, reading a magazine, or surfing the internet. It's important to understand the effects of these other messages on the persuasion process."

College students read a marketing-oriented pitch for a hypothetical Brown's department store. The pitch talked in some detail about three of the store's departments. Prior to that, students had read either a description of Smith's department store, the new Mini Cooper car, or a biographical sketch of a hypothetical college student. In each case, students' perception of the Brown's department store description was significantly affected by the nature of the previous message.

When the first message was flimsier—offering fewer supportive facts than the Brown's message—students rated Brown's more positively. "In other words," Tormala said, "the second message was seen as more persuasive when the first one contained relatively less information."

What is particularly significant is that it did not matter whether the first message was related to the second or completely unrelated. Simply being preceded by a less informative message made Brown's department store look better. Conversely, when the preceding descriptions contained *more* information than the Brown's message, the store's rating suffered.

Being given less information about the first item led participants to feel they knew more about Brown's, and, Tormala explained, "When people *thought* they had more favor-



Zakary Tormala



able information about Brown's, they liked the store better, even though the actual amount of information they had was unchanged."

A second series of studies looked at how another variable—the credibility of sources—affected the persuasiveness of a message. In this case, students were led to believe that their university was considering implementing comprehensive exams as a condition for graduating. All participants received a pitch about the change that they were told had been written by someone who normally would be perceived as moderately credible—a local community college instructor.

Earlier, students had read a different message supporting another new policy requiring campus community service. Researchers told some students that this message had been written by someone with low credibility—a 14-year-old high school student—while they told others it was written by someone of high credibility—a Princeton professor.

Participants responded much more favorably to the second, comprehensive exam pitch—supposedly written by the community college instructor—when they were told that the source of the first message they had read was the less credible 14-year-old rather than the more credible Princeton professor. "This result parallels those of the first studies," Tormala said. "When a moderately credible message is preceded by a less credible one, it appears to be more persuasive."

This research suggests that it is as important for ad campaigns to think about tailoring the context of their message as it is to think about the content. Marketers, for example, may want to place their TV commercials after something relatively more vapid. "They might even go a step more radical and consider buying the previous ad spot and filling it with a less compelling message for a different brand or product," Tormala said. "Following a less compelling ad for something else will help make your ad seem more persuasive when it arrives."

Such "greasing the wheels for persuasion," as Tormala put it, "can be used to sell product, promote a political candidate, or make important health messages or other pro-social communications more effective," he said. For greater detail on the studies see the April 2007 *Personality and Social Psychology Bulletin* and the January 2007 *Journal of Experimental Social Psychology*. ●

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>Faculty Publications

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The Impact of Analysts' Forecast Errors and Forecast Revisions on Stock Prices

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Journal of Business Finance and Accounting (Vol. 35, No. 5-6), JUNE-JULY 2008

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Stability in Supply Chain Networks

Michael Ostrovsky
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Jonathan Bendor and Dilip Mookherjee
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Business School students acknowledged the teaching efforts of, from left, Garth Saloner, Bill Barnett, and Robert Flanagan.

also in advising and working with students in related settings. “We are blessed with such great faculty at our School, and I applaud the student groups for recognizing excellence in teaching,” said Dean **Robert Joss**.

In nominating Saloner, one student noted: “He holds us to a very high standard. Not a minute of teaching time is wasted. Outside the classroom he is involved in lunches, study trips, dinners with students. He genuinely cares for students.”

“This is an extraordinary student body dedicated to the improvement of management,” Saloner told students at an outdoor awards ceremony. “You challenge the frameworks we teach, inspiring us to expand the boundaries. I taught the Endeavor case for the first time this year, and after the discussion I sat down and rewrote the teaching plan.”

Saloner, who also received the MBA teaching award in 1993, earned his PHD from the

Business School in 1982 and credited his thesis advisor **John Roberts** and faculty members **Robert Burgelman** and **Irving Grousbeck** with influencing his teaching and writing. Barnett, who earned his PHD at UC Berkeley in 1988, thanked GSB Professor **Glenn Carroll**, who was his thesis advisor.

Doctoral student **Nick Switaneck**, one of Barnett’s advisees, said Barnett “always knew how to meet me where I was and to help me grow.” Doctoral student **Elizabeth Pontikes** credited Barnett with leading her to be an ethical researcher, and to “focus on what the data’s showing” rather than what might be expected.

In the Sloan classroom, Flanagan faced some students with zero background in economics while others had degrees in the subject. “Everyone benefited and improved their level of knowledge,” said **Libby Brown**, Sloan ’08. Another member of the class, **Sarath Boyapati**, said Flanagan transformed individuals’ thinking by using “logic, rationale, and theories and their applications.”

School Adds 13 Tenure-Track Faculty

It is the year of financial analysis in the Business School corridors, thanks to the addition of five faculty in the field of finance. Other newcomers to the tenure-line faculty ranks include a senior professor in organizational behavior, and junior professors in accounting, economics, marketing, political economy, and operations, information, and technology.



Sarah A. Soule

Sarah A. Soule, now professor of organizational behavior, was most recently professor of sociology at Cornell, where she also earned her doctorate. Her research examines state and organizational-level policy change and diffusion, and the role social movements play in these processes. Current projects include analyses of the effects of advocacy groups on

>Faculty News

Three Faculty Honored for Inspiring Students

PROFESSORS **Garth Saloner**, **Bill Barnett**, and **Robert Flanagan** were honored May 27 by Business School students, who presented them with 2008 distinguished teacher awards.

Saloner, who headed the committee that created the new MBA curriculum, is also codirector of the School’s Center for Entrepreneurial Studies. He has accompanied students on trips to countries including South Africa and Ghana, as part of their academic experience, and was honored by MBA students who said he “demonstrated an uncanny command of the classroom: tough, rigorous, serious, attentive, and fun.” Saloner is the Jeffrey S. Skoll Professor of Electronic Commerce, Strategic Management, and Economics.

Barnett, recipient of the PHD Distinguished Service Award, was cited by doctoral students whom he advises for being engaged with his students and supporting their work. The Thomas M. Siebel Professor of Business Leadership, Strategy, and Organizations, Barnett is director of the Center for Global Business and the Economy and director or codirector of three executive education programs.

Flanagan, who this year taught the Sloan Master’s course in economics, is the Konosuke Matsushita Professor of International Labor Economics and Policy Analysis, Emeritus. In presenting him with the Sloan Distinguished Teaching Award, students cited his leadership ability in the classroom.

More than 40 faculty members were nominated for one of the three awards recognizing not only outstanding work in the classroom but



Jonathan B. Berk

environmental legislation in the United States and how protests affect decisions of corporations invested in Myanmar and stock prices of firms targeted by protesters.

Jonathan B. Berk, the A.P. Giannini Professor of Finance, comes from UC-Berkeley's Haas School of Business, where he was the Sylvan Coleman Professor of Finance. His interests include corporate valuation, capital structure, mutual funds, asset pricing, experimental economics, and labor econom-

ics. He is coauthor of a new introductory finance book for graduate students, coauthored with **Peter DeMarzo**, the GSB's Mizuho Financial Group Professor of Finance. Berk, originally from South Africa, was exposed to finance at Goldman Sachs before earning a doctorate from Yale.

Besides Berk, other additions to the finance faculty include:

IAN MARTIN, an assistant professor who conducts research on financial markets and the macroeconomy. He has investigated theoretical models of asset-price co-movement; the implications of disasters on financial markets; asset returns in the long run; the behavior of small assets; long interest rates; and the impact of borrowing constraints in equilibrium. A former Goldman Sachs trader in London, he received a doctorate in economics from Harvard.

FRANCISCO PERÉZ-GONZÁLEZ, an assistant professor whose research intersects corporate finance and organizational economics. Recently he examined the importance of top managerial talent for firm performance in family-controlled firms. A former staff economist for the Mexican government, he holds a doctorate in economics from Harvard and was most recently on the faculty of the McCombs School of Business at the University of Texas, Austin.

JULES H. VAN BINSBERGEN, an assistant professor whose research focuses on consumption-based asset pricing, return predictability, and quantitative portfolio management. Recently, he has looked at goods-specific habit formation for asset prices and the interaction among cash flow, growth predictability, and stock return predictability. He received a doctorate in finance from the Fuqua School of Business at Duke and is also a jazz musician who studied at the Royal Conservatory in The Hague, Netherlands.

BILGE YILMAZ, an associate professor whose research is in corporate finance, political economy, game theory, and market microstructure. He has written on the inefficiency of tender offers, optimal security design, corporate bankruptcy, strategic trading, and predatory lending. He holds a doctorate in economics from Princeton and was most recently on the faculty of the Wharton School, University of Pennsylvania.

Three junior faculty members have joined the political economy faculty as assistant professors:

SAUMITRA JHA, who earned a doctorate in economics at Stanford, researches institutions, political development, and economic growth. He has studied democratic responsiveness and leadership in Delhi's slums, and he has shown that Muslim and Hindu merchants cooperated cordially for centuries when trading in the ports of India. He has a courtesy appointment to the Stanford political science faculty.

CLAIRE S.H. LIM focuses on how political institutions structure the selection of public officials and their electoral incentives. She uses differences among the U.S. states and dynamic econometric models to analyze how politicians' ideologies interact with their policy choices. Lim, originally from Korea, received her PHD in economics from the University of Pennsylvania.

NEIL MALHOTRA studies political psychology, politics, and survey methods. He has written on responsibility attribution following government failure, the relationship between legislative institutions and public finance, optimal methods for designing and analyzing surveys, and publication bias in the social sciences. Recently he has studied the influence of risk perceptions on voting behavior in presidential primaries and leadership selection in the U.S. Congress. He received his doctorate from Stanford's Department of Political Science, where he also holds a courtesy faculty appointment.

Other new faculty members follow:

RENEE BOWEN, assistant professor of economics, applies game theoretic models to the behavior of individuals who are constrained by institutions and who have long-term strategic considerations. Recently she examined characteristics of democratic political institutions that compromise. After working in investment banking at J.P. Morgan Securities and consulting for the World Bank, she earned a doctorate in economics from Georgetown University.

MARIA OGNEVA, assistant professor of accounting and, by courtesy, of economics, studies the role of financial reporting in capital market efficiency. She examines the economic consequences of poor financial reporting and also has explored whether capital markets are efficient in the processing of accounting information. She received a doctorate in accounting from the University of Southern California after study at Lomonosov Moscow State University.

MONIC SUN, assistant professor of marketing, seeks to understand how sellers strategically disclose product information to consumers. For example, she has looked at how a product's quality and positioning jointly determine a firm's incentive to offer free samples. She is interested in dynamic quality adjustments, product line design, and internet marketing. She received her PHD in economics from Boston University after study at Peking University, China.

ROBERT SWINNEY, assistant professor of operations, information, and technology, studies supply chain management issues with multiple parties in cooperative or competitive situations. Most recently, he looked at the effects of strategic consumer purchasing behavior on operational decision making in fashion, retailing, and manufacturing. He has also studied the interface of finance and operations. His doctorate in operations management is from the University of Pennsylvania's Wharton School. ●

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Newsmakers

* WHO'S IN THE NEWS: A ROUNDUP OF MEDIA MENTIONS



Online Real Estate Sites Continue Growing

The grounded world of real estate is finding a home online. Several real estate websites are creating virtual communities for their users.

Sami Inkinen and **Pete Flint**, both MBA '05, founded Trulia three years ago as a search site tailored for the real estate market. Its straightforward maps and interface simplify house hunting. The two met while students at the GSB. A recent infusion of venture capital will allow the site to expand its social aspects, according to the *San Jose Mercury News*.

But it's not just potential buyers who benefit from an online community. **Ryan Slack**, MBA '00, created MyDealBook.com when he realized the company he helped found, PropertyShark.com, offered commercial real estate information only at the parcel level. MyDealBook fosters communication between developers, brokers, investors, and bankers

Sami Inkinen, left, and **Pete Flint**, both MBA '05, founded real estate search website Trulia, which now can be used on mobile devices.

to create a virtual online marketplace. Slack told *Community Property News* that the network serves as a way to recruit brokers.

For the past 20 years **David Faudman**, MBA '84, has organized real estate deals. His CleanOffer.com, started in 2002, recently expanded to the Austin, Texas, market. Both agents and buyers access the network, and buyers are notified almost immediately of new listings and changes in sales prices, according to *Inman News*.

He Grew into His Shoes

As a kid, **John Hoke**, SEP '06, came up with what he thought was a revolutionary idea for an athletic shoe—an air-cushioned sole. He dashed his sketches off to Nike founder **Phil Knight**,

MBA '62, who responded with a letter saying they were already developing that technology, but Hoke should come work for the company when he was old enough.

Hoke told the *Financial Times* he did just that and recently was handed the reins to the now Nike-owned sports brand Converse, whose shoes are considered to be the parent of every modern sneaker. Hoke plans on targeting the shoes to the "optimistic rebel" and will be continuing an ad campaign showcasing footwear named for famous and influential wearers past and present, like the already available custom sneakers commemorating Kurt Cobain, who helped establish Seattle's "grunge" sound.

A Private Investigator for High-Tech World

With a computer mouse in one hand and a telephone in the other, **Margo Evashevski**, MBA '98,

checks the backgrounds of prospective new hires in venture capital, private equity, investment partnership, and hedge fund firms as well as some of the entrepreneurs those groups fund.

"I do human due diligence," she told the *Wall Street Journal*. That can mean verifying if a startup president really did get an MBA from Stanford or unearthing the fact that your candidate for finance executive sold credit card information obtained from a bank where he once worked.

Gary Kremen, MBA '89, hired Evashevski to track down ill-gotten gains earned by a convicted felon who stole the sex.com domain name from him and profited wildly. Evashevski discovered some of the profits invested in a Tijuana topless bar, a Mexican shrimp farm, and a file-sharing service based in the Gaza Strip.

Swaddling 101 for Dads

It sounds like a boot camp. Its teacher looks like a boot camp instructor. But it smells like ... diapers? Welcome to Boot Camp for New Dads, the brainchild of **Greg Bishop**, MBA '81, who started the three-hour baby handling training sessions 18 years ago. The courses are now taught in 43 states as well as Britain and Australia. This year marks the graduation of the class's 200,000th attendee.

Although instructors push for the gentle touch, they can be unlikely candidates, like a former Air Force special-ops commander. Expectant dads are taught everything from diaper changing to burrito wrapping (aka swaddling) infants in their blankets. Bishop told *Time* magazine that one of the course's benefits is the discussion on marital advice, as dynamics change once a baby joins the family.

Gambling Big Versus Investing Wisely

Picture this: A stranger puts \$20 on the table and asks you to pony up \$1. If he gets heads on the flip of a coin, he takes all; tails you do. It's heads.

You're out \$1 but your decision was still a good one based on your knowing the potential returns. Your outcome, however, was bad. The stranger's decision to make a wager was bad because of the greater risk of loss involved, but his outcome was good because he won the coin toss. Professor Emeritus **Charles Horngren** used this example in an interview with *Business Finance* to illustrate the importance of distinguishing between bad and good decisions made in the face of risk. The best protection against a bad decision, he says, is to get the most information and increase your likelihood of a good outcome.

Stamp of Approval for Online Businesses

Remember the old television commercials asking buyers to look for the union label? A modern version of that can be the TRUSTe seal seen on more than 2,400 websites. TRUSTe, which recently converted to profit-making status, monitors and requires all its clients to adhere to a set of online privacy practices. Heavy hitters eBay, Apple, PayPal and Disney all are TRUSTe certified, according to the *New York Times*.



By taking TRUSTe from nonprofit to for-profit, Fran Maier, MBA '89, looks to grow the overseer of online security.

At the helm is **Fran Maier**, MBA '89, who sees the need for online policing increasing as more social networking sites are created and health records go online.

Land Brokers Pick Vintage Locations

Instead of acquiring or launching wineries, which he's done in the past, **William Hill**, MBA '69, is investing in the wine industry from the ground, literally. He and GSB classmate **Richard Wollack**, MBA '69, formed Premier Pacific Vineyards to acquire plantable land that they lease to vineyards.

"We think we found a real

Friends since their GSB days, Richard Wollack, left, and William Hill, both MBA '69, buy and sell land used to grow grapes for premium wines.

gap," Hill told *Wine Spectator*. Leasing small plots of land is an opportunity for small wineries to expand into other varietals, he said. So far they've acquired a total of 7,600 acres in California, Washington, and Oregon. Hill and Wollack emphasize they're in the real estate business, not the wine business, as they plan to systematically sell off the land.

Ulrich Hits Bullseye

It would be easy for **Bob Ulrich**, SEP '78, to claim credit for the success of retailer Dayton-Hudson and its subsidiary chain, Target stores. Since he was named to head the parent company in 1994, Target's sales and store presence tripled. Before that, when he was responsible only for the Target division, the division doubled in size. But he attributes the company's success to choosing the right team and taking care of them.

"It's not about me. It's about this team," he told *AllBusiness.com*. "People need to be motivated." Challenges included facing mega retailer Wal-Mart, providing designer products, and placing a stronger emphasis on food retailing and pharmacy services. After 41 years with Dayton-Hudson, Ulrich followed company policy and retired at age 65 in May.

The King of Shorts

Overlooked or shunned markets are favorite investment opportunities for **John Burbank**, MBA '92. In 2000, his Passport Capital

funds were shorting technology stocks. He beat the herd by early investments in India. Confident the soaring U.S. housing market would eventually crack, he started shorting stocks of U.S. subprime lenders in 2004. As the market rose, he doubled down by buying credit default swaps that paid if securities backed by subprime mortgages went into default. His Passport Global Strategy fund climbed 219 percent in 2007, according to *Forbes*.

"The way to make high returns is to invest in things people don't understand," Burbank said.



Passport Capital's John Burbank, MBA '92, grew his fund 219 percent in 2007.

V.C. Doyen Ventures into Green Territory

Change is afoot at Kleiner Perkins Caufield & Byers. The venture capital firm that helped establish Netscape, Amazon, and Google as household names is changing course, *Fortune* magazine reported. While other firms are investing heavily in Web 2.0 startups, Kleiner is moving toward green tech, biotech, and energy-related ventures.

Brook Byers, MBA '70, specializes in biotech with **Joe Lacob**, MBA '83, who splits his time between that field and energy-related ventures. One such investment is in Terralliance Technologies, Lacob told *Fortune*, which developed software that makes it easier and cheaper to detect and extract oil and natural gas. On the "junior varsity" roster are GSB alumni **Trae Vassallo**, MBA '00, and **Chi-Hua Chien**, MBA '06, who have been serving apprenticeships to older partners and are beginning to lead their first investments. ●



Managing Energy Constraints

Continued from page 17

cultural system worldwide cannot handle the demands of fueling our cars,” says **Rosamond Naylor**, senior fellow at the Freeman Spogli Institute for International Studies at Stanford.

Enter Coskata, a startup backed by Vinod Khosla and General Motors, which is building plants that can turn agricultural waste, garbage, or even tires into ethanol. Coskata has more in common with biotech startups than with refiners because a key part of its process uses microorganisms as a catalyst to break down organic material.

It will be able to make ethanol at a cost of about \$1 a gallon, says **Wesley Bolsen**, MBA '04, chief marketing officer and business development chief of the Warrenville, Ill., company. Now running a pilot project, the company expects to finish a larger demonstration plant in Pennsylvania that will be used by GM to test biofuels in its autos. Plans to build a California production facility that should come online in 2011 were close to being announced as this article went to press.

Ausra, another Khosla-backed startup, is attempting to solve a different part of the alternative energy puzzle: economical solar power. Rather than use expensive photovoltaic panels, essentially large semiconductors, Ausra uses large mirrors to reflect sunlight and boil water to drive steam turbines.

Executive Vice President John O'Donnell says his company expects to build and operate plants such as the one proposed for the Carrizo Plain, and also will sell components made by its 130,000-square-foot factory in Las Vegas.

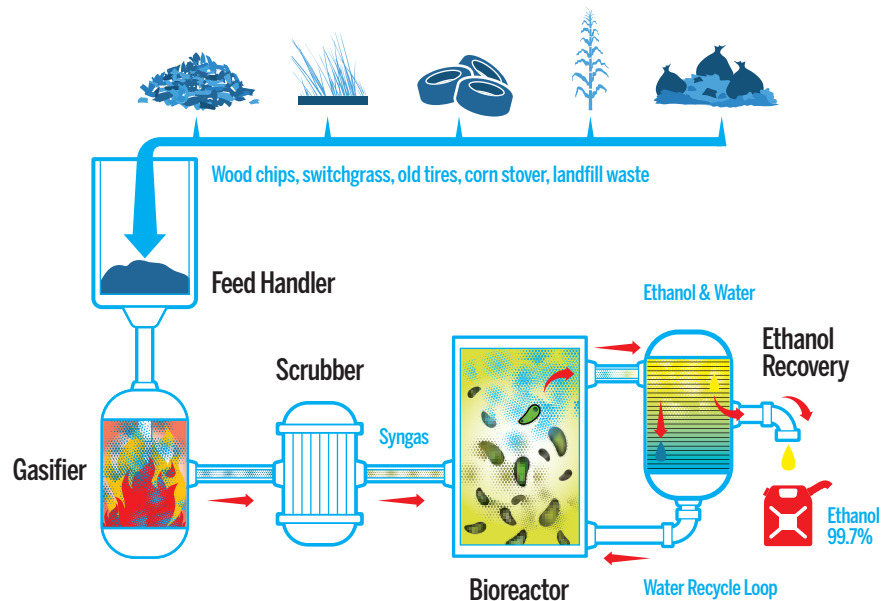
“Solving the problems posed by the energy shortage will take an enormous amount of money, talent, and effort.”

Pacific Gas & Electric has agreed to purchase power generated by the Central California plant, which will generate 177 megawatts of power, enough to power 120,000 homes. If all goes well, O'Donnell says, Ausra will obtain a permit by the end of the year and start construction in 2009.

A big downside of solar energy, indeed of many alternative technologies, is the inability to store electricity generated during the day. Ausra has an ingenious solution: Steam fills a high-pressure vessel and condenses into water. When the pressure is lowered by opening a valve, the water boils, thus forming steam to turn the turbine and generate electricity during the evening or on a cloudy day.

Frank Ramirez, MBA '83, looked at the energy storage problem and came up with a solution that relies not on heat, but on cold. His company, Ice Energy, has developed a hybrid air conditioning system that stores energy by freezing water in an insulated tank. It cools by circulating chilled refrigerant from the tank during the day to the evaporative coil of the conventional A/C system, eliminating the need to run the energy-intensive compressor. Ice is then refrozen each night when demand is lower and electricity is often less expensive.

A key challenge faced by utility companies, Ramirez says, is the



The Coskata Ethanol Creation Process

heavy use of air conditioning during the day. Shifting much of that load to the evening could reduce the need to build expensive and dirty peaker plants.

Taxes and Global Warming

FORWARD-LOOKING AS IT IS, the clean-tech revolution could be slowed, if not derailed, by an old-style dispute over taxation. If Congress fails to set a long-term policy regarding tax incentives for solar power, it may be difficult to build the installations planned by Ausra and others. The difficulty is less the size of the tax break than uncertainty over the amount, O'Donnell says. Without knowing total operating costs, including taxes, it becomes difficult, if not impossible, to negotiate the price of power delivered to utility companies like PG&E.

Besides taxes, environmental concerns could be an obstacle to alternative power. A number of solar projects have been proposed for public land in sunny Western desert areas, but environmental opposition to individual projects could drag out the lengthy federal government-permitting process run by the Bureau of Land Management. (In the case of the Carrizo Plain project proposed for private land, Ausra is seeking a license from the California Energy Commission.) Issues to be addressed on individual projects could include what effect the installation will have on endangered species, on water use, and on the land itself.

How those conflicts, not to mention many others, will be resolved, is not yet clear. Solving the problems posed by the energy shortage without further damaging the environment or imposing draconian lifestyle changes will take an enormous amount of money, talent, and effort. In an essay written earlier this year, Stanford Professor **Paul Romer** offered a hopeful perspective:

“It is the discovery of new formulas that really matters. Economic growth, true improvement in the quality of life, is possible because we keep making these discoveries ... and there is a virtually unlimited scope for discovery of valuable new formulas.” ●



THANK YOU

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ROBERT L. JOSS, *SLOAN '66, MBA '67, PhD '70;*
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