

# PERSPECTIVES

College of Business at the University of Illinois at Urbana-Champaign

Fall 2007

Volume 6, Number 2

## Talking Trash

The Economics of Pollution Control





## My Perspective

**O**ur campus may sit in the heart of Illinois, but the contributions made by the College of Business have a global reach. The depth and variety of our faculty's expertise and the reputation and caliber of their scholarship make them esteemed teachers and sought-after experts. These are exceptionally bright and committed professionals who set the highest standards for leadership in the global economy.

Our faculty's example creates a stimulating and collaborative environment—one that nurtures the potential of our students and inspires them, first as they contemplate their futures and then as they forge their professional paths.

In this issue of *Perspectives*, you can see the far-reaching impact of this environment of excellence. Faculty members from across the College offer their views on timely topics ranging from due diligence in investing to sub-prime lending to workplace flexibility. They explain their research in the field of environmental economics and on the subject of stock buybacks. And they put it all in context of how it impacts an individual, a corporation, and the global business community.

Our alumni are also out there making their contributions and adding their voices to the scholarly dialogue, as you can see in the opening article on microfinance and social entrepreneurship. And the College itself carries the mantle of leadership both on campus and in the larger educational community by establishing programs such as the Center for Business and Public Policy and by committing to the "green" design of our new Business Instructional Facility.

The seeds of scholarship, professional responsibility, innovation, and stewardship are planted on the Illinois prairie—and then they're sown across the world.

Avijit Ghosh  
Dean



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# PERSPECTIVES

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**About the Cover:**

Don Fullerton, an environmental economist and visiting professor of finance at Illinois, tours the University's Waste Transfer and Material Recovery Facility, where recyclable materials are recovered from campus waste, baled, and shipped to markets.



# The Lending Hand

"WE ECONOMISTS LIKE TO APPEAL TO ADAM SMITH'S CONCEPT OF THE INVISIBLE HAND, WHICH STATES THAT IF MARKETS ARE FUNCTIONING PROPERLY, THEN THE MARKET ITSELF WILL MAXIMIZE SOCIAL WELFARE. WHEN THAT'S NOT THE CASE, AS IS TRUE WHEN DISADVANTAGED PEOPLE HAVE NO BORROWING OPTIONS, THERE IS A ROLE FOR GOVERNMENTS AND OTHERS TO STEP IN FOR THAT PURPOSE."

— DON FULLERTON

**A** woodworker in Guatemala hopes to expand his small furniture-making business by acquiring electric tools. A maid in Ecuador dreams of establishing a craft stand to ensure her economic independence and her children's future. A young woman in western Africa wants to open her own hair salon. None has a credit history, none has collateral, but all have workable ideas and a need for capital to make their business dream a reality.

For John Choi, a 1996 accountancy graduate, these stories have a very familiar ring to them. As a managing director for World Relief in Kosovo from 2002 until 2005, Choi was responsible for the organization's local microfinance program. Like thousands of other microfinance organizations around the world, the program's goal is to provide small loans to help the poor establish or expand a business. And like the thousands of workers who assist these low-income entrepreneurs, Choi saw firsthand the opportunities and

challenges of providing microfinance services.

"Microfinance can open the door to economic self-sufficiency for people in poverty," says Choi. "But it's a challenging environment administratively because there's so much complexity. Each country or region has unique issues. Some are cultural, others revolve around market size or average income, and still others relate to different economic systems, the political climate, or corruption. And all of these impact the approach you can take to lending, even when the loans are small."

And when Choi says "small," he means it. Although in Kosovo \$1,000 loans are average, globally loans of \$50, \$75, and \$100 are more common in microfinance. While these amounts meet the needs of the low-income borrowers, managing loans of such a small size adds another level of complexity. It's also one of the reasons why banks have not served this market — that and the lack of a credit history or any collateral.

"Banks want to lend to people they know something about," says Don Fullerton, visiting professor of finance at Illinois and a public policy specialist. "When they're missing key information, there is a market failure. People who don't fit the typical borrowing profile don't have a chance to take advantage of the opportunities that a loan could bring them, and lenders miss the opportunities to grow their business, too."

This market failure has opened a door, and microfinance has put out the welcome mat.

## **A Borrowing Breakthrough**

Microfinance has its roots in an experiment initiated by Muhammad Yunus in the 1970s during a famine in Bangladesh. To assist villagers living near the university where he taught economics, he started lending to them from his own pocket. When he saw the opportunities this opened up to the villagers and how reliable they were in

"GROUP LENDING CAN BE SUCCESSFUL IN A SOCIETY WHERE PEOPLE HAVE FREQUENT CONTACT AND ESTABLISHED TIES. IT CREATES INCENTIVES WITHIN THE GROUP THAT GUARANTEE HIGH REPAYMENT RATES WITHOUT CONSTANT MONITORING BY THE MFI, AND THAT'S ANOTHER KEY TO SUCCESS BECAUSE IT KEEPS ADMINISTRATIVE COSTS DOWN."

— GEORGE PENNACCHI



## Microfinance by the Numbers

- Half of the world's population lives on less than \$2 a day.
- Fewer than 2% of poor people have access to financial services from sources other than money lenders.
- More than 2,000 MFIs serve nearly 77 million people in developing countries.
- Nearly 95% of microfinance borrowers repay their loans.
- Microfinance borrowing has been growing at a rate of 30% annually.
- The average loan amount is approximately \$400, ranging from \$1,000 as an average in the former Soviet Union and Eastern Europe to around \$100 for borrowers in Asia.
- Interest rates for MFIs average 30% to 31% to cover the cost of small loans and weekly repayments. Rates are declining due to increased competition and the larger loan balances associated with repeat clients and new financial product offerings. Moneylenders often charge double or triple the interest rates of MFIs.

Sources: Unitus; World Bank, Microfinance Information Exchange; The Virtual Library on Microcredit; *Microbanking Bulletin*

repaying the small loans, he looked for ways to replicate the idea beyond one village.

That was the beginning of the Grameen Bank, which expanded the practice of lending to the very poor at reasonable rates of interest without requiring collateral. In 2006, the Grameen Bank and Yunus were awarded the Nobel Peace Prize to recognize the contributions these efforts have made in alleviating poverty.

Group lending was at the heart of the Grameen Bank's philosophy and continues to be a model that microfinance institutions (MFIs) emulate. It works like this. The MFI offers the poorest villagers loans for their individual business projects, requiring that they form a group of three or four other villagers who seek similar loans. One of the stipulations of the loans is that if one of the borrowers in the group is unable to repay, all the members in the group lose their membership in the MFI's bank.

"This type of a loan contract means peers are monitoring each other— in effect, they're co-signing for each other," says George Pennacchi, professor of finance, who introduces microfinance concepts in his course on fixed income securities. "Group lending can be successful in a society where people have frequent contact and established ties. It creates incentives within the group that guarantee high repayment rates without constant monitoring by the MFI, and that's another key to success because it keeps administrative costs down."

### More Than Economics

While microfinance certainly is an economic tool, both in terms of opportunities for borrowers and lenders, for most MFIs it has a social mission as well — to help alleviate poverty, and sometimes to change minds.

Choi tells the story of one of his borrowers, a Serbian candymaker in Gracanica, a village in Kosovo that transformed into an enclave for minority Serbs after the war. With his recipe for

Turkish Delights and a series of loans from World Relief, Sasha grew his business from a small venture in his kitchen to a manufacturing plant that sells tons of candy each year, both inside and outside his country.

"There was a very important additional benefit beyond economic development and entrepreneurship in this case," says Choi. "Albanians wanted to buy his product but at first did not want to do business with a Serb. His program served as a liaison between Serbian and Albanian business people until business transactions became common enough for them to comfortably interact. Economics has a way of overcoming prejudice and bringing individuals with differences together for a common goal."

Bringing the poor into the borrowing process also creates opportunities to teach other lessons, like improving financial literacy regarding repayment, contracts, and credit and educating borrowers about other financial services like savings and insurance.

# Raise the Roof

## Housing and Microfinance

One limitation of the microfinance industry has been what Patrick Kelley, director of international housing finance for Habitat for Humanity and a 1994 accountancy graduate, refers to as “the mono-product mentality” of only providing micro-business loans.

But that trend is beginning to change. “Although micro-enterprise loans still make up the bulk of the industry, the microfinance sector is maturing,” he explains. “Housing is an emerging product offering, especially in Latin America, as are insurance products, more sophisticated savings products, and remittance services. It’s important that these financial products be mainstreamed by microfinance service providers to expand access to the diversified financial services that the developed world takes for granted. In some poorer countries, commercial banks often serve only a minority elite of the top decile of the population or less. With such limited access, many have no financial service other than hiding away savings under their mattress.”

### A New Approach for a New Market

The initial forays into housing microfinance have focused on working with the clientele of an existing microfinance institution (MFI). Much of the process is the same as with microenterprise loans, with the big difference being an evolution to longer-term loans.

“To address the massive need for housing, we have to be ready to think outside the box,” Kelley says. “One way Habitat is seeking to accelerate the development of housing product offerings is by serving as a second-tier financier for those who work with the poor. That could be MFIs, other financial retailers, or even commercial banks, depending on the country. We also intervene by helping MFIs do market research and make linkages with the construction support industries to develop a successful housing product. This type of innovation can help break through some of the systemic market failures that make poverty housing so pervasive in many developing world countries.”

And because housing loans have cash flow implications for a family that are different from microenterprise borrowing, Habitat has partnered with Citi to offer financial literacy training for borrowers. “With an increasing need to consider future cash flows and to understand budgeting, educating our clients is especially important to ensure successful outcomes,” Kelley explains.

Joint research between Habitat and ACCION, an MFI that has been engaged in microlending for 40 years, has shown that housing finance products in Latin America are in high demand and can be profitable. It’s likely that this will be true in other areas of the world as well. “There will definitely be a learning curve here, and the initiative will require an investment in institutional structures, but that is something that Habitat is committed to.”

“TO ADDRESS THE MASSIVE NEED FOR HOUSING, WE HAVE TO BE READY TO THINK OUTSIDE THE BOX. ONE WAY HABITAT IS SEEKING TO ACCELERATE THE DEVELOPMENT OF HOUSING PRODUCT OFFERINGS IS BY SERVING AS A SECOND-TIER FINANCIER FOR THOSE WHO WORK WITH THE POOR. THAT COULD BE MFIs, OTHER FINANCIAL RETAILERS, OR EVEN COMMERCIAL BANKS, DEPENDING ON THE COUNTRY.”

— PATRICK KELLEY





## Banking on Women



There are estimates that between 80 and 90 percent of microfinance borrowers are women. In most every country around the world, women have the highest unemployment rates and comprise the majority of the informal economic sector. Add to that their role as primary or sole caretakers in the family, and the need for assistance is obvious.

Microfinance institutions (MFIs) are addressing that need by targeting services for women. Some, like Pro Mujer in Latin America, are even geared exclusively to providing microfinance services for women. Research indicates that this makes financial sense for the client, the MFI, and the developing country.

Clients and their families obviously benefit from improved living conditions and opportunity, which can include a greater likelihood that children will receive an education. MFIs benefit by establishing a strong group of reliable borrowers, as women are more tied to the community and household and have higher levels of repayment. And the economies of developing countries benefit because, as research indicates, gender inequalities result in greater poverty, slower economic growth, weaker governance, and a lower standard of living for everyone.

### Does Microfinance Deliver?

With so many obvious economic and social benefits, what's the downside? Some critics, like Thomas Dichter, the author of *Despite Good Intentions: Why Development Assistance to the Third World Has Failed*, believe microfinance hasn't lived up to its billing— that while efforts to relieve poverty are well-intentioned, they are largely ineffective and that there is little more than anecdotal evidence to back them up.

While hard data might have been lacking in the past, efforts by the Microfinance Information Exchange (MIX) is changing that. The MIX was established as a non-profit private company in 2002 by a group of donors, investors, and philanthropists who saw the critical need for reliable, comparable, and publicly available information on microfinance.

According to Blaine Stephens, director of analysis for the MIX, "Until 10 years ago the data was all anecdotal, but now we have the hard numbers to speak very specifically about the trends in growth of borrowers and savers, about

expected returns, and about how efficient the MFIs are."

He admits, however, that "it is much trickier and a much slower trek to measure social performance than financial data, but there is a great deal of work going on right now in social performance management to help us track clients and their progress. There is additional research that is attempting to assess impact. For instance, a study by Dean Karlan and Jonathan Zinman in South Africa shows that borrowers randomly assigned loans from a pool of applicants did better at keeping their jobs, were less likely to go hungry, and were 19% less likely to fall into poverty after 6 to 12 months. Studies like this need to be replicated. Assessing impact is a work in progress."

Another criticism is that microfinance doesn't deliver on the promise of entrepreneurship. Pennacchi disagrees. "Just because it doesn't create the type of entrepreneurship that we think of in the developed world doesn't mean microfinance lacks an economic impact. You don't have to create full-scale

businesses to improve economies over time. It's hard to measure the economic impact of improving someone's life. When children get an education because the loans create an entrepreneurial activity that relieves the burden on the family enough to send the children to school, how can you quantify that? We might not be able to put a hard number to it, but we know education improves economies."

Dichter and other critics also say microfinance isn't enough to alleviate poverty. And on that point, they'll find lots of agreement. "It's important that microfinance programs are not oversold as a cure-all for poverty," says Pennacchi. "They are only part of the equation." Fullerton agrees. "There is no single way to provide for the public good," he says. "Optimal results call for a mix of organizations and approaches."

Microfinance professionals know they can't do it alone. Just ask Patrick Kelley, a 1994 accountancy graduate who worked in microfinance for six years, four in Rwanda, and is now the director of international housing finance for Habitat for Humanity.

"There is no doubt that microfinance is no poverty panacea, but it certainly

# Do-It-Yourself Lending

complements economic growth and development to create a more inclusive economy," he says. "However, investments in health, education, infrastructure, and private sector development are also critical strategies for sustainable poverty alleviation and equitable growth. It's not a matter of 'either/or' but of 'both/and.'"

## What's Ahead?

Choi believes that the criticisms are actually helpful to microfinance because they "spur the sector to continue to evaluate how they can improve efficiencies and outcomes." And as those improvements are made more people are paying attention.

Where microfinance has largely been an initiative of the nonprofit sector, its success and profit-making potential is beginning to attract other players to the field, including commercial banks and even securities firms. Last May, Morgan Stanley announced it was selling collateralized loan obligations to raise \$108 million to support MFIs.

"The success of MFIs has demonstrated that there is a bankable market to the poor, which has attracted competition," says Kelley. "This could be good for the poor, but it makes it more difficult for some of the initial demonstrators of that market to maintain their marketshare. Also, with more financial service providers entering the picture, there is the potential for clients to abuse the opportunity and that puts institutional assets at great risk, as we've seen in countries like Uganda and Bolivia already. The increasing professionalization of microenterprise creates opportunity, but it will also challenge the industry."

— Cathy Lockman



In the 1990s when Sonali Rammohan was an undergraduate at Illinois, she developed a passion for nonprofit management as a finance major and an active volunteer in Alpha Phi Omega, a campus service fraternity. Nearly a decade later, when she moved across the country armed with an MBA and experience in both the private and nonprofit sectors, she began volunteering with Kiva, an organization that links microentrepreneurs with potential donors via their website.

"To me, microfinance is putting business principles to work to serve a good purpose, a purpose of social entrepreneurship" she says. "I volunteered doing public relations for Kiva, spreading the word about their model, which uses an online platform to directly connect investors with clients. I also became a lender."

Kiva makes the lending role simple and allows anyone with an Internet connection to be a microfinance banker. When potential lenders visit the website, [www.kiva.org](http://www.kiva.org), they can view profiles, photos, business proposals, and lending histories of entrepreneurs in developing countries. The information has been vetted by microfinance institutions (MFIs) in each client's home country. Would-be lenders can choose from among the entrepreneurs featured and use their credit card to provide a loan as small as \$25 by using the website. Kiva transfers the loan proceeds to the local MFI, which disburses it to the borrower. The MFI is responsible for collecting the repayment and providing updates to Kiva, which supplies them to the online lenders. When the full amount of a loan has been repaid, the funds are returned to the lender who may withdraw them or re-lend.

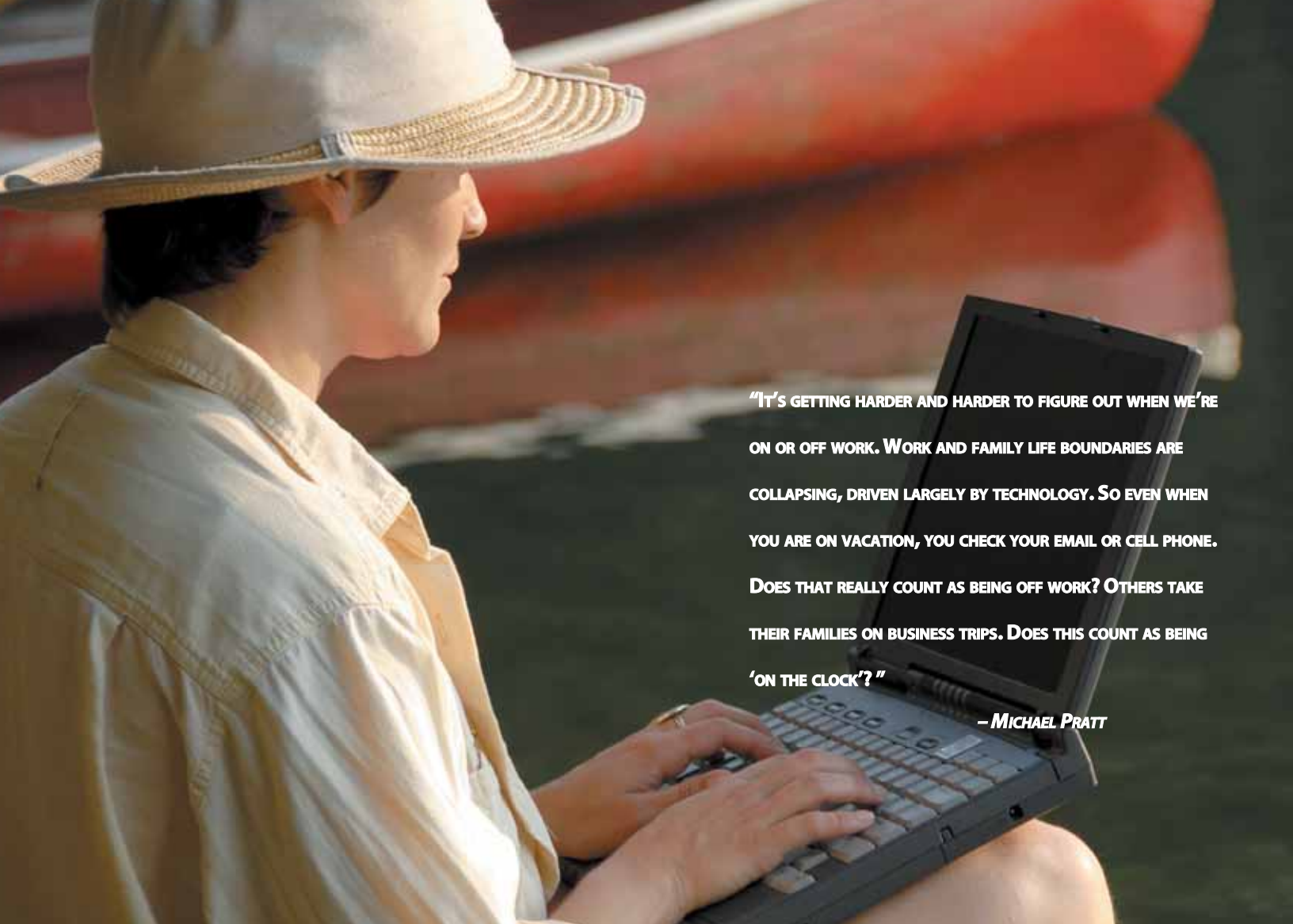
Rammohan made two loans to Ugandan entrepreneurs — a barber who needed a power generator to keep his business operating during electricity shutdowns and a woman who mills and sells maize but needed to hire workers to help her carry the product to market.

"I chose these borrowers because they were responsible for many family members and had compelling stories of working hard to improve their families' lives," Rammohan says. "I am hopeful that their loans will enable them to expand their businesses going forward."

## Top 10 MFIs by Number of Active Borrowers (2005)

Rank	MFI	Country	Number of Active Borrowers
1	Grameen Bank	Bangladesh	5,050,000
2	ASA	Bangladesh	4,181,594
3	BRAC	Bangladesh	4,159,793
4	BRI	Indonesia	3,313,532
5	PROSHIKA	Bangladesh	1,587,166
6	SHARE	India	814,156
7	Spandana	India	772,775
8	Caja Popular Mexicana	Mexico	554,244
9	Compartamos	Mexico	453,131
10	BANTRA	Peru	450,182

Sources: Microfinance Information Exchange, Inc. (MIX) based on MIX 2005 Global 100 MFI League Tables.



"IT'S GETTING HARDER AND HARDER TO FIGURE OUT WHEN WE'RE ON OR OFF WORK. WORK AND FAMILY LIFE BOUNDARIES ARE COLLAPSING, DRIVEN LARGELY BY TECHNOLOGY. SO EVEN WHEN YOU ARE ON VACATION, YOU CHECK YOUR EMAIL OR CELL PHONE. DOES THAT REALLY COUNT AS BEING OFF WORK? OTHERS TAKE THEIR FAMILIES ON BUSINESS TRIPS. DOES THIS COUNT AS BEING 'ON THE CLOCK?'"

— MICHAEL PRATT

# Are We Becoming the No-Vacation Nation?

It is no secret that Americans work more hours and have fewer paid vacations than any other developed country. For example, while European Union nations have a legally mandated two-week vacation policy and most workers get far more, the United States has no laws requiring paid vacation. Typically, employees have to work at a large U.S. company for 10 years before they get 15 days of paid vacation. And that figure does not take into account the approximately 25 percent of all workers who get no paid vacation. And the discrepancy between the U.S. and the EU does not stop there. Recent media reports have observed that many Americans are not even taking the little bit of vacation they have accrued.

For example, an Expedia study found that 35 percent of employees polled didn't take all their time off because of job

pressures. According to that survey, the average employed American sacrificed three days of vacation, up from the two days they gave up in 2003.

So, if employers are offering paid vacation, however paltry, why are people not taking it all? Some people report fearing for their job. If they can take vacation, they reason, they must be dispensable. And certainly some companies have a culture of overwork that leaves those who take time off feeling disloyal or underachieving. Often, not taking vacation also comes down to logistical difficulties. People report not taking vacations because either it is too difficult to coordinate schedules with two working parents and children in many activities or because they juggle multiple projects at work and there is never a good time to leave.

## Work/Non-Work Lines Collapsing

Michael Pratt, professor of business administration and James F. Towey faculty fellow, suggests that the shrinking vacation is part of a larger trend of blurring lines between work and family.

“It’s getting harder and harder to figure out when we’re on or off work,” says Pratt. “Work and family life boundaries are collapsing, driven largely by technology. So even when you are on vacation, you check your email or cell phone. Does that really count as being off work? Others take their families on business trips. Does this count as being ‘on the clock’?”

Pratt, who studies the costs and benefits of teleworking notes that the blurring of the lines leads to a central paradox of how we work today.

“People I have spoken to say, ‘On the one hand, working from home is great for work/family balance, and on the other hand I can never escape from work.’ And both are true. You get the flexibility to get your kids from school and take them to a soccer game, but the price you pay is you get up at 4 a.m. to do a conference call with people in China.”

So if, in fact, vacation time is becoming extinct, is this a crisis, as many fear, or simply the latest stage in the evolution of the workplace? The answer to that depends, it would seem, on whom you ask and on people’s individual circumstances.

In general, people think vacation should be vacation and work should be work, but they often make exceptions, especially for themselves.

For example, sometimes people prefer to check their emails while on vacation because of the consequences they face when they return. Pratt admits that he sometimes checks his e-mails while on vacation so that he does not have to “deal with hundreds of emails that can accumulate over a week or two.” He further notes, “If you are going to be so stressed out about what you’re going to come back to, then it’s not really a relaxing vacation and maybe you’re better off checking email while you’re gone.”

Which, of course, returns us to the question of whether that’s really a vacation or not.

Still, given the dramatic changes at the workplace — what with the advent of Internet and mobile technology — perhaps it should not be surprising that the nature of vacation also might change.

Judith Gebauer, assistant professor of management information systems, studies the uses of mobile technology in the workplace. She has found in several surveys that people appreciate the flexibility that Internet access and

cell phones gives them. If they are checking their messages on vacation that is often a way to feel more relaxed about being off duty, not less, says Gebauer.

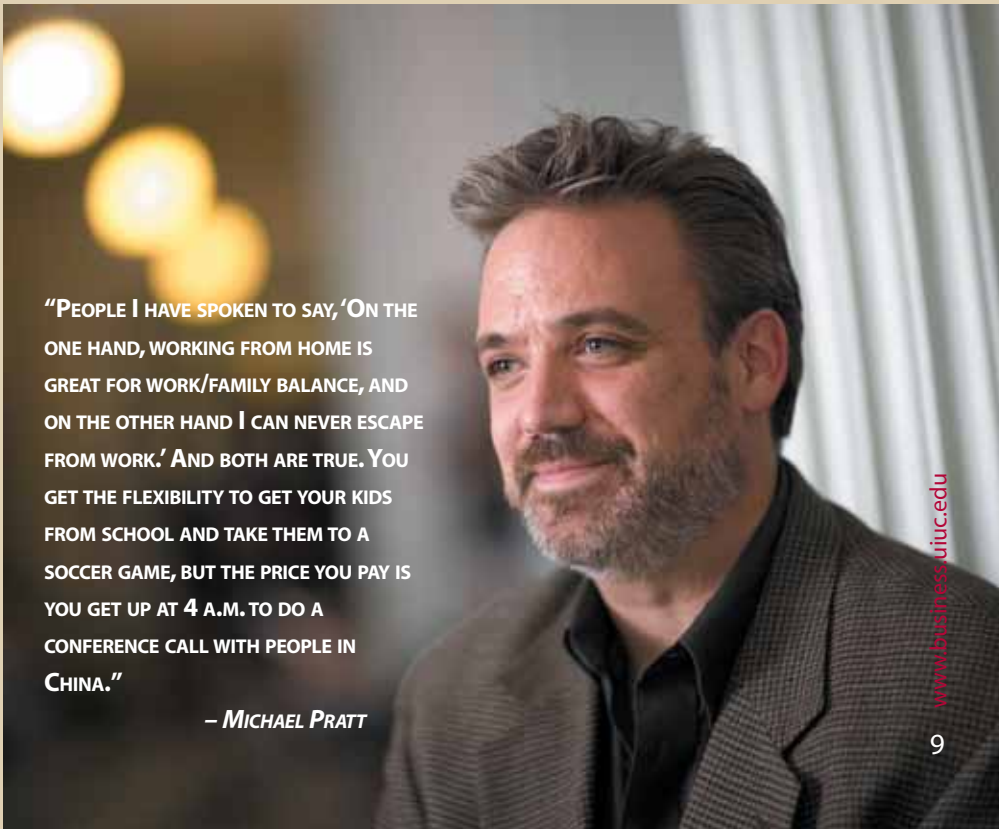
“Many people we spoke to say mobile technology makes them more productive and efficient,” she says. “This is particularly true for people in supervisory jobs who want to know what’s going on and to be kept in the loop, to react quickly when necessary. This technology also gives them flexibility to work from anywhere.”

People, being the adaptable creatures they are, have changed both how they work (more from home or the beach) and how they vacation (with Blackberry in hand). Research done by the Travel Industry Association indicates that many people are taking shorter vacations, sometimes closer to home. Consequently, the industry is pushing more regional markets geared toward people who are looking for a quick trip either by car or short flight. Vacations that are tacked on to a business trip have also become more common.

## Does Busyness Backfire on Business?

But how does this vacation deprivation impact American productivity?

There is evidence that taking breaks from work helps create healthier, safer, and more productive employees. Research conducted by the Families and Work Institute (FWI), which has been studying work/life balance for almost 20 years, found that overworked employees are more likely to make mistakes and to be angry at their employers and at colleagues who do not work



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— JUDITH GEBAUER



## Rest & Recharge

While the current blurring of work and non-work may be stressful, it may also be the reality of today's workplace. The old practice of working from 9 to 5, with two weeks in the Adirondacks— if it ever was the norm — may be extinct.

But Pratt notes that, as the line between work and non-work continues to blur, some companies are stepping up and becoming more involved in workers' family life by providing everything from a concierge

as hard. Employees who described themselves as overworked reported feeling higher stress levels, experiencing symptoms of clinical depression, and having poorer health overall.

"It's true that if you work 80 hours a week and take no vacation and your German counterpart works 40 hours a week with six weeks of vacation you'll be more productive, but not necessarily twice as productive," says Pratt. "At some point there are diminishing returns. And you have to think that getting away and relaxing will be better for you in the long run in terms of both health and productivity."

The FWI survey found just that. Employees who do take a higher percentage of vacation days to just relax and enjoy themselves (as opposed to, for example, taking care of a sick relative), even when they feel overworked on the job, are significantly less likely to return to work feeling overwhelmed by all they have to do after taking their longest vacation. Those that feel overworked, and work on vacation, do not return from vacation more relaxed and energized and do feel overwhelmed by all the work that has piled up in their absence. The study concludes that encouraging employees to take vacation time to simply relax might enhance the impact of vacation time and would benefit both employees and employers.

From a strictly medical perspective, one could argue that not taking vacations to recharge is stressful, and medical evidence of the health consequences of stress is well-documented. Stress, no matter the source, causes the body to produce more cortisol, a stress hormone, which has been implicated in heart disease. Perhaps Americans— particularly upper-level managers and other "knowledge workers"— are hurting themselves and their company by not taking their allotted vacation and/or bringing the office with them when they do vacation.

service to dry cleaning pick-up to child care, elder care, and even doggie daycare. Some firms even offer a kind of marriage counseling.

"The positive take on that is that it shows that companies care about their employees and want to help them," says Jeff Ericksen, assistant professor of labor and industrial relations at the University of Illinois. "The more cynical view is that companies want to make sure their employees can work every waking second."

FWI conducts an annual study of best practices in terms of work/life balance. The 2006 report, titled "Work That Works," found that the best companies have recognized and embraced the need for flexibility and autonomy. Many of the companies studied by FWI saw dramatically increased employee retention and profits when they instituted policies like having employees take however much vacation they wanted, making sure people took some vacation, and not keeping track of where or when employees work, only that they made their deadlines.

But this approach of flexibility and autonomy has its own share of pitfalls.

"Within the field of strategic human resources, people talk about the growing importance of autonomy in the workforce and having the workforce buy into the vision and mission of the firm," says Ericksen. "But part of the reason people may not be vacationing is that, working in these settings, people are more motivated to go to work and, if given the chance, will essentially live at work. So, you've created this tension and a culture where people start not taking care of themselves. And within that type of culture, overwork can become a status symbol, and then it takes courage to take a vacation."

It is up to both the employer and the employee to make sure that the employees take time to rest and recharge, says Joy C. Harper, a 1994 business administration graduate, who has worked with Procter & Gamble for 13 years.

"I really do try to take all my vacation every year," she says.

She and her husband, Myles, who has a less flexible and less generous vacation policy, try to take a driving trip once a



## PAID TIME OFF WITH 10 YEARS' TENURE

Country/Region	Minimum Paid Vacation Days	Paid Public Holidays	Total
Australia	20	11 (avg.)	31
Austria	25	13	38
Bulgaria	20	12	32
Canada	10	10 (avg.)	20
Czech Rep.	20	11	31
Denmark	25	10	35
Egypt	21	16	37
Finland	30	14	44
France	30	10	40
Germany	24	10	34
Greece	25	12	37
Hong Kong	14	12	26
India	12	19	31
Ireland	20	9	29
Israel	24	16 (avg.)	40
Italy	20	11	31
Japan	20	15	35
Lebanon	15	18	33
Lithuania	28	12	40
New Zealand	20	11	31
Pakistan	14	14	28
Poland	26	10	36
Portugal	22	12	34
Romania	21	7	28
Singapore	14	12	26
South Africa	21	12	33
South Korea	19	11	30
Spain	22	14	36
Sweden	25	11	36
Taiwan	14	11	25
Thailand	6	13	19
United Arab Emirates	30	9	39
United Kingdom	20	8	28
<b>United States</b>	<b>15*</b>	<b>10*</b>	<b>25*</b>
Vietnam	14	8	22

\* These numbers reflect typical practice among large U.S. firms. There is no federal law requiring employers to give a minimum number of vacation days and holidays off, paid or unpaid.

Source: Mercer

year with their three children; however, for those vacation days she has that her husband does not she tries to “do something nice for myself or just pick up the kids and do something fun with them. I think the relaxation factor on vacation is affected by the state in which you left things at work and by what could be in store for you when you get back,” she says with a laugh. “The tighter I left things, the more quickly I relax.”

Harper also keeps work issues in perspective. “You know the building will still be standing when you get back; the issues will still be there.”

### Balancing Act

Perhaps, with the increasing awareness of the bottom line benefit of flexibility in the workplace, with EU countries setting an example, and employees from both Generations X and Y demanding a more balanced life, the scale will tip back more toward valuing vacation as much as work.

There is a strong desire to get our lives back in balance. One indication of that desire is the efforts of groups like Work to Live, an organization founded by Joe Robinson (editor of *Escape* magazine), to push for a federally mandated, minimum-three-week vacation for every American worker.

Still, it will be an uphill battle because the “enemy” is not one particular person or organization, but a guerilla-style mindset that is difficult to fight against. Getting vacation depends not only on employers offering it, but on employees taking it. And that will require everyone to re-examine their “overwork” ethic and learn when to say when.

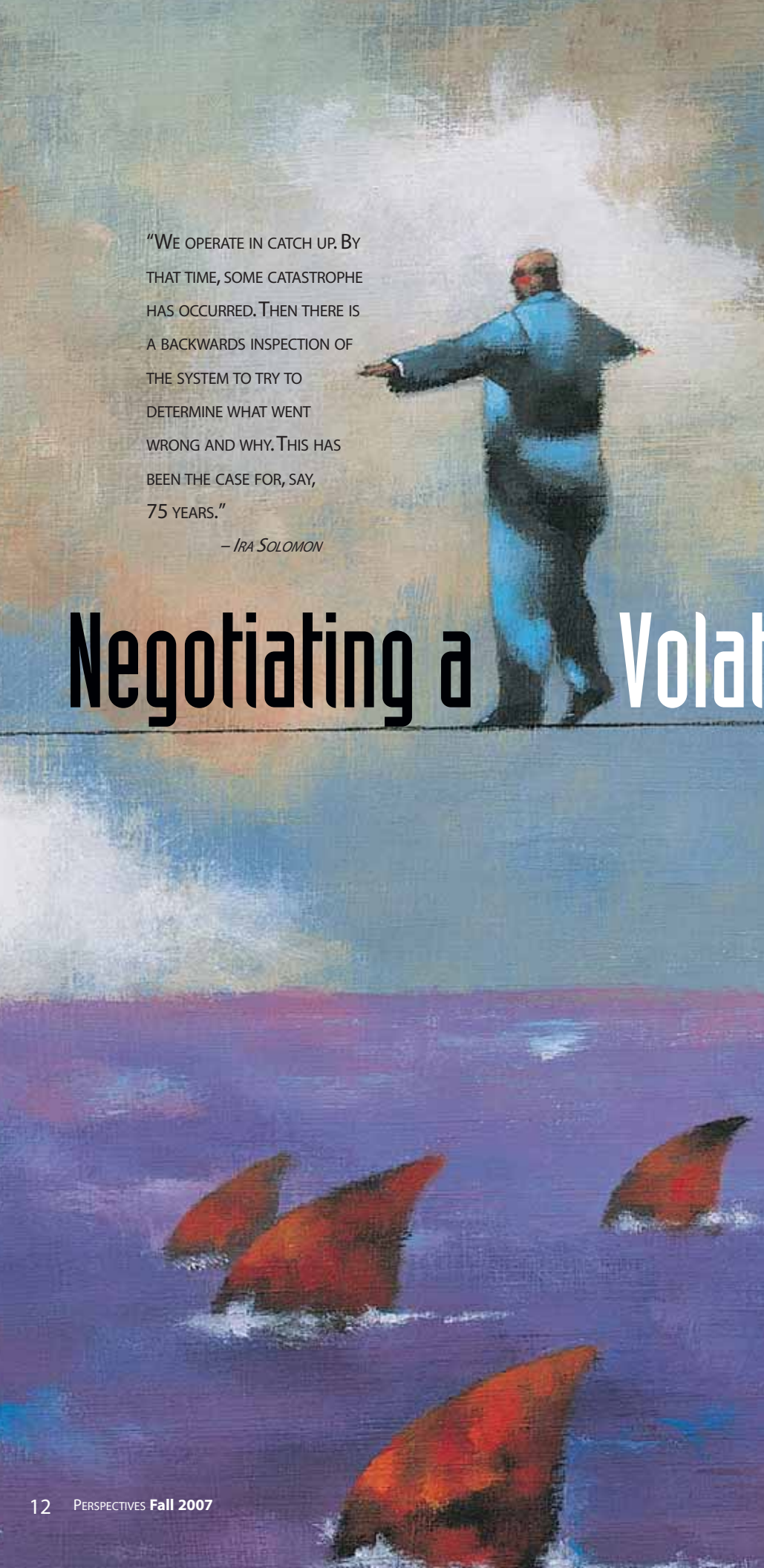
Although businesses are not keen on the idea of federal legislation, the advantage is that the “playing field” will be even. And, as Robinson notes, “If six-day work weeks and no time off was considered so cruel in the 19th century that labor laws were required to make things better, perhaps it is time once again to get the government involved.”

– Deb Aronson

“OVERWORK CAN BECOME A STATUS SYMBOL, AND THEN IT TAKES COURAGE TO TAKE VACATION.”

– JEFF ERIKSEN





"WE OPERATE IN CATCH UP. BY THAT TIME, SOME CATASTROPHE HAS OCCURRED. THEN THERE IS A BACKWARDS INSPECTION OF THE SYSTEM TO TRY TO DETERMINE WHAT WENT WRONG AND WHY. THIS HAS BEEN THE CASE FOR, SAY, 75 YEARS."

—IRA SOLOMON

# Negotiating a Volatile Economy

Anyone caught up in the housing meltdown or the gyrating stock market might want to know why corporate financial statements didn't give fair warning of what was to come.

One way to understand how this economic tsunami struck without more warning is to look at the financial system through the eyes of accounting and finance specialists. *Perspectives* asked three accounting experts at the College of Business — Professors Ira Solomon, A. Rashad Abdel-khalik, and Mark Peecher—to explain what financial data can tell investors, and what it can't.

## Ira Solomon: Working With A System Designed For An Earlier Age

"What we really have here is another facet of a pervasive problem in our financial reporting system," says Ira Solomon, professor of accountancy, and head of the department. "It's a system devised for an earlier era. Trying to fit this system into our current world leaves certain gaps. The system is really designed for an industrial era where companies created value by using physical assets—like property, plants, and equipment—to create products like cars.

"Now we've got companies increasingly creating value by methods other than harnessing tangible assets. Some companies today are creating value via knowledge-based services and products. And we even have companies that make money by creating exotic financial instruments."

Those instruments include things like mortgage-backed securities, collateralized debt obligations, hedge funds, and derivatives—things that didn't exist in an earlier era. And some of these financial



Ira Solomon

**"I THINK GREATER TRANSPARENCY IS ALWAYS BETTER. IF PEOPLE UNDERSTOOD THE RISK, PEOPLE MIGHT NOT INVEST IN EXOTIC FINANCIAL INSTRUMENTS, OR THESE INSTRUMENTS MIGHT BE PRICED TO OFFER A HIGH RETURN (IN RETURN FOR THE RISK)."**

instruments have gone sour seemingly overnight. For instance, two major hedge funds that were exposed heavily to the imploding sub-prime mortgage markets were recently declared essentially worthless.

One factor is that the way home loans are made today is radically different from the conservative system that once ruled the mortgage industry. In the old days, the financial institution that made the home loan retained the mortgage. "These institutions would do a very thorough credit check because they would be stuck with the consequences if the borrower defaulted," says Solomon.

Things are very different these days. Mortgage companies don't use their own funds to make housing loans — they use investors' money. In the current system, once the loan is made, it often is bundled with other loans into mortgage-backed securities. Some of these securities are made up of sub-prime loans — loans to borrowers who have credit problems and are more likely to default.

Wall Street packages these mortgage-backed securities and sells them to a variety of buyers. Some go to individual

investors, some go to pension funds, some wind up in hedge funds, for example. But the bottom line is this: the local savings bank no longer holds the debt. The people who hold the debt, both individuals and institutions, are far removed from the homeowners that borrowed the money. And some of these individuals and institutions have been badly burned. "It turns out," says Solomon, "that there is not enough transparency in the system for the people who wind up owning the debt to understand what they've acquired."

So the system needs to be changed to make sure the new risks are more apparent to investors. "I think greater transparency is always better," says Solomon. "If people understood the risk, people might not invest in exotic financial instruments, or these instruments might be priced to offer a high return (in return for the risk)."

Changing the system is difficult, however, so the changes tend to be made after things go awry. "That's usually what happens," says Solomon. "We operate in catch up. By that time, some catastrophe has occurred. Then there is a backwards inspection of the system to try to determine what went wrong and why. This has been the case for, say, 75 years.

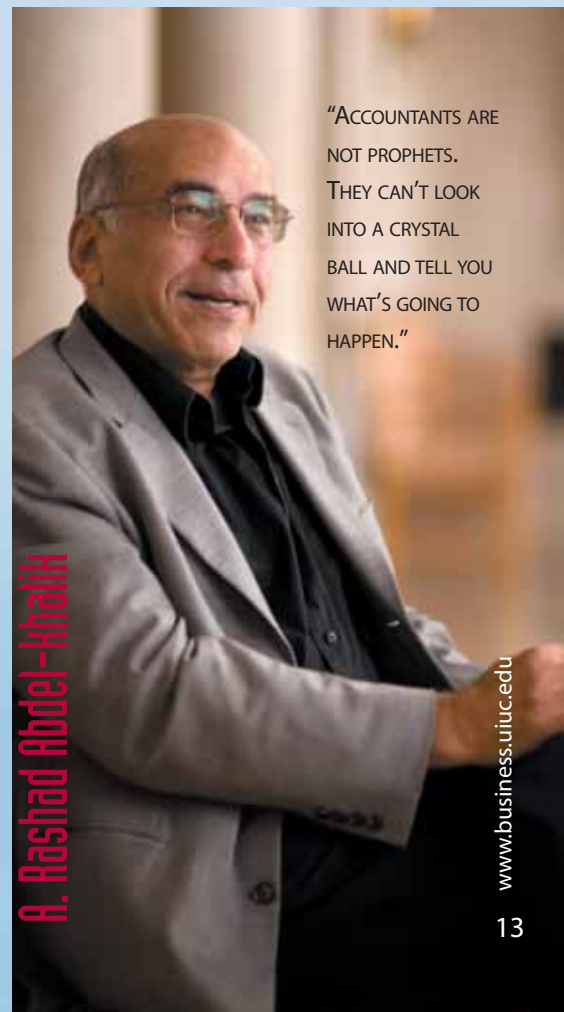
"We go through economic cycles of one form or another and these financial problems occur. Then people try to fix them. The Sarbanes-Oxley Act of 2002 is a recent example. Of course, by then, there's another problem. Most of the time, the money is gone."

### **A. Rashad Abdel-khalik: What Financial Reports Show, What They Don't**

When ordinary investors read audited financial statements, they may assume that they are looking at numbers that represent cut-and-dried "observable truth." That's not the case, says A. Rashad Abdel-khalik, professor of accountancy. Furthermore, they rarely recognize that the financial statements are prepared by the management and are, in fact, management representation.

Most of the numbers reported on the balance sheet and income statement involve making numerous assumptions and estimations. Take pension costs, for example. To estimate the cost of a defined benefit pension plan for the year requires making many assumptions that may not pan out.

"You have to make actuarial assumptions," says Abdel-khalik. "You make assumptions about expected future raises in compensation of the employees. You estimate projected investment income from the pension fund. And, using an estimate of cost of capital, you estimate the future obligations in terms of current dollars. When you report the numbers, people think it's the truth. But the truth is contingent on the realization of the related assumptions. If, for example, pension fund investments fail to perform at the assumed level, then



**"ACCOUNTANTS ARE NOT PROPHETS. THEY CAN'T LOOK INTO A CRYSTAL BALL AND TELL YOU WHAT'S GOING TO HAPPEN."**

A. Rashad Abdel-khalik

**“FINANCIAL MARKETS ARE HARD TO PREDICT BECAUSE MANY GEO-POLITICAL, TECHNOLOGICAL, AND SOCIAL EVENTS IMPACT THEM. THESE EVENTS CAN HAVE GLOBAL RIPPLE EFFECTS BECAUSE ORGANIZATIONS’ OPERATIONAL AND FINANCIAL RISKS ARE INTERWOVEN.”**



the cost being charged would be understated.”

Accounts receivable and loans are another case in point. “Accounts receivable come from selling on credit to other people. The number on the balance sheet for accounts receivable is what’s owed, minus bad debts and estimates of debts that the company thinks might go bad. So the reported number is not a hard number. It’s an estimate or a forecast of what you will collect. There is no such thing as 100 percent certainty in the numbers. The numbers are all estimates involving judgment.”

Financial statements also may not be a good barometer of trouble to come. For example, companies must report or write off an impairment when they expect the value of an asset to be impaired. This would serve as advanced warning to investors of future difficulties. But the warning may not come as soon as investors might like. “Five years ago, there was no expectation of trouble from sub-prime loans,” says Abdel-khalik. “So there was no reason to expect these assets to be impaired. And so there was no reason, given the available information at that time, to ask for writeoffs or give investors a warning.”

Still, there are things investors need to do to protect themselves from the

myriad risks of the market. “As an investor, you must practice due diligence,” he says. “Due diligence demands, for example, a very careful reading of a section of the annual report called ‘Management Discussion and Analysis.’ A good investor should not skip over this section. It tells you about the investments that a company has made or plans to make. It tells you about the company’s business. It gives information about a company’s product lines. And it includes information that you may not see in the numbers. For example, a company may say that it is going to invest in ethanol plants. The company can’t put that on the balance sheet because it hasn’t happened.”

Investors must combine the bits of information from financial statements with information they may glean elsewhere, he says. In other words, they shouldn’t depend solely on information from accountants. “Accountants are not prophets,” says Abdel-khalik. “They can’t look into a crystal ball and tell you what’s going to happen. So it’s up to the investor to get more information on the management, the nature of the company’s business, the company’s business strategy, and its position in the marketplace, for example. Financial statements give you only a piece of what you need in order to answer these questions. So you need to do a lot of work.”

## **Mark Peecher: Taking A Very Big View Of The Financial World**

Over the years, a new way of thinking about the world has evolved. It’s called systems thinking. As the name suggests, systems thinking takes the big-picture view of things. The business and financial system is particularly complex because it is global. Far-flung events can send shock waves around the world. So systems thinkers try to head off trouble by thinking big.

Systems thinking is not a crystal ball, but it increases your ability to deal with dynamic risks. “Financial markets are hard

to predict because many geo-political, technological, and social events impact them,” says Mark Peecher, professor of accountancy. “These events can have global ripple effects because organizations’ operational and financial risks are interwoven.” Thus, a recent headline in the *New York Times* read: “Why A U.S. Subprime Mortgage Crisis Is Felt Around the World.”

Standard operating procedure for systems thinkers is to keep an eye open for potential trouble, while recognizing that it’s not always possible to see it coming.

“The systems thinker tries to anticipate unintended consequences,” says Peecher. An example would be a new drug that treats some malady but also produces unexpected side effects that subject the pharmaceutical company to liability lawsuits.

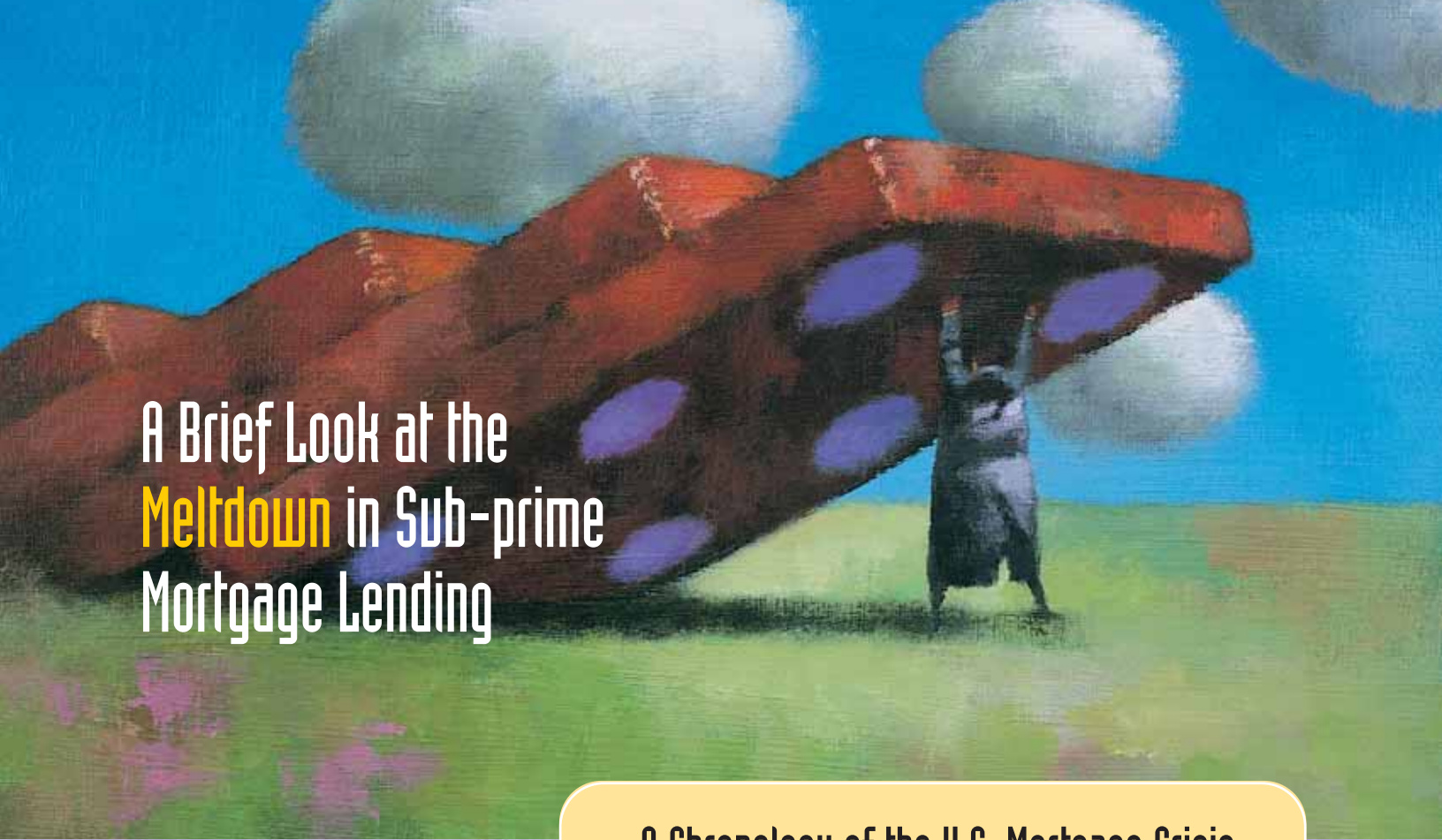
Those who practice systems thinking ask many questions: Is this industry going to be impacted by global warming? Is a trade war likely? What happens if there is a revolution in a country where a critical parts supplier is located? And at the same time, systems thinkers have to understand fundamental pieces of the puzzle. “You still need domain expertise to fruitfully apply systems thinking,” says Peecher.

Even then, there is no silver bullet. “The bad news is that people who think in terms of systems realize that there is a lot more unpredictability than most of us would like,” he says. “Sometimes, you get hit anyway. But the idea is that you take actions to get hit significantly less than others. For example, a systems thinker might limit or entirely avoid investments that others pursue,” Peecher says.

Systems thinkers also gain an edge when disaster strikes. Because they are vigilant about what can go wrong, they often have given thought to what could be done should the worst case scenario occur.

While this may sound pessimistic, Peecher observes that: “Systems thinkers aren’t negative. But they do acknowledge weak links. They recognize that actions can have multiple side effects and some can be very damaging.”

– Doug McInnis



# A Brief Look at the **Meltdown** in Sub-prime Mortgage Lending

**T**he meltdown of the U.S. housing industry began in late February when the overheated Shanghai stock market plummeted. That triggered a 400-plus point drop in the Dow Jones average. The shock waves from the markets rattled the huge U.S. credit industry. Soon, credit markets began to tighten lending requirements, and the flow of funds used to make sub-prime loans began to dry up. In turn, the mortgage companies that had been making sub-prime loans began to fail, creating unemployment in that sector.

The credit crunch occurred just as large numbers of sub-prime mortgage borrowers began to default on their mortgages. The pain hit in every state, but in some pockets it was acute. Stockton, California, a city of 300,000, saw roughly 8,000 homes sent into foreclosure between January 1 and late summer.

The collapse of sub-prime lending and the increase in home foreclosures helped puncture the housing price bubble, sending home sales down and deflating the booming home-building industry. By late summer, the fallout from these events began to impact the U.S. economy, as job growth slowed markedly.

Sources: *New York Times*, *Wall Street Journal*, Agence France Presse, Center for Responsible Lending.

## A Chronology of the U.S. Mortgage Crisis

**2001** - Advocates for low-income homeowners charge that lenders are making home loans without regard to borrowers' ability to repay them.

**December 2006** - The first sub-prime lenders fail as sub-prime mortgage borrowers fall behind on payments.

**February 27, 2007** - Falling prices on Shanghai stock exchange triggers stock sell-off in U.S. The Dow Jones Average falls more than 400 points.

**March 1, 2007** - Home sales suffer biggest drop in 13 years.

**March 13, 2007** - Mortgage foreclosures hit record levels.

**April 2, 2007** - New Century Financial Corp., a major sub-prime lender, files for bankruptcy and dismisses 3,200 workers.

**August 31, 2007** - *New York Times* reports the impact of the U.S. sub-prime mortgage crisis is felt around the world.

**September 12, 2007** - Treasury Secretary Henry Paulson predicts the troubles in financial markets, including sub-prime lending, will take time to resolve.

**September 14, 2007** - Commerce Department reports that August retail sales, excluding auto sales, plunged.

**September 17, 2007** - *BusinessWeek* reports the SEC has opened a wide-ranging inquiry into growing U.S. mortgage debacle.

**October 17, 2007** - Treasury Secretary Henry Paulson announces that the housing decline is still unfolding and "is the most significant current risk to the economy."

Sources: *New York Times*, *Wall Street Journal*, Associated Press, *BusinessWeek*.

# Field of Green

## *Exploring Environmental Economics*

**D**on Fullerton considers himself an environmentalist, but he readily concedes that like-minded folks may fervently disagree.

That's because Fullerton, a visiting professor of finance, is an environmental economist.

"Which is all sort of ironic, because environmentalists tend to hate economists," he says with a laugh.

But Fullerton explains the divergence in simple terms. He believes that the environmental benefits ought to exceed economic costs of any program to reduce or clean up pollution.



“Environmentalists don’t like that view, because they would always want more pollution abatement. They may believe pollution is inherently wrong, so we should have none of it,” says Fullerton, who arrived at the University of Illinois this fall to join the newly established Center for Business and Public Policy. “That’s not realistic. The only way to have no pollution is to have no economic activity.”

Fullerton has studied how government policies influence consumer behavior in the context of environmental issues. He has focused his research on two hot-button issues: garbage collection and vehicle emissions.

In both spheres, Fullerton has found that government mandates to reduce pollution often fail because governments do not implement the cheapest manner of abatement. For example, costly pollution control equipment may be required on every car, when it could be skipped on cars that are driven very little. In addition, individuals may find ways to get around the mandates, resulting in more environmental damage rather than less.

## Making Cents of Waste

Fullerton’s interest in environmental economics was piqued when he saw a *Wall Street Journal* article 20 years ago about a municipality in Pennsylvania that decided to shun traditional garbage collection and start anew. Instead of collecting a monthly subscription fee, the town initiated a charge based on each bag of garbage collected, assuming that this policy would have the desired effect of reducing pollution and increasing recycling.

But Fullerton found that, in both theory and practice, this isn’t always the case. In one community that changed to the price-per-bag method, he and a graduate student went out into the field and measured the amount of curbside garbage to be collected from 100 households — the weight and the number of bags as well as the weight of the recycling. They measured before the change went into effect and then went back again several months later and repeated the exercise.

What they found was that the number of bags was significantly reduced. In fact, the number of bags fell by 37 percent. However, the weight of each bag increased — so people were simply stuffing more in each bag. The overall weight of their garbage decreased by only 14 percent. And while the amount of recycling went up, the increase was only one-third of the missing garbage amount.

What may account for a lot of the difference is another “market” for garbage — illegal dumping and burning. These illicit

practices are difficult to measure, and their ramifications are even more difficult to price in this “market.”

“Yes, a bag of garbage is socially costly,” says Fullerton. “It has external pollution attributes, so many have proposed a charge per bag of garbage. But it is not as costly as that same bag of garbage thrown into the woods or a vacant lot, or thrown out the car window by the side of the road. As soon as you assume that a given bag of garbage is more costly when dumped than when put in a landfill — which must be true — then instead of charging for garbage collection we should be subsidizing it. The policy implications are the exact opposite.”

Fullerton suggests that cities continue municipal garbage service without the price per bag, but market it as a deposit-refund system. Instead of bringing those soda bottles back to the store for a mere 10 cents each, this deposit-refund model takes on a more big-picture flavor. When a purchase is made at a store,

an extra fee would be collected that would “reflect the social external damages from dumping that item.” The refund then would be “free” collection.

“Cities already do this implicitly when they have sales tax and free collection,” Fullerton says. “The way in which an explicit policy may improve the circumstances a little bit is to have differential rates on products that are more damaging than others.”



“AS SOON AS YOU ASSUME THAT A GIVEN BAG OF GARBAGE IS MORE COSTLY WHEN DUMPED THAN WHEN PUT IN A LANDFILL — WHICH MUST BE TRUE — THEN INSTEAD OF CHARGING FOR GARBAGE COLLECTION WE SHOULD BE SUBSIDIZING IT. THE POLICY IMPLICATIONS ARE THE EXACT OPPOSITE.”

## Fueling Success

Fullerton sees the regulation of vehicle emissions as a situation analogous to the garbage example, as governments around the world have tried to reduce air pollution by mandating various ways to get people to drive less — and unintended consequences result. Fullerton explains the example of Mexico City, where the government enacted a plan known as “One Day Without a Car,” a program intended to improve air quality in the notoriously dirty city. What it means is that for one day a week, cars with a certain license plate number would not be allowed on the road.

To circumvent this law, families often buy another car — with a different license plate number — usually an older car that has poorer emission controls.

“Mandates certainly can work,” says Fullerton, “but only if the government mandates the cheapest form of abatement. The problem is that the government doesn’t necessarily know what the cheapest forms are, and they usually get it wrong. People

# At the Center

## Exploring How Public Policy Impacts the Economy

Don Fullerton is one of 13 University of Illinois faculty members serving as research associates in the College's newly established Center for Business and Public Policy. The mission of the multidisciplinary Center is to provide intellectual leadership and to promote research that advances our understanding of the effects of public policy on the economic environment in which businesses operate.

Because expenditures by federal, state, and local governments comprise nearly one-fifth of the U.S. Gross Domestic Product, the government plays a variety of roles relevant to business. The government is a consumer of private sector goods and services, a provider of critical economic infrastructure and human capital, an investor in research and development, and a partner or competitor in providing services such as retirement security and health care insurance. In addition, the government writes the rules under which markets operate, with far-reaching consequences in areas as diverse as labor market practices to financial market disclosures to environmental standards. And obviously, as a taxing body, the government significantly influences the behavior of businesses in both product and financial markets.

According to Jeffrey Brown, William G. Karnes Professor of Finance and director of the Center, understanding the impact of public policy is crucial for today's business leaders. And the Center can play a valuable role in helping that happen. "By supporting leading researchers, the Center will help business operate more effectively in the current policy environment and will also provide guidance to policymakers about the effects of public policy on the economy."

### Faculty Research Associates in the Center for Business and Public Policy

Jeffrey Brown	Finance
Kristine Brown	Labor & Industrial Relations
Steve D'Arcy	Finance
Don Fullerton	Finance
Fred Giertz	Economics
David Hyman	Law
David Ikenberry	Finance
Richard Kaplan	Law
Charles Kahn	Finance
George Pennacchi	Finance
Josh Pollet	Finance
Michael Weisbach	Finance
Scott Weisbenner	Finance

have examined these command-and-control mandates, and yes, they can achieve some abatement, but they're several times more expensive, depending on the program."

So how do we reduce pollution from vehicle emissions? Just as all garbage pollution can't be taxed directly — with no way to measure the amount of illegal dumping or burning — Fullerton says that no current mechanism can adequately measure and tax the pollutants an individual puts into the air by driving a car.

"The question, then, is how to design a workable combination of taxes and subsidies: How should policy change the price of each observable driving activity? What should have a higher price, and what should have a lower price? The best pricing would induce the same behaviors you would like to get from an ideal, but unavailable, tax on emissions," says Fullerton.

### His economic analysis shows that:

- While unpopular, a gasoline tax is a logical place to start. "You can tax gasoline at different rates that depend on the composition of the gasoline. You can have a higher rate on dirty gasoline and a lower rate on clean forms of gasoline or ethanol."
- Vehicles could be assessed an "environment" tax when purchased. "You can have a higher rate on the dirty ones and a lower rate on the clean ones, and you could even subsidize the purchase of the cleaner ones."
- Annual registration fees, often assessed by state or local governments, could vary in a way that depends on the cleanliness of the vehicle. "So if you want to pay a lower annual fee on your own car, you could take it to the inspection and maintenance facility and fix the broken pollution control system. Even without that annual fee, policy could subsidize people for fixing their pollution control system."

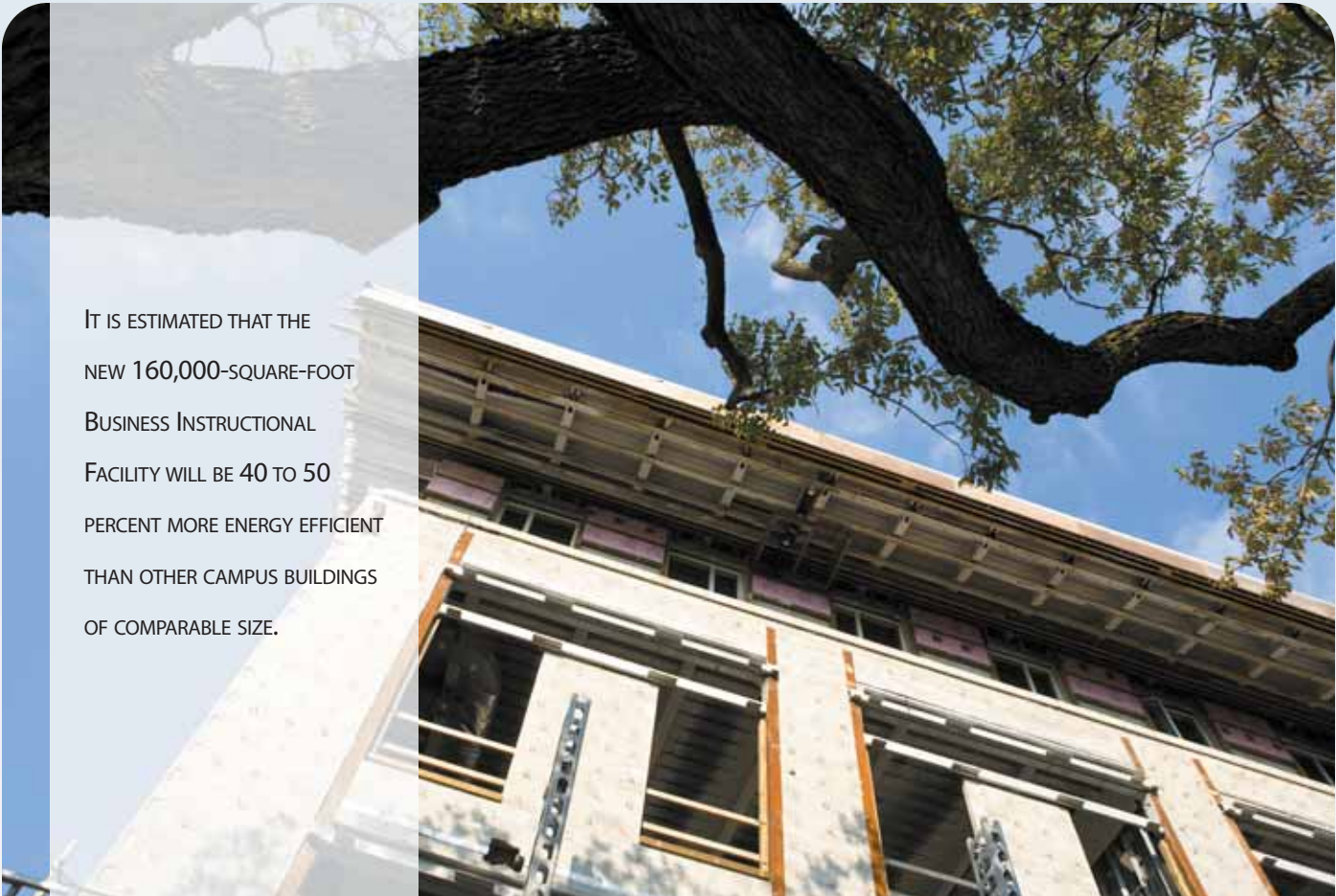
### It's Not Cheap Being Green

Fullerton sees the public's acceptance of the reality of global warming as a catalyst for change, on a micro- and macro-economic scale. In the meantime, he will continue to investigate how to help the environment economically, one car or one garbage bag at a time.

As an economist, he believes he can do that by examining the marketplace and finding policies that will help achieve the cheapest methods of pollution abatement — because the cheaper the methods, the more likely they will be accepted by the public and implemented by policy.

"That's why a cost-benefit analysis is useful, to design policies that help cut pollution in the cheapest possible ways — then we can afford *more* pollution control measures than if done in these expensive ways," he says. "Ultimately, that's what environmentalists and environmental economists both want — efforts that will have the most positive impact on the environment."

— Laura Weisskopf Bleill



IT IS ESTIMATED THAT THE NEW 160,000-SQUARE-FOOT BUSINESS INSTRUCTIONAL FACILITY WILL BE 40 TO 50 PERCENT MORE ENERGY EFFICIENT THAN OTHER CAMPUS BUILDINGS OF COMPARABLE SIZE.

## A Learning Environment That's Environmentally Friendly

**W**hen the new College of Business Instructional Facility opens in the Fall of 2008, it will be the first green building on campus, with a design that makes it not only comfortable and state-of-the-art but also energy efficient and environmentally friendly.

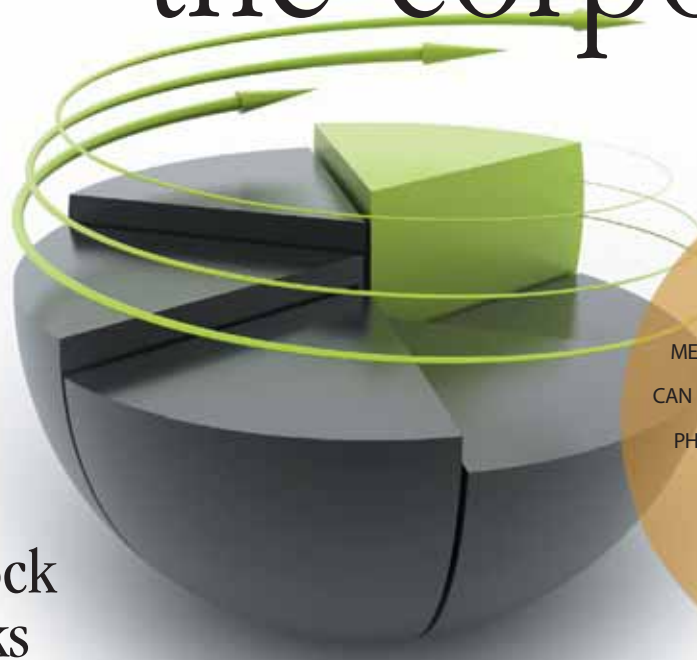
That means it will have more insulation, triple-pane windows, photo sensors to dim the lights gradually as more daylight enters the room, a displacement air system to move cool and warm air more efficiently, plantings on portions of the roof, and minimal paving to help dissipate heat. In addition, a photovoltaic array on the auditorium roof will capture sunlight that will be converted to electricity to provide 8 to 9 percent of the building's energy needs. Other environmentally friendly measures include automatic and measured lavatories to conserve water and a commitment to recycling construction waste, which at this stage of the building process stands at 90 percent.

By achieving such objectives, it is expected that the facility will receive gold certification through LEED, the Leadership in Energy and Environmental Design rating system of the U.S. Green Building Council.

What does environmentally friendly mean from an economic standpoint? In the case of the Business Instructional Facility, it means that the initial investment in green design will pay significant dividends in energy savings over the life of the building. In fact, computer modeling done by Atelier Ten, an environmental design firm, estimates that the 160,000-square-foot building will be 40 to 50 percent more energy efficient than other campus buildings of comparable size.

"We are exceptionally proud to be the first campus building with the distinction of green design," says Dean Avijit Ghosh. "As a College of Business, it's important to us to show leadership in this area. It is another sign of our commitment to innovation and stewardship."

# Reslicing the corporate pie



STOCK BUYBACKS ARE USUALLY EXPLAINED IN THE PRESS AS A MECHANISM THAT CORPORATE MANAGEMENT CAN USE TO INCREASE EARNINGS PER SHARE. THE PHENOMENON OF RECYCLING CAPITAL FROM BUYBACKS INTO THE CREATION OF NEW COMPANIES HAS BEEN LARGELY OVERLOOKED BY THE MAINSTREAM MEDIA.

## How stock buybacks encourage the growth of new companies.

Anyone who follows financial news is likely to see a growing number of stories about corporations that are buying back their stock. What's missing from the individual stories is the larger picture: the large number of buybacks is reshaping the U.S. economy by rapidly shifting hundreds of billions of dollars from unproductive uses to new ventures.

This is an important part of the process by which the U.S. economy renews itself through the shrinkage and death of old companies and the rise of innovative new ones, says David Ikenberry, chair of the Department of Finance.

The U.S. has gone through this cycle of death and renewal many times.

Perhaps the best example was the shift from the horse and buggy era to the age of automobiles. It takes a great deal of money for such shifts to take place. In the current economy, one of the sources of this capital is stock buybacks, says Ikenberry, who has studied the buyback phenomena extensively.

For instance, data calculated by Ikenberry and others showed that announced buybacks exceeded three-quarters of a trillion dollars between 1995 and 1999, and the current buyback boom appears much bigger. Between mid-June and mid-July of this year alone, corporations announced 81 buybacks totaling more than \$65 billion, according to data compiled by The Online Investor.

### Moving Money

When a company buys back its own stock, it shifts cash from corporate coffers to the stockholders who sold their shares. The stockholders in turn look for new investments, and some of the cash winds up financing the next generation of innovative companies.

Stock buybacks are usually explained in the press as a mechanism that corporate management can use to increase earnings per share. The phenomenon of recycling capital from buybacks into the creation of new companies has been largely overlooked by the mainstream media.

"If you read the popular press, they largely trivialize this," says Ikenberry. "Instead, the press turns it into an earnings-per-share manipulation device.

That misses the point. In place of that, this notion of recycling capital seems more appropriate. You think about the dot.com boom. Where did the capital for all that expansion come from? It came from this recycled capital.”

Of course, not every investment of buyback cash works out. The dot.com boom was littered with failures, just as the early years of the automobile age were marked by failed car companies. But enough succeed to change the economy. “We put a lot of spaghetti up on the wall, and some of it stuck,” says Ikenberry. “Google is now one of the largest companies in the world.”

### What Triggers Buybacks?

Buybacks have an impact because they add up to a lot of money, as Ikenberry observed in a journal article that summarized stock repurchase research done by himself and other economists. The piece, entitled “What Do We Know

About Stock Repurchases?” appeared in the Spring 2000 edition of the *Journal of Applied Corporate Finance*. It was coauthored by Gustavo Grullon when both authors were at Rice University.

The paper also observed that in 1998, for the first time, corporations distributed more cash to investors through share repurchases than through cash dividends. And the trend toward buybacks hasn’t slowed.

“Buybacks are going at a breakneck pace,” Ikenberry says. “It appears to be much bigger than in the period from 1995 through 1999.”

There are two reasons why the pace of buybacks could get particularly torrid: many corporations are sitting on cash hoards from strong corporate profits, and many stocks are cheap. When corporations have more money than they need for their operations, buybacks are one way to use it. And when stocks are cheap, it costs less for companies to buy back their own shares.

Why might stocks be cheap now and in the immediate future? One reason is that the fallout of the ongoing sub-prime mortgage debacle has shaken the stock market. Shockwaves from the growing number of defaults on mortgages issued to sub-prime borrowers has hit the stocks of mortgage companies, home builders, and Wall Street investment firms.

But those tremors have shaken other stocks as well, spurring a broad market decline in stock prices. Falling stock prices may give investors fits, but they also encourage companies to buy back their stock because it’s cheaper to do so when prices are down. “We’re going to see an avalanche of buyback announcements,” Ikenberry predicts.

If the stock price downturn continues and triggers more buyback announcements, it would follow historical precedent. Buybacks rose after the big market crash of 1987, the mini-market crash of 1991, and the market disruption that followed the attack on the World Trade Center in 2001.



“BUYBACKS ARE GOING AT A  
BREAKNECK PACE. IT APPEARS TO BE  
MUCH BIGGER THAN IN THE PERIOD  
FROM 1995 THROUGH 1999.”

– DAVID IKENBERRY

## 2 Views on Stock Repurchases

There are two ways to look at stock repurchase programs. One way is to view them from the perspective of corporate management. The other is to look at how buybacks impact the economy.

Management uses buybacks to “signal” their optimism about their firm’s future and to indicate that they think their stock is undervalued in the marketplace. Managers also buy back stock to boost reported earnings per share, though economists say that this justification amounts to “an economic sleight of hand.”

But the bigger picture focuses on how buybacks impact the larger economy. Finance professor David Ikenberry explained it this way in a paper he coauthored on the subject — “What Do We Know About Stock Repurchases?” from the Spring 2000 issue of the *Journal of Applied Corporate Finance*.

“A central premise of how capital is allocated in a free economy is that corporations should consider returning capital to shareholders when they have run out of value-added investments. Shareholders are then free to reallocate this capital to more productive uses. The reason for this is that shareholders ... have a broader view of economy-wide opportunities.

“In short, one important reason for share repurchases has to do with the natural birth and death process of companies in a capitalist system. Although corporate managers appear to use stock repurchases simply to address their own perceived undervaluation problems, the financial markets at large effectively use repurchases as a principal means of liberating capital from a

moribund economic sector so that it can be channeled into more promising ones.”

In the era before stock buybacks took off, corporations primarily returned excess cash to stockholders through dividends. But the tax laws now work against that because dividends are taxed as ordinary income. For individuals in high tax brackets, the tax bite on ordinary income can be quite steep. By contrast, any profits from stock buybacks are treated as capital gains. The top tax rate for capital gains is lower than the top tax rate for ordinary income. In addition, stockholders who don’t want to incur any additional tax bill can simply opt not to sell their shares.

One reason for the surge in buybacks was a change in the regulatory climate. Before 1982, there were no regulatory guidelines for buybacks. Many firms avoided repurchases apparently because they were afraid they would be accused of manipulating stock prices if they did so.

In 1982, the Securities & Exchange Commission issued rule 10b-18, the first rule that set out guidelines for stock repurchases. This reduced the chance that a company would run into legal trouble if it bought back its stock. After rule 10b-18 took effect, the number of share buybacks surged. By 1998, for the first time, the total amount of cash spent on stock buybacks by U.S. companies was greater than the amount of cash that companies paid out in dividends.

The stock buyback movement, which began in the United States, has gone global, spreading to such countries as Canada, the United Kingdom, Japan, and Germany.

“IN SHORT, ONE IMPORTANT REASON FOR SHARE REPURCHASES HAS TO DO WITH THE NATURAL BIRTH AND DEATH PROCESS OF COMPANIES IN A CAPITALIST SYSTEM. ALTHOUGH CORPORATE MANAGERS APPEAR TO USE STOCK REPURCHASES SIMPLY TO ADDRESS THEIR OWN PERCEIVED UNDERVALUATION PROBLEMS, THE FINANCIAL MARKETS AT LARGE EFFECTIVELY USE REPURCHASES AS A PRINCIPAL MEANS OF LIBERATING CAPITAL FROM A MORIBUND ECONOMIC SECTOR SO THAT IT CAN BE CHANNLED INTO MORE PROMISING ONES.”

## STOCK REPURCHASES—A TIMELINE



**1982**

The SEC issues rule 10b-18, which outlines guidelines for stock repurchases, setting the stage for a future buyback boom.

**1987**

Buybacks surge in number after stock meltdown.

**1998**

For the first time, corporations spend more on buybacks than dividends.

**2001**

**(September)** Attacks on World Trade Center and Pentagon spur sharp market drop. As stocks become cheaper, buybacks accelerate.

But in the long run, the sub-prime mortgage debacle could have the reverse effect on buyback programs if it leads to an economic slowdown that depresses corporate profits. If profits are down, corporations would have less money to spend on stock repurchases. In that case, Ikenberry says, fewer companies would complete buyback programs already announced, and you would see fewer announcements of new buyback programs.

Why would troubles in sub-prime lending damage the economy and corporate profits? First, U.S. home prices fell 3.2 percent in the second quarter of 2007. That was the sharpest rate of decline since Standard & Poor's created a nationwide housing price index in 1987. As prices have fallen, it's become harder for consumers to borrow against their homes to finance big-ticket purchases, such as cars and vacations. Much of the current economic expansion has been attributed to consumer spending, and home equity loans have helped to fuel that spending. If consumers stop spending because they can't borrow against their homes, corporate profits would likely drop, along with the size of cash hoards that are used to buy back stock.

In addition, many homeowners are either losing their homes or on the brink of doing so. "If my mortgage is in trouble, the last thing I will do is buy a new car," says Ikenberry.

### Pull Backs on Buybacks

Generally, companies have been reliable about following through on announced buybacks, though they usually hedge buyback announcements with language that allows a quick exit. For instance, they say they "intend" to follow through, and they don't say how quickly they will do it.

Finance professor Michael Weisbach studied the buyback phenomenon about a decade ago and found companies completed announced buyback programs about three quarters of the time. But sometimes, companies never repurchased any shares after making a buyback announcement or failed to finish buyback programs they had already started.

In his study, there were a number of reasons why that happened, Weisbach found. For example, "If the stock price went up after they made the announcement, it no longer made sense to do the buyback," says Weisbach. "Let's say you announce you'll buy back your stock because it's trading at \$25 a share and you think it's worth \$30 a share. If the price goes up to \$30, then the reason for buying it back is no longer there."

There were three other reasons companies failed to follow through, he says. "They had a shock to their cash

flow, they needed the money elsewhere, or they discovered a better use for it than buying back their stock."

That's where the sub-prime lending crisis represents a potential threat to buybacks. If sub-prime problems pull down the larger economy, corporations might quickly find they need the money elsewhere.

### Repurchase, Return, Recycle

In the meantime, stock repurchases are churning along and helping to fuel the transformation of the U.S. economy — and in the process generating jobs to replace those lost to foreign competition, automation, and corporate downsizing.

And some of the money being recycled through buyback programs comes from companies that are part of an industry in decline.

"If a company is in a declining industry, that may be the best time to give the money back through stock repurchases," says Ikenberry. "Rather than put the money into buggy whips, they ought to give the money back to shareholders. Then the capital that's liberated from declining business can be recycled and put back into biotech or whatever the great new uses are."

- Doug McInnis

## 2007

### (February 26)

Dow Jones average falls more than 400 points after stock prices plummet on the Shanghai exchange - setting the stage for sub-prime lending debacle and stock market volatility.

### (February 26)

The plunge in the Dow Jones average is a sign that investors may be taking another look at their appetite for high-risk investments.

### (March 23)

Mutual funds invested in real estate plunge on worries over rising mortgage defaults.

### (June-July)

With corporate profits strong, buybacks run at high levels.

### (August)

Mounting trouble in stocks, sub-prime housing, and credit could spell trouble for corporate America. If profits should fall, stock buybacks would drop.

# COLLEGE BRIEFS

## Faculty Members Receive Professorships

This fall the College announced professorships for four faculty members.

**Rajshree Agarwal** is the John Georges Professor of Technology Management and Strategy. She earned her Ph.D. in economics from the State University of New York at Buffalo and joined the faculty in 2001. In addition to her professorship, she serves as the scholar in residence at the Academy for Entrepreneurial Leadership and the director of the Innovations and Technology Management Initiatives at the College.

**Jeffrey Brown** has been named the William G. Karnes Professor of Finance. Brown is currently director of the Center for Business and Public Policy at the College and associate director of the National Bureau of Economic Research Retirement Research Center. He earned his Ph.D. from the Massachusetts Institute of Technology and joined the faculty in 2002. In 2006 he was confirmed by the Senate as a member of the Social Security Advisory Board.

**Joseph Mahoney** and **Cele Otnes** have been named Investors in Business Education Distinguished Professors on the basis of their scholarship, leadership, and teaching excellence. Mahoney joined the Department of Business Administration faculty in 1988 and teaches strategic management and business economics. He earned his Ph.D. from the Wharton School of Business. Otnes, who completed her Ph.D. in communications at the University of Tennessee, has been a member of the Business Administration faculty since 2000. She teaches courses in consumer behavior, retailing, and promotion.

## Westgren Assumes Leadership Role

**Randall Westgren** was named the head of the Department of Business Administration in August. He joined the University of Illinois in 1995 as a professor of agribusiness management in the Department of Agricultural and Consumer Economics and has recently served as a professor of business administration and director of the Center for International Business Education and Research (CIBER) in the College of Business.

Prior to joining Illinois, Westgren was department chair in agricultural economics at McGill University and assistant professor of agribusiness at the Leavey School of Business, Santa Clara University. He earned a Ph.D. in agricultural economics from Purdue University.

Westgren assumes the department head position from **Huseyin Leblebici**, who continues his research and teaching pursuits in the College.

## College Names Faculty Fellows

The following four faculty members have been appointed as fellows in the College:

**Ruth Aguilera**, an associate professor of business administration, was named the Center for Professional Responsibilities in Business and Society Fellow. Aguilera earned a Ph.D. in sociology from Harvard University, specializing in economic sociology and comparative methods. She joined the University of Illinois in 1999.

**Murillo Campello** is an associate professor of finance and was named the James F. Towey Faculty Fellow. Campello completed his Ph.D. in finance at the University of Illinois. He has been a member of the finance faculty since 2002.

**Timothy Johnson** has been appointed the Robert and Karen May Faculty Fellow. Johnson earned a Ph.D. in finance from the University of Chicago. He joined the faculty in 2006 and is an associate professor.

**Scott Weisbenner**, an associate professor of finance, is the Julian Simon Memorial Faculty Fellow. After earning a Ph.D. in economics from MIT, he worked as an economist for the Federal Reserve Board of Governors in the capital markets section. He has been a finance faculty member since 2000.

## Entrepreneurship Program Earns Recognition

*Entrepreneur* magazine recently named the entrepreneurship program at the University of Illinois as one of the top 25 in the nation. The rankings, compiled by *The Princeton Review*, list the undergraduate program 16th and the graduate program as 21st. It is the first time the University of Illinois has made the list.

Earlier in the year, *Fortune Small Business* magazine ranked Illinois among the top 25 campuses in three categories for entrepreneurship, and the National Consortium for Entrepreneurship Centers recognized Illinois as having the best cross-campus entrepreneurship program in the United States.

In addition, the College's Executive MBA program was recently named as among the nation's top 12 executive programs for entrepreneurship by *Fortune* magazine. For more information, see <http://money.cnn.com/magazines/fsb/bestcolleges/2007/executives/index.html>.

The Academy for Entrepreneurial Leadership, which coordinates and encourages entrepreneurial initiatives across campus, is affiliated with the College of Business. About 2,700 undergraduates and 1,500 graduate students are enrolled in entrepreneurship-related classes across campus.



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