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CLASS NOTES.....



Triage on Health Care System

IN THE WINTER OF 2006, one of our sister publications, *Stanford Medicine*, asked on its cover if the U.S. health care system was a "ticking time bomb." The magazine quoted experts, some of them from the Business School, who answered yes. But they also left me with the impression that we would likely cure diabetes or end the obesity epidemic before the bomb was defused.

Along came the 2008 presidential race and for a while, a national discussion about health care inequities, quality, and pricing problems gave me hope that reform would move to the front burner in 2009. It still may do so, but as I write this, the signs are not encouraging. That is why I am delighted to read on page 17 that faculty members **Andy Grove** and **Robert Burgelman**, along with some unusual suspects from the private sector, are prodding our MBA students to look at ways that an outsider industry might disrupt the status quo and give us reform alternatives not yet on the table. It probably won't happen tomorrow, but if Steve Jobs at Apple can disrupt and remake the music industry, perhaps some of our graduates will someday build a better health care delivery system. If you are spurred to activism on this issue, our story on page 14 outlines the tough issues that must be faced.

You might also start this magazine by sampling our story on the coffee industry in Guatemala. Author and first-year MBA student **Blythe Yee** and her companions who took the photographs provide a glimpse of the deeper learning that study trips give when students get their hands dirty at the first link in a supply chain. For another view of study trips, read on page 6 about alums who returned to Thailand to develop a basic business curricula suited to local conditions. They may be updating the Peace Corps, a model that another alum critiques, also on page 6. With all the adventure in our revised curriculum, you might wish you were back here pulling an all-nighter with a pot of Guatemala's Arabica. Cheers!

EDITOR

Letters to the Editor

John Hersey's illustration on the cover of the February magazine is so captivating, I could not let it pass without admiring comment. I am currently conducting culture shaping seminars with our great employees here in Phoenix and in the home office in San Antonio, part of which cover the value in appreciating how people approach decision making from different perspectives.

Nowhere could one find a better visual of the distinctions between "left brain" and "right brain" perspectives than that provided by the decidedly "right brain" brilliance of Mr. Hersey. Or is there some "left brain" at work in there as well? We are left to further inquiry.

Marina Krakovsky's wonderful article on Professor Shiv's work [on decision making] is so timely and relevant, it reinforces the enduring value of lifelong learning in general and my cherished association with my alma mater in particular. For that I thank you and your staff for your consistently superb work.

Kattleen O Tosle

-Bill Putnam, Sloan '79 Rear Admiral, USN (Ret.), Senior Vice President, USAA Phoenix, AZ

I want to comment on the cover of the February issue. I am not an artist, but it is the most attractive and visually appealing cover that I have seen in a long time. By long, I mean I am MBA'72.

> **-Hoshi Printer,** MBA '72 Newport Coast, CA



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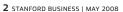
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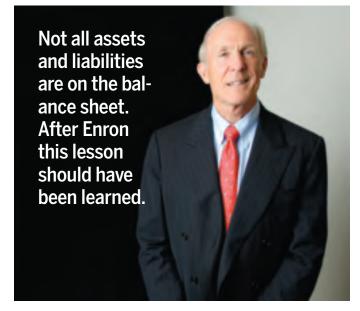
A Call for Back-to-Basics Bankers

SINCE MID-2007 the news has brought nearly daily reminders about risk in the credit and financial markets. So, when I was invited to give a lecture to Australia's Melbourne Centre for Financial Studies last December, I decided to address "Modern Finance and Its Leadership Challenges." In many respects, it took me 35 years to prepare the lecture because so much came not just from gathering my thoughts but also from my long banking experience. After all, the current subprime problem is only the latest in a series of excessive credit extension cycles that have included commercial real estate (twice), agriculture, shipping, oil and gas, developing nations, and leveraged buyouts (twice) since I graduated from the GSB.

In the age-old business of providing affordable loans to creditworthy borrowers we used to have one institution that found the borrower, priced and committed to make the loan, funded the loan from its own resources, held the loan on its balance sheet, and serviced and collected the loan. Now as many as a dozen separate entities might get involved in making that same loan. This brave new world has given people better access to credit, but financial products have become mindnumbingly complex, even to the experts. Risks are split, shared, and redistributed, making it hard to track who is actually bearing what risk. Relentless daily market pressure and competition drive new products into the market faster than they are understood.

But the more things change, the more the basic "truths" stay the same. The subprime mortgage mess illuminates nine lessons for financial leaders:

- Borrowers need to repay loans. No lender does a borrower a favor by making a loan that can't be repaid. It is easy to make loans but hard to make good loans-lenders must keep their eye on underlying credit risk.
- Investors need their money back with a return. No one does savers any favors by selling them investments whose risk they either don't understand or can't bear. Some inappropriate investors ended up holding instruments containing subprime mortgage-backed securities when they should have been invested in other assets.
- If it looks too good to be true, it probably is. AAA-rated securities with higher than AAA returns signal trouble. There is no alchemy in finance—junk can't be turned into gold.
- Not all assets and liabilities are on the balance sheet. After Enron, this lesson should have been learned, but history has repeated itself in short order with structured investment vehicles (SIVs).
- Not all funding is created equal. Borrowers need to remember the difference between dealing with markets and wholesale funding sources (which can be impersonal, unstable, and uncompromising)



versus dealing with institutions and retail funding sources (where the borrower can find someone to talk with and work things out).

- If it is too difficult to understand, don't buy it, trade it, or underwrite it. In the securities alphabet soup of CDOs, CPDOs, CDSs, and "synthetic CDSs," it is not clear that investors, underwriters, or traders fully understood what they were dealing with. Just ask the former CEOs of Citibank, Merrill Lynch, and Bear Stearns.
- So-called "normal" distributions exist only in statistics textbooks, not in financial markets. Many describe recent events as "unprecedented" and "unforseeable," which is not the case. Fat tails on distribution curves are a fact of life in financial outcomes.
- Borrowing in one currency and lending (unhedged) in another can lead to trouble.
- The short run and the long run are not the same. Strip away the complexity and you often find people engaged in that old recipe for disaster of borrowing short and lending long.

As Ron Sandler, MBA'76, (whom the British government recently named to turn around the failed Northern Rock bank) and other executives try to right the ships of modern finance, it is essential to focus on enterprise leadership. The test of enterprise leadership is whether the firm is stronger 5 or 10 years after the leader departs. This can be measured along 5 dimensions: strategy, people, culture, risk management, and long-run value. Change the firm for the better, and stay focused on long-term value. This is the only sure path to a successful financial institution for all-customers, staff, shareholders, and the broader community. •

*For the full text of the Dean's lecture, see gsb.stanford.edu/news/headlines/Jossmelbourne.html

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VHAT'S UP: NEWS ABOUT THE GSB AND ITS GRADUATES









Epicurean Edibles at Stanford Dorm

Let's make it clear. There are reasons to choose an executive program other than the excellence of its dining. Great faculty, top-notch participants, innovative curriculum, collegial atmosphere-Stanford Executive Education has it all. But let's not forget the food!

When the Financial Times rated executive programs, Stanford Business School ranked number one in the world in "food and accommodation." Why? Here's a hint: roasted chateaubriand with bordelaise sauce and sauce béarnaise, whole spring lamb on a spit, whole roasted pig with hoisin sauce. These are just three of the entrees that came out of the kitchen of Raul Lacara, general manager and executive chef of Schwab Executive Services, in the course of the Stanford Executive Program last summer.

And Lacara is no slouch when it comes to the rest of the meal. The chateaubriand represented

only one of the selections at a pan-European dinner, which also included tapas, braised bacalahau, herring salad, and shepherd's pie. Eighteen different passed appetizers preceded the whole lamb and its sides, salads, and dessert at an Australian feast. The roast pig had to share the spotlight with Peking duck at

the China station of a pan-Asian dinner, where the menu also featured Vietnamese and Malaysian appetizers and Japanese, Singaporean, and Indian entrees.

Lacara, who first learned to cook professionally in the Hotel Nikko Manila, apprenticed in Germany and has worked in fine restaurants in Asia, the Middle East, and the United States, as well as on luxury cruise lines. He has won numerous awards



Raul Lacara, the award-winning general manager and executive chef of Schwab Executive Services, with an elaborate ice carving.

for his cuisine and his ice carving, a specialty that finds its way into many of Schwab's festive dinners. Executive Education is currently working on a cookbook of Lacara's recipes, which is expected to be available in 2009.

Solar or Bust in Four Decades?

If the world had to rely on the United States for all its oil, the supply wouldn't last very longone year to be exact. According to calculations by Gilbert Masters, professor emeritus of civil and environmental engineering, current oil supplies in all nations combined will last about 41 years. Masters painted the sobering picture of the world's looming energy dilemma during a threeday January conference sponsored by the Stanford Business School Alumni Association and



Gilbert Masters

the University's Woods Institute for the Environment. (See related story, page 19.)

With new oil sources not guaranteed, more companies are interested in renewable energy, including solar and wind power, and electric-powered vehicles, Masters said, citing a 2007 Morgan Stanley report that the market for environment-friendly products and technologies will reach \$1 trillion by 2030. Venture capital investments in "greentech" businesses rose to \$2.4 billion in 2006. Masters said. and investments in solar power reached \$1.2 billion by the end

of the third quarter of 2007.

Masters advocates generating electricity for cars from sunlight, using photovoltaic technology. While a typical car using conventional fuel costs 14 cents a mile to run, a hybrid costs half that, he said. Electricity purchased during off-peak hours would cost about 1.5 cents a mile. Factor in a "smart garage" generating solar energy with photovoltaic roof tiles, and consumers would have enough power "to drive one of these plug-in hybrids and all-electric cars about 12,000 miles a year."

Pundits Turn Mist into Downpour

Thinking back to the beginning of this interminable year of presidential election campaigning, a moment breaks through the mist of political fatigue: when Hillary Clinton seemed to be caught off guard and spoke through misty eyes of the personal toll her campaign had taken. Many pundits credited that atypical display of vulnerability as the turning point in the New Hampshire Democratic primary, which she won.

Emotional ideas stick, and so do unexpected ones, says Business School Professor Chip Heath in his book Made to Stick: Why Some Ideas Survive and Others Die. "When ideas like this are propagated, we find that they're exaggerated along the way and become even more unexpected," Heath told the New York Times a few days after the primary. "What I heard was that Hillary broke down and cried, but when I watched it on YouTube she wasn't really crying. It had already been exaggerated."

Woz's Apple Recipe: Mix Oil and Water

Steve Wozniak has a recipe for a great high-tech startup: Begin with two young guys, one a computer nerd and the other a marketer, add money, and maybe you'll wind up with a company as successful as the one he and his buddy Steve Jobs built.

To get startups through their often lean, early years, founders need to have complementary

strengths, the Apple Computer cofounder told students at a talk sponsored by the Entrepreneur Club. He suggested they look for an engineer with many skills "and not divide it down into one guy will do this design, one guy will draw on paper, one guy will write the manual, another will actually design, another will build it, and yet another guy will test it."

"From the technologist's perspective, is there value in having a partner on the business side?" asked Garth Saloner, codirector of the Center for Entrepreneurial Studies.

"It's absolutely critical," Wozniak responded. "I totally admire the business people," he said, but he wouldn't want to be one. "I decided I'd just be an engineer at the lab, hooking up wires and doing that for all my life."

She's a Hottie Now

The moment of truth arrived for Heidi Roizen, MBA '83, one morning last May, when she stepped on the scale and discovered she weighed more than her husband. "That's one of those times when you say, 'I've got to do something about this," Roizen told lifestyle show host Martha Stewart.

Roizen had tried diet and exercise to little avail. The music



Heidi Roizen, MBA '83

she worked out to was OK, but the words were either violent or vapid. Then it hit her: "There ought to be music to psych you

Classroom Snippets

Critical Analytical Readings

In the new MBA curriculum, first-year students are assigned specific portions of books, along with shorter readings, for the course Critical Analytical Thinking. One of the important lessons of this first-quarter course is to read everything with a critical and skeptical eye, which means that just because a book is on the reading list does not imply that the faculty endorse the book's contents. With that caveat, here are books that were on the course reading list autumn quarter.

William Easterly

The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much III and So Little Good Penguin Press, 2006

Milton Friedman and Rose Friedman

Free to Choose: A Personal Statement Harvest Books, 1990

Thomas Gilovich

How We Know What Isn't So: The Fallibility of Human Reason in Everyday Life Free Press, 1993

Malcolm Gladwell

Blink: The Power of Thinking without Thinking Back Bay Books, 2007

Thomas P. Hughes

American Genesis: A Century of Invention and Technological Enthusiasm, 1870-1970 Viking, 1989

Steven Johnson

The Ghost Map: The Story of London's Most Terrifying Epidemic—and How It Changed Science, Cities, and the Modern World Riverhead Trade, 2007

Milan Kundera

The Joke Harper Perennial, 1993

John McMillan

Reinventing the Bazaar: A Natural History of Markets W. W. Norton, 2002

Jeffrey D. Sachs

The End of Poverty: Economic Possibilities for Our Time Penguin Books, 2006

Thomas C. Schelling

Strategies of Commitment and Other Essays Harvard University Press, 2006

up, music that when you're driving to the gym, it makes sure you actually go in."

Roizen is known as a successful software entrepreneur and venture capitalist, but she's also a funny writer. In the months after she hit the weight wall, she wrote lyrics to a bunch of motivational workout songs. One is an ode to the "Skinny Jeans" that hang in what her husband calls her "aspirational wardrobe." Another, inspired by the words on her car's rearview mirror, proclaims: "Objects in the mirror will get thinner than they now appear." There's Roizen's power app for power abs, "The Incredible Shrinking Woman":

You see I'm a superhero, with

powers of epic might / I use wills of steel, at every meal, to control my every bite / And with my X-ray vision I can see without a doubt / There's a skinny girl inside me, I've just got to let her out.

Roizen recruited Nashville producer David Malloy to write music to her lyrics and singers to record them. She put up the money, and six months after hitting her personal worst, Roizen had gained a music company and lost 30 pounds.

Roizen's songs and her line of inspirational tees and tanks (including Stewart's favorite, "Do Not Feed") are available through SkinnySongs.com. As for the lyricist, she's singing "I'm a Hottie Now" all the way to the gym.

Quotable



"The Fed has to be very careful now to add just the right amount of stimulus to the punchbowl without mixing in the potential to juice up inflation once the effect of the new punch kicks in."

Richard Fisher, MBA '75, president and CEO of the Federal Reserve Bank of Dallas, speaking Feb. 7 at Instituto Tecnológico Autónomo de México, in Mexico City.

"Ten years from now, the PC will largely be a thing of the past; it'll all be done pretty much on smart phones. That's already the case in other countries."

Sanford Miller, MBA'75, general partner of Institutional Venture Partners, speaking at the School's Principal Investment Conference in February.



Consumer Choices Can Reform Sweatshops

Giving the back of his hand to Adam Smith's notion that an "invisible hand" guides markets, the Business School's **Hayagreeva** "**Huggy" Rao** argued that it is instead the "visible joint hands of activists that shape markets and can exert a profound effect" on sweatshop operations overseas.

Rao, an expert on cultural causes of organizational change, said consumers can wield influence over the working conditions at manufacturers. "By educating, by moralizing consumers, movements can create natural incentives for firms to differentiate themselves," he said.

Rao was among a group of Stanford faculty convened last fall to discuss the role of the University, the garment industry, and social movements as they relate to working conditions for the men and women who make gear emblazoned with Stanford's logo.

"We've always exercised great care in how the Stanford name is used," University President John Hennessy said. "That should apply not only to the name of the University around the world with respect to research and education, but also in the way it's used with apparel products.

"Just as Stanford has adopted

standards on its own core campus talking about having a healthy, safe, secure working environment, we should expect the same thing for the products we use and the products that carry our name."

Business Basics Taught with Goats, Soybeans

It was one of those aha moments. In January 2007, Business School students Scott Raymond and Katherine Boas visited Thailand on a Service Learning Program study trip. There they met social entrepreneur Mechai Viravaidya, founder of the Population and Community Development Association, which extends microloans to entrepreneurs in Thailand's rural villages. "Mechai said, 'Wouldn't it be great if we had a basic business curriculum that everybody could learn so that people who receive the loans could use them wisely?"" Boas recalls. "Scott and I looked at each other and said, 'Well, we could do that."

Boas and Raymond, both MBA '07, returned to Stanford to research and write the "Barefoot MBA Curriculum," a teaching guide for development professionals. The curriculum presents basic concepts of business that are applicable everywhere, but are told as stories that appeal to people in a certain area. In the first version, written in English and adapted to rural Thailand, the lesson about interest involves the loan of a goat to a neighboring farmer, cost benefit is demonstrated by the sale of pigs, and the concept of competition is a tale of two soybean vendors.

Raymond and Boas returned to Thailand last summer, thanks to a GSB Service Learning Program fund that provided airfare and living expenses. There they presented their ideas to local English-speaking representatives of the microfinance organization who tested the lessons, in Thai, in a classroom of village entrepreneurs. The curriculum is purposely not copyrighted. It is intended to be translated into any language; its stories can be shaped to any local issue.

Six months and many revisions later Boas and Raymond told participants at the Schwab Foundation Social Enterprise Summit in Rüschlikon, Switzerland, about their work. "Social entrepreneurs from around the world, especially but not exclusively in microfinance, were excited about a free, adaptable tool to teach business skills to anyone anywhere." Raymond and Boas wrote in their blog. "We arrived at the summit hoping to find additional partners to adapt and implement the Barefoot MBA; we left with a stack of business cards of

people eager to help."

The "Barefoot MBA Curriculum" can be downloaded at barefootmba.org.

Strauss Challenges Peace Corps' Legend

Imagine an Iowa farmer confronted by a freshly minted college grad from Cameroon armed with a three-month crash course in agriculture and the certainty she can teach the Midwesterner how to raise pigs.

"I'm pretty sure the American farmer would see it as a publicity stunt and a bunch of hooey," says **Robert Strauss**, MBA '84, who witnessed the reverse of this scenario when he was Peace Corps country director in Cameroon from 2002 to 2007. Strauss was also a Peace Corps volunteer in the '60s and a recruiter in the '70s.

The world has changed since 1961, when the Corps first offered developing countries "well-meaning young people possessing little more than good intentions and a college diploma," Strauss observed in a January op-ed column, "Too Many Innocents Abroad," in the New York Times. "What the agency should begin doing is recruiting only the best of recent graduates—as the top professional schools do—and only those older people whose skills and personal characteristics are



MBA student Scott Raymond, left, gets a lesson from a Bangkok barber Khun Tubtim as part of research for developing the "Barefoot" curriculum.





Korean Study Trip

South Korean President Roh Moo-hyun, top photo, dons a sweatshirt for his MBA visitors, including his son, Gun Ho Roh, right, at their December study trip. MBA students Michal Bortnik and Brooke Jones, bottom photo, visit Dorasan train station in Korea's demilitarized zone on Dec. 22, just 10 days after freight trains resumed service from South to North Korea following a 56-year hiatus. The resumption in service was one of the economic reconciliation initiatives of President Roh, whose term ended in February.

a solid fit for the needs of the host country." If this means fewer volunteers, he said, so be it.

Strauss's op-ed was widely disseminated in print and online. Although he received kudos from some readers, many echoed the objections raised in a letter to the editor from U.S. Sen. Christopher Dodd, D-Conn., a volunteer in the Dominican Republic in the mid-'60s, who announced he had written a bill that would not downsize but, rather, double the Peace Corps.

Strauss obviously hit a nerve. But why? Part of the reason, he surmised in an email sent from Madagascar where he has begun a consulting business, is "because Peace Corps is the last untarnished remnant of the Kennedy years, the last line of defense before all the walls of Camelot come tumbling down. Also, no one likes to wash dirty laundry in public, and since the very beginning the Peace Corps has been exceptionally good at keeping its dark side private."

As for Dodd's suggestion to double the Corps, Strauss wrote, "And where would he send twice as many volunteers? I don't know a lot of country programs that would be ready to accept them until there was much more support for them in the field."

Don't Eat the Spoon that Feeds You

They say green is the new black, but to the Business School green means more than one fashion layer-it extends from the construction plans for the School's future campus down to the environmentally sustainable practices of its current cafeteria.

Over the past year, the Arbuckle Cafe in the basement of the old GSB building has led the University in composting and recycling. In January 2007 it was the first food campus to switch to biodegradable "spudware" made of potato starch and food containers of sugar cane and polyacetic acid. Currently the only items in Arbuckle that are not compostable are hot coffee lids and the wraps on pre-packaged grab-and-go items, like chips and snack bars.

If you can't eat it or compost it. you can recycle it, and, according to Julie Muir of Stanford Recycling, the Business School leads in that as well. "I am very thankful to Arbuckle for taking the lead because it is helping me to encourage other campus cafes," Muir



Bon Appétit's Arbuckle Cafe spudware is certified by the Biodegradable Products Institute.

said. "They are a model program for the rest of the campus."

The Business School is green academically as well. Last year, for the second time, it took the top spot in "Beyond Grey Pinstripes," a biennial survey of business schools by the Aspen **Institute Center for Business**

Education that evaluates how well schools integrate environmentally sound practices into the curriculum.

They're Playing Our Song

Music has been a part of his life since he started piano lessons at age 6 in Spokane, Wash. These days Business School Dean **Robert Joss** is known to sit down at the keyboard with family and friends for a sing-along of Broadway tunes or Christmas carols, so it was not surprising that Bob Asadorian, MBA '72, who helps find guest deejays for the campus radio station, asked Joss to do *Lunch Special* duty one day in February.

Among the songs on Joss's KZSU playlist was "You Can't Stop the Beat" from the musical Hairspray, a song his grandkids sing, and "Only You" by the Platters, "a very popular 1950s group when my wife and I were in high school," Joss said, "and over the vears, this has become 'our' song."

The dean's other selections ranged from the sublime "Nessun Dorma" from Turandot. which he heard Pavarotti sing with the Three Tenors in 1997, to Australian folk songs "Waltzing Matilda" and "I Still Call Australia Home," which remind him of the country he called home in the '90s when he was CEO and managing director of the Sydneybased bank Westpac.

Any undergraduate listeners were probably most surprised, however, to learn the history behind the Dean's choice of "Rock Around the Clock," by Bill Haley and His Comets. Before that song came out in the mid-'50s, Joss said, "Adults and children all listened to the same music. The Hit Parade of top 10 songs was something you and your parents would both watch and listen to on TV. After rock 'n' roll appeared, the parents and kids went their separate ways musically." •

For a complete list of Dean Joss' music go to: gsb.stanford.edu/ news/headlines/hit_parade.html

Mountaintop Catastrophe as Teacher

Barely surviving an Andes plane crash and avalanche, Pedro Algorta discovered the value of teamwork.

WHEN PEDRO ALGORTA WAS APPLYING to the Stanford Graduate School of Business in 1979, he submitted the usual package of transcripts, test scores, and essays. Then, almost as an afterthought, under the heading of Additional Information, he added a short note. "It wasn't very specific," recalls Algorta, MBA '82. "I just mentioned that I had gone through a very extreme experience in the Andes Mountains."

In fact, Algorta was a survivor of one of the most well-known plane crashes of all time: the 1972 downing of Uruguayan Air Force Flight 571 in the frozen Andes, about a hundred miles southeast of Santiago. The impact instantly killed 12 of the 45 people onboard; 5 the next day; 1 on the 8th day; 8 suffocated in a subsequent avalanche; and 3 more died of frostbite and other injuries. For 72 days, Algorta and the remaining passengers huddled in the plane's wrecked fuselage with little to eat but chocolate, some wine, and eventually the flesh of their dead companions. The highly publicized ordeal was related in a bestselling book, Alive, and a 1993 movie of the same name.

No one from the Business School admissions office ever asked Algorta about the cryptic note on his application. Even after he enrolled at Stanford, few of his classmates were aware of what the soft-spoken young man had been through. Now though, after a successful career in the Argentine brewing and wine industry, the former CEO is rethinking his long public silence on the subject. Last year, at the urging of his family, the 56-year-old father of three agreed to be interviewed for an anniversary book and documentary on the crash. More recently he shared his harrowing story with a rapt audience of GSB alumni.

Algorta was just 21 years old-an idealistic, left-leaning economics student at the University of Uruguay in Montevideo-when the ill-fated Fairchild FH-227 crashed on Oct. 13, 1972. The flight had been chartered by a team of rugby players, alumni from his Catholic high school in Montevideo, who wanted to play a match in Chile. Algorta, eager to visit a Chilean girlfriend, happily signed on for one of the bargain surplus seats.

Algorta recalls a festive atmosphere onboard the twin-engine turboprop as it set out on the journey from Montevideo to Santiago, Chile. When the pilot began to pick his way through the rugged Andes Cordillera, though, the plane hit frightening turbulence. Outside the windows, the jagged peaks of the mountains seemed perilously close.

"Suddenly the joy stopped and fear took

over," Algorta recalled in his Dec. 4 talk, co-sponsored by the GSB's Lifelong Learning program and the Center for Leadership Development and Research. "I remember the engines of the plane were put on full potential as the pilots tried to

recover altitude, but it was too late." One of the wings clipped a slope and was ripped off. The rest of the plane skidded to a stop on the soft snow of a glacier at about 12,000 feet elevation.

Overcoming their initial shock, the survivors organized for what they were sure would be a swift rescue. Directed by the rugby team captain (four of the five crew members were dead), Algorta and his companions tended to the wounded, removed bodies from the wreckage, and devised makeshift sleeping quarters. Through a small transistor radio, they heard that rescuers were scouring the mountains for them. What they didn't realize was that the white fuselage of the downed plane was nearly invisible to searchers from above.

As days wore into weeks without rescue, the group fell into a useful, if monotonous, routine: cleaning the plane's interior, melting snow for drinking water, smoking, praying the Rosary, dreaming and talking incessantly about food. "We were all going to launch successful



businesses related to food," Algorta said wryly. "We also talked about silly things: how we were going to get back home—we were not going by plane—and what we were going to tell our parents."

Then one day, about 10 days into their ordeal, the young passengers turned on the radio to hear devastating news: The search was being called off, at least until the summer thaw. Desperate by now for something to eat, they seriously began to consider what previously had been unthinkable.

"We started talking about it," Algorta told his hushed audience, "and one day we just went out to one of the frozen bodies, made a small cut with broken glass, took some of the flesh, and put it on top of the fuselage to dry. Then, one by one, we ate." There was some rationalization. Some of the passengers compared the act to Holy Communion, suggesting that these friends, like Jesus Christ, might have died in order for them to be saved. Another suggested that if he died, he would be more than willing for the rest to take and eat his body. But the truth required no apology. "We all ate because we were weak and hungry," Algorta said simply. "And we wanted to live."



Pedro Algorta in 1972 was among 16 passengers who survived a plane crash and an avalanche in the Andes. Their 72-day ordeal eventually forced them to eat from the frozen bodies of passengers who had not survived.

As their extreme hunger faded, the survivors began concentrating on a new objective: to send a small expeditionary force down the mountain to find and bring back help. The fittest of the group began taking short, exhausting forays from the plane, trying to figure out the best way to go. The route was by no means obvious. Some favored going east, where the terrain seemed less daunting. Others lobbied for a more direct, if treacherous route west toward Chile.

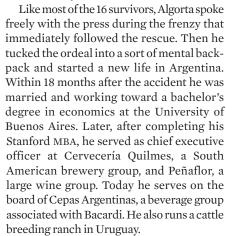
"We were just getting ready to choose the expeditionaries," Algorta recalled, when suddenly one night the passengers heard an ominous blast in the distance. Within seconds, an avalanche engulfed the plane, spilling tons of snow into the open end of the fuselage and killing eight who were sleeping on the floor, including the rugby team captain. Algorta, too, was buried.

"In the beginning," he explained, "you can continue breathing [in an avalanche] because the air flows through the snow. But then the snow freezes and the oxygen is cut off. ... After many attempts to get out, I just felt very tired and started to stay still. I realized I was dying and felt enormous quiet and peace. And then when I was almost gone, one of my friends removed the snow over my face, and air came into my lungs. Suddenly all the will and strength to continue fighting for life came back."

It took several days for Algorta and his companions to dig them-

selves out of the cold darkness, during which time three more perished. By then their resolve to get off the mountain by their own devices was stronger than ever. On Dec. 12, three of the strongest passengers set out over the thawing summer ice while Algorta and the others stayed with the plane, clutching their precious radio and listening for bulletins. Ten days later-72 days after they had taken off from Montevideo—came the news they had been longing to hear: Their friends had arrived in Chile, and a search-and-rescue helicopter

was on its way.



Interestingly, Algorta said, his leadership style in the business world was a reflection of how he behaved on the mountain. Unlike the heroic young men who walked down the mountain for help, he explained, "I stayed with the group. And that is the kind of leader I've been in my life: building teams, being with people, making groups work."

Why did Algorta decide to open his mental backpack and talk about his story again after all these years? Partly it was about reaching middle age and having more time for reflection. "All my life I didn't have time for my mountain," he explained. "I was too busy working, studying, being a father. ... For me it is just part of my normal life. I never dreamt about it. I never had nightmares."

Then, too, he wondered if anyone really cared. "Why would people be willing to hear me speak when so many things happen to other people in life?" he reasoned. "People go to war. People get transferred and have personal ordeals and disgraces. Why would people want to hear about something that happened to me 35 years ago?"

The answer, fittingly enough, came about two years ago while Algorta and his wife, Noelle, were traveling in Chile not far from where the crash occurred. "Our tour guide was a woman in her 40s who'd had a tough life," he recalled. "Her only child had committed suicide, and she said the only reason she was still alive was because our story had inspired hope in her. ... I thought, well, maybe my story has something that really means something to other people."

Algorta blogs [survivorwalk.blogspot.com] and would like to write a book about his personal experience in the Andes. He's also building a series of corporate workshops around the leadership lessons he learned: truths about the value of teamwork, leadership styles, and having a group objective. Above all, he wants to send a message of hope—that the human instinct for survival is strong, and if he and his friends could overcome the Andes, you can overcome the mountains in your life, too. As he explained, "We were just a group of ordinary guys who went through an extreme situation. And ordinary guys can accomplish extraordinary things." •



On a study trip to Guatemala, students sample the socioeconomics of coffee.

LET'S SAY YOU LIKE COFFEE. Perhaps you go to Starbucks every day. Maybe you want developing countries to develop, and you also believe that small coffee farmers deserve a chance to make a living. Perhaps you care about the environment, and have been buying organic coffee because that seems the most sustainable way to farm.

So, what kind of coffee should you buy? Fair trade? Organic? Starbucks? We hoped to figure this out during a School-sponsored service learning trip in December 2007, as we took a look at coffee farming and supply chains in Guatemala, a country where a nearly 40year civil war ended only a decade ago. Ten days, six coffee farms, erratic showers, four blackouts, and one earthquake later, we're still not sure. But the trip was a rich experience, one that raised questions far beyond coffee. Some of us are still puzzled as to where we should buy our morning cup. But we're also thinking about corporate social responsibility, agriculture, education, and the challenges that the small farmers we met are facing every day.

SHOULD YOU BUY GUATEMALAN COFFEE? Anacafé certainly wants you to. Our trip kicked off with a visit to Anacafé, the association of coffee producers charged with promoting Guatemala's coffee. Christian Rasch, Anacafé's president and a big coffee producer himself, gave us a primer on the organization, which is authorized by the Guatemalan government to grant farmers and exporters the licenses necessary to export coffee and which works hard to drive up demand for high-quality Guatemalan Arabica beans. (For the caffeinated, there are two main types of coffees, Arabica, which is the better stuff, and Robusta, a

hardier but harsher-tasting bean that you'll find in mass-market coffees. Around 2000, Vietnam started producing Robusta, sending coffee prices plunging-and creating an incentive for countries like Guatemala to focus solely on cultivating Arabica.)

Rasch and his fellow Anacafé members are trying to make Guatemala's coffee appealing to the buyers and cuppers (coffee tasters) of the world. Twenty years ago, said Rasch, the country's biggest buyer was Folger's. Now, 25 percent of Guatemala's coffee goes to Starbucks. "In Guatemala we say, 'You don't fight with the cook," he joked. This strategy of cooperating with big buyers, marketing, and investing in the cupping that differentiates regional coffees seems to have worked; Guatemalan coffee sales have been growing steadily.

After Rasch's presentation, we had a cupping session. It's a difficult task for the nose and palate. You've got to get a good whiff of the froth that crowns a cup of grounds and hot water. Then you've got to suck the coffee through your teeth, evaluate it, and spit. We knew what we liked; the mountain-grown Arabicas of which Guatemala is so proud were complex and deep. As for the Robusta, critiques included "corn," "grass," and "diaper." We left our meeting appreciative but somewhat skeptical. If Anacafé had a stranglehold on the export licenses—and was run by coffee producers—the organization could pose conflicts of interest.

SHOULD YOU BUY FAIR TRADE COFFEE? Before our trip, we had read about Fair Trade, a certification and labeling system that seeks to benefit agricultural producers in developing countries. To obtain this Fair Trade certification, a farming community needs to meet standards that

By BLYTHE YEE, MBA Class of '09





Student author Blythe Yee picks coffee cherries at a mountainside coffee farm as part of a service learning trip.



The travelers experienced an earthquake during their stay in Antigua in Guatemala's coffee-growing region.



Students sort coffee cherries they picked. Each student's half-day haul of coffee beans was worth about 80 cents.

include having democratically elected leadership, paying living wages, and investing in schools; those who meet these standards are guaranteed a minimum price for their goods. Fair Trade coffee fetches a farmer about \$1.50 a pound, versus about \$1.35 for non-certified coffee. And Fair Trade lets a consumer feel pleased about paying a bit more for coffee produced by small, forward-looking farms. Very often, we had learned, small Guatemalan farmers wound up at the

mercy of "coyotes," middlemen who paid them dirtcheap prices for unprocessed coffee and then sold it to exporters. Fair Trade, it seemed to us, was a way to give coffee farmers some price protection from the covotes.

The group spent two days at Santa Anita, a Fair Trade-certified coffee cooperative of about 40 families who each owned about 10 acres of mountainous land. The cooperative formed a decade ago after the end of a civil war that pitted guerrilla fighters against U.S.-backed military governments. With

nowhere to go, some 100 ex-guerillas purchased the farmland with a government loan. Santa Anita's leader, Rigoberto Agustín, had spent nearly three decades as a guerilla fighter. Agustín was stout, charismatic, humble, and humbling. "It's one thing to say 36 years of war, but it's very different to have lived it," he said modestly.

Santa Anita was one of the service elements of our trip. We picked, hauled, and sorted coffee. Picking coffee, we learned, can be a bit like sledding-with no snow and no sled. Some of us picked on a plot of land known, we learned later, as "The Cliff." It was a near-vertical mountainside slope that had to be hacked through with a machete.

With baskets tied around our waists, we picked coffee cherries with one hand and clung to the trees with the other. "We also had to battle swarms of bees," recalled Andy Martin, Class of '09. And while we genuinely appreciated Santa Anita's organic farming-nobody had to worry about harsh pesticides—we sure as hell weren't going to touch the coffee clusters that were riddled with ants. After picking the cherries, we hauled them in sacks and baskets on an uphill trail back

We had learned small farmers wound up at the mercy of "coyotes," middlemen who paid them dirt-cheap prices for unprocessed coffee and then sold it to exporters.

> to the farm. Our haul for the morning was about 170 pounds of coffee cherries, which would have earned us about 80 cents each—not quite enough for a bottle of Gallo, the national beer.

> Squatting on a cement drying patio, we sorted the coffee cherries. The women of Santa Anita challenged the GSB women to a basketball game (and thrashed us, despite the GSB team's height advantage). The men of Santa Anita took on our guys in soccer-a rather fast game on the concrete basketball court—and beat us there as well. After a day of picking and pick-up games, cold showers awaited us.

Agustín spoke frankly about what Fair Trade practices mean to his



Sophie Pinkard, left, Blythe Yee, and Melania Lonchyna sort coffee cherries at a coffee cooperative.



Pedal power is used for husking coffee beans at As Green As It Gets, an economic development organization.



Tour leader and teacher Hugo Suarez translates Spanish to English for the study group that worked at coffee farms.

farm. "Through the Fair Trade family, we get a lot of interaction with buyers," he explained. "Buyers are listed on the internet, but we wouldn't know this." Nobody at Santa Anita had the English skills to market coffee internationally, he added. Fair Trade certification has allowed Santa Anita to find a market, but the certification initially cost the little cooperative 2,000 euros. They're paying less for it now, but when Hurricane Stan decimated their crop in 2005, they had to fork over a certification fee-even though it amounted to more than the farm's production that year.

After dinner with the families of Santa Anita—Professor Jesper Sørensen and his wife were hosted by the community's chicken supplier whose house was filled with bowls of freshly slaughtered chicken feet and heads destined for New Year's celebrations the next night we found out what had happened to the coffee we had painstakingly picked that morning. The farm's wet mill, which strips the pulp off Guatemalan businesses like coffee farms and textile producers with training and financing, sells roasted coffee to churches, school fundraisers, and a few coffee companies in the United States with whom Voorhes has cultivated relationships. Every dollar from the \$8 price of a 1-pound bag goes back to the families in the organization's farming collective. Touring the village around the farm, we saw flimsy cornstalk houses with corrugated steel roofs, and then sturdy concrete homes that coffee money had helped build. One family had started a brisk business in totes and satchels made of burlap coffee-bean sacks, a cottage industry As Green As It Gets had helped fund.

The organization's coffee isn't Fair Trade, which, Voorhes explained, certifies unroasted green coffee; the lion's share of the roasted coffee price still ends up in the hands of roasters. Anacafé, he asserted, wasn't doing much to help small farmers capture more value. It had taken his small collective two years to get an export license. Some farmers fare



Students Jonathan Reinemund, Sophie Pinkard, and Preston Bottomy compared by "cupping" coffee varieties.



Student trip leader John Joseph likes the taste of Arabica at a mill owned by coffee exporter Cafcom.



Cafcom employees Juan Lantzendorffer, left, and Carlos Bacaro with students Chimeka Thomas and Sarah Garrett.

the coffee cherries, wasn't operating that day, and unprocessed cherries are perishable. Because some families were in need of cash, our haul had been sold to some local coyotes at a rock-bottom price. We looked at each other in dismay-and then laughed ruefully at the irony of it. Even a Fair Trade farm can't always afford to be fair.

SHOULD YOU TRY TO BUY DIRECT FROM A COFFEE FARM? One issue preoccupied us throughout our trip: roasting. Why did coffee roasters and final sellers capture so much value in the supply chain? Suppose small farmers roasted coffee collectively and sold it overseas. They would be able to capture a lot more value, we figured. We never could determine what percentage of coffee's retail price went to roasters and exporters, but putting more of that price into small farmers' pockets, we thought, would be a no-brainer for improving their business.

Unsurprisingly, it's not that simple. Coffee quality deteriorates faster after you roast it. Plus, big buyers have their own roasting specifications, which can also be a way to mask inconsistencies in their bean supplies. A roasting machine can cost about \$25,000. And there was another obstacle, pointed out Franklin Voorhes, who heads an economic development organization called As Green As It Gets (asgreenasitgets.org). If you're an illiterate farmer, "Where are you going to sell your coffee?" he asked.

Voorhes' organization, just outside the city of Antigua, tries to answer that question. As Green As it Gets, which provides small worse: "If you're an illiterate Mayan, filling out a form is a major obsta-

At As Green As It Gets, we helped out again. To process coffee, you have to dry the beans after you strip the pulp. Drying beans requires a flat concrete surface, and the collective was facing a production bottleneck: not enough space to dry the coffee. So we pitched in and helped build a patio. Though monotonous, picking coffee had had a certain agrarian appeal; mixing and pouring concrete offered no such charms. Making concrete required mixing up a heavy sludge of dirt, cement, and rocks. We then pushed it in tottering wheelbarrows and dumped it into the patio's frame. And then we repeated that process again and again. We spewed expletives as wet concrete slopped out of our shovels and onto our shoes.

After finishing part of the coffee-drying patio, we prepared to head back to Antigua. The town's power failed leaving most of the concreteencrusted group without showers. So we discussed the day by candlelight in our hotel dining room. (It was the first of several blackouts we endured.) We liked Voorhes a lot. He was making a real difference in his community. But we worried about the families he worked with. What Voorhes had didn't seem like a sustainable business model. He was the one who maintained all the relationships with the U.S. buyers. Without him what would those families do? He'd said he could probably charge more and find more buyers but that he was no marketer. He drew no salary and his girlfriend, a speech therapist, supported him. Over candlelight, we agreed that he was quite admirable and perhaps a little mad.

SHOULD YOU BUY STARBUCKS COFFEE? Starbucks has a program called C.A.F.E. (Coffee and Farmer Equity) Practices, which sets standards for the coffee farms from which it sources its beans. Based on U.N. labor standards, the program tries to ensure that farms adhere to sound environmental practices and provide decent wages and working conditions. Over half the coffee Starbucks bought in 2006 was from C.A.F.E.-certified suppliers. Starbucks also provides funds to loan programs that serve small farmers and makes community investments in schools and free health clinics around coffee farms. We visited one

such facility, the Clinica Santa Clara, a pleasant little community health center. We also stopped by Finca San Sebastián, a large farm that supplies Starbucks. It dwarfed Santa Anita, and its coffee plants sat in vast, neat, irrigated rows. During the coffee harvest, San Sebastián pays temporary pickers as much as Santa Anita does—about \$7 per hundred pounds of coffee cherries—but its flat land, healthy plants, and easy access would have made a worker's day worth much more. San Sebastián's size and efficiency were impressive but a little dispiriting:

How could a little farm like Santa Anita compete? Rigoberto Agustín and his comrades had spent decades fighting for the right to own their land. But wouldn't workers be better off picking at a big, productive farm with access to corporate-funded schools and health clinics?

Touring a huge processing mill owned by Cafcom, Guatemala's largest coffee exporter and a Starbucks supplier, we asked more questions about C.A.F.E. Practices. To be C.A.F.E. certified, a farm must pay a Starbucks-approved, third-party certifier to verify that it meets labor, quality, and environmental standards. Starbucks also has an agronomy team that trains farmers in sustainable, high-quality production techniques. Under the program, Starbucks scrutinizes its supply chain; the exporters from which it buys beans have to provide documentation of how much they paid the farmers.

Discussing Starbucks brought up the issue of corporate social responsibility: What is a public company's real obligation, and what constitutes the right level of contribution? To be sure, Starbucks doesn't have to build clinics. But if it has a corporate social responsibility program, should it be doing more? The company was touting its economic transparency, but farmers had no idea what their coffee was fetching further up the supply chain, nor was there a minimum price to the farmer.

After our visit to San Sebastián, the group took a short break from coffee farms. But it wasn't all relaxation. One free evening our dinners

came with a side of earthquake. The next day hiking up an active volcano and toasting marshmallows in its cracks, we wondered if our proximity to the molten lava was wild fun or just idiotic.

So, what should you buy—and do? "I was hoping we could come back and say: 'Buy this,'" said **Sophie Pinkard**, MBA Class of '09. But 10 days left us with no obvious answers about how supply chains, farming, marketing, or big business could be changed to make the lives of small farmers more productive and promising. We were disenchanted with labels like Fair Trade. We weren't sure if the children of Santa Anita would ever, as their parents fervently hope, escape coffee farming. We wondered how the families of As Green As It Gets would fare if anything happened to Franklin Voorhes.

Discussing Starbucks brought up the issue of corporate social responsibility: What is a public company's real obligation, and what constitutes the right level of contribution?

Some of us didn't think the answer lay in agribusiness at all: "Small-scale farming in coffee is Guatemala's past, not its future," commented **Evgeny Pervago**, MBA Class of '09. "We should not focus on paying 10 cents more per pound." Education, we agreed, would make the biggest difference, and contributing directly to schooling initiatives could be the best answer, given the Guatemalan government's poor record of social investment. We had seen effective models of farming and non-profit educational organizations but wondered how scalable they were. And yet small organizations were making a real improvement in disadvantaged communities. You didn't have to swing for the fences, Professor Sørensen reminded us, to make a difference.

So, if you're a curious coffee drinker, we can tell you a fair bit about brewing techniques, roasting specifications, and bean quality. (In short, don't buy anything that's not 100 percent Arabica.) We can tell you how your beans were picked and processed. We'll probably tell you that we're a bit skeptical about labels like Fair Trade. We're still stunned that a half-day's labor on a Guatemalan coffee farm wouldn't have earned us enough to buy a latte. And though we might not be able to tell you where to get your cup of coffee, we can promise you a great story about where it came from. •

Blythe Yee previously was a reporter with the Wall Street Journal. A version of this article first appeared in the Stanford Business Reporter.



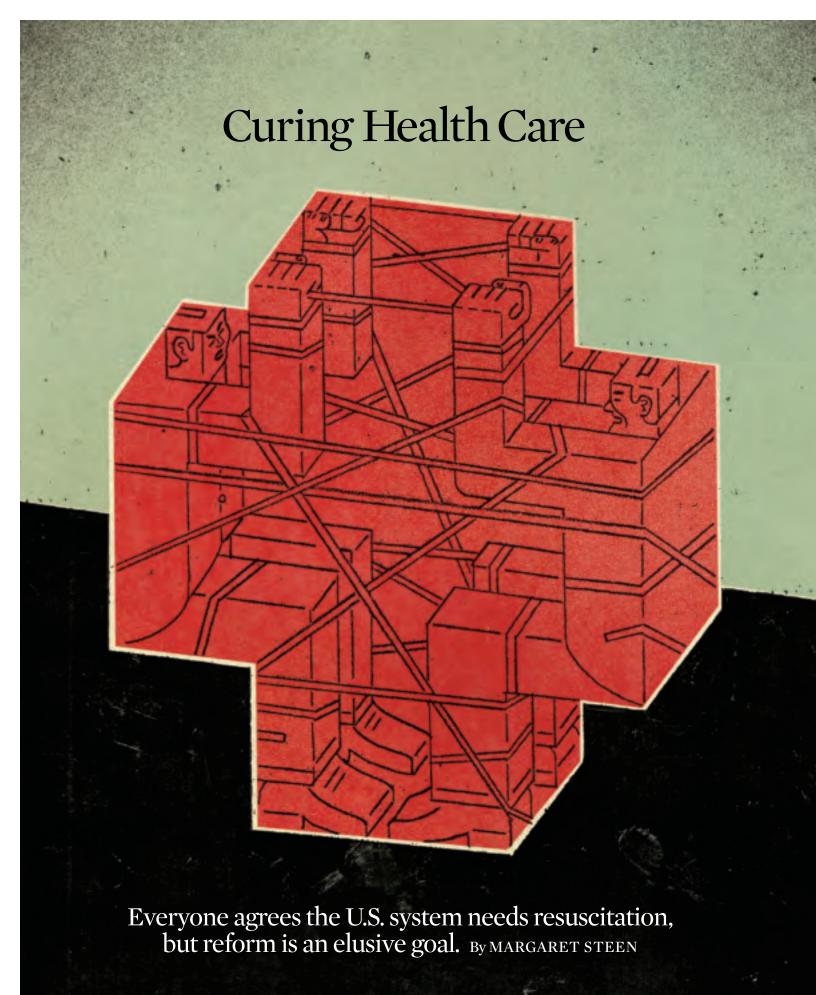
Employees of coffee buyer Starbucks and seller Cafcom at a Guatemalan dry mill for processing beans.



Franklin Voorhes, founder of As Green As It Gets, builds relationships with buyers of \$8-per-pound roasted coffee.



GSB Professor Jesper Sørensen and study trip leader John Joseph help build a coffee-drying patio.



To see the unraveling of the U.S. health care system, look at the numbers:

The average family premium for employer-sponsored health insurance was \$12,106 in 2007, according to a survey by the Kaiser Family Foundation and Health Research and Educational Trust. Workers pay \$3,281 on average out of their paychecks for their share of a family policy.

Premiums for family coverage have increased 78 percent since 2001, according to the same survey. During that same time, wages have increased 19 percent, and inflation has gone up 17 percent.

Nearly 47 million people, or about 16 percent of the population, were uninsured in 2006, an increase from 2005, according to the Census Bureau.

"IT'S AN ISSUE THAT'S TOP OF MIND FOR ALL OF OUR CITIZENS and all of our business leaders," said Steve Miller, MBA '68 and executive chairman of Delphi Corp., the former parts unit of General Motors that is undergoing reorganization under bankruptcy court protection. "It's a huge cost problem and a huge worry problem."

But has the system unraveled far enough to force U.S. citizens, business leaders, and politicians to confront the difficult choices involved in fixing it? With the number of uninsured growing and insurance costs beginning to affect the competitiveness of American business, some speculate that the time may be right for health care reform to finally succeed. But there are also forces, from inertia to interest groups, aligned against fundamental change-and there is no consensus on what shape reform should take.

Experts cite several reasons that the U.S. system spends so much and has such rapidly rising costs. One frequently mentioned culprit is inefficiency.

"I can't think of another industry that is as fragmented and poorly organized" as the traditional American health care system, in which doctors are paid for each procedure they perform, said Dr. Robert Pearl, SEP '98, executive director and CEO of the Permanente Medical Group, the organization that employs Kaiser Permanente physicians and medical staff members who are paid a salary rather than a fee for service. (Kaiser Permanente is not affiliated with the Kaiser Family Foundation.) "In most communities across this nation the practice of medicine remains a 19th-century cottage industry, with doctors in small offices writing on pieces of paper," added Pearl, who is also a lecturer at the GSB. Those notes are then unavailable when a patient goes to the local emergency room at night or on a weekend.

But although administrative costs-including marketing, claims processing, and "filtering out undesirable patients"-account for a portion of health care expenditures, there is no evidence that they've been rising faster than other health care costs, said Dr. Alan Garber, the

ILLUSTRATIONS BY DAVID PLUNKERT

Henry J. Kaiser Jr. Professor and a professor at Stanford Medical School and, by courtesy, at the Business School. He is also director of Stanford's Center for Health Policy and a physician at the Veterans Administration Palo Alto Health Care System. "Getting more and maybe better forms of care" is a more likely culprit," he said.

"Technology has done a lot of really fabulous things for health care. We have stuff now that even 15 to 20 years ago was inconceivable,"

"Technology has done really fabulous things, but all that stuff costs real money."

-DANIEL KESSLER, GSB Professor of Management

said Daniel Kessler, the David S. and Ann M. Barlow Professor of Management at the GSB and a senior fellow at the Hoover Institution. "But all that stuff costs real money."

And while some expensive new technologies have saved or improved patients' lives, others are no more effective than less expensive treatments. "We are paying for a lot of things that don't work better than less expensive alternatives," said Dr. Douglas Owens, professor of medicine at Stanford and a physician with the Palo Alto Veterans Administration. For example, people often use more expensive drugs to treat hypertension, but they don't work better than less expensive, older alternatives.

The problem is that it's not clear which technology is effective at saving or improving lives—and thus worth the cost. "It's very hard to tell apart the good from the bad," Kessler said. "That's the fundamental problem in health care."

There are other ways in which the U.S. health care system encourages wasteful spending. Economists say the current system insulates patients from the true cost of their care. "The system has promoted the psychology that health care shouldn't cost anything," Garber said. "At the same time, we're delivering care that's enormously costly."

The fact that employer-provided health insurance isn't taxed adds to the problem, Kessler said, creating "a huge incentive for people and their employers together to not be so concerned about the cost

The fee-for-service payment model used widely in the U.S. industry also creates distorting incentives, said Sara Singer, MBA '93, assistant professor in the Department of Health Policy and Management at the Harvard School of Public Health and a senior research scholar at Stanford's Center for Health Policy. "Insurance companies pay for services regardless of their value, which causes providers to provide more services, without necessarily encouraging disease prevention."

"People are worried that they won't get so many new drugs or new devices, but at the same time, they're very worried about the rising cost of care."

-VICTOR FUCHS, Stanford Economics Professor, Emeritus

The dilemma, then, is how to curtail costs without imperiling the innovation that has led to life-saving new technologies. "People are worried that they won't get so many new drugs or new devices, but at the same time, they're very worried about the rising cost of care," said Victor Fuchs, professor emeritus of economics, who has proposed that a reformed system include an independent institute to evaluate the cost-effectiveness of technologies. "They can't have them both. They can't have a lid on rising expenditures and all those new technologies."

Miller goes further, saying, "I'd suggest we admit we have to ration health care."

Without reining in the costs, experts fear, it will be nearly impossible to expand access to health insurance to everyone. In fact, Garber said, extending insurance to more people without containing costs will simply make the problem worse. Opinion polls show that the public is concerned about health care, and this concern has been reflected in press coverage and the presidential campaign. So is the time right for meaningful reform? There are some reasons to think so.

Patricia Mintz, MBA'80, an independent consultant who works with foundations, local governments, and nonprofits to provide health coverage to low-income populations, said the lack of health insurance is increasingly affecting the middle class, not just poor people. "You're one job loss away from not having health coverage for your family." It's also a growing concern for the self-employed.

The escalation of costs is putting pressure on the employer-based system, as well. The longstanding link between employment and health insurance is partly a consequence of business' need to compete for workers during a period of labor shortages and wage controls in World War II. W. Richard Scott, professor emeritus of sociology, who has studied the decline of the U.S. health care system, said the system is "one of those American compromises," based partly on resistance to a government-run program.

"At some point Congress will have to do something, and the question is when. It could be during the next presidential administration."

-DR. ALAN GARBER. Stanford Medical School Professor

Although several experts point out that employers pass the cost of care on to their employees (through lower wages) and their customers (through higher prices), rapidly rising costs are still a strain for employers-a strain that threatens the country's economic growth. "As U.S. companies search for savings, they build plants in other countries," said Miller, who writes about his career trying to rescue American companies with unsustainable costs in a 2008 book, The Turnaround Kid.

Two upcoming events may push the action along, as well. First, Medicare will face a crisis as the baby boomers become eligible for the program. "If you look at Medicare expenditure projections, it's a very frightening picture for the federal budget," Garber said. "At some point Congress will have to do something, and the question is when. It could be during the next presidential administration." The solutions—so politically unpalatable that few politicians are openly discussing them now-range from cutting benefits to raising the eligibility age to charging wealthier seniors for more of their care. If nothing is done, Medicare will consume a greater and greater portion of the federal budget.

In the next few years, it should become clearer whether the Massachusetts health care plan, which was passed in 2006 and aims to provide health care to all residents, is working. "I think that people are looking now toward Massachusetts and saying if it works,

Continued on page 18

Students Explore How Market Forces Might Push the Moribund System to Change

THILE PRESIDENTIAL CANDIDATES DEBATE HOW the government could fix the U.S. health care system, students at the Graduate School of Business are exploring how the system might be pushed to change through market forces.

GSB Professor **Robert Burgelman** and **Andy Grove**, former chairman of Intel, teach a seminar called *Strategic Thinking in Action—in Business and Beyond*, which in the fall of 2007 explored how a business that is established in one industry can enter a different industry and force it to change.

This concept was developed in a research paper by Burgelman and Grove, who call such companies "cross-boundary disruptors." It requires an industry that is large enough to offer a substantial growth opportunity, yet stagnant enough that it is due for a change. Startups often try to change these industries but instead trigger a defensive reaction by the industry.

This opens the door for a more established company from another industry—often one in which growth opportunities are limited—to play the role of disruptor and lead the industry to a new structure. The disrupting company needs to have the financial, technical, and organizational resources to compete. And it needs strong strategic leadership.

As an example, Burgelman and Grove used Apple's disruption of the music industry, which was, they wrote, following outdated rules "including a business model that was increasingly unpopular with their customer base." When the recording industry managed to shut down startups such as Napster, it gave Apple an opening. Apple's growth potential in the personal computer market was limited, and it had "the bold and persistent strategic leadership of Steve Jobs" when it introduced the iPod.

In the seminar, students explored this concept and looked at potential disruptors of four other industries, including health care. The team examining health care looked first at Burgelman and Grove's suggestion in their paper that Wal-Mart "is in an excellent position to play the role of the disruptor." It has a strong record of innovation in other areas, including introducing radio frequency identification, or RFID, technology into its supplier network. Yet it seems to have saturated its market, so it has little room to grow. Wal-Mart has started setting up in-store clinics that offer standard treatments and services for low, fixed prices of \$19 to \$59.

The students, in their research, didn't dismiss Wal-Mart's potential, but they decided to focus on Microsoft as a potential disruptor instead. The company has both the money and the political clout to take on the health care industry, said **Owen Tripp**, MBA Class of '08, one of the students in the group.

"We tried to break down the industry," said **Michael Rogers**, also Class of '08. "It's an incredibly inefficient industry, but which part of it is really getting rich where it shouldn't be? We felt like the most inefficient part was in the administration."

Microsoft is offering a free service called HealthVault that the group thought could improve health care administration. It captures test results and health records in an online system so they can be viewed by health care providers anywhere. This has the potential to reduce administrative costs and make it easier for patients to switch to a different doctor if they choose.

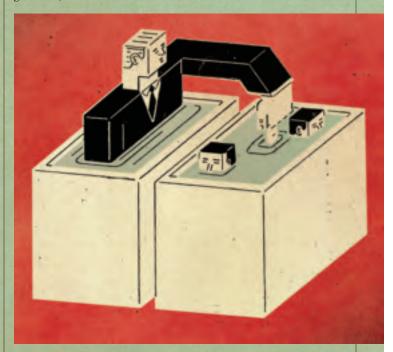
"Once you develop a history with a hospital, you're unlikely to actually move because of that history you've built," Tripp said. "You have all this experience, this data that's stored locally with the provider."

The team presented their preliminary ideas to the class midway through the course. "We came in and presented this: 'Microsoft has

a great product, here are the benefits, why would people not want to use it?" said **Dave King**, Class of '08. "Our classmates and professors said, 'Here's a laundry list of reasons why healthy people wouldn't want to use it."

The list, which included consumer security and privacy concerns, prompted the group to refine their thinking about HealthVault. They concluded that Microsoft should first focus on getting people with chronic illnesses who have to monitor their health regularly to use it. If this is successful, Medicare might eventually adopt the system. "That's the point at which we see it tipping to a much larger audience," Tripp said.

The students emphasize that this is their vision for HealthVault, not Microsoft's. And there are plenty of reasons why HealthVault may not disrupt the industry. Grove, for example, said he doubted that online record-keeping would be transformative. "Sometimes we technologists think that technology makes all aspects of the world go round," he said.



And Tripp said the group's survey data suggested the privacy issues will be a huge challenge. Microsoft is "known as the company that people try to attack with viruses," he said, so people may be reluctant to trust it with their health data.

The ambiguous nature of cross-boundary disruptors is one of the things that makes the seminar challenging. There are no textbooks explaining how to predict which disruptors will truly change an industry, for example.

"The students are expected to be content generators," Burgelman said. One of the things they learn when doing research to present to their classmates is how to deal with ambiguity.

"When they are faced with a situation kind of like real life—the problems are pretty vague and the solutions are left to them—we get various forms of negative reaction," Grove said. He hopes that once students know no one will provide the answer for them that "the scientific instinct will get awoken and curiosity will take over and drive. Sometimes it happens and sometimes it doesn't."●

-BY MARGARET STEEN

Continued from page 16

then maybe it will work nationally," Singer said. "If the insurers can't hold down the premiums of the plans in Massachusetts, the system will unravel. If this happens, I think people will get scared about the prospects for national reform."

Just what form would national reform take? Few powerful players are talking about a national single-payer system, since it would up-end

"If the insurers can't hold down the premiums of the plans in Massachusetts, people will get scared about the prospects for national reform."

-SARA SINGER, MBA'93

so much of the current system. "You can't get there from here," Scott said.

Alain Enthoven, the Marriner S. Eccles Professor of Public and Private Management, Emeritus, at the GSB, wrote a paper for the Committee for Economic Development, a business-sponsored think tank, proposing a model in which everyone would have a range of choices for health insurance. An employer or the government would pay the cost of the lowest-priced plan-probably a health maintenance organization, or HMO—and individuals would pay the difference in cost for higher-priced plans. A number of large employers, including Stanford, already use a system like this, Enthoven said, and they have found that most employees choose from among the lowest-priced plans. Enthoven reported that in 2005, only 13 percent of Stanford employees chose the most costly plan. If that preferred provider organization (PPO) plan were the only one the University offered, Enthoven said, it would have cost the University an additional \$44 million per year.

This shows that when choosing insurance plans, at least, people do tend to choose less expensive care when they are not insulated from the costs. Some proposals would extend consumer choice to the point of care, not just to insurance plans. But not everyone is convinced that would work. "At the point where you're having a heart attack, you're not going to say, 'Gee, where's the cheapest place for me to get care?"" Mintz said. "The incentives need to be aligned for physicians to make the best decisions."

Kessler suggests offering tax credits to low-income people to help them afford insurance and providing public subsidies for the chronically ill—a population for whom traditional health insurance doesn't

"At the point where you're having a heart attack, you're not going to say, 'Gee, where's the cheapest place for me to get care?"

-PATRICIA MINTZ, MBA '80

work. This would expand the number of insured people, though it wouldn't provide universal coverage.

Kessler thinks reform may come from a lot of small changes eliminating the tax advantage for employer-based insurance, changing the fee-for-service structure, emphasizing preventive care and disease management—rather than one big reform package. "It's going to be a

bunch of little changes, each one of which fixes a hole."

There is no consensus on which of these many ideas would work best to fix the system. And that's one reason many experts are hesitant to predict fundamental reform anytime soon.

In addition, despite the high numbers of uninsured, the fact remains that the vast majority of Americans do have health insurance. People with insurance "don't want to take a chance on some unknown system," Fuchs said, which means the proposals from leading presidential candidates are basically designed to prop up the current system, not to fundamentally change it.

Preserving what people already have—especially their choice of doctors-makes problematic using some other countries' systems as a model. "Our society places enormous value on individuality," Scott said.

"People have been saying for a long time that it can't go on much longer this way," Enthoven said. But it's not clear that public anger at the situation has reached the point that will force fundamental change.

Although employers are feeling pressure due to rising costs, many business leaders resist the idea of government intervention. "They're very worried that this will become the post office," Miller said.

Health care is definitely attracting the attention of CEOs in a way that it didn't in the past. But an employer with lots of retirees who have been promised health care has different concerns than one with a small number of relatively young, healthy employees. "The employers are up in arms, but they have not yet settled on a solution they can all endorse," Garber said.

Finally, there's the issue of money. Expanding coverage will cost

Business leaders are "worried that this will become the post office."

-STEVE MILLER, MBA '68

more, and given the shaky state of the economy, finding money to fix the system could be a tall order. Insurance and pharmaceutical companies will resist changes to the system that cut into their profits. And, "in general people's philosophy is that they don't really care who pays, as long as it's not them," Pearl said. This is one reason that "no action is the most common outcome in this politically difficult arena."

Some proposed reforms might improve Americans' health but not save much money in the short term. For example, proponents of reform often argue it will save money since the uninsured won't go to emergency rooms for routine care. Although there would be some long-term savings, initially the reduction in emergency room care costs would be offset by the newly insured going to get care they hadn't been able to afford previously, Singer said.

Some improvements in the health care system could save money, but often in fee-for-service medicine, at the expense of the people who spent it. For example, Pearl said, when doctors invest in a new technology that reduces the number of procedures they perform, they earn less money while insurance companies benefit financially.

Fuchs believes that in the short term, chances of significant reform are "virtually nil." In the next 5 to 10 years, he says, the chances of change are "no better than 50-50" unless a crisis gets Congress' attention. But over the long term, "major reform is practically inevitable."

What form that major reform will take, of course, is still unclear.

"There's nothing that's going to answer this or make it go away," Kessler said. "The tension between the benefits of new technology and health care cost growth is here to stay." •

Alums Explore Eco-Friendly Business Ventures

IN THE NOT-TOO-DISTANT FUTURE, Ade Dosunmu, MBA '01, hopes you will buy software that he is developing to monitor and reduce how much energy your building consumes. It isn't easy to devise a system that will work in a wide array of homes and commercial spaces; Dosunmu reckons his New Jersey-based company, GreenPrimate, won't have its product ready until later this year. But he sees mounting evidence that plenty of consumers are willing to pay for such an energy-saving service, something they would likely have ignored a decade ago.

Back in January, Dosunmu was one of 70 eco-minded Stanford grads who enrolled in a Lifelong Learning program, "Reduce Your Ecological Footprint." Aimed at business people who want to find ways to adopt environmentally sustainable business practices, the three-day event was jointly sponsored by the Stanford Business School Alumni Association and the University's Woods Institute for the Environment. It drew attendees from a wide range of businesses, some looking for ecologically friendly practices they could adopt to appease their conscience, others spying opportunity to make money in a rapidly emerging industry. But many alums at the conference seemed intent on accomplishing both goals.

Conference attendees-heavily MBAs and engineering grads-came from a variety of organizations, including nonprofits, municipal agencies, environmental groups, real estate companies, hospitality-related businesses, and venture capital firms. Several people, including Stephen Paradis, MBA '91, said they hoped to find strategies to implement within their own workplaces.

The chief operating officer at the nonprofit Appalachian Trail Conservancy in West Virginia, Paradis said he was looking for ideas to share with his group, which serves as caretaker for the scenic wilderness trail and its surrounding land. Those green strategies could include encouraging the thousands of park volunteers to carpool when

A back-to-school session helps alums learn how to reduce their ecological footprint.

coming to perform cleanup and maintenance work on the trail or using low-emission vehicles to haul supplies.

It is important, Paradis said, to "maintain the park in a way that is ecologically sustainable and that does not consume so many resources." And, he added, "It's worthwhile to have the opportunity to come and hear what's going on in this field."

Conference speakers, many of them Stanford professors, provided a wide range of information about the growing sustainability movement. Stephen Schneider, one of the world's leading climate experts and



Ade Dosunmu, MBA'01

His software for monitoring and regulating building energy use is part of the growing "clean tech" industry.

a professor in Stanford's Department of Biology, told the group he supported incentives that would allow businesses "to do well by doing good." Schneider is one of about 2,000 scientists and policy experts worldwide who made contributions to the United Nations' Intergovernmental Panel on Climate Change, which shared the 2007 Nobel Peace Prize with former Vice President Al Gore.

Erica Plambeck, an associate professor of operations, information, and technology at the Business School who studies corporate supply chains, detailed her research on how retail giant Wal-Mart is working to develop steady sources of ecologically sustainable products while continuing to attract consumers, even though the environmentally superior items often cost more.

Biology Professor Gretchen Daily shared her findings about the sometimes unrealized economic value of ecosystems, including how biodiversity in Costa Rican rainforests can benefit nearby coffee farms by contributing to higher crop yields and improved sales. "One of the things you need is to be able to demonstrate the relevance of natural capital in real dollar terms," Daily said.

Barton Thompson, professor of natural resources law, presented





information on how to get consumers to use less of the most precious liquid on the globe—water. Gilbert Masters, professor emeritus of civil and environmental engineering, addressed emerging initiatives to reduce dependence on foreign oil (see page 4), while law Professor David Victor outlined ways China and India are mightily challenged to reduce their ecological impact amid explosive population growth in the two nations where people are striving for a vastly improved standard of living. And James Sweeney, professor of management science and engineering, spoke about America's move toward wind and solar power to cut carbon dioxide emissions and reduce dependence on foreign countries for oil.

Finding new sources of energy, conserving resources, and reducing waste are subjects that find a broader audience than even a few years ago. For example, just over half (53 percent) of people responding to a 2007 Gallup Poll said they think the nation will face a critical energy shortage during the next five years. In addition, 6 of every 10 holiday shoppers surveyed last year said they were willing to pay more for environmentally friendly goods, according to a report by audit, tax, and advisorv firm KPMG.

Investors are also hot on the trail of sustainable businesses. Last year, \$2.19 billion, or 7.4 percent, of U.S. venture capital investments went to American firms developing technologies that are kind to the environment, conserve resources or energy, or reduce harmful waste, according to a recent report by PricewaterhouseCoopers and the

Stephen Paradis, MBA'91

He came to the conference looking for ways to reduce the enviromental impact of human use of the scenic Appalachian Trail, shown here at Harpers Ferry, W. Va.

National Venture Capital Association. Just three years ago, in 2005, venture capital firms made \$497.2 million in green investments, just 2.1 percent of the total, according to the report.

A group of Stanford alumni who now work for Bay Area venture capital firms confirmed growing business interest in eco-friendly ventures. "When we first started investing in 2001, we saw about 20 business plans in clean tech. We're now logging about 4,000," said panelist Raj Atluru, MBA '97, managing director of Draper Fisher Jurvetson. The Menlo Park venture capital firm is a top investor in emerging clean technology firms. Among DFJ's many green investments: the Reva Electric Car Co. in India, the SolarCity solar installation service in Foster City, Calif., and Miartech, a company in China that developed technology to transmit data over power lines, enabling real-time meter reading and the ability to make the power distribution system more efficient.

All the attention that green technology is getting from investors is positive news to David Hoe, MBA '87 and managing director of investment banking firm Aktis Capital Advisory in Hong Kong.

"Getting buy-in from corporations instead of just the Birkenstockwearing community is significant and impressive, given the entrenched existing interests and lobby groups," he said in an email following the conference. "Making money by greening is potentially huge. This could be epic on the scale of a new Manhattan Project," he said, referring to the massive effort by experts in the 1940s to harness technology and develop the atom bomb.

Building homes and commercial structures that are more energyefficient and made with materials that are either recycled or from ecofriendly sources is another sector Atluru expects to dramatically expand. "The building sector has seen absolutely zero innovation, and that's going to change," he said. "We are seeing a lot of companies in that category."

The conference persuaded Janet Griggs, MBA '73 and owner of Taste Catering in San Francisco, that private investment rather than government policy will be most effective in reducing ecological footprints. "As long as you have the capitalist system, you will have people interested in finding opportunities. That capitalist drive is one of the strongest and—as long as it is directed in a positive direction we all benefit."

Hearing the talks also handed Griggs knowledge of the industry so she can "talk the same language" as her business clients, many of them Bay Area venture capital firms.

For Stanford engineering alumna Janis Cenedella, the conference offered information about new conservation-focused building technologies. The division manager for builder S.D. Deacon Corp. of California said many of her firm's clients own shopping centers and are ready to expand and "hungry to find out what we can do." While they are ready to go green, they're not exactly sure what's available or effective. "They look to institutions like Stanford to try the new things, so then a developer can say, 'If it worked for them, then I can use it." Speaking of the University's efforts to construct more energy-efficient buildings, she said, "I feel if Stanford's made this commitment to green building, could they be on the cutting edge of the technology too? If you think about it, the semiconductor industry was born here. Why couldn't the green revolution also be born here?"

Amy Dryden, owner of the AEC Reprographics printing company in Flagstaff, Ariz., also came away convinced that the green movement is finally taking hold. "I heard people say that clean technology is a real option and green technology is something we can actually invest in. I came home with a sense of optimism that people are starting to think outside the box, about other options, about doing things differently," said Dryden, who majored in human biology at Stanford.

Dryden's printing company offers eco-friendly products to architects, engineers, and building contractors. She said her shop uses only paper that comes from sustainable sources and handles only digital printing, which uses less harmful chemicals. The company also offers to print construction plans on a plastic-based paper substitute that's waterproof, durable, washable, and recyclable.

Among the changes she learned about at the conference that would immediately cut energy use: replacing conventional light bulbs with compact fluorescent bulbs. "If everyone did that, it would have a huge impact, but still not enough."

Plambeck's presentation of a Wal-Mart case study was "really helpful," Dryden said. "I had some very great discussions with folks out of the classroom. It caught us all by surprise, but got me thinking that if Wal-Mart can do this, certainly a little print shop in Arizona can make these choices."

The diversity of attendees was one of the strengths of the conference, several said. "When you take yourself out of your own little circle, your mind has the ability to see other connections," caterer Griggs said. "That helps me deal with our clients, who come from all different parts of life."

Emily Ma, who holds a master's degree in mechanical engineering from Stanford, also enjoyed the intimate setting and mix of participants. "I didn't meet just designers and architects, but also museum curators and people in government," said Ma, a project lead and design engineer at Palo Alto-based design and innovation consulting firm Ideo.

The biggest lesson Ma learned? "This is a complex problem, and it requires people to let down their guard and work together in a multidisciplinary way to solve these issues."

Dosunmu, the New Jersey technology entrepreneur, also thought



Janis Cenedella

Janis Cenedella, MS Engineering 1981, converses with Mark Stowell, safety coordinator, during an extensive restaurant remodel in Newport Beach, Calif. Builders want green solutions, she says.

connecting to alums from different backgrounds was one of the conference's most valuable aspects.

"The thing that actually made it nice was the lifelong learning concept, that you could get people from many different generations, in many different places in life, and those people could share ideas and perspectives," he said, noting the stark contrast with typical MBA classes where students tend to be much closer in age and where they stand in their careers.

At the conference, "you had one guy who might have been 80, down to people who just finished their MBA. They brought different perspectives, and those perspectives were backed up by life experiences."

Asia's Future as High-Tech Innovator



THERE IS A GROWING BELIEF in scientific and technical circles that Asia is not only a place for making things but also a place where important technologies will be created—perhaps soon. The regions we studied are establishing the requisites for this. They have able, well-trained people, have or are developing needed institutions, and have researchers with personal experience and connections in productive research establishments around the world.

The American experience supports the view that the core need for having innovative science-based industries is having excellent universities, and these are in short

supply in much of Asia. Dr. Morris Chang, chairman of Taiwan Semiconductor Manufacturing Co., is quoted to this effect: "I wish Taiwan had a world-class university." According to a recent survey of the world's top 500 universities by Shanghai's Jiao Tong University, Asia has none in the top 100 outside of Japan. The New York Times Higher Education Supplement rates Asian universities higher, with 8 in its top 100 outside of Japan: Beijing University (17), National University of Singapore (18), Hong Kong University (39), Indian Institute(s) of Technology (41), Hong Kong University of Science and Technology (42), Nanyang University (50), Tsinghua University (62),

and the Chinese University of Hong Kong (84). This is not very many for a region with 40 percent of the world's people.

The problem is not with the quality of the students; rather, it is with the organization of their university systems and the research support provided. On the whole, they are over-regulated. In some, faculty members are civil servants; there is too little peer review for promotions and research grants (using foreign as well as domestic peers); and there is too little competition for faculty and students among them. As a result, many talented students have gone abroad for graduate studies and staved; many first-rate academics from Asia are found in U.S. and European universities; others have moved to careers in business; and governments have tended to allocate research funds preferentially to research institutes rather than universities. Given the importance of graduate students in advancing science, this is a dubious allocation of resources. The U.S. experience has been that linking advanced research with graduate education helps both teaching and research.

There is currently a strong interest in all the Asian countries we have studied in having more collaboration between academic institutions and industry. At the same time, there is

strong interest in moving the technology base of the countries to higher value-added products. These two objectives are somewhat in conflict. Too strong faculty-industry ties can lead faculty and graduate students away from the creation of new technologies. In top U.S. universities, the criteria for promotion of faculty are based solely on teaching and contributions to leading-edge research. Collaborations

Asian countries should develop their higher education systems to compete for global technology leadership.

with industry and commercial work are not included.

One indicator of change is the large and growing numbers of scientists and engineers with advanced degrees. The number of PHDs granted in Korea from 1986 to 1999 increased by 4 times, in Taiwan by 5 times, and in China by about 50 times (from 100 to 200 to more than 7,000). There is increased spending on research and development as well as growth in the number of scientific publications and their quality, as measured by citations.

On the commercial side, there is a high and rising level of patents Continued on page 34

Prospects for Venture Capital in Asia

MY FATHER BECAME A RELUCTANT ENTREPRENEUR in 1965 at age 60, the mandatory retirement age for government civil servants. As the most prominent surgeon in Pakistan, he had played a key role in building the medical infrastructure of the country after partition from India in 1947, and had no intention of mothballing his scalpel. Instead, he mortgaged the family home to build and run the premier private hospital in Karachi. He practiced well into his 80s, and I watched his entrepreneurial instincts flourish as necessity inspired him to transcend convention, run a business, and continue to innovate and publish.

Eventually however, his business faced issues of succession planning, growth financing, and the lack of an exit strategy. When he stopped practicing, the hospital shut down, and the building was sold. Pakistan, and the rest of Asia, was in the doldrums.

Fifty years later, Asia is front and center. The wave of outsourcing and offshoring of the past few years has been accompanied by a sharp increase in investment. Private equity investors are rescuing family

The wave of outsourcing has been accompanied by a sharp increase in investment in Asia.

businesses, and providing financial exits. Perhaps most important, venture capital is being invested in innovative new companies. Some expect that this industry will migrate to Asia just as rapidly as manufacturing and software development. However, as we have seen from our experience here in Silicon Valley, venture capital continues to be an apprenticeship business, and it takes time to season a VC team. Further, while things move quickly in India and China, key underpinnings necessary for a domestic venture capital industry are still being put into place. I expect it will take five to ten years for venture capital in Asia to reach maturity, a remarkably short time considering what needs to happen.

Asia is certainly in the news: In 2007, an estimated \$1.4 billion was invested as venture capital in China, and \$1.1 billion in India, both record amounts, and these amounts are slated to grow in the coming years. (By comparison, \$30 billion was invested in the United States.) Silicon Valley VCs are moving to Asia: Dick Kramlich of New Enterprise Associates recently announced a move to China, and Vinod Khosla, MBA '80, of Kleiner Perkins Caufield & Byers has rebased to India. Firms I was involved with in their early days, such as Golden Sands



River in China and Chrys-Capital in India, are now established franchises. Even in my native Pakistan, the IT industry is ramping up steadily, and start-up companies are attracting venture capital.

vcs invest in start-ups, often that set out to commercialize new technologies. There are many ways for things to go wrong, and it may take five to seven years for a VC to find out whether a company investment was a hit or a write-off. For a VC fund with a portfolio of such investments, the planning timeframe needs to be at least 5 to 10 years. And, investors in VC funds would like to see a new firm succeed with a couple of funds before making major bets. In Asia the following additional factors are particularly important in gauging the timeline:





Faruq Ahmad, MBA '76

ments; however, such changes are still taking root. These countries see innovation and entrepreneurship as stimulating a virtuous cycle of growth and prosperity, and today, a company can be formed, raise capital, grow, and go public (or be acquired) in Shanghai or Mumbai. This is a dramatic change from just six years ago, when I was investing in China with Mingly Capital.

- At its core, venture capital depends on company formation or people to create investible "deals." An entrepreneur must translate an invention into a defensible and practical business plan, something that Silicon Valley does uniquely well. Such an entrepreneurial culture takes time to mature. To catalyze the process, experienced, savvy, and successful ethnic Indians and Chinese are returning home to accelerate company formation, mobilize educated workforces and motivated entrepreneurs, instill best practices, and bridge the experience gap.
- As domestic markets in India and China grow, a domestic venture capital industry will increasingly focus on local and regional needs. We are seeing this start to happen. However, local VCs will need access to global markets for their companies, and investments by global investors in Asian VC funds will provide a vital link. U.S. investors continue to be most interested in such investment opportunities.
- Venture capital is about great success, but also about learning from failure, and it is a cyclical business. So far, Asia has been on the rise. It remains to be seen how Asian VCs and entrepreneurs will weather the stresses of a down cycle.

While this will indeed be the Asian century, it is links to the United States, and to Silicon Valley in particular, that will be vital to growing the pie and to globalizing the benefits of innovation. At the end of the day it is about the movement of people and ideas, and the alumni of institutions such as Stanford will play a key part.

Faruq Ahmad, MBA '76, founded PenWare, a venture-backed software company, before becoming a VC in Silicon Valley and China with Mingly Capital and an institutional investor in venture capital funds with C.M. Capital. He currently advises institutional investors, venture funds, and companies. He can be reached at faruq@paloaltocap.com.

The Golden Legacy of Ernie Arbuckle



FIFTY YEARS AFTER Ernie Arbuckle was named dean and nearly 25 years after his death, his name is still everywhere at the Business School.

In February the 40-year-old Arbuckle Award, the School's oldest alumni recognition, was presented to Henry Segerstrom, BA'46, MBA '48, citing him as "an individual judged to best exemplify the qualities of dynamic leadership and administrative skills so evident in the man it honors." In June a member of the Class of 2008 will receive the student Arbuckle Award-recognition by peers that he or she is essentially the heart and soul of the class. In 1982 a group of his friends endowed the Ernest C. Arbuckle Professorship, held today by Kathryn Shaw. And a portrait of Arbuckle and his wife, Kitty, greets visitors as they enter the Arbuckle Cafe for their daily lattes, burritos, and sushi.

The School has had other great deans and outstanding faculty, but Ernie (no one refers to him as Dean Arbuckle, and few recall him as "Arbuckle") holds a special niche-half fun and good stories and half admiration for a legacy that endures. One of the fun Ernie stories took place in 1967 when Stanford students, including undergrads, voted him the "Red Hot Professor." Ernie acknowledged the honor by donning his undergraduate letterman's sweater-earned for tossing the javelin impressive distances—and leading the student body in the Axe

Ernie and Kitty Arbuckle at home with dog Trooper in the 1960s.

yell during the Stanford vs. Oregon football game. The event was immortalized in photographs that found their way into Time magazine and eventually into virtually every history of the University.

A few years later Arjay Miller, who succeeded Ernie as dean, handed him a sweater at the 1975 Arbuckle dinner and insisted Ernie repeat the performance. Flashing a sheepish grin, Ernie stood before the cheering alumni and announced: "Well, if we're going to do this we have to do it right," and then executed a perfect cheerleading performance that rattled the wine glasses and brought down the house.

Doing things right was something Ernie insisted on and excelled at.

Arbuckle had put himself through Stanford as an undergraduate working odd jobs including reading to a blind man and a summer stint as a section hand on the Sierra Railroad. After earning his MBA in 1936, he worked for Standard Oil and Golden State Co., then a major dairy; commanded a PT boat during World War II; and was an executive of W.R. Grace immediately before becoming dean in July 1958.

During World War II business schools struggled to stay alive as students and many faculty were scooped up in the war effort. The war decimated PHD programs, virtually cutting off the supply of new faculty. By the mid-1950s not only were students flooding back under the GI Bill but critics—who would be joined shortly by studies from the Ford and Carnegie foundations—were demanding loudly that business schools do a better job of educating managers. When Dean Hugh Jackson announced his retirement in 1956 after 25 years, Ernie Arbuckle, then a Stanford trustee,

was named to the committee to find a new dean.

Committee member George Jedenoff, AB '40, MBA '42, who knew Ernie first as a fellow Stanford rugby player, recalls that "the committee decided we should have a businessman as dean. He had to sell the School to the business community. That was important to us as we recovered from the war years. Ernie was a wonderful selection."

Getting him to take the job wasn't easy, however. Ernie kept turning down University President Wallace Sterling's offers. "What turned the trick was Wally put Ernie on a plane to New York, took him to the Waldorf-Astoria, and shoved him into a room with Herbert Hoover,"





Former Dean Ernie Arbuckle motivates the student contingent at a football game at Stanford Stadium in 1967.

recalled James Howell, the Theodore J. Kreps Professor of Economics, Emeritus. "Hoover [the man responsible for creating the Business School in the first place] beat down all Ernie's complaints. He kept saying 'I'll solve that.' Ernie came out and said it was the greatest sales job he'd ever seen."

Howell, along with Robert Gordon, authored the 1959 report for the Ford Foundation credited with turning around management education by challenging it to become less vocational and more academic. Just months after becoming dean, Ernie had formed two committees, one of faculty to develop a 10-year plan, and another of business people to advise him. He showed up at 6:45 every Tuesday morning to make the coffee for the faculty group, and "we pounded out the plan by December," recalled Howell, who then went to work reconfiguring the curriculum. The School added organizational behavior, more quantitative methods, microeconomics, and business policy; revamped accounting, marketing, and finance; and eliminated real estate, transportation, insurance, and law courses.

Former President Herbert Hoover beat down all Ernie's objections with the comment, "I'll solve that."

Howell had visited 90 universities, in researching the Gordon-Howell report, so for the first five years Arbuckle relied on Howell for advice on faculty hires. "Ernie always closed the deal in hiring new faculty. My wife estimates we probably had 50 chicken dinners at the Arbuckles' while those deals were made," said Howell. Their first hire was Chuck Bonini, a young statistics professor regarded as one of the top in his field.

"He built trust with the faculty," recalled Bonini, who watched the curriculum expand to include management science and decision science subjects. "Ernie loved the School and was very dedicated to it. He was also part of the University at large and that was important." Soon James Porterfield and Robert Davis and a young associate professor named Robert Jaedicke moved west from Harvard.

Another young faculty member was James Van Horne, who noted that when Arbuckle arrived there were 11 tenure-line faculty members, 8 over the age of 60. Seven years later, "when I came in '65, there were 54 faculty members and the School was very exciting," Van Horne said. Arbuckle would "come around once a month, come into the faculty

offices and just talk. Other academics realized the School was onto something. In '67 we were far more quantitative than other schools in the nation; we were at the vanguard."

Once Ernie set out to make a hire, he knew who to ask to help him get the resources he needed. He duck hunted with Hewlett and Packard. ("He'd be the first one up in the morning, and he'd hike deeper into the woods with his tremendous energy," recalled Arjay Miller.) He knew Common Cause founder John Gardner well and made famous Gardner's advice to repot his career every 10 years, moving seamlessly from leadership in one industry to another. "He had more friends than anyone I knew," recalled Miller. "If you went out to lunch with him, when you returned there'd be 8 or 10 notes on his desk from people who had called. He'd sit down and call them all back."

"Ernie was a good judge of people. The world of business is big and complex. You can't make it alone, so you are as good as the people you know, and Ernie knew plenty," said Miller. "I'd say understanding people was really his long suit."

"He had an incredible sense about people," agreed Dean Robert Joss, who was an MBA, Sloan, and PHD student during Arbuckle's deanship and was later recruited by him at Wells Fargo Bank. "Ernie didn't know the academic literature independently. He didn't know who he needed to hire [to expand the faculty], but he knew who to ask for advice."

Arbuckle also invited a few friends to serve on the School's newly created Advisory Council, an important vehicle to this day for bringing business leaders in touch with management education.

"In the beginning we didn't want to increase the size of the student body, which was good," recalled Howell. Existing faculty were tired from teaching the heavy loads of returning veterans and stretched thin. But once the faculty started to grow Ernie set out to get the best students. "He was a cheerleader," said Van Horne. "He went to the dorms to ask undergrad students to consider enrolling in the MBA Program." He also personally interviewed student applicants.

Arbuckle left the GSB in 1968, assuring everyone the School would be better off with someone new in the dean's chair he had occupied for 10 years. "Change is self-renewing," he said, moving on to become chairman of Wells Fargo Bank and then at age 65 chairman of Saga Foods, the food service and restaurant firm.

On a Friday evening in 1986, driving from their Portola Valley home to their residence in Carmel, Ernie and Kitty Arbuckle were killed in a traffic accident on Highway 1.

"Ernie established the model of the businessman dean," Dean Emeritus Robert Jaedicke said at a memorial service. "Ernie said he took the job because he didn't know whether he could do it. That comment is typical Ernie. But he must have been the only one in the world who felt that way." •

Global Opportunities: Expanding Horizons at the GSB

How the GSB is preparing students to be global leaders by fostering deep understanding of international business through firsthand experiences.



Professor Garth Saloner, the Jeffrey S. Skoll Professor of Electronic Commerce, Strategic Management, and Economics, left, and Andrew Cantor, MBA Class of 2008, bottom, with Nana Kofi Minta Gyeabour, defense chief of the town of Kenyase in the Ahafo mining region on a trip to Ghana in December 2007.

The Innovation: International experiences and global business courses help students develop respect for diverse cultures, understanding of the complexities of managing effectively in a global environment, and awareness of the impact of businesses on communities. Global experiential learning activities supported by the Center for Global Business and the Economy provide unparalleled opportunities for students to gain firsthand experience.

The Need: MBA study trips, Global Management Immersion Experience internships, and exchange programs with Tsinghua University and the Indian Institute of Management (Bangalore) are eye-opening and transformative. But developing these unique and highly rewarding experiences, along with new international business courses, requires extraordinary faculty commitment and extensive resources.

Why Give: As the world economy becomes more interdependent, business leaders must remain sensitive to differences between markets, countries, and people. "I wanted to invest in the GSB because of the strong need for more global-minded business leaders," says Roger Deromedi, MBA '77, chairman of Pinnacle Foods Group. "During my career, I have been continually confronted with managers caught in the paradigm of their own local view."

Impact on GSB: We need continued investment from our alumni and friends to innovate and create new opportunities and courses that prepare leaders for the global marketplace. "Study trips force us to challenge and reconsider some of the assumptions we make on a day-to-day basis," says Andrew Cantor, MBA Class of 2008. As a leader of the 2007 Ghana study trip who also participated in the Indian exchange program, he says the trips "brought to life for me the way social and cultural issues have an impact on business."



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Why Popcorn Costs So Much at the Movies

MOVIE THEATERS are notorious for charging consumers top dollar for concession items such as popcorn, soda, and candy. Are moviegoers just being gouged?

New research by Wesley Hartmann, associate professor of marketing at the Business School, and Ricard Gil, assistant professor of economics at the University of California, Santa Cruz, suggests there is a method to theaters' madness-one that benefits the viewing public. By charging high prices on concessions, exhibition houses keep ticket prices lower, which allows more people to enjoy the silver-screen experience.

The findings empirically answer the ageold question of whether it's better to charge more for a primary product (in this case, the movie ticket) or a secondary product (the popcorn). Putting the premium on the "frill" items opens up the possibility for price-sensitive people to see films. That means more customers coming to theaters in general, and a nice profit from those who are willing to fork it over for the Gummy Bears.

Indeed, movie exhibition houses rely on concession sales to keep their businesses viable. Although concessions account for only about 20 percent of gross revenues, they represent some 40 percent of theaters' profits. That's because while ticket revenues must be shared with movie distributors, 100 percent of concessions go into an exhibitor's coffers.

Hartmann and Gil looked at detailed revenue data for a chain of movie theaters in Spain. By comparing concession purchases in weeks with low and high attendance, they showed that pricing concessions on the high side in relation to admission tickets makes sense.

The fact that concession sales were proportionately higher during low-attendance periods suggested the presence of "die-hard" moviegoers willing to see any kind of film, good or bad—and willing to purchase high-priced popcorn to boot. "The logic is that if they're willing to pay, say, \$10 for a bad movie, they would be willing to pay even more for a good movie," Hartmann says. "This is underscored by the fact that they do pay more, even for a bad movie, as is seen in their concession buying. So for the times they're in the theater seeing good or popular movies, they're actually getting more quality than they would have needed to show up. That means that, essentially, you could have charged them a higher price for the ticket."

Should theaters raise their ticket prices then? No, he says. The diehard group does not represent the average viewer. While the cinephiles might be willing to pay, say, \$15 for a movie ticket, a theater that tried such a pricing tactic would soon find itself closing its doors.

"The fact that the people who show up only for good or popular movies consume a lot less popcorn means that the total they pay is substantially less than that of people who will come to see anything. If you want to bring more consumers into the market, you need to keep



Putting a premium on frill items allows some businesses to draw more consumers and increase profits.

ticket prices lower." Theaters wisely make up the margin, he says, by transferring it to the person willing to buy the \$5 popcorn portion.

The study substantiates what movie exhibitors have intuited. "The argument that pricing secondary goods higher than primary goods can benefit consumers has been circulating for decades, but until now, no one has looked at hard data," Hartmann says.

In another study examining Spanish theaters, the researchers discovered that moviegoers who purchase their tickets over the internet also tend to buy more concession items than those who purchase them at the door, by phone, at kiosks, or at ATMs. (The latter option has not yet hit the United States.) More research is needed to figure out why, but for now this suggests that theaters may want to be sure to partner with an internet service to make such ticketing available—or even take the function in-house.

People who come to the movies in groups also tend to buy more popcorn, soda, and candy, Hartmann and Gil found. While this, too, merits more investigation, it may be that such groups comprise families or teenagers. "If that turns out to be the case, it may be that theaters will want to run more family- or adolescent-oriented movies to attract a more concession-buying crowd," Hartmann says.

The research paper, "Why Does Popcorn Cost So Much at the Movies: An Empirical Analysis of Metering Price Discrimination," is available on the Business School website under Faculty/Research.

Pros and Cons of Internal Resource Auctions

>Faculty Research

WHEN MANAGERS WITHIN the same company compete for internal resources such as machines, consultants, and workspace, how does top management figure out who should get what? Recently, some organizations embraced creating markets within firms to let managers duke it out by buying and selling resources. Hewlett-Packard has created markets for allocating computing power and conference rooms, and Ford uses an internal market for distributing cars to dealers.

A recent study of internal online auctions finds that, in some cases, auctions can streamline the process of resource allocation. But researchers caution there are other instances when resources allocated through auctions will hurt the bottom line. The full study appears in the December 2007 issue of the Journal of Accounting Research.

"The problem of resource allocation has been solved before by a mathematical application known as the 'optimal revelation mechanism,' which uses extremely complicated rules," says Richard Saouma, PHD '06, one of the authors of the recent study and an assistant professor at the Anderson School of Management at UCLA. (Others were Stanley Baiman, PhD '74, a professor at the Wharton School of Business, and Paul Fischer, a professor at Penn State's Smeal College of Business.) Two divisions that want a single resource—such as specific machinery—

might lay out their case to the CEO by describing in quantitative fashion how badly they need the machine to complete a job. The CEO must decide which division gets the machine, how to compensate each manager for completing their respective projects, and whether both divisions are even worth being in the competition.

The optimal revelation mechanism uses the quantitative information submitted to make every decision. It spits out figures dictating who should receive the resource, who should be asked to carry out the project, and how much each party should be compensated upon successful completion. The problem is that decisions may seem arbitrary. A manager may be a loser in any category without having a clear picture of what information the other side gave. Because of this, Saouma says, some firms hesitate to use the mechanism.

The researchers, including Saouma and Madhav Rajan, the Gregor G. Peterson Professor of Accounting at the GSB, used mathematical models to see what effect on company profits a simple resource auction would have compared to the optimal revelation mechanism. In many cases, they found, auctions were just as efficient and significantly simpler to implement. "This implies that 'simple' works," Saouma says.

But not in all cases. For instance: A defense contractor has two divisions: one bidding for a project with the Air Force, and one making a pitch to the Navy. The same piece of machinery is essential to both

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projects, yet the machine can't be split between both. Both contracts are worth a lot of money to the company.

When the competing projects are big money makers, or when the resource being auctioned is extremely critical to project success, the researchers found using a simple auction results in lower firm profits than what could theoretically be achieved by using the optimal revelation mechanism. In this case, Saouma observes, "a company is better off using the optimal revelation mechanism."

"In cases like this, a resource bid through auction may not end up going to the division that would have made the most money for the firm," Saouma says. "Or, the division that wins the resource may not end up paying the firm as much for the resource as it would have if the optimal revelation mechanism had been used."

Thus in high-stakes cases, organizations will want to exert more control over how scarce resources are allocated. Leaving it up to the internal market could have a negative effect on the bottom line. Given that auctions do prove useful some of the time, and given their relative simplicity, straight auctions hold promise for companies looking for ways to take the hassle out of parceling out pieces of the finite pie. The oil company BP "used an auction to allocate pollution permits across business units, which worked very well," Saouma says.

The study also suggests that corporate software designers and consulting firms may stand to profit handsomely by creating new products and services to assist companies in implementing internal auction mechanisms. Such services could include adjusting how the affected managers are compensated to guarantee that the internal market operates smoothly, or even hosting the electronic auction altogether.

-MARGUERITE RIGOGLIOSO

Your Auditor's Other Clients Can Affect Your Stock Price

THE RELIABILITY of the financial reports an auditor issues depends on whether the auditor has multiple clients as well as upon the financial stability of the auditing firm, according to research by two accounting scholars. Moreover, the stock price of a given firm varies based on the quality of audits of other firms in the client portfolio of its auditor.

Anne Beyer, assistant professor of accounting at the Business School, and Sri Sridhar of Northwestern were prompted to build a model to analyze the impact of audits as the result of the fallout from the accounting scandals at Enron, Sunbeam, WorldCom, Tyco, Waste Management, and other firms. They wanted to know how the quality of a particular audit is related to the auditor's client portfolio and how investors' perception of audit quality affects the stock prices of client firms.

Their research model predicts that the market capitalization of the firm being reviewed depends not only on its publicly available audit report, but also on the audit reports of all the clients of the same auditor. Because investors can be uncertain about auditors' integrity, they continually update their impressions. "It turns out that the market's perception of the auditor's integrity is influenced by all the audit reports he or she has issued," Beyer says.

She and Sridhar also used the model to determine how increased governance regulations—such as the Sarbanes-Oxley Act and mandates of the Public Company Accounting Oversight Board-might affect the quality of audits. The model predicts that stricter governance measures can actually decrease the quality of reports issued.

"As governance measures become stricter, the opportunities for

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unscrupulous auditors to misrepresent the financial status of a client are reduced—and the penalties for getting caught are much greater," Beyer explains. This is the intention of such regulations, but as incentives for presenting overly rosy pictures decline, so do those for being diligent about the first part of the auditing process—the gathering of information. "Thus, increasing governance might actually have a bad effect."

For a more detailed account, see their March 2006 report in the Journal of Accounting Research.

Expensive Wine Tastes Better, According to Brain Study

IN WHAT WILL BE MUSIC TO THE EARS of marketers, the old adage that you get what you pay for really is true when it comes to that most ephemeral of products: bottled wine.

Researchers, including Business School marketing Professor Baba Shiv, asked research subjects to taste and evaluate two wines, one that cost \$5 and another that cost \$45. The wine was, in fact, the same, but the part of the brain that experiences pleasure became more active when the drinker thought he or she was drinking the more expensive vintage.

The study, published in the Jan. 14 Proceedings of the National Academy of Sciences, is one of many in the area of decision neuroscience that Shiv and colleagues are pursuing. In this case they used functional magnetic resonance imaging to measure brain activity. An article about some of Shiv's other research projects appeared in the February issue of Stanford Business magazine. His coauthors for this study were Hilke Plassmann, a former Stanford postdoctoral researcher; Antonio Rangel, a former Stanford economist; and psychologist John O'Doherty of Caltech. Both Plassmann and Rangel are now at Caltech.

Elections Make Candidates Reluctant to Change Views

POLITICIANS MAY HAVE sound reasons for being unwilling to alter their policy positions, even when available information suggests changing would be in the best interest of the people they represent. That's the conclusion of Kenneth Shotts, associate professor of political economy, and Brandice Canes-Wrone, PhD '98, now an associate professor at Princeton, from their game-theory model looking at policy rigidity. The work was published in the May 2007 issue of American Political Science Review.

In an ideal world, they say, an incumbent would make decisions based on the available information, some of which may not be known to voters, and voters would reward the politician for good results.

Shotts gives as one example presidential decisions about going to war. "If voters want incumbents to make decisions about going to war based on available information, they should reward the incumbent by reelecting him after successful wars, but not unsuccessful ones. Also, they should not reelect the incumbent when he failed to go to war but should have, and they should reelect him when he avoids a war that would not have been a good idea."

Due to the uncertainties of the real world and the complexities of most issues, voters instead tend to vote along ideological lines. "Even if the war goes badly, as long as it's in line with the voters' general leanings-hawk versus dove, in this case-they'll reward the incumbent," the researchers suggest.

The harmful effects of such behavior can be mitigated when voters—or shareholders in the case of elected corporate boards—are well informed about the preferences of elected decision makers as well as about the country's or the firm's interests, they say.

Cross-Collaborative Teaching in Seven Schools



>Faculty News

BASIC ACCOUNTING IS IMPORTANT not only to people in the business world, but also to other professionals. So Business School accounting professor Madhav Rajan spends part of his time at Stanford Law School teaching a financial accounting course to law students. Increasingly, Stanford is drawing on the University's joint resources to help prepare students for complex careers. Rajan is among more than two dozen Business School faculty members who teach courses either offered for students of other schools and departments on campus, or that are jointly listed for other graduate students.

This year two MBA electives, *Interpersonal Dynamics* and *High-Performance Leadership*, were used as the basis for a new elective course available to graduate students from Law, Engineering, Earth Sciences, Education, Humanities and Sciences, and Medicine.

Known as *Interpersonal Influence and Leadership*, the course was designed to help students learn how to build more open, effective, and rewarding relationships en route to becoming more effective leaders. Developed by Business School lecturer **Carole Robin**, the course was taught winter and spring quarters by lecturer **Scott Bristol**.

The original *Interpersonal Dynamics* class, known to generations of GSB students as Touchy Feely, was pioneered in the late 1960s by **David Bradford**, the Eugene D. O'Kelly II Senior Lecturer in Leadership, Emeritus, and **Jerry Porras**, the Lane Professor of Organizational Behavior and Change, Emeritus.

Another new course available fall quarter for the first time is *Core Legal Concepts: Thinking Like a Lawyer*, developed jointly by Stanford's professional schools, including Business. The goal is to teach students how to deal effectively with both constraints and opportunities created by the law. It addresses the legal aspects of business agreements and relationships and is available to MBA, Sloan, and PhD students.

Madhav Rajan, the Business School's Gregor G. Peterson Professor of Accounting, teaches a section of financial accounting at Stanford Law School. Increasingly, the University offers cross-disciplinary resources to graduate students.

Accounting Leader Sprouse Dies

Robert T. Sprouse, a former Business School accounting professor whose work influenced the conceptual framework of the nation's accounting standards, died Dec. 23 at Scripps Mercy Hospital in Chula Vista, Calif., from prostate cancer complications. He was 85.

At the GSB from 1962-1973, Sprouse was "a first-class faculty member in all ways. Students flocked to him," recalled **Robert Joss**, dean of the Business School. Over his long career, Sprouse wrote two textbooks and more than 40 articles and was inducted into the Accounting Hall of Fame.

A San Diego County native, he earned a doctorate from the University of Minnesota and taught first at the University of California, Berkeley, where, with faculty mentor Maurice Moonitz, he coauthored a paper that argued for the use of replacement costs and net realizable values for the valuation of inventories and fixed assets. He then moved to the Harvard Business School where he worked with Robert Anthony on a project dealing with accounting for long-lived assets. He joined the Stanford Business School faculty in 1962 and left in 1973 to become a member of the newly created Financial Accounting Standards Board. His 1966 article, "Accounting for What-You-May-Call-Its," in the *Journal of Accountancy*, had laid the groundwork for the board's asset-liability approach.

Following his 1985 retirement from the board, Sprouse taught for three years at San Diego State University, provided litigation support in court proceedings, and bred and raced thoroughbred horses. He is survived by his wife, Fran, and a daughter and a son.

New Books on Competition, Medical Innovation

A book on medical innovation and another on organizational competition are the latest to be published by members of the Business School faculty.

The Red Queen Among Organizations: How Competitiveness Evolves by William Barnett was published in February by Princeton University Press. Barnett is the Thomas M. Siebel Professor of Business Leadership, Strategy, and Organizations. His book examines the effects—including the unforeseen perils—of competing and winning using examples from the computer manufacturing and commercial banking industries. Barnett uses the Red Queen from Alice in Wonderland as a symbol that businesses have to run fast just to keep their place.

Innovation in Medical Technology: Ethical Issues and Challenges is authored by Margaret Eaton, a lecturer in management at the GSB,

and Donald Kennedy, a former Stanford University president, professor, and commissioner of the U.S. Food and Drug Administration who now is editor-in-chief of Science and cochair of the National Academies' of Science Project Committee on Science, Technology, and Law. Eaton teaches an interdisciplinary course about the bioscience industry, a category that includes biotechnology, pharmaceuticals, medical devices, genomics, vaccines, and medical diagnostics, and she has been a senior



Margaret Eaton

research scholar at the Stanford Center for Biomedical Ethics.

Eaton and Kennedy examine the ethical, legal, and social problems that arise with cutting-edge medical technology by using examples of four powerful and largely unregulated technologies: off-label use of drugs, innovative surgery, assisted reproduction, and neuroimaging. Their book is published by Johns Hopkins University Press.

Bill Miller Likened to David Packard

William Miller, who continues to impress the tycoons of Silicon Valley with his deep knowledge of the region and technical innovation, was honored Feb. 22 with the 2008 David Packard Award. Miller is the Herbert Hoover Professor of Public and Private Management, Emeritus, at the Business School, a frequent investor and cofounder of companies, and currently the cofounder and chair of a nanotechnology company that hopes to provide diesel automotive and stationary power industries with catalyst materials that reduce exhaust emissions. (Nanostellar, Inc., was one of four nanotech firms accepted in 2008 into the World Economic Forum's Technology Pioneer program.)



William Miller

The David Packard Award is presented annually by Joint Venture: Silicon Valley Network, to honor a person who "brings an entrepreneurial, cross-boundary, problemsolving approach" to the region's challenges. "Recipients embody the spirit of David Packard, Silicon Valley's legendary pioneer who set the highest standard for civic engagement," the award sponsors say.

Miller's multifaceted contributions include his past leadership as a Stanford provost and professor, as president of the research insti-

tute SRI International, and his continuing involvement as a venture capitalist, entrepreneur, and inveterate institution builder. (He is also the coauthor of a book on Asian technology development excerpted on page 22 of this issue.)

The Packard Award was presented as part of a daylong "State of the Valley" conference in San Jose, at which Miller participated in a panel discussion of how the Valley can be a model for climate protection and economic growth. He is among those Valley industrialists who hope the area might become a major center for development of cleaner fuel technologies.

Homeland Security Research Cited

The Institute for Operations Research and the Management Sciences, also known as INFORMS, presented its President's Award in November to Lawrence Wein, the Business School's Paul E. Holden Professor of Management Science. The award recognizes important contributions to the welfare of society by members of the operations research profession. Wein was chosen for "pioneering research that characterizes and improves homeland security operations and for communicating his results to government officials and the public at large." •

> Faculty Publications

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Margaret Eaton

Journal of Business Ethics (Vol. 77, No. 1), JANUARY 2008

ECONOMICS

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Journal of Economic Literature (Vol. 45, No. 4), DECEMBER 2007

Managerial Contracting and Corporate Social Responsibility

Journal of Public Economics (Vol. 92, No. 1-2), FEBRUARY 2008

Simple Estimators for the Parameters of Discrete Dynamic Games (with Entry/Exit Examples) Ariel Pakes, Michael Ostrovsky, and Steven Berry

RAND Journal of Economics (Vol. 38, No. 2), SUMMER 2007

Antitrust in Innovative Industries Ilva Segal and Michael Whinston American Economic Review (Vol. 97, No. 5), DECEMBER 2007

Impossibility of Collusion Under Imperfect Monitoring with Flexible Production

Yuliy Sannikov and Andrzei Skrzypacz American Economic Review (Vol. 97, No. 5), DECEMBER 2007

FINANCE

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Peter DeMarzo and Michael Fishman Review of Financial Studies (Vol. 20, No. 6), NOVEMBER 2007

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Satisfaction Guaranteed—"Payment by Results" for Biologic Agents Alan Garber and Mark McClellan New England Journal of Medicine (Vol. 357, No. 16), OCTOBER 2007

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The Economist's View of Human Resources

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Internet Competition and Policy Bill-and-Keep Peering Gireesh Shrimali and Sunil Kumar Telecommunications Policy (Vol. 32, No. 1), February 2008

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Bestseller Lists and Product Variety Alan Sørensen

Journal of Industrial Economics (Vol. 55, No. 4), DECEMBER 2007

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Wheeler, and Dirk Smeesters Personality & Social Psychology Bulletin (Vol. 33, No. 12), DECEMBER 2007

ORGANIZATIONAL BEHAVIOR

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Miguel Unzueta, Brian Lowery, and Eric Knowles

Organizational Behavior & Human Decision Processes (Vol. 105, No. 1), JANUARY 2008

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A Modest Proposal: How We Might Change the Process and Product of Managerial Research Jeffrey Pfeffer

Academy of Management Journal (Vol. 50, No. 6), DECEMBER 2007

SUPPLY CHAIN MANAGEMENT

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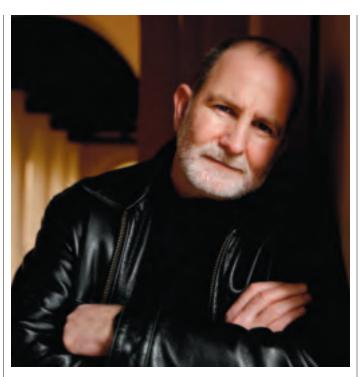
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Erica Plambeck and Terry Taylor Management Science (Vol. 53, No. 12), DECEMBER 2007

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VSMaker

WHO'S IN THE NEWS: A ROUND-UP OF MEDIA MENTIONS



Bill Guttentag, a filmmaker and GSB lecturer, makes films that address political and ethical issues.

Exporting Values Through Movies

During the occupation of Nanking in the winter of 1937, hundreds of thousands of Chinese were killed by the Japanese. A small group of foreigners, including an American doctor and a German businessman. saved tens of thousands of lives.

Their heroism is on display in a documentary film, Nanking, directed by Bill Guttentag, a filmmaker and lecturer at the GSB. He feels it's important to make films that address political and ethical issues.

"The entertainment industry makes up 6.5 percent of the U.S. gross domestic product," Guttentag told the San Francisco Chronicle. "For better or worse, we're exporting our values. It's an incredibly important industry."

Terror in the Eyes of Late Shoppers

As their deadline approaches. shoppers become increasingly motivated by negative emotionswhat will my wife say if I don't have a birthday present for her?-and make different decisions than they might have earlier.

According to a study by GSB Professor Jennifer Aaker, PhD '95, and Cassie Mogilner, PHD Class of '10, people were more likely to act on negative advertising messages when a decision had to be made immediately: They said they were willing to pay \$672 for an airline ticket when warned that they would miss their vacation if they didn't act soon, whereas they would pay only \$493 for a ticket that came with a positive message. When making a decision about a trip that was months away, they said they would pay more when the message was positive.

"When people feel like they have a lot of time, they become aspirational and confidentthey want to buy the best thing," Mogilner told the Washington Post. "As time closes in, they become less confident and their goals become much more minimal."

Is Internet Advertising **Passing Toddler Stage?**

Like toddlers just figuring out how to string words into sentences, three key online areassocial media, online video, and games—are beginning to learn how to be more effective in their pursuit of advertising dollars.

"The slow start is because there are no standards yet in any of these media," wrote Jeremy **Liew**, MBA '00, for *VentureBeat*. An advertiser can make one TV ad and run it on multiple networks, or create one print ad for several magazines. But online properties require custom ads.

"All three industries need ad unit standards to be able to scale." wrote Liew, who is a partner at Lightspeed Venture Partners in Menlo Park, Calif. "This year, standards will start to emerge in each media."

Riding High on the Hog

Chuck Toeniskoetter, MBA '73, has worked on the restoration of San Jose's St. Joseph's Cathedral and the old Santa Clara County Courthouse. But for Toeniskoetter. who is chairman of Toeniskoetter & Breeding Inc. Development, simple pleasures—like being able to ride his Harley-Davidson motorcycle—are more important.

Toeniskoetter had a stroke in 2000 and for a time couldn't even pick up a utensil with his right hand. Now that he's able to ride again, he finds that the bike helps him break down social barriers.

"People everywhere are interested in the Harley," he told the Silicon Valley/San Jose Business

Journal. "It crosses all lines, from the CEO to the assemblyline worker."

GM's Chief Corvetteer

Corvette has a new chief engineer: Tom Wallace, Sloan '80. He's new to this particular job, but he has been with GM since 1966. He came to the GSB in mid-career "because [GM] thought maybe I was a little too 'engineering-ese," Wallace told *Vette: America's* Favorite Corvette Magazine.

And Wallace said his interest in cars goes back even further: "When I was in high school, I had the fastest car in town. I used to drag race at the time and very seldom lost."

Surfing the Mall

The first time **Scott Dunlap**. MBA '98, went on a 100-mile run. he injured his leg at mile 96. Instead of quitting, Dunlap limped for 2 hours and 20 minutes to reach the finish line. "I found out I had much more in me than I would have guessed." he told the Silicon Valley/San Jose Business Journal.

Dunlap is using his energy and focus on the company he founded, NearbyNow. Its goal is to bridge the gap between online and offline shopping by making malls searchable via internet and cell phone.

"There's a trend of people who research online but buy locally," Dunlap said. "If we get it right, we don't have to go sell to one of the large search companies. We can become a large company."

Working Out Roles for Two-Career Couples

In 2001, Candace Matthews, MBA '85, was offered a dream job: president of SoftSheen-Carson, a L'Oréal company. But she wondered about the toll the



Candace Matthews, MBA '85, at home with her family.

increased travel, longer hours, and relocation would take on her family, which included recently adopted 3-year-old twins.

Her husband, Bruce, offered to sell the coffee shop he owned and take care of the children and the household full time. It hasn't always been easy. "I've had to adjust to comments from people who think I'm not doing my job as a mother," Matthews told Essence magazine for a story about gender role reversals in some families.

But the arrangement has worked. "There is absolutely no way I would have this kind of success in my career without Bruce," she said.

Tight Reigns on China's Video Sharing

Google's video-sharing site YouTube is absent from China, which creates an opportunity for local startups. "That does give the players in China some time," said Victor Koo, MBA '94. Koo is CEO and founder of Youku.com, a video-sharing company based in Beijing that recently received \$25 million in venture capital money.

The site can't show videos with sexual or political content, which are prohibited by the government. "Sex videos are easy to screen." Koo told BusinessWeek. Political content is "a little tougher," but Koo said, "We have algorithms that make everything related to politics stand out for us to identify."

Putting in a Cork Makes Wine Profits Sag

Argentina's exports of wine to the United States almost tripled from 2002 to 2006. But it's not clear the growth will continue. Inflation is leading to increased labor costs, and the euro's strength means European-made wine barrels and corks cost more, USA Today reported.

"Like any business, we need to find efficiencies," said Santiago **Achaval**. MBA '89 and president of the Achaval Ferrer winery. "It is the big concern going forward."

Solar Pioneer

Freeman Ford, Sloan '80, flew planes off aircraft carriers in the Vietnam War. Today he's fighting a different battle: the energy problem.

Ford is president and CEO of FAFCO, the oldest and largest manufacturer of solar poolheating panels in the United States. The company has made enough solar collectors over the past 30 years to generate the same amount of power as four nuclear reactors. Despite slow U.S. adoption of solar power, Ford is optimistic.

"If our destiny is to survive, and I think it is, we are going to have to recognize that we need to use the resources that we are given more intelligently; we are going to have to be a bit more imaginative," he told the Chico News and Review. "I think we can certainly do this."

Facebook Strives for Transparent Language

What if you want to use Facebook but you speak Swahili? Javier Olivan, MBA '07, hopes you could be part of the solution. He works on Facebook's Translations application, which allows translators all over the world to put Facebook into different languages. Users then vote on the best translation.

"Facebook users are great, and they're really passionate about the product." Olivan said in an interview on blinkx, a video search engine. Swahili may have to wait; the application is starting with French, German, and Spanish.

"Hopefully someday we'll

Javier Olivan, MBA'07, works on internet language transparency goals. get to the goal where everybody on the planet is on Facebook," Olivan said.

Improved Searches in eBay's Future

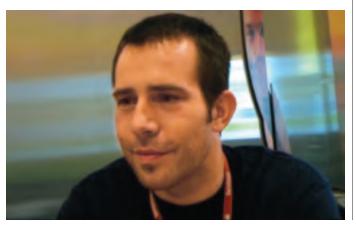
EBay's incoming chief executive officer, John Donahoe, MBA '86, wants to take on rival Google's search dominance. Donahoe told the New York Times he wants eBay to use its wealth of information-including customer feedback, information from PayPal, and shipping costs—to help buyers find what they want more quickly.

"Let's say you wanted to buy a BlackBerry," Donahoe said. "Last time I checked we had 25,000 BlackBerry listings. That is a fairly confusing experience. A year from now you will be able to say, 'I want a BlackBerry. Boom. Show me the latest models and the cheapest price."

Business Software to the Third Power

Almost a decade ago, Marc Benioff left business software maker Oracle to start Salesforce.com. Now the next generation of company alumni is coming into its own: Workers are leaving Salesforce.com and other firms founded by Oracle alumni to start companies. One of them is **Tien Tzuo**. MBA '98. employee No. 11 at Salesforce.com who has started Zeora. It aims to provide billing systems to companies that sell software services.

"Oracle led the database revolution and Salesforce.com led the on-demand revolution," Tzuo told CRM Buyer. "Maybe we can lead the next revolution." •



Asia Innovation

Continued from page 22

in Japan, Korea, and Taiwan; the beginning of international patenting from China; and a shift toward net zero in the balance of royalty and license payments with the United States. The number of Taiwanese firms with R&D centers had risen to 39 by 2003. Singapore has recruited a stellar group of biologists from around the world, and many foreign firms have set up R&D centers in China—supposedly over 600 in number. There is a question about what activities are actually taking place in these centers; many currently seem to be designing products for the domestic market rather than doing research or leap-ahead development, but this is likely to change.

China has great ambitions in science and technology, and given its accomplishments, they are likely to be realized—although the timing is uncertain. Between 1995 and 2000, its spending on R&D more than doubled. It still was only 1 percent of GDP but was growing at 10 percent a year, and the government says it wants to increase that share. In the year 2000, China ranked 8th in the world in scientific papers (3 percent of the world total) compared with its rank as 15th in the world 5 years earlier. This is not to assert that China's capacities are up to those of the industrialized countries. This will not likely happen soon, but China is on the move.

A creative Asia will have mixed impacts. The generation of new ideas can benefit everyone. It also gives its creator an industrial advantage—as Silicon Valley has demonstrated—in being a pioneer. What should not be in doubt is that the United States and every other nation will face new opportunities for collaboration as well as significant challenges in competition with the rise of an innovative Asia.

On Becoming an IT Powerhouse

The book traces how six regions of Asia-South Korea, Taiwan, Hong Kong, Singapore, China, and finally India-transformed themselves into major participants in the information technology industry since the 1970s. The editors list these similarities:

- All adopted growth-positive development policies; China and India later than the others.
- All invested in educating scientists and engineers.
- All acquired information technologies from foreign entities.
- Their governments actively promoted IT industries, which helped new firms take advantage of nearly universal standards and growing demand for products in the relatively open U.S. market.
- All exercised strategic openness to the outside world not only through trade but also through licensing, investments by multinational corporations, and flows of people to and from other countries, including students seeking advanced U.S. degrees.
- All had linkages with the United States such as students coming to the United States for advanced degrees, often staying to work and, for some, then returning home; extensive trade in goods and services; direct investments; and payments for technology.
- Their universities focused on producing trained people, rather than on producing new technology.
- The financial systems of these countries changed, diminishing the role of banks and expanding the role of stock markets. All sought to develop venture capital industries, although the results were mixed. •



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