We know ILLINOIS students are exceptional and highly coveted hires, and now everyone else knows it, too. In September, The Wall Street Journal named ILLINOIS as one of the top three universities in the country for educating students who are considered top-rated by recruiters.

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We’re proud to provide the education that puts our students in an enviable position with recruiters, but more than that we take great pride in knowing that through their education and affiliation with ILLINOIS our students, our alumni, and our faculty continue to take the lead in making business better.

Sincerely,

Larry DeBrock
Dean
Brain Trust
By Cathy Lockman

Is the decision-making process influenced more by emotion or reason, and what does that mean for business?

Leading the Charge
By Bob Preer

Faculty experts explore what steps are needed to improve financial reporting eight years after the implementation of Sarbanes-Oxley.

Moving into High Gear
By Doug McInnis

Financial engineering plays a growing role in today’s business environment.

The Public-Private Wage Gap
By Bob Preer and Cathy Lockman

When it comes to comparing the salaries and benefits of public and private workers, experts say there’s more to it than just numbers.
How do you know what you know?

“Businesses have spent a lot of time, money, and thought establishing and ensuring compliance with ethical systems, and yet the general assessment is that they haven’t been highly successful. [We] explored the possibility that the answer to why this is true might have to do with the disconnect between the way ethical systems are designed and implemented and the way human beings actually make decisions.”

—Ira Solomon
Think back to where you were when you heard about the attack on the World Trade Center on September 11, 2001. If you’re like most people, you’re probably certain that your memories of what happened that day are accurate because of the dramatic nature and universality of the event. But really, if you’re like most people, you’ll find that the reliability of such memories is often suspect.

A 1992 study of students’ recollections of the Challenger explosion is a case in point. Psychologist Ulric Neisser asked students in his class to write down their memories about the space shuttle’s explosion the day after it happened. He wanted to know what they remembered about where they were and what they were doing as well as how they heard the news and how they felt when they heard it. When the same students were interviewed two years later, only 10 percent of them gave the same account as they had the day after the explosion. But what is even more interesting is that when faced with the inconsistencies in their accounts, many of the students were certain that the newer recollections were correct, even when they were shown their earlier handwritten versions of the day’s events. They chose the newer accounts that their brains had rewritten over the original account written in their own hand.

If memories as powerful and dramatic as the Challenger disaster can be unreliable, how can we be certain about the mundane, everyday occurrences? And, more importantly, how can we make decisions based on what we believe are truths when their reliability is less than certain? Is certainty based on a set of facts that you know and can repeat, or is it more of an emotional response? In short, how do we know what we know and what should we do with that knowledge?

Neurologist Robert Burton explores these questions in his book, On Being Certain: Believing You Are Right Even When You’re Not, and recently shared his work at a two-day Roundtable hosted by the College’s Center for Professional Responsibility in Business and Society and attended by a group of accomplished business professionals and academicians from across the country. It’s a topic that has broad implications for business because the concept of “certainty” impacts all decision making, from hiring practices to corporate strategy to professional responsibility and ethical compliance, which is a specific focus of the Center’s initiatives.

“Businesses have spent a lot of time, money, and thought establishing and ensuring compliance with ethical systems, and yet the general assessment is that they haven’t been highly successful,” says Ira Solomon, professor of accountability in Business and Society and a member of the Center’s Board of Advisors. “This Roundtable explored the possibility that the answer to why this is true might have to do with the disconnect between the way ethical systems are designed and implemented and the way human beings actually make decisions.”

Challenging Your Certainty

What is it exactly that influences our decision-making process? Maybe that sounds like a no-brainer: you examine the evidence, evaluate the options, and arrive at a reasonable conclusion. This process of conscious deliberation allows us to feel certain about our choice. But that would mean that each of us, when presented with the same evidence, would come to the same conclusion, and we know that doesn’t happen.

Burton suggests another possibility. “Actually, about 95 percent of cognition occurs unconsciously, which means that despite how certainty feels, it is not a conscious choice or even a thought process.” Instead, he says, certainty is more like love or angst. It relies on experience and emotion that are part of the involuntary mechanisms of the brain, rather than reason and analysis. In fact, says Burton, “Certainty, which I call the ‘feeling of knowing,’ will trump reason every time.”

So if people rely more on intuition, gut feelings, and emotion to make decisions, how do business leaders use that information to build a better organization, a stronger corporate culture, and a more ethical environment?

According to J. Brooke Hamilton, a Roundtable participant who teaches management and organizational behavior as well as ethics at the University of Louisiana at Lafayette, it begins with a challenge. “One of the chief obstacles for people to overcome in organizational settings is their conviction that they are right and others are wrong,” he says. “The first step in this process is to challenge people to identify their feelings of certainty and to encourage them to consider where those feelings come from. It’s difficult to get people to connect and reach agreement if they don’t understand why...
they believe what they do. To do that, you have to question your own certainty.”

Duane Farrington, senior vice president at State Farm Insurance Companies, agrees. After the Roundtable, he incorporated that kind of challenge into his work with his peers, who represent some of State Farm’s top management and strategy officers.

“We shared the information with our peers to create a conversation around the idea that just because you’re confident doesn’t mean you’re right,” says Farrington. “We encouraged everyone to assess how they know what they know. Personally, it led me to suspend my own assumptions as I talk about strategic issues at work and instead to spend more time listening. Now when I go to my peers or they come to me and say, even tongue in cheek, ‘How do you know what you know?’ it’s a deliberate approach that says we need to explore the idea further and get a deeper understanding before we make a decision. It’s a strategy that creates an environment where collaboration is favored over debate. And it has allowed us to have more robust dialogue about strategic issues.”

But when employees are encouraged to question their certainty does the organization become more vulnerable to group think? And if so, is that necessarily a negative?

Farrington doesn’t think so. “In strategic situations, you want that kind of creative thinking that comes with questioning,” he says. “But there are also times when having everyone on the same page is truly important for a company. From the standpoint of an insurance company, for instance, we have an ethical obligation to pay what we owe and to use sound pricing practices. To have anyone thinking contrary to this could not be tolerated. As a result, we have established a culture or a group thinking that says: ‘At State Farm, we pay what we owe, and you are definitely an outsider if you don’t think that way.’ We have this collective thought process about losses and how we pay and how we price our products; we don’t want creativity in that arena.”

The duality presents its own challenge. “We want people to think the same way to a point, but then we want them to step forward and be leaders,” says Anne Farrell, an assistant professor of accountancy whose recent research focuses on the role of emotions in financial decision making (see page 5). “We have to accept this duality. A leader must be able to function as both a group thinker and an individual thinker.”

High Stakes, High Emotions

But what about those decisions that need to be made in a split second, where there is no time for deliberation or collaboration?

Cathy Bodnar, the chief compliance officer for the Cook County Health & Hospitals System, knows that environment well and says that self-awareness is important in managing that type of decision making. “In health care, you have to react quickly and decisively. Often, that means acting on instinct or your gut feeling. And although those kinds of decisions are made unconsciously, they’re based on more than just emotion. They’re based on years of professional experience as well.”

That’s an important distinction, says Burton. “When it comes to gut feelings, intuition, and split-second decisions, we have to have criteria to know when to trust those feelings.”

(continued on page 6)
Consider the following scenario. You are looking for a general contractor to build your new home. You’ve interviewed several and have narrowed it down to two builders; each has 20 years of experience, comes very highly recommended, and has provided you with the same exact bid for the work. With the first contractor, you made an immediate and friendly connection; with the second, you came away confident of his ability but far less impressed with his interpersonal skills. Who would you choose to build your new home?

A quick poll would most likely favor the friendly contractor, the one you have a good “gut feeling” about. That’s because our affective, or emotional, reactions often weigh heavily in such decisions. However, what if the second contractor told you that he would guarantee your satisfaction by establishing a solid completion date and reimbursing you $500 per day for any day beyond that date? Would that change the way you process the information when making your decision?

In other words, would your analytical reasoning intervene in your emotional response? Anne Farrell, assistant professor of accountancy, and Brian White, a Ph.D. student, are researching that very question. Their project focuses on investment decisions rather than personal ones, but the premise is the same.

“We are looking at the cognitive processes we use when we make decisions,” says Farrell. “In a work environment, people often find themselves in emotion-laden situations, where the affective system of our brain is engaged and our reaction to ‘go with our gut’ is automatic. Our research examines whether particular accounting tools can get people to shift from using their brains’ affective processing systems to the analytical processing systems when making decisions. We don’t want people to ignore their emotions—rather, we seek ways to get them to weigh their emotions appropriately.”

Decisions, Decisions

How does this research aid business? According to Farrell, when we know how the brain processes such information, “It enriches our understanding of the influence of emotion on managers’ decisions and on how that influence can be impacted by the decision context.”

White adds that “Shifting between affective and analytical processing modes can be beyond our consciousness and can take an imperceptible amount of time. The only way we can truly see whether accounting can prompt a processing shift is to look inside the brain.”

Therefore, one phase of Farrell and White’s study is a web-based task, where participants review investment proposals, some of which are designed to create emotional responses, and make decisions on which proposals to accept. They investigate whether different accounting tools provided with the investment proposals change the decisions participants make.

“The web-based data we gathered has provided a lot of rich, valuable information regarding actual decisions,” explains Farrell. “The second phase of the research is an MRI task that replicates the scenarios we use in the web-based task but that allows us to examine differences in the actual cognitive processes through which these decisions are made. Using this imaging technology, we’ll be able to see whether there is an observable change in the way information is processed in the brain.”

The opportunity to extend and complement prior research with brain imaging technology is novel in accounting. In fact, the chance to collaborate with the University’s Beckman Institute for Advanced Science and Technology, an interdisciplinary institute devoted to leading-edge research in the physical sciences, computation, engineering, biology, behavior, cognition, and neuroscience, “has been a great opportunity for us to work with some exceptional people from very different fields,” says White. “We hope that ours will be the first of many collaborations between the College of Business and the Beckman Institute.”

— CATHY LOCKMAN
To get a firsthand sense of what Robert Burton means by “the feeling of knowing,” consider the following excerpt from On Being Certain: Believing You Are Right Even When You’re Not. Read the passage through from beginning to end without skipping to the bottom for an explanation.

A newspaper is better than a magazine. A seashore is a better place than the street. At first it is better to run than to walk. You may have to try several times. It takes some skill, but it is easy to learn. Even young children can enjoy it. Once successful, complications are minimal. Birds seldom get too close. Rain, however, soaks in very fast. Too many people doing the same thing can also cause problems. One needs lots of room. If there are not complications, it can be very peaceful. A rock will serve as an anchor. If things break loose from it, however, you will not get a second chance.

The paragraph may seem to be incomprehensible until you consider a single clarifying word (refer to the bottom of this box to view that key word). Now, reread the paragraph and feel how your previous sense of confusion turns into understanding. You’ve experienced “the feeling of knowing.”

Clarifying word: Kite

Train the Brain
For organizations, the dualities of facts and feelings and of independent and group thinking raise another interesting challenge: How do we establish an environment that encourages both individual and group thinking, and what does that mean in terms of creating an ethical culture in our organization?

“Rules promote group thinking,” says Farrell. “So organizations have to determine when and how they promote rules or choice. And then the question becomes: Is ethics a rule or a choice?”

Experts say there are elements of both in ethical decision making. Organizations often provide a set of rules that guide employees and then through training and modeling convey those rules; however, choice often trumps rules, so there also has to be an innate sense, a feeling, that there is a reason to think and act ethically.

Again, this is where brain processing comes into play. Brian White, a Ph.D. student in accountancy who is coauthoring research with Farrell, says both analytical and emotional processing are involved when employees face ethical dilemmas.

“People often assume that the analytical system will always lead to a better decision, but that’s not the case,” White explains. “Emotional, or heuristic, processing is more commonly called ‘going with your gut.’ Because we often store knowledge as feelings, going with your gut is an efficient and effective way of applying relevant knowledge to a decision, even if you can’t explicitly articulate it. Because ethics-related decisions are seldom black and white, they are exactly the decisions that can benefit most from incorporating intuition into judgment.”

But can you teach the intuition that leads to ethical decision making? White thinks so, but only with a long time horizon and mainly by example. “I have far more confidence in my ability to train my three children to be ethical than in my ability to do so for students that I teach for 12 or 15 weeks. Having said that, I think the way in which we integrate professional responsibility into the accounting

“People often assume that the analytical system will always lead to a better decision, but that’s not the case. Because we often store knowledge as feelings, going with your gut is an efficient and effective way of applying relevant knowledge to a decision, even if you can’t explicitly articulate it.”

– BRIAN WHITE
curriculum at ILLINOIS is very effective. My students take it seriously, and they understand that the professionalism component of their coursework prepares them for careers in accounting.”

Hamilton agrees. “The challenge as I teach professional ethics to my students is to cull the best ideas from moral psychology, neuroscience, philosophy, and topics like certainty, which Burton raises, to give them something very practical,” he says. “The goal is to take their natural inclination to do the right thing and make that interest more sophisticated so they can employ it in their careers.”

Beyond the classroom, Hamilton suggests companies find ways to encourage introspection by designing workplace training programs that include a discussion of how the brain functions and the roles that reasoning, emotion, and certainty play in decision making.

“If you want to learn to golf, you have to understand the five basic parts of the golf swing. Once you understand each part, you can put them together. We need to take the same approach in ethics training courses,” Hamilton says. He explains that by understanding how the brain processes information, people are more prepared to recognize their own patterns of thinking both individually and in a group environment. With that information, they can take the next step of determining how they can personally commit themselves to being ethical and then who or what they can rely on to help carry out that commitment.

“When you play golf, you keep score to see how you’re doing and how your golf swing is progressing,” Hamilton says. “It’s important to have personal tests and measurements to see how you’re progressing as an ethical person, too. Understanding ‘how you know what you know’ helps the individual make and measure progress and helps businesses devise more effective systems for ethical decision making.”

—Cathy Lockman
An extraordinary consensus formed in Washington in the summer of 2002 on a course of reform for corporate accounting and reporting. By overwhelming majorities, the House of Representatives and Senate approved the Sarbanes-Oxley Act. When President George W. Bush signed the bill that July, he called it “the most far-reaching reform of American business practices since the time of Franklin Delano Roosevelt.”

In the eight years since, Sarbanes-Oxley—named for its co-sponsors, Democratic Senator Paul Sarbanes of Maryland and Republican Representative Michael G. Oxley of Ohio — has brought a range of responses.

The public, looking for somewhere to vent their frustrations over unethical corporate behavior and their own market losses because of the fallout from corporate scandals, has, in general, applauded the measure. But there are critics, too, and their voices grew steadily louder as the law was implemented. They viewed the passage of Sarbanes-Oxley as an improper government intrusion in the marketplace.

But no matter whether you view Sarbanes-Oxley as an overdue reform or an overreach by the government, one thing is certain. It has changed the accounting landscape. Executives of public companies and auditing firms have had to make major changes in the way they record and report financial matters. The accounting profession has had to devote significant resources in order to comply with the law’s many provisions. It has been costly and has taken considerable time and effort to implement.

“Sarbanes-Oxley is a comprehensive attempt at reform of the public company auditing profession through regulation,” says Ira Solomon, professor of accountancy and department chair. “It covers a lot of turf. Parts of it are non-controversial, while others have been extremely controversial, especially with respect to cost-benefit issues.”

While many question whether the financial costs have outweighed the benefits, Solomon and colleague Mark Peecher, professor of accountancy, say it’s time to begin a new dialogue on Sarbanes-Oxley, because the law is here to stay.

“The question is not whether the Sarbanes-Oxley law will be here in the future,” says Solomon. “The Supreme Court recently decided that, with some tweaks, it will be. The question now is, how do we make it serve the best interests of society going forward?”

The Why and What of Sarbanes-Oxley

Sarbanes-Oxley is intended to protect shareholders and the general public from accounting errors and fraudulent practices. It sets standards for auditing of public companies, and it includes provisions designed to ensure auditor independence and to promote financial disclosure.

Before Sarbanes-Oxley, accountants were guided primarily by standards established by industry associations. “Until the law was passed, the auditing profession had been largely self-regulated,” says Peecher.

That self-regulation proved costly in the wake of corporate scandals—like...
WorldCom, Enron, Tyco International, and Adelphia Communications. With the economy in a downturn and the stock market experiencing dizzying gyrations, the public and politicians demanded stricter financial oversight of U.S. companies. Sarbanes-Oxley was the result.

Under the law, much more detailed disclosures are required of companies. Senior executives also have to take individual responsibility for the accuracy of financial reports. The Public Company Accounting Oversight Board (PCAOB), which was created as part of Sarbanes-Oxley, established detailed processes for audits as well as procedures for inspection and enforcement.

Sarbanes-Oxley increased penalties for fraud, and it made the failure to certify corporate financial reports a criminal offense.

The Next Steps in Reform

Professors Solomon and Peecher have been studying the outcomes of Sarbanes-Oxley to assess the extent to which the resulting reforms have improved the quality of financial reporting and external audits.

The global financial crisis exposed weaknesses in corporate finance accounting and reporting, according to Solomon. “We have Sarbanes-Oxley, and yet we still had many companies—as Warren Buffett said—swimming without any shorts on, but we don’t find out until the tide runs out.”

Solomon believes that the PCAOB may have overreached initially. It first set audit standards that were too burdensome and costly for companies, then later repealed the requirements.

The board also may be trying to do too much by establishing such an extensive inspection regime, according to Solomon. “They have armies of individuals who go check the work that the public company auditors perform. These are the auditors of the auditors,” he says.

Solomon and Peecher suggest that the following two questions are central to ensuring that the reform initiated with Sarbanes-Oxley and carried out by the PCAOB will serve the best interests of society and result in continued improvement in the quality of financial reporting. Essentially, it’s a matter of how best to hold auditors accountable for their work.

1. What kind of accountability framework should regulators use to motivate auditors to improve audit quality—that is, are rewards or penalties most effective?

2. What accountability framework should regulators employ to evaluate how well auditors have done their job—that is, is it best to examine the auditor’s judgment process or the outcome of the financial statements/audits to make that determination?

Improving Reporting by Improving Judgment

In a presentation to the European Audit Quality Conference in September, the accountancy professors raised these questions, focusing specifically on how regulatory inspections, auditor incentives, auditor judgment processes, and audit reports could be modified to enhance audit quality. They proposed several reforms, most of which could be implemented by the PCAOB.

For instance, Solomon and Peecher suggest that the regulators should devise a reasonableness test to assess auditor’s judgment and that inspections should be done during an audit, not just when the audit is complete. The two professors contend that the PCAOB is too focused on outcomes rather than judgment processes. If an accounting mistake or reporting error surfaces after an audit is finished, the PCAOB may very well reprimand the auditor, even if the auditor followed proper procedures.

“Someone who has knee replacement surgery can get an infection even if a physician has done everything according to quality control standards,” Peecher says. “Similarly, an audit is not designed to provide absolute assurance.”

In addition, they suggest that the regulators revisit the concept of professional skepticism to encourage auditors, or when possible, require them to
actively question their own judgment-process quality. The idea is that by improving judgment, you can improve financial reporting.

“Even when people feel that they are certain, that doesn’t mean that they’re right,” says Solomon. “Neuroscience research suggests that even judgment processes that we are confident about can still be biased. Auditors need to consider this potential bias not only in their own thinking, but in the judgment processes of other auditors on their engagement team.”

Peecher and Solomon also believe that when evaluating the work of auditors, the PCAOB should offer more detailed evaluations, highlighting work that is of high quality. The board now uses what is, in effect, a pass-fail system.

“That gives no clear incentive for an auditor to employ excellent auditing procedures,” Peecher says. “It becomes a race to the bottom.”

The accountancy professors also favor a change in the law that would allow auditors who uncover fraud to receive cash rewards. U.S. law now provides for payments to whistleblowers, usually in an amount that reflects a certain percentage of the fines imposed by regulators on the violating business. But auditors are prohibited from receiving rewards.

In fact, the current system does little to encourage fraud detection because there are potential penalties for auditors in the form of financial disincentives if they spend too much time on an audit, which searching for fraud would require, as well as the resulting lost fees and lost clients if they do find it. Direct payments to auditors would provide an incentive to uncover fraud, according to Solomon and Peecher.

“A payment to the audit firm would offset the negatives that happen in those situations and potentially unleash forces for innovation,” Solomon says.

But that’s just part of the equation, Solomon explains. “The incentives of all parties involved in corporate governance need to be re-examined. In addition to considering policies like paying auditors rewards for discovering financial statement fraud, there needs to be consideration of why audit committees and boards in general have not been more effective advocates for excellence in financial reporting and auditing.”

Peecher agrees that the law should reward auditors who do the right thing. “Now everything is set up to penalize auditors whose work is deemed substandard. Both economics and psychology suggest you get better long-term performance with a mix of rewards and penalties.”

– Bob Preer

Earlier this year, Protiviti, a global business consulting and internal audit firm, released results of their Sarbanes-Oxley Compliance Survey, a study that includes data on the cost, value, and benefits of complying with the 2002 law. More than 400 corporate executives and professionals across all sectors provided their opinions on the topic. Of those 400, nearly 70 percent are in or beyond their fourth year of compliance. Some of the survey’s key findings include:

- Across organizations, the cost of Sarbanes-Oxley compliance is down by 50 percent in their most recently completed fiscal year, when compared to their first-year compliance costs.
- Most respondents indicated that the costs of Sarbanes-Oxley compliance exceeded the related benefits in the initial year of compliance; however, the trend reverses for most companies over time such that, for the current year, benefits exceed costs.
- Even though a majority of respondents indicated that the Sarbanes-Oxley compliance process offers some benefits, the most significant of which is enhanced understanding of control design and control operating effectiveness, they believe their external audit costs would decline by as much as 30 percent if Sarbanes-Oxley was no longer required.
Although the corporate world and the auditing profession is eight years into the implementation of Sarbanes-Oxley, it only recently passed a significant legal challenge.

The Free Enterprise Fund, headed by College of Business alumnus Stephen Moore, filed suit against the law, challenging its constitutionality. Earlier this year, the U.S. Supreme Court issued a ruling that affirmed some of the Free Enterprise Fund’s main contentions, but, in the end, left the law largely unchanged.

To Moore—economist, writer, and activist—Sarbanes-Oxley was a serious overreach by government into the workings of the marketplace.

“It is one of the worst laws we have seen in a long time,” Moore says. “It has caused an enormous amount of accounting work for businesses. I’ve talked to a lot of CEOs who say it causes them tremendous stress. Even honest mistakes can lead to criminal penalties.”

The law’s burden is greatest on small- and medium-sized companies, according to Moore.

About five years ago, Moore and several like-minded activists, began discussing the possibility of fighting Sarbanes-Oxley. An attorney advised them that the law might be vulnerable to a constitutional challenge because it vests extraordinary authority in the Public Company Accounting Oversight Board (PCAOB), an unelected body whose members are instead appointed by the Securities and Exchange Commission.

Moore founded the Free Enterprise Fund for the purpose of challenging Sarbanes-Oxley. The lawsuit moved through the legal system, eventually making its way to the U.S. Supreme Court. On June 28, the court struck down a provision in the law that insulated the PCAOB from presidential oversight. The court ruled unconstitutional a provision that says board members can be removed only by the Securities and Exchange Commission and not the President. However, the court upheld the rest of the law and refused to invalidate any past decisions of the board.

Moore says that he believes the Free Enterprise Fund won the court case, but he qualifies it as a “pyrrhic victory.” While the justices may have changed the rules governing who can remove members of the PCAOB, the court did not deliver what Moore and the Free Enterprise Fund wanted, which was for the entire law to be overturned.

“The court ruled in our favor, but only on narrow grounds,” Moore says.

**Business As Usual**

The Supreme Court’s decision will have little effect on how auditors do their job, according to people in the accounting profession.

“The case really revolved around whether and how PCAOB board members could be removed,” says James C. Cook, a partner at Ernst & Young LLP and a 1971 accountancy graduate. “In terms of implications for financial reporting or how auditors go about auditing financial statements, there is really no effect.”

Timothy J. Reierson, a 1981 graduate in accountancy and a partner at PricewaterhouseCoopers LLP, says, “The Supreme Court decision really had no effect on what we do. For us, it really is business as usual.”

While the court case was making its way through the legal system, accounting professionals did keep an eye on it, however. “I think there was interest from the standpoint of where this might go, but I don’t think a lot people who were executing audits day-to-day were paying a lot of attention,” Reierson says.

Cook adds, “As a practical matter, I don’t think many expected Sarbanes-Oxley to go away.”

He says the accounting profession has enthusiastically accepted and implemented the provisions of Sarbanes-Oxley and recognizes its value.

“I certainly believe that independent regulation of the profession is strengthening confidence in financial reporting and audit quality,” Cook says.

Reierson says the law has brought a new emphasis on ethics and accountability to the profession. “I think the law has been a net positive in terms of reinforcing the importance of our responsibilities as auditors, improving the quality of the work we do, and strengthening our relationships with those charged with governance, including boards of directors and audit committees,” he says.
A brand is part and parcel of a company’s personality profile. Just like individuals, some brands are the friendly and approachable type, others are powerful leaders who attract a cult following, and others simply leave people cold. A variety of components contribute to a brand’s personality, including name, logo, slogans, designs, symbols, colors, fonts, taglines, signage, and packaging. Combined successfully, these can create a rich network of positive associations, motivating consumers at a visceral, rather than intellectual, level to take action. Establishing that kind of strong emotional bond is the holy grail of brand loyalty.

The Name Domain

The brand name is the pivot around which all the other elements revolve, and when it’s well-chosen it can create a host of positive associations that establish it as a superior product or service.

“Ultimately, a successful name is one that sells product, assuming of course that the product fulfills a true consumer need,” says Mike Glick, senior brand manager for Abbott Laboratories and a 1999 graduate in business administration.

“When it comes to consumer products, brand names need to be highly descriptive to ensure that the key benefits are clearly communicated.”

In addition to being descriptive, names for sub-brands depend heavily on the use of the overarching brand name. “While some sub-brands, such as Windows or Xbox, are long-established and can stand on their own, newer products have no inherent brand equity and need to be used together with the overarching brand name,” explains Glick. “When Xbox was originally launched, it was important for Microsoft to use its brand name in order to give the innovation some credibility.”

In the development of a memorable name, qualitative and quantitative market research are also essential, says Glick. “Most companies, for instance, conduct multiple studies to assess consumers’ and customers’ reactions to the new names. Research can range from surveys to focus groups to eye-movement tracking and biometric studies. Even after a new name is launched, it’s important for companies to continue market research in order to track the brand’s equity scores.”
“Loyalty is a strong word and is often erroneously applied to repeat consumption behavior. From my perspective, loyalty is when your consumer voluntarily becomes an ambassador for your brand and goes about spreading the word and recommending it.”

– Rashmi Adaval
Sometimes a naming dilemma arises when two companies merge, and each is an established brand in its market. JoAnna Abrams, CEO of The MindClick Group, Inc. and a 1990 graduate in finance, recalls the example of two mediation firms, JAMS (Judicial Arbitration & Mediation Services) on the West Coast and Endispute on the East Coast. “Neither company wanted to give up its name, and the combined name JAMS/Endispute was not working,” she says. “After researching both companies’ markets, we selected the name ‘JAMS’ because clients valued the ‘judicial’ aspect of the name, which emphasized the large number of retired judges serving as mediators for the firm. This gave the company greater stature than the somewhat awkward ‘Endispute; particularly in comparison with their strongest competitor, the American Arbitration Association.”

However, the new JAMS logo took into account the more friendly positioning of Endispute by showing a round figure in the center and half circles on either side, a stylized representation of a person who brings two sides together. “We didn’t want to create the perception of aloof judges who can’t roll up their sleeves,” says Abrams. “By marrying the essence of both companies in the name and logo, we achieved the positioning of a substantial but approachable mediation firm.”

Lost in Translation

Just as carefully chosen names can skyrocket a brand’s trajectory, poorly designed names can call forth negative associations. Particularly egregious cases occur when companies attempt to translate names into other languages. “When Coca-Cola was first introduced in China, the Chinese characters chosen to represent sounds similar to the English name would have meant ‘bite the wax tadpole,’” recalls Rashmi Adaval, associate professor of business administration. “Fortunately, the company identified a different set of characters which meant ‘happiness in the mouth,’” she says. “Similarly, Pepsi’s slogan ‘Pepsi brings you back to life’ would have translated into Chinese as ‘Pepsi brings your ancestors back from the grave,’ and Clairol couldn’t call its curling iron ‘Mist Stick’ in Germany where ‘mist’ is slang for ‘manure.’”

The emotions of brand associations, whether positive or negative, are further reinforced by attitudes consumers bring with them to the marketplace. Adaval has researched how feelings influence product judgment. “Interestingly, when people are having a good day they don’t necessarily evaluate everything more positively,” she says. “Rather, we see a polarization—a popular brand is evaluated more favorably, while a less famous, negative, or indifferent brand is judged even more negatively. Even if the consumer does not make a purchase that day, the positive or negative evaluation persists and affects choices made later.”

Getting Creative

Since naming is not usually among the core competencies of manufacturers and service businesses, many choose to outsource the task to naming and branding specialists. “Because a great deal of money rides on a strong brand name, it’s wise to bring in an experienced professional who can serve as a creative and strategic resource,” says Brent Scarcliff, creative strategy director of Scarcliff Salvador Inc., a firm that guides companies through the process of naming and branding. “An outsider who is not wrapped up in the company’s day-to-day operations can bring a fresh perspective and a disciplined process to the naming task.”

Scarcliff’s research into the relationship of brand and culture led him to conclude that a brand is a manifestation of a company’s culture, while a product or service is an element of the target audience’s culture. “Therefore, one of the most important criteria is that a company name be a strong symbol of the company culture and that a name for a product or service fit into and expand the everyday culture of consumers,” he says.

Any brand strategy or naming project should draw on the approaches of all the various disciplines that have contributed to the development of branding theory, notes Scarcliff. These include: marketing, which allows a company to distinguish itself in one or more of the “four Ps”—product, price, promotion, and place; psychology, which developed the idea of positioning to capture mindshare; art and design, which stresses the importance of appealing to all five senses; sociology, with its research on tipping points, influencers, and viral effects; and belief branding, which holds that brands occupy a similar place in society as mythology once did. Nike, for instance, is the name of the Greek goddess of victory, appealing to consumers’ Olympian spirit. Taken one step further, belief branding becomes cult branding, as when people talk about brands like Apple in almost religious terms.

To select a memorable name, Scarcliff recommends applying the SIMPLE test. Ideally, a name should be:

- **symbolic**, that is, serves as a strong symbol for the brand (e.g., Apple, Corona, Nike)
- **imaginative** (e.g., Google, Windows, Xbox)
- **meaningful**, that is, is relevant to the audience (e.g., Jaguar, Lexus, Pop Tarts)
- **playful**, that is, lends itself to word play (e.g., Jamba Juice, Snapple, Visa)
- **lovable**, that is, creates a bond with the audience (e.g., Land O Lakes, Mini, Sunkist)
- **extraordinary**, that is, differentiates itself from the competition (e.g., Patagonia, Red Bull, Wii)

Among the names created by Scarcliff Salvador are “Vodvil” for a new type of entertainment club in Hollywood, reinvigorating the early 20th century term “vaudeville.”
“Idiocracy” for a movie about an average man who awakens from a time capsule to find himself the smartest man on earth after 1,000 years of reverse evolution, and “Librisa” for the Mount Nelson Hotel’s luxury spa, a hot spot in Cape Town, South Africa.

When a naming project is outsourced, it’s critical for company leaders to remain deeply involved because their vision and passion are the best sources for the emotions the brand will convey in the marketplace, says Abrams. “Challenge the creative team to grasp the vision of your brand, to feel the associated emotions and bring their essence to life,” she advises. “Don’t rush the process. Get market feedback to clarify how your vision is being received by consumers so you can develop a name that communicates at a visceral level.”

Where Did the Loyalty Go?

“Many brands are in trouble from the standpoint of achieving true consumer loyalty,” says Adaval. “Brand managers use repeat purchases as an indicator of brand loyalty and gear the majority of their marketing efforts toward achieving this type of repeat behavior. However, what marketers fail to realize, or choose to ignore, is that it might not be loyalty that motivates your purchase.”

Instead, Adaval explains, you might actually be indifferent to the product itself and choose the brand simply out of habit, or you might select it based on its low price or because the other alternatives are not viable.

“Loyalty is a strong word and is often erroneously applied to repeat consumption behavior,” Adaval says. “From my perspective, loyalty is when your consumer voluntarily becomes an ambassador for your brand and goes about spreading the word and recommending it. If you look at Apple, for instance, you can see that they started off having this cult-like following. People who used Apple products initially saw themselves as ‘different,’ and if you talked to any of them you immediately knew they were passionate about the product. That is loyalty.”

With that definition in mind, Adaval challenges consumers to identify brands for which they feel such an affinity. It’s likely the list is very small, or even nonexistent. Consequently, when something new comes along, consumers easily switch, which leads companies to use more “tricks” (e.g., coupons, promotions, etc.) to lure them back instead of building loyalty through product improvement, customer service, and innovation. In fact, says Adaval, “Companies are so concerned with market share that instead of innovation, we often see brand proliferation,” that is, mere extensions of existing items to create the illusion of new products.

“To get true loyalty,” Adaval says, “you must have products that ‘delight’ and continue to deliver that same experience over time.”

After all, a good name can only create a rich network of positive associations if it stands for a product that delivers.

– Alice Shepherd
For a few minutes on May 6, the stock market plunged with unprecedented speed, shedding 1,000 points before swiftly recovering most of the losses. The event, now dubbed the Flash Crash, still hasn’t been fully explained. But if the future offers a repeat, financial engineering is likely to help some investors buy stocks at bargain prices.

“I’ve no doubt that financial engineers have already reprogrammed their models to say that if this happens again, there is a buying opportunity,” says Morton Lane, director of the new Master of Science in Financial Engineering Program at the University of Illinois.

Financial engineers use high-speed computers and advanced mathematics to model complex financial systems in order to create new investment strategies and new financial products. The goals are to cut risk and boost profits.

Finance Professor Neil Pearson defines financial engineering more simply as “the use of mathematical tools commonly used in physics and engineering to help solve financial problems.”

Financial engineering has been a much-discussed topic the last few years, in part because of its successes—a number of investment funds run by financial engineering programs did quite well before the market meltdown of 2008. But financial engineering has also garnered attention because some critics think it contributed to the financial unraveling that led us into the Great Recession. Supporters of financial engineering disagree.

“Two things caused the crash—the illusion that housing prices could go up forever and the fact that there was too much credit out there,” says Lane. “Neither one had anything to do with financial engineering.”

In any case, financial engineering is now a well-entrenched part of the financial tool kit used by both high-roller investors and risk-averse managers.

It evolved as high-speed computing revolutionized the financial world and as Wall Street realized that mathematics and computer models of complex financial systems had a role to play in both making money and managing risk. The roots of this field date back to ancient times. Historians record that the great Greek
mathematician Thales used his skills to calculate that the next olive crop would be very large. Then he cornered the market on olive presses. When a bumper crop arrived, Thales reaped a fortune.

**Man + Machine**

While financial engineering gives a competitive edge to its practitioners, it guarantees neither hefty profits nor a risk-free future.

“Financial engineering can help us manage a little better if things go well or if things go poorly,” says Pearson, the Harry A. Brandt Distinguished Professor of Financial Markets and Options. “But the bigger issue of whether things go well or poorly is not going to be affected by financial engineering.”

“Financial engineering is a tool,” says Mark Vonnahme, director of the Master of Science in Finance program at ILLINOIS. “But it never substitutes for understanding your business and the importance of using common sense in decision making.”

Vonnahme closely monitored economic indicators, particularly housing statistics, when he made critical decisions in his previous position as president of CNA Surety Group, Chicago, the nation’s largest publicly traded surety firm. “Housing statistics are generally one of the leading indicators of what’s going on when you are extending credit to the commercial construction industry,” says Vonnahme, the Fox Family Distinguished Clinical Professor.

But financial engineering does play a crucial role at firms such as Chicago Trading Company, which specializes in derivatives transactions across markets in Europe and North America. In general, the company profits by spotting pricing discrepancies that can be turned into a profit.

“Financial engineering is very, very important to the core of our business,” says CEO Eric Chern, a 1992 ILLINOIS graduate in general engineering. Nonetheless, human managers always trump machines in crucial judgment calls, he says.

“We don’t have black boxes that we turn on and then walk away from. Our financial engineering is like building a very advanced fighter plane. There’s a lot of technology in those planes, but I still want a very skilled pilot at the controls. We’re creating a lot of very advanced technology that our pilots are using to fly our planes better.”

**At the Controls**

Just as homeowners buy home insurance, businesses look to financial engineering to cope with everyday problems and worst-case scenarios. Recently, a Canadian insurance company spent $200 million to buy derivatives linked to a fall in the consumer price index. If deflation occurs, as some financial observers fear it will, the company stands to profit handsomely, *The Wall Street Journal* reported.

According to Tim Johnson, associate professor of finance and the Robert and Karen May Faculty Fellow: “One component of financial engineering is risk management, and credit derivatives will continue to be an important tool of risk management, perhaps even more so as a result of recent improvements in the market infrastructure.”

Here’s how they work. The buyer of a credit default swap is insured against loss by the seller in the event that a loan or bond goes into default. For example, some Midwestern banks used credit default swaps to cover their extensive loans to companies with exposure to the ups and downs of the farm sector, says Johnson.

Credit default swaps are also used to protect lenders against governmental defaults. For instance, holders of Greek bonds or other Greek debt have an incentive to buy credit default swaps in light of that country’s dicey finances. “A lot of banks—especially eastern European banks—lent Greece a lot of money, and they wanted to cover themselves through credit default swaps in case Greece went out of business,” Johnson says. These and similar cases help explain the explosive growth of the market for credit default swaps, he says. But credit default swaps can also be used...
When the Flash Crash struck May 6, it immediately invited comparisons to the Crash of 1987.

“Nobody had ever seen the market fall as fast as it did in 1987,” says Assistant Professor of Finance Virginia France, who has written about the event. “The same thing happened in the Flash Crash. And in both cases, the market recovered without any major economic impact.”

In each crash, the cause is still being debated. In 1987, when the market fell nearly 23 percent in one day, some people blamed computer-program trading. The plunge could also have been triggered by bad news. “People have come up with three or four possible news stories,” says France. “But there’s no consensus.” One possibility, France says, was that the market was too high and any piece of troubling news might have popped the bubble.

By contrast, the Flash Crash may have been caused in part by changes in the way shares trade. A few years ago, the New York Stock Exchange accounted for more than 80 percent of trades. Now it’s about 25 percent, says Morton Lane, director of the new Master of Science in Financial Engineering Program at ILLINOIS. The rest goes to other exchanges, which number in the hundreds.

On the afternoon of May 6, the rapid fall in prices for some stocks set off automatic trading slowdowns for those stocks on the NYSE. The slowdowns are designed to allow a breather while order is restored. But the trades were just routed to secondary exchanges, which suddenly experienced abnormal volumes in these stocks.

“Every exchange has a natural order of business,” says Lane. “For a certain stock, that might be three sell orders. Suddenly, it’s 90, and that indicates an (apparent) problem with the stock, so it falls faster and faster.” Soon, the chaos spread to other stocks. One stock fell from $40 a share to one cent, and then swiftly recovered, The Wall Street Journal noted.

On June 10, the SEC set new rules to temporarily stop trading in a stock at all exchanges if its price falls more than 10 percent in five minutes. According to a statement from SEC Chairwoman Mary Schapiro, “These new rules will require all markets to pause simultaneously and provide time for buyers and sellers to trade at rational prices.”

“OUR FINANCIAL ENGINEERING IS LIKE BUILDING A VERY ADVANCED FIGHTER PLANE. THERE’S A LOT OF TECHNOLOGY IN THOSE PLANES, BUT I STILL WANT A VERY SKILLED PILOT AT THE CONTROLS.”
– Eric Chern, CEO, Chicago Trading Company

“FINANCIAL ENGINEERING CAN HELP US MANAGE A LITTLE BETTER IF THINGS GO WELL OR IF THINGS GO POORLY. BUT THE BIGGER ISSUE OF WHETHER THINGS GO WELL OR POORLY IS NOT GOING TO BE AFFECTED BY FINANCIAL ENGINEERING.”
– Neil Pearson

as a speculative tactic to make money, Johnson says. Third parties can buy credit default swaps even though they don’t hold any of the debt. Some are believed to have bought credit default swaps on Greek debt, hoping to profit off a Greek default. In fact, some European finance ministers have accused speculators of trying to undermine Greek finances in order to bring about a default, Johnson says.

The use of credit default swaps and other derivatives has come under increasing scrutiny since the financial meltdown. Berkshire Hathaway’s Warren Buffett has called them “weapons of mass destruction,” notes Johnson, even though at least one unit of Buffett’s company uses them heavily.

An excess of credit default swaps sold by AIG backfired when the subprime mortgage market collapsed, and AIG couldn’t cover its potential losses. The United States intervened to save AIG through a massive bailout rather than risk the fallout that might occur if the company failed.

But supporters of financial engineering say the problems were with AIG management, not with the swaps. “The problem with AIG was that they sold too much and failed to anticipate how bad the credit downturn could be,” says Lane.

And AIG was but one of many players who misread the tea leaves. “Did homebuyers appreciate the fact that they could lose their jobs and have the price of their house go down at the same time?” asked Lane. “There were lots of false assumptions based on the collective delusions that we all had. We now know that when things go bad, they can all go bad at the same time.”
From hedge funds to government agencies, the world needs financial engineers to cope with the increasing speed and rising complexity of modern finance. The University of Illinois is now set to provide them.

“We’re not here to train people to make a bundle in a hurry, although they may do that,” says Morton Lane, director of the new Master of Science in Financial Engineering Program. “We’re here to show them how to put complicated financial relationships into a computer model and engineer them in a way that is both rewarding and prudent.”

What tools do they need to accomplish that? According to Lane, “Students need to appreciate economic theory, finance theory, and they need to learn to build, program, and execute computer models, and then make financial decisions as a result of what they learn.”

The program is a joint venture of the Finance Department in the College of Business and the Industrial and Enterprise Systems Engineering Department in the College of Engineering. As such, it’s a marriage of business, computing, software development, and mathematics—all of which are used in financial engineering.

The link-up is the first time a professional master’s degree program has been a joint effort of the two colleges, says Jong-Shi Pang, Caterpillar Professor and head of the Department of Industrial and Enterprise Systems Engineering. Pang, who serves on the program’s faculty, has done extensive work in areas of mathematics that have financial applications—for example, his research has delved into the complex issue of setting prices for options.

Pang says that students in the program will learn that financial models can always be improved and that they should constantly strive to do so. “Financial markets are constantly changing,” he says, “so you want to be able to adapt your model to that. At the same time, computer technology is advancing, mathematics is becoming more sophisticated, software is improving, and better data are becoming available. So you want to be able to take advantage of those changes as well. The whole process is going through a very fast evolution.”

And Pang says students will also need to understand that their work is only as good as the quality of the data that goes into it. He cites the old computer catch phrase—“garbage in, garbage out.”

**Where Are the Jobs?**

The financial engineering field is highly diverse, so ILLINOIS graduates will have many options. Some will develop sophisticated computer models to help investors and fund managers negotiate the complexities of the financial world. Others will create derivatives, such as credit default swaps. Still others will run quant funds, which manage investment portfolios with computers rather than people; others will pursue opportunities in risk management.

Some may simply set up shop as algorithmic traders, running computer-generated trades with their own money from home offices. “A lot of young people who enter the program want to do that,” says Lane. “That’s the glamour position for financial engineers.” But their services should be in heavy demand elsewhere as well. Government agencies need financial engineers, as do manufacturers, hedge funds, commodities traders, banks, insurers, and firms that specialize in wealth management and information technology.

And when they do, then what?

“I think we can all do things better. We all learn from our mistakes,” says Lane, who compares the evolution in financial engineering to the evolution in automotive technology. “The automobile has been around 115 years, and it’s had lots of problems along the way. But the auto gets better and better, though it still doesn’t stop idiots from crashing them, and it doesn’t prevent problems that we hadn’t anticipated. But we get better and better at redesigning our cars, and the same thing will happen with financial engineering. There will be no stopping progress.”

– Doug McInnis

**“COMPUTER TECHNOLOGY IS ADVANCING, MATHEMATICS IS BECOMING MORE SOPHISTICATED, SOFTWARE IS IMPROVING . . . . YOU WANT TO BE ABLE TO TAKE ADVANTAGE OF THOSE CHANGES.”**

– JONG-SHI PANG

**“WE’RE NOT HERE TO TRAIN PEOPLE TO MAKE A BUNDLE IN A HURRY, ALTHOUGH THEY MAY DO THAT. WE’RE HERE TO SHOW THEM HOW TO PUT COMPLICATED FINANCIAL RELATIONSHIPS INTO A COMPUTER MODEL AND ENGINEER THEM IN A WAY THAT IS BOTH REWARDING AND PRUDENT.”**

– MORTON LANE
Emily Post might say that it’s bad manners to ask people how much money they make and even worse to tell people how much you make. If that’s true, there’s a lot of impolite conversation currently going on across the country. Perhaps the weakened economy, federal and state budget shortfalls, and high unemployment numbers have ratcheted up the dialogue, but for whatever reason, the topic of wages—and especially the perceived disparities between compensation in the private and public sectors—has a lot of people talking.

In fact, a recent USA Today report that showed salary for federal employees to be on average more than $30,000 a year higher than comparable salaries for private sector employees, and $60,000 higher when benefits are added in, brought fighting words from the U.S. government’s Office of Personnel Management Director John Berry, who said in a statement: “Recent press stories regarding pay for federal employees compared to private sector workers are unfair and untrue. Simply put, these stories have compared apples to oranges.”

Though the USA Today report and similar ones from the Cato Institute and Heritage Foundation do show a growing wage gap between the private and public sectors, experts at ILLINOIS say Berry’s criticism of an unfair comparison standard is valid.

“The issue is more complex than it first appears,” says Jeff Brown, finance professor and director of the Center for Business and Public Policy. “People need to have a well-defined question in mind when they start to inquire about this issue. When someone says, ‘Oh, public sector workers are paid too much,’ what exactly
A Controversial Issue

Emotions run high when it comes to the public-private wage gap topic. For many in the private sector today, pay is stagnant or even decreasing. The value of 401k stock plans and individual retirement accounts—the primary retirement savings of those in the private sector—fell dramatically after the stock market crashed in 2008.

Many private sector employees resent public employees, whose jobs appear more stable and who receive generous, taxpayer-funded benefits, especially pensions. In some states, tax increases have been proposed to bolster public employee pension plans, many of which are seriously underfunded.

“Private sector workers see their retirement assets going down in value and their future taxes going up,” Brown says. “They see public sector employees getting what appear to be really generous pensions that are guaranteed by the state.” It’s natural that people are going to say, ‘Wow, maybe my taxes wouldn’t need to go up so much if we weren’t paying such lavish pensions to public employees.’ While natural, this reaction is unfortunate because it blames the public workers, rather than blaming the elected officials who have consistently failed to fully fund the benefits as they were earned.”

J. Fred Giertz, professor of economics and a faculty member in the Institute of Government and Public Affairs at ILLINOIS, says that for many years a basic trade-off was assumed for public sector workers. They would receive less pay than those in the private sector but would be compensated with job security and better benefits.

“That’s still true in some situations, but in more recent years public employees have tended to do somewhat better,” Giertz says. “They’ve been able to get salary increases and maintain their benefits, while in the private sector retirement benefits have been reduced and employees have to pay a larger share of health care costs.”

Also fueling taxpayer resentment are the handful of public employees—mainly college football and basketball coaches—whose annual pay can climb into the seven-figure range.

But federal officials, like Berry, take exception to the idea that public sector workers are overpaid or, in many cases, even paid as much as a private industry employee. “The federal workforce today is highly specialized,” he says. “Thirty years ago, over 22 percent of our workforce was in blue collar jobs. Now that percentage has dropped by half while the percentage of IT and health professionals has doubled. Data...
clearly show that many of these highly specialized workers—doctors, nurses, cybersecurity professionals—are paid less than their private sector counterparts and are making a significant sacrifice in pay to serve their neighbors.”

He says that federal employees do receive fair wages and good benefits, but that there’s something else that draws many to the public sector. “People grow up dreaming about working for NASA, or the CIA, or becoming a park ranger, or cancer researcher. We should be applauding these hard-working civil servants—not mischaracterizing them.”

Show Me the Money

So just what do the numbers say? Using U.S. Bureau of Economic Analysis data, the USA Today report mentioned earlier compared pay for jobs that exist in both the federal government and the private sector, among them accountants, lawyers, nurses, clerks, and janitors.

On average, federal employees earned $67,691 in 2008 for occupations that exist in both government and the private sector, according to the data. The average pay for the same jobs in the private sector was $60,046 in 2008, according to the newspaper’s analysis. If benefits are added in, the gap becomes even wider. The value of health care, pension, and other benefits for federal employees was $40,785, the newspaper calculated. For private employees, the average benefits package was worth $9,882.

USA Today reported that the gap existed in jobs that are white-collar, blue-collar, management, professional, technical, and low-skill. In all, 180 jobs paid better average salaries in the federal government; 36 paid better in the private sector.

A Bureau of Labor Statistics report, issued in June 2010, seemed to bolster USA Today’s conclusions. The report found that total compensation for state and local workers averaged about $39.81 per hour, while private worker total compensation averaged about $27.73 per hour—a gap of over $12 an hour.

Finance Professor Nolan Miller says that it is incorrect to assume from these numbers that public sector workers are being compensated excessively. One possibility, he says, is that government workers are better educated and have more experience than private employees. If this is true, then federal workers could be expected to earn more, even if they hold the same job title as someone in the private sector, according to Miller.

The only way to determine if there is indeed a wage gap is to compare people in the same job categories who have similar qualifications, according to Miller. “Then you determine what that person would make if they worked for the government or if they worked for the private sector,” Miller says. “That can give you a much different answer.”

What Are the Apples and What Are the Oranges?

According to classical economic theory, a functioning free market will decide how much an employee in the public or private sector should make. But in today’s troubled economy, the labor market is not working very efficiently, according to Kevin Waspi, a finance instructor at ILLINOIS.

“You can’t just say that the market determines what everyone is paid,” Waspi says. “The dirty shame of it is that in a time when the economy is so weak, whenever a worthwhile position becomes available—public sector or private sector—the list of applicants who are qualified is just so long and strong.”

In addition to marketplace issues, there are other reasons why it may be difficult to assess wage gaps in the private and public sectors. According to Giertz, one obstacle to making accurate comparisons is the fact that some jobs in the public sector, such as firefighter or police officer, do not exist in the private sector. “It’s a basic problem,” he says. “It’s difficult to compare public and private sector employees.”

Plus, many of the service-related and entry-level jobs in private industry, such as retail sales, fast-food workers, and wait staff, which are generally lower-paying, have no counterpart in the public sector. That can reduce the average salary figures for the private sector in comparison to the federal averages.

Miller says that making comparisons when jobs do not exist in one sector can still be done, although it requires more complicated analysis. “What you want to do is to hypothetically move a person who has a particular skill profile—in education or in experience, for instance—between the public and private sectors and ask what that person would make in each sector,” he says.

Another obstacle to fair comparison is finding a way to account for qualifications. In April 2010, the Institute on Retirement Security published a study that examined public and private compensation over a 20-year span. The report found that state and local government workers do tend to be better educated than their private sector counterparts and are twice as likely to have advanced degrees.
According to the study, if education and other qualifications are accounted for, state workers earn 11 percent less than private sector workers, and local workers earn 12 percent less. Government workers do receive more generous benefits, but even when those are accounted for, state and local government workers earn about 7 percent less than private employees, the study found. And relative to private sector workers’ earnings, compensation for state and local government employees has fallen over the past 20 years, according to the report. The data from this study does not include federal workers, which may be one reason why its findings differ from broader reports that include all public sector workers.

Miller says this study is compelling because it accounts for differences in employees’ education, experience, and age. The fact that state and local government employees are actually paid less explains why their pension benefits tend to be better, he says.

“Pensions offered by the government are more generous and more stable,” Miller says. “What’s the cost of that? Government workers tend to get lower wages. You have packages that consist of lower wages and better benefits.”

Giertz says there may be a number of reasons why government workers tend to be better educated. In some cases, the jobs are more demanding. In others, the jobs simply attract more educated people.

Giertz cites the example of U.S. Postal Service jobs, which offer higher salaries than private sector jobs that require similar skills.

“In instances like this, you tend to get people who are overqualified, who may have more education than is really necessary to do the job,” he says. “You might say they’re paid more because they have better qualifications, but it’s really the other way around.”
Compelling Numbers

Waspi believes there is validity in the widespread belief that public employees are faring better today than those in the private sector.

He cites a recent Heritage Foundation study that found that the average federal worker makes $78,901 a year versus $50,111 for the average private sector worker. If benefits are added in the calculation, the federal worker receives $111,015 to the private sector employee’s $60,078.

“That is a pretty big difference,” Waspi says. “Even if you account for flaws in the measures and for the large variances in both the private and public sectors, to have this great a difference tells me that the weight of the evidence supports the belief that there is a significant difference.”

An important factor in pushing the federal salaries higher is the growing cluster of highly paid positions in the government, according to Waspi. “We all read about the business owner who makes $48 million this year and the bank CEO who makes $300 million,” he says. “But there are not that many of them compared to people in government regularly earning $300,000, $400,000, or $500,000 a year.”

The influence of unions may also play a role. Over 30 percent of government workers belong to unions, while only 7 percent of private workers are unionized. This is one possible explanation for why public sector employees have done as well as they have, according to Miller.

Job Insecurity

If government workers over the years have traded compensation for job security, they may have to do some new calculations in the years ahead, according to Giertz.

In the recession that began in late 2007, governments have come under intense financial stress and have responded by cutting jobs. Some also have looked to rein in pay and benefits.

“Things are happening in the public sector now that haven’t happened in decades,” Giertz says. “There is a huge revenue shortfall for most governments. They are under a whole lot of pressure to cut.”

Giertz sees the budget crunch for governments continuing for at least three to five years. Most will have to eliminate jobs.

“The real question is whether they’ll try to cut wages as well,” Giertz says. “Probably in the short run it will be just employment, but in the longer run you would expect wages to be under pressure, too. Whatever public employees gained in the last 10 to 20 years may be eroded over the next five years.”

Pension Tension

In the public sector there also are jobs that are subject to union contracts, even though the people who hold them are not union members. In that case, the union penetration is even stronger than the numbers would suggest,” Miller says.

Government pensions are more generous than those in the private sector, almost everyone agrees.

Waspi, who has taught classes on employee benefit plans and currently teaches in the area of financial markets and asset valuation, said one reason he left the private sector to work for the university was to take advantage of the state retirement system. Although legislative action reduced benefits for new hires, veteran staff can retire with 80 percent of their salary if they work in the system long enough.

“It’s a very generous plan,” Waspi says. “When pay was perhaps less than the private sector, this was a way to encourage people to work in a university. It also was designed to encourage long-term service.”

Miller says that while pension benefits are higher in the public sector, the overall compensation packages for public and private workers are comparable.

“This conclusion is backed up by the fact that we don’t see people leaving the private sector in droves to come to the public sector,” Miller says.

Brown says that slashing pensions could backfire, forcing governments to increase pay and other benefits or risk losing skilled workers.

“We need to think of this both as a human resources issue and as a financial problem,” Brown says. “How do we design a pay and retirement and health care system that is affordable but also allows us to attract and retain the kind of workers we want to have?”

– Bob Preer
– Cathy Lockman

“You can’t just say that the market determines what everyone is paid. The dirty shame of it is that in a time when the economy is so weak, whenever a worthwhile position becomes available—public sector or private sector—the list of applicants who are qualified is just so long and strong.”

– Kevin Waspi
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Roundtable Series

A MEETING OF THE MINDS

Sponsored by DEPARTMENT OF ACCOUNTANCY AT ILLINOIS

PricewaterhouseCoopers®

Business Leadership
B-Schools and the Social Contract
December 13, 2010  Lunch, 11:30-1:30pm

Twenty-Something Leaders in Business
Marketing Yourself for a Dream Job
January 19, 2011  Evening, 5:30-7:30pm

Deep Dive Workshop
Information Security
February 9, 2011  Lunch, 11:30-1:30pm

Corporate Responsibility
Workplace Diversity Beyond the Basics
March 2, 2011  Breakfast, 7:30-9:30am

Women in Business
May 11, 2011  Lunch, 11:30-1:30pm

Join us, we have brilliant ideas to share!

Register at www.business.illinois.edu/alumni/events email: BusinessAlumni@illinois.edu phone: 217/244-6669