FALL/WINTER 2002

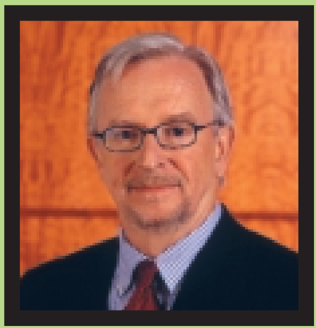
STERNbusiness

All-star CEO line-up: Welch of GE, Grasso of NYSE, Rowe of Aetna, Klein of Bertelsmann

The New, New Economy

Yes, There is a New Economy The Verdict on Regulation FD
Are Markets Really Fair? Fixing the Accounting Mess
Directors in the Hot Seat Wal-Mart's Private-Label Gamble

a letter from the dean



In the span of a few months last spring, some of the most admired and powerful leaders of American business interacted with the Stern community: Federal Reserve Chairman Alan Greenspan, former Treasury Secretary and current Chairman of the Executive Committee at Citigroup Robert Rubin, retired General Electric CEO Jack Welch, and New York Stock Exchange Chairman Dick Grasso.

Our location in the middle of the world's financial capital surely helps attract such luminaries. But I would like to think that our reputation as one of the world's top business schools also helps to attract a steady flow of the best and brightest students, faculty, and practitioners to our campus.

The give-and-take between executives, students, faculty, and key government officials both enriches the overall environment at Stern and reflects an essential engagement with the world we study. Such engagement is particularly crucial at a time when there is widespread questioning of some of the fundamental assumptions of our economic system. Events of the past few years – whether it was the bursting of the Internet stock bubble or the Enron and Worldcom scandals – have rightly set off a wide-ranging effort to assess the legacy and impact of what came to be know as the New Economy.

As an economist, I have my own perspective on questions relating to the New Economy. But as readers of this issue of STERN*business* will find, our understanding can be enhanced greatly by turning to other disciplines: accounting, management, and finance, to name just three. The articles in this issue not only represent a broad range of disciplines, but also a broad range of contributors.

As a faculty member turned Dean, I find this sort of participation particularly gratifying. For it shows that there exists at Stern a widespread commitment to using scholarly techniques to analyze real-world issues, and to do so in a language and format that is accessible to a broad audience. Here, probing research is not simply a means for faculty to burnish their resumes; it lies at the core of what we do as teachers and colleagues.

In recent months, much of the debate and discussion on topics such as accounting reform and corporate governance has been couched in the language of politics, retribution, and punishment, and delivered in sound-bites. But I firmly believe that as members of an academic community, one of our roles is to seek answers to questions in a dispassionate manner and in a way that relies heavily on sound data and theoretical analysis. We can also play a constructive role in society by using the understanding thus gained to propose solutions and best practices.

This issue, then, encapsulates much of what makes me so excited about Stern. It is filled with diverse contributors, promotes incisive analysis based on both research and experience, and seeks answers to some of the toughest questions we face.

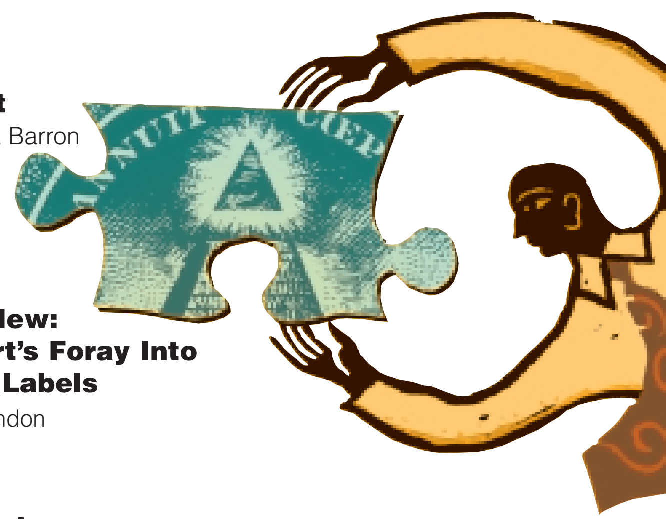
Thomas F. Cooley

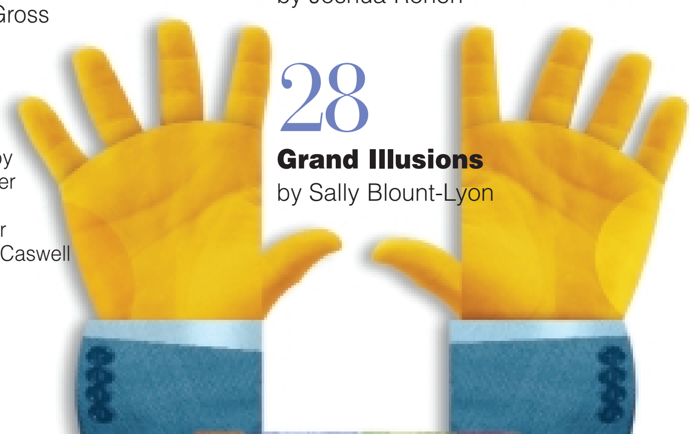
Thomas Cooley
Dean

contents

FALL/WINTER 2002

The New, New Economy





Illustrations by
Gordon Studer
Tim Cook
Robert O'Hair
and Michael Caswell

STERN*business*

A publication of the Stern School of Business, New York University

President, New York University ■ John E. Sexton
Dean, Stern School of Business ■ Thomas F. Cooley
Chairman, Board of Overseers ■ William R. Berkley
Chairman Emeritus, Board of Overseers ■ Henry Kaufman
Associate Dean, Marketing and External Relations ■ Joanne Hvala
Editor, STERN*business* ■ Daniel Gross
Project Manager ■ Caren L. Piela
Design ■ Esposite Graphics, New Orleans

Letters to the Editor may be sent to:
NYU Stern School of Business
Office of Public Affairs
44 West Fourth Street, Suite 10-83
New York, NY 10012
http://www.stern.nyu.edu

Dick Grasso chairman and chief executive officer New York Stock Exchange

Dick Grasso has been chairman and chief executive officer of the New York Stock Exchange since 1995. The NYSE is the world's largest and most valuable stock market. It lists more than 2,800 companies, trades an average of 1.3 billion shares daily and has a global market capitalization of approximately $16 trillion. Mr. Grasso joined the NYSE in 1968 and has held several positions, including president, chief operating officer, and executive vice chairman. In addition to his responsibilities at the Exchange, Dick serves on the boards of companies such as Home Depot, and on several educational institutions, including NYU Stern.

Editor's Note: The interview between Marshall Loeb and NYSE Chairman and CEO Dick Grasso took place on April 16, 2002. The NYSE Corporate Accountability and Listing Standards Committee issued its report on June 6, 2002.

ML: *How do you measure success at the New York Stock Exchange?*

DG: More important to us than the number of listings and the market capitalization is how the consumers feel; whether they are corporate, institutional, or retail users. If that small investor who's buying or selling 10 shares of Home Depot doesn't get the same quality of execution as the largest user, eventually our market franchise will erode. We also measure success in terms of how we evolve the business. In 1990, we were the world's second largest market, behind Tokyo. Today, we are five times the size of the second largest market in the world. If you were to pull our non-United States franchise standing alone, it would be the third largest marketplace in the world. I'm proud of the fact that 10 years ago two-thirds of the companies that we trade today were not traded on the New York Stock Exchange. That reflects the dynamism of both the United States economy and the world economy.

ML: *How badly has investor confidence in the free and honest workings of the market been shaken by the recent scandals involving Enron, Arthur Andersen, and stock analysts?*

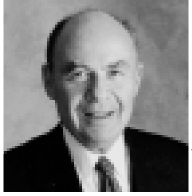
DG: Every day when you pick up the newspapers, you can't help but think that the entirety of the system is broken. I have a brand new committee of my board, the Corporate Accountability and Listing Standards Committee, working to define the actions that we must take to restore the public's good feeling about our markets. We did some opinion research recently. The good news is that the American investing public is willing to watch what the system does in response. Historically, when we've had dark chapters it has been private sector initiative that has routed out the cancer.

We trade 2,800 of the greatest companies in the world. In the total landscape of public America today, there are about 12,000 companies as defined by the SEC's (Securities & Exchange Commission) reporting standards for public ownership. However many we can count in this dark chapter, they are a very, very small minority of a system that the whole world admires.

We have 85 million Americans who are directly participating in the equity market. When you add indirect ownership we're a nation of owners. We have to step back and ask, "Where did we fail?" But we should never apologize for a system the whole world admires.

ML: *What do you think should be done? Give me one or two reforms that should be enacted.*

DG: Well, it's not just what we will do. It's what we will advocate and support. The NYSE was around long before the SEC was created and long before there were professional organizations in the accounting and legal fields. In the late



Marshall Loeb, the former managing editor of *Money* and *Fortune*, conducts a regular series of conversations with today's leading chief executives on the Stern campus.

"Every day when you pick up the newspapers, you can't help but think that the entirety of the system is broken. . . [But] However many we can count in this dark chapter, they are a very, very small minority of a system that the whole world admires."

1870s, through its listing agreements, the NYSE took the bold move of telling its publicly traded companies that they had to report their results of operations.

Roll the clock forward to the turn of the century. We began to require annual comparative financial reporting and quarterly reports. Back in 1978, for the first time, we required of our listed companies the creation of an independent audit committee. It wasn't an SEC mandate, it wasn't a congressional initiative, it was the Exchange again reacting to a period of crisis.

Today, our new committee is looking at the issues of how many independent directors should populate a board. I think we need to tighten the definition of what is an independent director. Some believe a former employee can be deemed independent after the passage of time. In some cases, say that former employee is drawing a big pension, one would question the independent definition. We've got to look at nominating committees. How do public or independent directors get chosen in corporate society today? We've got to look at compensation committees. I mean, clearly those two latter committees need to be populated, if not entirely, then certainly in a strong majority, by independent directors.

The Exchange can take a certain number of actions in the governance area. I think that the Exchange must take an advocacy role in what other people should be doing. For instance, taking a very supportive role of the SEC's initiative on the creation of a self-regulating organization in the accounting profession.

ML: *What role is the New York Stock Exchange taking in the analysts' research scandals? Is the Exchange itself putting any pressure on the brokerages to keep their analysts totally independent?*
DG: At our board meeting in February, the Exchange, working with the NASD (National Association of Securities Dealers) and the SEC, developed a series of new rules designed to deal with the issue of analyst conflicts including how they're compensated and when they may talk to investment bankers.

Again, I think it's important that we as a self-regulating organization make certain that we've got the proper insulation, so that banking doesn't become an extension of the analyst community and vice versa. On the other hand, where the system has clearly broken down, we're not going to gloss it over. We're going to lay it right out to the American public to read. The real beauty of our system is that when people devise short cuts and in some way affect the system, the system has the ability to self correct.

ML: *What do you think of New York State Attorney General Elliot Spitzer's steps in this direction?*
DG: He rightly has the consumer's interest at heart. Because what built this market? It's public confidence. You don't guarantee investors a profit. You have to guarantee them fairness. You have to guarantee them transparency. I think he recognizes that he cannot, as the Attorney General of New York, impose structural reform on the industry. Working closely with SEC Chairman Harvey Pitt and with the self-regulatory organizations, he is going to produce a benefit to consumers in New York State and to investors throughout the country.

ML: *Can you give us some examples of things that you worry about that regulators or elected officials may try to impose upon the system now?*
DG: There is not a silver bullet that will cure the system. You shouldn't attempt to do in the public sector what is better done in the private sector – such as listing standards. There are those who would like to see legislated into the securities acts definitions of independent directors and compositions of committees. That's better left to a listing standard. These issues should be bottom up, with the private sector driving towards best practices. And the investor in my mind, will always gravitate to those with best practices.

ML: *A few years ago during the midst of the raging bull market we heard much talk of 24-hour trading. What are the NYSE's plans for 24-hour markets?*
DG: There was a period between 1997 through 2000 where people much preferred to trade online at 2:30 in the morning rather than sleep. I said at that time, and I'll say it again today, 24/7 trading will come when the customer base wants it. Today, you can go to your work station and buy 100 shares of AOL at 11:00 p.m. But it certainly will look nothing like your experience at 11 a.m. During market hours, the stock trades on average 30 million shares a day. In the after hours on a very large day it'll trade a half a million, or far less, and you'll move the stock on a small number of shares. Right now consumers value liquidity more than they value instant gratification.

ML: *Some people are trading stocks on electronic communications networks (ECNs) instead of on the New York Stock Exchange. How strong is the competition to you and what are you doing to counter it?*
DG: Well, competition has been absolutely terrific for our institution. A week ago this Monday, 34 years ago, when I first walked into that building, we had very little competition. And it almost killed us. So as we saw the natural monopoly break as it did in May 1975, as we saw the birth of alternative market structures, it was a great propellant to reinvent the NYSE. But we love the way we've been doing things since 1792 – the full open outcry. We love the theater of the live. We love the fact that 130 million people watch that opening bell each morning and listen intently to Maria Bartiromo of CNBC do her post-bell commentary. But what you don't see from a distance is the fact that more than 90 percent of our orders on an average day are on our e-commerce application.

The ECNs have been very

continued, page 10

Joel Klein

chairman and chief executive officer

Bertelsmann, Inc.

Joel Klein is chairman and chief executive officer of Bertelsmann, Inc., and chief United States liaison officer to Bertelsmann AG, the German media conglomerate that employs more than 80,000 people and operates in 56 countries. The company's business interests include the publisher Random House, music company BMG Entertainment, several book and music clubs, and online retail channels. Mr. Klein is responsible for corporate functions in the United States and advises the company on legal and governmental issues, and acquisition and e-commerce initiatives. Prior to joining Bertelsmann, Mr. Klein served as Assistant Attorney General in charge of the antitrust division of the United States Department of Justice from 1997 to 2001. There, he led many landmark cases, including the Microsoft case. Prior to joining the Clinton Administration, Mr. Klein founded a law firm in Washington D.C., and taught at the Georgetown University Law Center. Mr. Klein graduated from Columbia College in 1967 and from Harvard Law School in 1971.

ML: *Tell us briefly what you do, what you're responsible for and what Bertelsmann does in the United States.*

JK: Bertelsmann grew up in an improbable place called Guetersloh. It started in 1843 as a Bible printing company and evolved into a religious book publisher. After World War II, it migrated toward book clubs and then music clubs. It kept moving up the value chain, and started to buy publishing companies such as Random House, music companies such as RCA, a magazine company (Gruner + Jahr), and then moved into European television with the RTL group. In the United States we are a significant, but obviously incomplete, media company; that is, we're missing some assets we would like to have in visual media. Also, we are very active in the Internet space. We co-founded AOL Europe with AOL Time Warner, and have invested in or extended credit to CDNOW, BN.com, and Napster.

My job is a combination of fundamentally three things. One is our United States strategy, including e-commerce. The second is to build corporate infrastructure for United States operations that we know will continue to grow. And third, to devise a long-term strategy for getting Bertelsmann better known and more comfortable in the United States economy and in Washington.

ML: *Do you think that these interlocking industries of media, entertainment, and technology will shake down into five or six huge multi-national companies? Or will there be plenty of room for small and medium-sized companies?*

JK: The answer is both. I do think there will be a handful of global powerhouses. The Internet is a worldwide global distribution system unavailable to us five years ago, and it's going to become increasingly available with broadband. This is going to put more and more pressure on companies to build scope and scale and to finance the risks of growing companies in China and India and throughout the rest of the world. Right now, there are clearly four or five or six companies that are dominant in the U.S.: AOL Time-Warner, Viacom, Disney, Vivendi Universal, News Corporation and Bertelsmann. And in the next three, four, or five years, I think you will see several of these companies look toward further mergers.

Having said that, there's going to be myriad opportunities for people who want to play in a particular space in a particular niche. There are still going to be magazines that grow up and take off. The cultural differences between the United States, Europe, Asia, Africa, South America, are still so vast that you can't simply develop content in one country and export it all over the globe.

ML: *: AOL Time Warner appears to be having some* *severe problems. Do its troubles suggest that there maybe something basically wrong with these megamergers between huge corporations?*

JK: It was hard enough to merge *Time* magazine and Warner Media. But to take AOL, which grew up in an entirely different culture, and merge it with the old Time empire, even though you could see the potential for synergies, was very hard to execute. It takes a fair amount of learning to give up independence cheerfully and to see if you can make the whole greater than the sum of the parts. Still, I think it's been a rather effective integration of a variety of media assets. And all things considered, I think AOL Time Warner will work through some of these implementation issues and probably develop as a significant player.

ML: *What is your perspective on the issues of piracy and artists' rights?*

JK: Well, that's a very serious problem. I would be the first to tell you that anyone who comes forward with a simple solution is somebody who is missing key ingredients. On the one hand, we understand that technology is going to create opportunities for consumers that are going to create challenges for content providers. By and large, people in general have grown up under this model on the Web that somehow you get the eyeballs and then you monetize them. Well, companies have done a terrific job getting the eyeballs, but they haven't done such a hot job figuring out how to monetize them. So you have a culture that got used to free content.

But free is a very hard way to keep the content pipeline regenerating itself. No honest person would walk into Tower Records and say "I'd like to help myself to a handful of CDs today" and not pay for them. On the other hand, people are doing this by the minute on Kazaa and Morpheus. And I think that's a problem. Still, the music companies can't simply sit back and say "Look, we'd like to sell you CDs with 14 songs for $16.95 and if you don't like it, tough." We will find ways to make it more difficult for people simply to download for free or file share for free. And the courts are slowly going to throw sand in the gears of the pirates.

ML: *One gets the impression that broadband has been something of a disappointment. What's the state and future of broadband?*

JK: There are 10 to 12 million people in the United States who have broadband. It will continue to move forward. I remember that back in 1996, during the debate over the Telecom Act, the cable people said they would go into the telephone business, and the telephone people were going to distribute content over their lines. There was a lot of entrepreneurial enthusiasm on the front end that didn't necessarily work its way through the system.

Still, the world today, with Internet access, is just different and it's clearly moving in one direction. AOL is not losing subscribers as time goes on. There are not fewer and fewer people spending less and less time on the Internet. By the same token, as more content gets digitized and is available to people, there will be more and more uses and demands for broadband.

"Nobody would walk into Tower Records and say, 'I'd like to help myself to a handful of CDs today and not pay for them.' On the other hand people are doing this by the minute on Kazaa and Morpheus."

ML: *Let's switch the topic somewhat. You led many of the United States Government's landmark antitrust cases, including the monopoly challenge against Microsoft. Do you think Microsoft got off too easily?*

JK: One of the things I did the day I left the Justice Department was make a point not to comment on cases after I leave.

ML: B*ertelsmann is essentially a privately owned company. Does that give Bertelsmann certain advantages over stockholder owned companies?*

JK: The principal benefit is you don't have to look at the stock market each day and worry about your quarterly earnings and either feel pressure to make a lot of deals that have balance sheet impact but no economic impact or to make short-term decisions that maybe of marginal value as compared to executing on a longer-term strategy.

The bad side, I suppose, is that when the acquisitions come around, we have to use cash while everybody else uses stock. Stock is a better currency with which to buy than is cash. And so, that's a competitive disadvantage that we need to navigate. I suspect that Bertelsmann will eventually go public.

ML: *You've had the marvelous experience of being able to work at very high levels in the public sector and in the private sector. What do you think are the really important differences?*

JK: For me, public service is the highest and greatest calling. I believe that. I grew up in public housing in Queens. My father was a postman, didn't graduate from high school. And I clerked on the Supreme Court, worked in the White House, and am now a senior executive at Bertelsmann. I don't think that happens by chance. I think the democratic infrastructure and values matter. When I was 26 years old, I clerked for Louis Powell on the Supreme Court. It was a transforming experience and I've always felt this need to pay back and to fight because I think otherwise values that I care about stand a lesser chance to be implemented.

By the same token, being part of a great company or a private sector opportunity where there's real entrepreneurship, where you could have wonderful ideas and see them implemented is a very exciting thing. And I don't in any way minimize the value of making a good living, being able to support your family well. But I've got to tell you, I've been rich and I've been poor and to me, it's not the organizing feature of my life.

Q & A with Students

Q: *Bertelsmann is known as being a very ethical and very socially giving company — through the Bertelsmann Foundation in particular. Is there*

continued, page 10

stern*ChiefExecutive*series

John W. Rowe, M.D.

chairman, president and chief executive officer Aetna, Inc.

John W. Rowe, M.D., is the chairman, president and chief executive officer of Aetna, Inc., the largest healthcare and benefits organization in the U.S. with $20 billion in annual revenue, 17.5 million healthcare members, 13.7 million dental members, and nearly 12 million group insurance customers. Before joining Aetna in 2000, Dr. Rowe served as president and chief executive officer of Mt. Sinai NYU Health, and still serves as a clinical professor of medicine at the Mt. Sinai School of Medicine, specializing in gerontology. Before joining Mt. Sinai in 1988, Dr. Rowe was professor of medicine and founding director at the Division of Aging at Harvard Medical School and chief of gerontology at Boston Beth Israel Hospital. He is the author of more than 200 scientific publications, mostly about the physiology of the aging process as well as a popular book, *Successful Aging*.

Interview conducted by Robert Kavesh, Marcus Nadler professor of economics and finance at NYU Stern.

RK: *Analysts have referred to a "perfect storm" that may create a crisis in healthcare. What does that mean?*

JR: The "perfect storm" in healthcare is brought about by three coincident factors. The first is the recession, which I guess is over, but it puts pressure on corporations' ability to spend on benefits. The second factor is rising healthcare costs. And the third is 44 million uninsured people, which is a national disgrace.

What's very important to understand is that in American healthcare, in general, people don't buy insurance. You're either a beneficiary of the Medicare or Medicaid program, or get your healthcare through an employer-based program. So it is the large employers in America who really determine what healthcare benefits people are going to get and what they're willing to pay. This January, which is when most healthcare contracts get recontracted, we expected the perfect storm to land. We increased our prices more than 19 percent at our company and, surprisingly, the prices stuck.

One of these days either the American public is going to get fed up with the number of uninsured and get the politicians to do something, like regulate costs, which is unlikely, or the employers are going to say, "We're not going to pay it anymore." And that's going to be when the storm hits the beach.

RK: *So how do we control healthcare inflation?*

JR: The fact is that Americans have a tremendous appetite for choice and for healthcare. And up until now, when faced with the decision of paying more or not having choice, they've always decided to pay more. But there is a way to control healthcare inflation. It's called an HMO. HMOs came to the forefront in response to employers' demands for a reduction in the rate of inflation of healthcare. When they came in, healthcare inflation rates fell and there was a backlash. People wanted more choice. They didn't want these restrictions. The economy was booming. The labor force was tight. Employers had to offer bells and whistles to recruit and retain workers in a tight labor force. So we evolved to what I call managed care light.

One of the things that may happen is that corporations may come back and say they're willing to take some heat from their employees and switch back to traditional HMOs. The alternative is defined contribution plans, where they give employees more responsibility and autonomy and in return they're going to have to pay more.

RK: *What about the so-called "death spiral," when you give individuals discretion as to how they spend their benefit dollars*

and take them out of a reasonable network. You're left with those who perhaps are higher-risk so the premiums go up and up?
JR: In this case – defined contribution for consumers – employers give employees money and say, "Okay, you can put this into a medical savings account and you get coverage, but beyond a certain amount you're on the hook." Aetna has a product like that called the Aetna Health Fund. The IRS has ruled that you can roll-over the medical savings account balance year after year after year. It gives the employee an incentive to spend less on healthcare. So, for example, you might use the generic medicine rather than the special brand medicine.

RK: *That doesn't sound so bad.*
JR: It doesn't sound so bad with a couple of exceptions. We want to avoid the moral hazard associated with the woman who feels a lump in her breast and decides not to spend money on the X-ray. Secondly, we have to pay for all of the preventative services. I think it's bad healthcare, bad business, and unethical not to do so. Still, we think that this brand of defined contribution probably has legs. It may become very common.

If the money isn't used and accumulates, the employee has control over it. We would like to have a situation where people could use it to buy long-term care insurance or disability insurance but we rolled this product out a month ago and we've gotten a lot of interest.

RK: *What kind of adjustments have you had to make going from the not-for-profit sector to become CEO of one of the nation's largest companies?*
JR: Much of what I do as a CEO and chairman for this very large company is not that much different than what I did as a CEO of a $2 billion organization which was one of the largest employers in New York City. And as you manage individuals, do strategic planning, and try to control the budget expenditures, you have a variety of external relationships. Mine were with the community and the unions. Now they're with Wall Street and the City of Hartford, for instance.

"Americans have a tremendous appetite for choice and healthcare. And up until now, when faced with the decision of paying more or not having choice, they've always decided to pay more."

RK: *What else?*
JR: In academia, the focus was on the process. It had to be transparent. People wanted to give input at every step. And even if they didn't give input, they wanted to be asked. There were committees, town hall discussions, and referendums.

By contrast, the for-profit public company is outcome oriented and bottom-line oriented. Early on in my experience at Aetna I had a problem and I suggested to some top executives that we needed an interdisciplinary group from around the company to meet and think about how to solve this issue. And as I walked out of that meeting, one executive came up to me and he said: "Why don't you just tell us what you want to do?"

That never happened to me in academia. In this instance, I didn't know what we should do and I needed the wisdom of a group of people from around the company. And I think the for-profit environment could use more of that.

The other thing I have noted is that in academia, there is a neglect of culture. Culture is a constituent element of academia. It is what it is in a given institution. But in business, culture is to be managed. If you talk to Lou Gerstner about what he did at IBM, he'll say he managed the cultural change over the course of 10 years. No one would ever stand up in an academic institution and say "I'm here to change the culture." And I think it's a reflection of the interest that people have on the outcome. If what you have to do to help us get to this outcome is to change the culture, then let's change the culture.

RK: *What's the least desirable aspect of your job?*
JR: Laying off 11,000 people in the last year and a half.

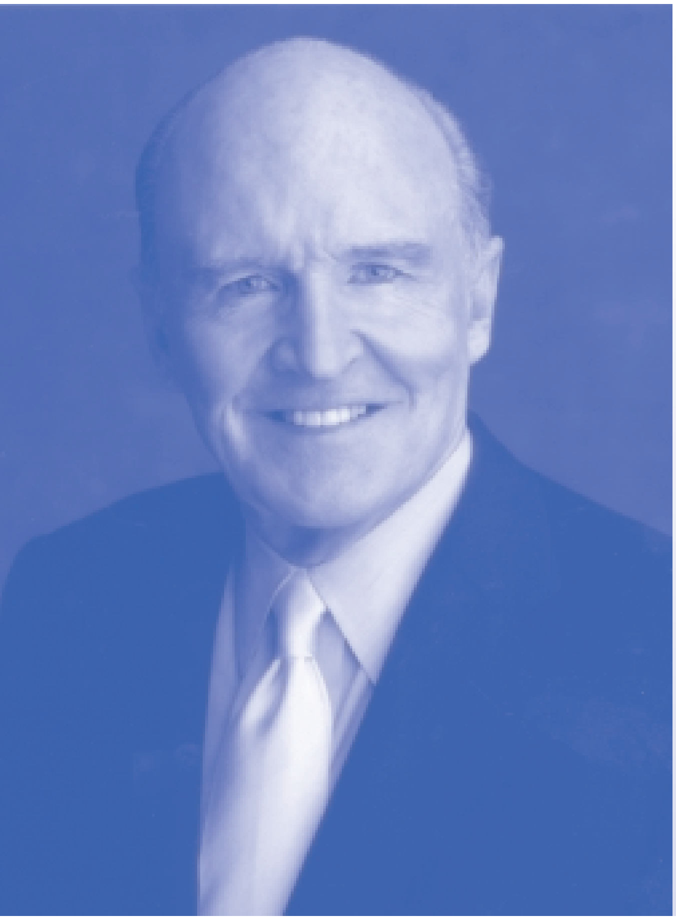
RK: *Could you expand upon that a little bit?*
JR: You rationalize about the greater good for the greater number and shareholder value, but the fact is, you're putting people out of work at a time when the economy is softening. It's so hard because not only do you put people out of work but the ones who are left feel they are overworked because they are now doing the work of the people who left. They have survivor guilt. You have to manage the residual workforce intensively to try to orient them and energize them and support them.

I had the sense that if I had the right management and I had the right strategy and I fixed the operations and I got rid of the bad business, that I could get the company to the point where it was improving its function in a couple of years. But doing those things per se did not yield a distinctive, discernable competitive advantage in the marketplace. We have to change the organization's culture so that once we are functioning effectively, we can take the next step.

RK: *You wrote a book called* Successful Aging*. How did you get into that?*
JR: In the early 1980s, I received a MacArthur Award and had started a long project with several colleagues. A bunch of us decided that the field of aging was preoccupied with death and disease and disability and lists for getting into nursing homes. And no one was looking at the positive elements of aging. So we assembled an interdisciplinary group that I chaired. I spent 10 years supervising that study and the book sold very well.

RK: *Any words of wisdom, or insight or suggestions, that you might impart to people, most of them at early stages in their career or just getting going?*
JR: The one thing that strikes me as I think about my own career is the extraordinary non-linear nature of it. I trained as a physician with all seriousness of purpose to take care of patients, and I trained as a scientist; I did research in a laboratory at Harvard for years and years. And then I kind of found myself

continued, page 11



Jack Welch former chairman and chief executive officer General Electric

Jack Welch, who recently completed a remarkably productive 40-year career at General Electric, is an American business icon. During his 20 years as chairman and chief executive officer of GE, from 1981 to 2001, Welch turned the company into one of America's most admired and consistently profitable companies. Managing businesses as diverse as the NBC television network, GE Capital, and GE Power Systems, Welch pioneered innovative management techniques such as Six Sigma. Since leaving GE, Welch has become a consultant to other CEOs and an author. His memoir, *Jack: Straight from the Gut,* has been an international best-seller. A graduate of the University of Massachusetts, he holds a masters and Ph.D. in chemical engineering from the University of Illinois.

ML: *What did you view as the primary responsibilities of your job as CEO? What issues did you choose to delegate and what issues did you want to deal with directly?*

JW: One of the breaks I had in a leading company as complex as GE was, I knew my job. I knew what I could do, and what I had no idea about. I didn't know anything about making a Seinfeld show. I knew very little about designing a jet engine. All I really knew were people. This business game is all about winning and the only way you win is if you field the best team. And so I spent all my time trying to field the best team. We gave our business leaders the money to go do it! If they did it well, we'd hug them, take care of them. If they didn't do it so well too often, we'd probably part company.

ML: *It would seem to be a really daunting, almost hopeless task to find out what each one of your hundreds of thousands of employees could contribute in the way of her or his specific talents. Surely you couldn't have done it with more than 20 people?*

JW: No, I did it with about 500 to a thousand.

ML: *You were personally acquainted with that many people?*

JW: Absolutely. And I evaluated them and worked with them. We had a 20/70/10 system, in which the 20 best, the middle 70, and the bottom 10 are rigorously looked at every year. Now, at most groups I meet with people think it's Darwinian. Well, if the bottom 10 are identified and dealt with early in their career, they can be launched into careers elsewhere.

ML: *You mean they're fired?*

JW: They're asked to leave or they know they're on the bottom end and they leave on their own — no one wants to be where they know they're in the bottom 10. Now I'm going to ask you a question here: How many of you have worked for three or four years? How many of you, in the time you were there, got a straightforward appraisal of what was good about you and what your weaknesses were? Only about 30 percent. Think of it. How do you instill integrity when 70 percent of you were never told how you stood? Recently, a company I consult with flew in 38 of their "top executives" under 40, for four-hour teaching session. I asked them "Why do you think you're here?" And they sort of mumbled, "Well I guess you were here, so...." And, I said, "No, the reason you're here is, somebody said you're the top 38 people in this company." And they looked at each other in shock. Because no one had told them. A top 20 is worth 10 middle 70s. If you get a star, hang on.

ML: *With the people who are on the top 20, how do you find*

out what you and the corporation have to deliver in order to keep and develop them?
JW: We probably don't get it all right. But we know one thing we have to do is challenge every single manager to create an atmosphere where people want to be filled with passion about their work and about their company. Never let them come to work in a mundane, dull job. If you do, shame on you.

ML: *Would you like to comment more on what issues you chose to delegate and which ones you dealt with directly?*
JW: Generally, I wasn't involved in pricing, styling, or product design. But when I was involved, I took deep dives. When I'd go to a doctor, and get a CAT scan, and I'd see a Siemens machine, I'd make sure I found out why it was there. And, that would drive meetings. In our medical business, designing the CAT scanner is a jazzy, exciting job. Making the tubes for that CAT scanner is a backwater job. But the tube is the heart of the machine. So I saw that our tubes aren't lasting as long as Phillips' were, and that our engineers are all not excited about them. So I became a lunatic and became a tube manager. I visited the facility frequently, had the place cleaned up, made it look prettier than the CAT-scanner facility, brought the best people over there, and changed the game. And I didn't do a damn thing other than use the power of the position to create a frenzy. The same thing held when we wanted to transform GE from a products company into a service company. People didn't think highly of service. So how do you change that? You don't change things with a speech. You take your best design engineer, the most respected in the group, and you put him in charge of service. And then, all of a sudden, he or she hires only great people. And before you know it, service is the place to be.

ML: *Jack, how do you instill a culture in which people are willing to take those kind of chances, and lift the entrepreneurial spirit and the general intellectual atmosphere of the whole environment?*
JW: By making heroes out of those who find new ideas from somewhere else and spread them. We just found companies that could serve as role models and learned from them. Wal-Mart showed us how to be more responsive to customers. Toyota taught us about inventory management. Big companies don't communicate as well as small companies, so they have a lot going against them. What do they have going for them? Muscle. Strength. Capital. So what does that say to you? Go to bat more often. Take more swings. The small company's got to be right. They can knock themselves out of the water with a bad move. Big companies don't have to be right all the time. And so the idea of being big is just to let people let 'er rip. Try stuff.

Q: *Of your many accomplishments, what are you most proud of?*
JW: Oh, without question, unleashing spirit in thousands of people. Having them share the rewards. Spreading the option plan way across the company. Having people that we've rewarded both in the soul and

"Your job is to create an atmosphere where people fight to get there, where you have more people with more passion than anybody else."

the wallet, because they had fun. Just think of the winning locker room, and the losing locker room. Where do you want to hang out? Look, this is all about giving people self-confidence. Some people get it at their mother's knee. Some people get it because they played sports. There's a fine line between arrogance and self-confidence. But building self-confidence is a huge deal, and when you can get a company that feels good about itself, people are proud to be there.

Q: *What was your most challenging time at GE?*
JW: Well there were several. It was no fun being Neutron Jack.

Q: *Explain that to those who might not know what it means.*
JW: Well, we had 440,000 people doing $26 billion worth of work. We were making television sets in Syracuse, New York and Matsushita was selling them in Syracuse for less than our manufacturing cost. It didn't take a brain surgeon to figure out you had to get out of Syracuse. Today we have 300,000 people, and we do $140 billion worth of business – five times the volume with 35 percent fewer people. America was just top heavy. It's the worst thing in the world, the layoff. You shouldn't have a manager in your company that enjoys doing it. But you shouldn't have one there that can't do it.

Q: *What personal lessons can you share with MBAs, and students, about how you develop and enhance your career?*
JW: First I'll talk about curriculums. In the schools that I've been at, there sure isn't enough conversation on what constitutes management, leadership, in real terms. I talk to kids who are telling me they're taking Dysfunctional Technology Transfer. What is that going to do for you? You should see some of the courses I've seen on my book tour to business schools. Business is sweat, and human behavior. And common sense. And logic. And it is not a perfect science. How many times are you talking about caring more? About being open to ideas from everywhere? That's what's going to make you a great leader. Dysfunctional Technology is not going to get you there. Yes, you have to know some numbers. But a lot of resource allocation is not because somebody taught you how to do an internal rate of return calculation. It's because you've got a good nose.

Q: *When you're considering hiring someone, what characteristics and qualities do you look for?*
JW: Well, obviously, grades count. I really think passion, with a capital P, is an enormous ingredient. Somebody who cares about people. Somebody who's open and self-confident.

Q & A with Students
Q: *Many people say that the best opportunities are often found in the worst economic times. Where do you see the*

continued, page 11

Dick Grasso interview cont'd.

"Where the system has clearly broken down, we're not going to gloss it over. We're going to lay it right out to the American public."

good at being vertical competitors. They don't try to trade all 2,800 securities. They pick their securities. They pick their customers. And they pick their trade size. And they do quite well.

Because that threat of extinction forces you to constantly change, the only constant in my business is that every year we rip it apart intellectually. Every year my senior most partners and I basically ask the question "What is it that made us very successful last year that we know will not help us in two years?"

Q & A with Students

Q: *I'm an independent director of both a publicly listed and a private firm. In both cases it's a hard role. And I'd like to know whether your organization is thinking about providing any type of support for the role of the independent director.*

DG: Part of the work product coming out of this new committee is going to be an institute for independent directors. We're going to take practitioners — people like Jerry Levin, the former CEO of AOL Time Warner; Ken Langone, one of the co-founders of the Home Depot; the attorney Marty Lipton (a partner with Wachtell, Lipton, Rosen and Katz) — and they're going to become faculty for those who sit on public boards or who are considering sitting on public boards.

Q: *There has been a trend fairly recently about socially conscious investing. Do you think that the socially conscious element will be incorporated into the listing standards for companies on the exchange such as Philip Morris?*

DG: The issue is probably more hotly debated on the non-United States side. Particularly when you get to human rights issues in some parts of the world, and whether companies from those areas should be acceptable for listing. We've taken the position that our listing standards have historically measured quantitative measures, not qualitative ones. I will tell you that in certain instances we do have the right to deny a company listing, even though they meet all of our standards. But I don't think you're going to see as broad a listing application in the social area as tobacco or alcohol or fire arms. Rather you're going to see what we've begun to experience, where those companies disaggregate their businesses so that investors can make choices as to which parts they want to invest in.

Q: *Can you talk about the pros and cons of going public for NYSE?*

DG: The driver for us in 1999, when we were thinking about going public, was a firm belief that I had then that we were about to see a very different breed of competitor in our business. Yes, we're a transaction manager and yes, we're a platform for economic activity, but what we really are is a data company.

If you take that generic definition there are lots of names that can walk into your space. If my competitor was eBay, I was going to need capital at a very different level. I was going to need stock for acquisition and incentivization purposes. That whole temptation went away quite quickly with the dot-com explosion.

As far as the downsides, think of me as a manufacturing facility. Our utilization rate is less than 15 percent. Our average daily volume is 1.3 billion. Our capacity is somewhere between 10 and 14 billion. And I build that excess capacity for a very important reason. Chairman Greenspan comes on the tube and says, "I think I'd like to kick up interest rates 500 basis points." We'll light up like a Christmas tree. I might not trade 13 billion shares in a single day, but my flow rate will feel like it. So we have to maintain that capacity. As a public company I couldn't afford to do that. We're a private institution with a public purpose. That doesn't lend itself to public ownership.

Joel Klein interview cont'd.

a conflict there with the Napster investment? And what is going to happen when or if you go public?

JK: Our involvement in Napster was designed to transition Napster to a lawful service. And frankly, I think the industry by choosing to litigate, rather than working with Bertelsmann, actually spawned this generation of Napster clones. Second, I am proud of the fact that Bertelsmann is an ethical company. When you start to read, as we read now, about Enron and Andersen, I think you want to be on the right side of those issues. However, that doesn't mean one doesn't have an obligation to worry about the bottom line in business. What made Bertelsmann different, frankly, is that Reinhard Mohn took one of the largest aggregations of wealth in the world and put it into a foundation dedicated to the public good. But if we were to monetize these shares in an IPO, there would still be money that would flow into the Bertelsmann Foundation and the Foundation could still continue to do the things that it does.

Q: *Early on, you mentioned that you thought Bertelsmann Inc. had a few holes and you were certainly looking to fill them. In general, would you comment on where some of those holes are and, specifically, are there any that might be filled from the small company technology space?*

JK: We're not in the TV or the movie business in the United States. That's not an easy hole to fill but I think it's something that certainly over time we need to think about. We've also got some challenges on where we go in music.

The third area is technology. If I were to say one thing generally about media and entertainment companies is that they don't fully understand the impact that technology is going to have on them going forward. And if they are under-invested, it is in technology R&D. And so, one of the things we're trying to do in Bertelsmann is to increase our sophistication, look for the right partnering opportunities, and try to get ahead of the curve in that respect.

"If I were to say one thing generally about media and entertainment companies is that they don't fully understand the impact that technology is going to have on them going forward."

Q: *To what extent does the fact that you were asked to join Bertelsmann signal that regulatory affairs and government affairs are of primary importance in the media industry?*

JK: This is your polite way of saying, "Why would a sophisticated company hire a non-businessman like me, right?" I didn't come to Bertelsmann to be a regulatory lawyer player, although obviously antitrust, FCC, and foreign ownership issues will impact us. I've spent five years looking at virtually every major media merger in the globe and saw all the technology and media issues from both sides. I used to jokingly say to the people at AOL and Time-Warner, "Each of you think you understand why the other guy did the deal. But I'm the only one who's seen documents from both sides of the transaction." ■

John Rowe interview cont'd.

as a manager, and now I find myself in this current position. I didn't plan it. It happened. I think there are a couple of lessons there. One is don't overplan your career. And two, be willing to take risk. If I had been too cautious, I would still be a professor at Harvard Medical School, which is not a bad thing. But I would not have had any of the fabulous experiences that I've had and been able to make a contribution to the American healthcare system in any way.

Q & A with Students

Q: *How do you deal with situations with the tension of wanting to be a national, comprehensive provider and working in markets where you may be losing money insuring a particular area or group of people?*

"In academia, there is a neglect of culture. . . But in business, culture is to be managed."

JR: Aetna is, in most markets, a licensed HMO, a health plan that is community-rated and an insurance company that is experienced-rated. So in many instances we can stop offering a given product in a community-rated area if we're getting creamed, and go to an experienced-rated basis only.

You have to look at the strategic importance to the company of the given market. Ten million of my members are the employees or the beneficiaries of national employers. If Dupont is one of my national customers and Wilmington, Delaware is community-rated, I'm not going to walk out of Wilmington. Because that means that I'm walking out of Dupont, which has 250,000 members nationwide.

Q: *What are some of the ways you can use information technology to add value?*

JR: We have the largest healthcare database in the industry. We know more about patients than doctors. When I was a physician writing a prescription for a patient, I knew every prescription that I had written for that patient but I didn't know what her gynecologist had written or what an orthopedist that she saw in the emergency room on the weekend when she sprained her ankle and forgot to tell me about it. But I know because Aetna pays for every one of those prescriptions.

We should be able to develop a personalized customized approach to using the medical information available in the literature and the patient's condition to enhance the patient's capacity to make healthcare related decisions. ■

Jack Welch interview cont'd.

opportunities in the years ahead?

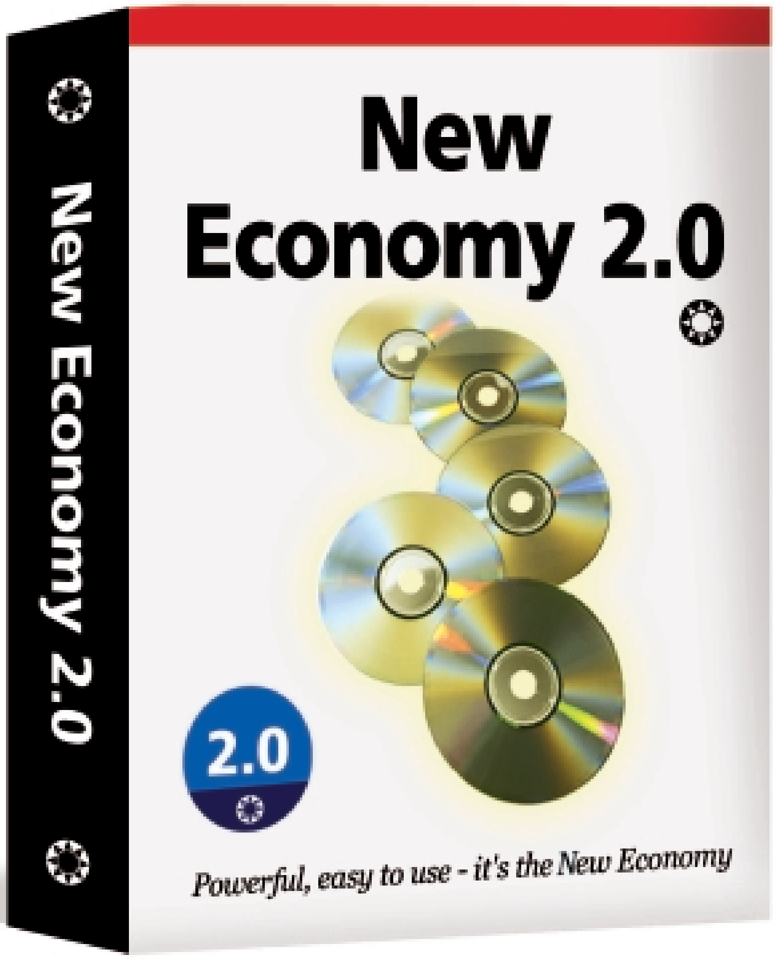
JW: Well, there is no question that there is going to be a massive marriage of information technology and medical diagnostics, and therapy treatment. This is all coming together in a way that's going to improve life, and expand life expectancy. But to speak more broadly it's more important to be able to be agile, to be ready for anything, and to respond quickly, than to predict.

And I'd take issue with the notion that these are the worst economic times. I talked to 300 CFOs in Colorado Springs two weeks ago. They're scared, because the media has called this the most tumultuous time in history. But when I took over in 1980, the Japanese were going to take over America. Inflation was at twenty percent. The prime rate was 21 percent. It was going to be double digits forever. In 1918, the war between Europe and the States was called the Great War. By the time World War II came, they had renamed it. World War I. Because it wasn't the greatest war anymore. World War II was. We've created 20 million new jobs in the last twelve years. We've lost four. Now, if you're one of those four, you don't like it; and it is awful, but unemployment is relatively low. Today, inflation in negligible. We have the strongest economy we've had in a long time, with one quarter down. We've got narrow sectors that are hurt. We had a bubble, but we were left with a great technology to build great businesses around. We are at the beginning of the greatest period in the world. It just feels lousy if you hadn't been in the other periods.

"It's the worst thing in the world, the layoff. You shouldn't have a manager in your company that enjoys doing it. But you shouldn't have one there that can't do it."

Q: *What is the role of the corporation as an agent of change in our society?*

JW: The corporation has an enormous role: to win. A winning corporation has excited people, growing jobs, security in where they're going. They're paying taxes in the community, they're mentoring and giving back, their spirits are high, they're involved in PTAs. What is a losing corporation? They don't pay taxes. The people are scared to death. They don't know where their next meal's coming from or if they'll get laid off. They can't give back, they're trying to just stay alive. Globalization is the greatest thing that ever occurred. You see it in Ireland, where the per capita income is off the chart compared to what it was twenty years ago. You see it in the faces in Budapest and Warsaw and India. Yes there is a sweat shop here or there, and we shouldn't have them. But are the plants better than they were in these places because we have global standards? Is the environment better because we are putting up plants that don't spew out coal dust next to the existing plants in developing countries. Yes. Now, globalization has not cured cancer. It didn't solve Afghanistan. But find a better system that's brought the have-nots closer to the haves. The governments don't do it. So winning corporations, globalizing, are the best shot at giving back, and bringing the have nots closer to the haves. And that, in the end, is what we're all about. ■



By **Daniel Gross**

Given recent events, it's tempting to declare the New Economy – that convergence of technology, finance, information, media, and markets that transformed American business in the remarkably prosperous 1990s – a thing of the past.

But those shoveling dirt on the grave of the New Economy may be acting in haste, as a careful perusal of this issue of STERN*business* suggests. After all, many of the sweeping trends that gathered force in the 1990s are very much with us, and are hard at work. Yes, there is still a New Economy, as Dean Thomas Cooley and Mehmet Yorukoglu convincingly conclude in their article (p. 20). "The effects of the information revolution will continue to be felt and influence economic well being for decades to come."

Sure, the late 1990s saw a rapid inflation and then deflation in asset values of telecommunication networks. But while stockholders and bondholders may have suffered losses, society surely gained something. As former General Electric CEO Jack Welch noted in his appearance at Stern (p. 8). "We had a bubble, but we were left with a great technology to build great businesses around." Welch, it will come as no surprise, is still optimistic. "We are at the beginning of the greatest period in the world. It just feels lousy if you hadn't been in the other periods."

Events of the past few years have also properly inspired some reconsideration of long-held premises about the underpinnings of our economic system. Accordingly, Professor Sally Blount-Lyon shrewdly brings the tools of psychology to bear on one of the most fundamental tenets of economics: the presumed fairness of markets. In her provocative article, she deftly outlines and then debunks the "fair-market illusion." (p. 28).

Amid this new climate, executives are finding that some business practices that were widely accepted in the 1990s now may appear potentially problematic. Professor Jeanne Calderon illustrates this dilemma in her article on off-balance-sheet financing techniques in the real estate industry (p. 32). "Trends such as mezzanine financing and land banking enable developers to shift land-acquisition and development debt off their balance sheets," she writes. "In the wake of the Enron debacle, as investors and regulators begin to clamp down on off-balance-sheet financing, these controversial methods are receiving more scrutiny."

The Enron debacle – and the failures of management and boards at other companies – have sparked calls for reform in the way companies govern themselves and provide information to the public and investors. For more than a century and a half, the New York Stock Exchange (NYSE), as a self-regulating organization, has responded to crises in investor confidence by proposing new standards for corporate governance. In his appearance at Stern (p.2), NYSE Chairman and CEO Dick Grasso outlined some of the steps the Exchange is taking to help restore investor's faith. "The real beauty of our system is that when people devise short cuts and in some way affect the system, the system has the ability to correct itself."

In a talk at Stern last March, Federal Reserve Chairman Alan Greenspan – one of the icons of the New Economy – noted that this corrective process is well underway. "The sharp decline in stock and bond prices following Enron's collapse has chastened many of the uncritical practitioners of questionable accounting. Markets are evidently beginning to put a price-earnings premium on reported earnings that appear free of spin. Corporate governance has doubtless already measurably improved as a result of this greater market discipline in the wake of recent events."

One of the more controversial reforms of the past few years has been the Securities and Exchange Commission's Regulation FD (Fair Disclosure). Enacted in 2000, it forced companies to stop providing information to selected analysts, and instead disclose it to all investors at the same time. In one of the first academic studies of the impact of Regulation FD, Professor Partha Mohanram and Stern Ph.D. graduate Shyam Sunder, sifted the data and concluded that Regulation FD has worked as intended (p.14). Among their many intriguing conclusions: "While the performance of analysts may have declined in the post-FD period, one cannot attribute the decline to the passage of the regulation after one controls for the changing macroeconomic environment."

Even with the new regulations and reforms brewing, there's still room for improvement. And in an interview (p. 26), Professor Joshua Ronen lays out one intriguing method for avoiding future accounting scandals. Instead of having companies pay accountants' auditing fees, he suggests that insurance companies insure financial statements. "The insurance companies would hire the auditors," he proposes. "The coverage amount, which covers directly investors for losses as a result of omissions or misrepresentations, and the premiums paid by the clients, would be disclosed in the financial statements. Obviously, higher coverage and a small premium would be a signal of better quality financial statements."

The recent accounting scandals were a product, in part, of the failure of board audit committees to exercise proper oversight. In her article, Professor Patricia Barron reviews the proposals to reform the functions of audit committees and of boards of directors more generally, and finds them somewhat lacking (p. 38). "What is missing from much of the current dialogue is the flesh on the bones of that skeleton that truly makes boards strong advocates for the shareholder." She further suggests some detailed best practices for board members in this new era.

It will surely emerge as an irony that some classic Old Economy companies may yet prove to be among the biggest beneficiaries of the information technology revolution. John W. Rowe, M.D., the Chairman, President, and CEO of Aetna, Inc., believes data management will provide competitive advantage for the large health insurance company "We have the largest healthcare database in the industry. We know more about patients than doctors," he said in a Stern CEO interview (p. 6). That should lend itself to creating customized approaches to its millions of patients.

Bertelsmann, Inc. CEO Joel Klein, who is at the forefront of the melding of old media (book publishing, records) and new media (file-sharing), also believes mass-customization will be the key to profits and growth. As he put it in a talk at Stern (p. 4), we have moved beyond the "first phase where you had mass audience and everybody listened to the same thing, to the second phase where you could have smaller communities." What's next? "Each individual consumer is going to become her or his own audience."

With its highly sophisticated inventory controls, and its old-fashioned salesmanship, Wal-Mart has proven remarkably adept at melding the old and new. Now, reports Stern alumnus Tim Condon, the nation's largest retailer is creating private-label brands, and, in the process, challenging some of its largest suppliers. "The question now is how the various players will react to this new trend."

This question, and the many others posed (and answered) in these pages, should lead us all to believe that the New, New Economy will be as fascinating and exciting as the original version.

DANIEL GROSS *is editor of* STERN*business*

The SEC's Regulation FD, which required companies to share all important data with all investors – rather than with analysts – has proved controversial. Critics said it would impair analysts' ability to forecast earnings and create havoc in the markets. Supporters argued that it would merely level the informational playing field. Who was right? One of the first efforts to measure the quantitative effects of Regulation FD offers some surprising answers.

Full Disclosur

By **Partha S. Mohanram** and **Shyam V. Sunder**

On October 23, 2000, the Securities and Exchange Commission (SEC) implemented one of its most controversial and far-reaching measures. Regulation Fair Disclosure, or Reg FD, as it is known, required that publicly held companies communicate all material information to all investors at the same time. The SEC's stated objective for the rule was to eliminate the practice of selective disclosure to favored analysts and institutional shareholders.

Industry groups like the Securities Industry Association (SIA) and the Association for Investment Management Research (AIMR) cried foul. They argued that Reg FD would lead to a deterioration in both the quality and quantity of information reaching investors, and that it would significantly impair analysts' forecasting ability. The SIA also contended FD would "deter analysts from vigorously competing to glean useful information for their clients and the markets." The group quoted member surveys that found analysts under the new regime were experiencing considerable difficulty in arriving at reliable earnings forecasts due to a decreased flow of information – even as corporate investor relations professionals claimed to be providing the same amount of information. For their part, the SEC and small investor groups argued that Reg FD should not impact the quality of information available to analysts. Instead, it would merely remove the timing advantage previously enjoyed by analysts and compel these highly paid workers to earn their keep. With reduced information flowing from management, they argued, analysts would have to undertake more private information discovery and analysis in order to maintain


$146,350.
$33,360.
$11,580.
$223,155.
$25,400.
$10,350.
$210,300.
$55,100.
$11,215.
$11,580.
$5,200.
$100,120.
$296,610.
$453,4
$296,610.
$453,46
e
$27,600.
$170,555
$142,95
$122,440.
98,876

accurate coverage of individual companies.

Thus far, Reg FD has inspired a great deal of rhetoric but not much data. So we set out to investigate some of these claims on a quantitative basis. We used the I/B/E/S summary database to create a matched sample of analysts' quarterly earnings-per-share forecasts in both the pre- and post-FD environments. The pre-FD dataset included forecasts from November 1999 through June 2000, and the post-FD dataset consisted of eight months of forecasts from November 2000 through June 2001. This matched sample design ensured that seasonality and firm-specific characteristics would not impact our results. Then we ran a series of univariate and multivariate tests on the data to answer three broad questions: (1) Has forecasting error increased since October 2000? (2) Are analysts now relying more on alternate sources of information? and (3) Have analysts who were all-stars in the pre-FD world been able to maintain their edge in the new environment?

To a large degree, this was virgin territory. While prior studies have largely focused on assessing the impact of change in quality of information, we aimed to measure the impact of change in access to information. The results are both intriguing and somewhat surprising.

Cloudy Forecasts

The first hypothesis we set out to test was that reduced management disclosure to analysts would result in greater absolute forecast errors in the post-FD world. **Table 1** compares the characteristics of analysts' forecasts before and after Reg FD for our sample. To ensure comparability, we matched our post-FD observations with the corresponding observation for the same firm from the same fiscal quarter for the prior year.

The absolute forecast error is defined as the absolute difference between the actual earnings per share and mean estimate, divided by beginning of period price. That figure, as seen, has increased from a mean of 0.0022 in the pre-FD period to 0.0039 in the post-FD period. This increase is significant for the raw absolute error, which has increased from 4.9 cents in the pre-FD period to around 6.2 cents in the post-FD period. Hence, it appears from this first glance that the ability of analysts to "get it exactly right" has diminished after Reg FD.

In addition, the results show that the range of analysts' forecasts has also increased significantly in the post-FD period. And when we looked at forecast dispersion, or the standard deviation of analysts' forecasts at a given point in time, we found that it, too, had increased significantly. In other words, analysts in the post-FD world tend to have a more divergent view of firms' prospects. When we repeated the analysis for the medians the results are essentially similar, with one significant difference: the absolute forecast error doesn't change much in the two eras. So for the median analyst, Reg FD has had minimal impact on the ability to get the forecast absolutely correct.

One of the problems with these univariate tests is that Reg FD came into effect around the same time that a downturn started in the US economy. The post-FD observations (November 2000 to June 2001) are likely to be from after the Internet meltdown, while the pre-FD observations (November 1999 to June 2000) are likely to be largely from the height of the Internet boom. Hence, some of the increase in forecast errors is likely to result from the earnings volatility set into motion by the unexpected downturn. To better isolate the effect of Reg FD, we ran multivariate regressions with a pooled sample of information from both the pre-FD and post-FD periods.

We included a critical independent variable called SURPRISE, which controls for macroeconomic effects such as the large decline in earnings that firms experienced around the time Reg FD came into effect. Then we ran the regressions both with and without SURPRISE, in order to isolate the importance of controlling for the earnings surprise. Our variable of interest is POSTFD, which indicates whether an observation was before or after FD. In the first specification that excludes SURPRISE,

TABLE 1

Characteristics of Analyst Forecasts: Before and After Regulation FD

Latest available forecast of one quarter ahead quarterly EPS from I/B/E/S Summary File, prior to end of fiscal period.

Panel A: MEANS			
	Means Pre-FD	Post-FD	T Statistic for difference
Scaled Forecast Error	0.00033	-0.00195	-6.25***
Unscaled Forecast Error	0.01536	-0.01560	-7.52***
Scaled Absolute Forecast Error	0.00223	0.00390	4.79***
Unscaled Absolute Forecast Error	0.04967	0.06215	3.51***
Scaled Range of Forecasts	0.00345	0.00458	4.04***
Unscaled Range of Forecasts	0.08272	0.09258	2.34***
Scaled Forecast Dispersion	0.00112	0.00169	3.93***
Unscaled Forecast Dispersion	0.02623	0.03200	3.73***
Panel B: MEDIANS			
	Medians Pre-FD	Post-FD	Z Statistic for difference+
Scaled Forecast Error	0.0003	0.0000	-10.27***
Unscaled Forecast Error	0.0100	0.0000	-10.32***
Scaled Absolute Forecast Error	0.0008	0.0007	0.38
Unscaled Absolute Forecast Error	0.0200	0.0200	0.21
Scaled Range of Forecasts	0.0015	0.0017	3.50***
Unscaled Range of Forecasts	0.0400	0.0500	3.25***
Scaled Forecast Dispersion	0.0005	0.0006	4.68***
Unscaled Forecast Dispersion	0.0100	0.0200	4.54***

Significantly different from zero using a two tailed test at * 1% ** 5% * 10%**

POSTFD has a significant and positive coefficient, confirming the univariate results from earlier. However, when we include SURPRISE, the coefficient on POSTFD is insignificant. That indicates that the large unexpected negative surprises in the post-FD period may have been responsible for the increase in absolute forecast error. So while the performance of analysts may have declined in the post-FD period, one cannot attribute the decline to the passage of the regulation after one controls for the changing macroeconomic environment.

Common Knowledge vs. Private Knowledge?

Analysts surveyed by the AIMR regard conversations with management as the most important source of information for forming opinions about a company. In the post-FD environment, analysts' ready access to management has potentially been curtailed. This may reduce the precision of the shared or common knowledge that analysts have at their disposal. In this environment, one would assume that analysts would have to increase the effort expended on their own private information gathering and analysis. So we set out to test two hypotheses. First, that the level of common knowledge reflected in analyst forecasts in the post-FD period would be lower than the level in the pre-FD period. Second, that the level of idiosyncratic knowledge reflected in analyst forecasts in the post-FD period is higher than the level in the pre-FD period.

These are abstract concepts. But researchers Orie Barron, Oliver Kim, Steve Lim, and Douglas Stevens in 1998 developed a model for inferring the information environment that analysts operate in by studying the distribution of forecasts. Information here does not necessarily refer only to managerial disclosures but also to any other relevant information or insights that analysts may uncover on their own. Under the so-called BKLS model, there are a few important metrics. The precision of public information measures the extent to which analysts rely on common or public information while coming up with their forecasts. The precision of private information measures the extent to which analysts rely on private or idiosyncratic information while doing so. The sum of the two is the precision of total information.

Again, we used information from the I/B/E/S summary database to calculate the precision measures. **Table 2** presents univariate tests that compare the precision of information before and after Reg FD. **Panel A** presents the means of the variables. The results indicate that while

TABLE 2

Precision of Analyst Forecasts: Before and After Regulation FD

The precision of the information underlying analyst forecasts is inferred using the framework provided by BKLS (1998). BKLS provide two metrics for measuring the precision of the public and private information underlying analyst forecasts as below.

Panel A: MEANS	N	Pre-FD Mean	Post-FD Mean	T Statistic for difference
PUB	1320	400	234	-4.49***
PRIV	1320	587	765	3.02***
TOT	1320	987	999	0.20

Panel B: MEDIANS	N	Pre-FD Median	Post-FD Median	Z Statistic (Wilcoxon)
PUB	1320	78.7	37.4	-6.20***
PRIV	1320	34.8	85.6	5.04***
TOT	1320	285.9	248.4	-1.35

Significant using a two tailed test at * 1% level ** 5% level *10% level**

DEFINITION OF VARIABLES

Variable	Definition
PUB	Precision of Public Information from BKLS framework (h)
PRIV	Precision of Private Information from BKLS framework (s)
TOT	Precision of Total Information from BKLS framework (h+s)

the precision of public information (PUB) has declined after the passage of Reg FD, the precision of private information (PRIV) has increased. As a result, the precision of total information (TOT) is essentially unchanged. When we repeated the test for medians, the results are similar. Thus, at the univariate level, the results indicate that analysts appear to be compensating for the reduced precision of common information by acquiring more idiosyncratic knowledge on their own.

To confirm the univariate results, we ran regressions with our precision measures as dependent variables. As before, we included SURPRISE as a dependent variable, as the unexpected downturn may also have had an impact on the precision of information. We also included controls for earnings variability, sales growth, firm size, and price-to-book ratio – all factors that may affect the precision of information.

In the regression for the precision of public information (PUB), POSTFD has a significant negative coefficient, consistent with our univariate results. Hence, there does appear to have been a decline in the precision of public information, potentially because of reduced disclosures from management to the analyst community. However, in the regression for the private information (PRIV), POSTFD has a positive coefficient, indicating that there has been a corresponding increase in the precision of analysts' idiosyncratic information. POSTFD has an insignificant coefficient in the regression for total information (TOT), showing that analysts may have essentially compensated for the reduced disclosure through private information gathering and analysis.

Among the control variables, SURPRISE has a significant negative coefficient in all three regressions, indicating that macroeconomic factors reduced the precision of all information and made forecasting very difficult. In addition, we found there was lower precision of information for firms with volatile earnings and rapid growth, and greater information for larger firms.

Taken together, these results provide strong support for some of the SEC's conjectures regarding the efficacy of Reg FD and refute the SIA's viewpoint that analysts incentives to gather information will be dampened in the new environment.

Tomorrow's All-Stars

Analysts can distinguish themselves through superior performance in terms of their ability to make earnings forecasts, set price targets, and pick stocks. Such superiority does not go unnoticed, as highly rated analysts receive lucrative remuneration packages.

Now, empirical research has shown that superior analysts are more likely to be well connected with the companies they follow. In the post-FD setting, such linkage advantages are likely to be less important. This may level the playing field for all analysts and lead to a convergence in performance among analysts. So we set out to check the following hypothesis: analysts who had superior performance in the pre-FD period will be unable to maintain their superiority in the post-FD period.

Using a sample of I/B/E/S forecasts from the detailed database from 1997 to November of 1999 (just prior to the beginning of our matched pre-FD and post-FD sample), we classified analysts into four quartiles based on their average absolute forecast error in this testing period. The top quartile consists of analysts with the lowest absolute forecast errors. We then compared the performance of analysts in these quartiles in our pre-FD and post-FD period. The results are presented in **Panel A** of **Table 3**.

In the pre-FD period, the superior analysts plainly maintained their superiority. The data show a gradual increase in mean absolute forecast errors from 0.0019 for the top analysts to 0.0022 for the 3rd quartile, to 0.0025 for the 2nd quartile, to 0.0030 for the bottom analysts. The difference between the top and bottom quartiles is highly significant, and this result holds for means as well as medians.

But when we compared the four groups in the post-FD period, we found a dramatic change. The four groups are virtually indistinguishable in the post-FD period! The mean absolute forecast error is identical for the first three groups at 0.0038 and insignificantly greater for the formerly bottom quartile at 0.0042. Hence, there appears to have been a convergence among the four groups, and the analysts who used to be superior in the

TABLE 3

Impact of Regulation FD on Individual Analysts

Latest available forecast of one-quarter ahead quarterly EPS from I/B/E/S Detail File, scaled by beginning of period price. Pre-FD and post-FD observations are calendar matched (i.e. a Jan 2001 post-FD observation will be matched with a Jan 2000 pre-FD observation.

Panel A: Impact on Analysts Based on Prior Performance

	Bottom Quartile		2nd Quartile		3rd Quartile		Top Quartile		T Stat (Top–Bottom)	Z Stat (Top – Bottom)
	Mean	Median	Mean	Median	Mean	Median	Mean	Median		
Before Reg- FD	0.0030	0.0013	0.0025	0.0010	0.0022	0.0008	0.0019	0.0006	-5.75***	-10.37***
After Reg-FD	0.0042	0.0010	0.0038	0.0009	0.0038	0.0010	0.0038	0.0010	-1.10	-1.00

Panel B: Analysis of Analyst Characteristics

	Bottom Quartile	2nd Quartile	3rd Quartile	Top Quartile	T Stat (Top–Bottom)
	Proportion	Proportion	Proportion	Proportion	
Belongs to "Large" Brokerage	32.3%	41.1%	43.1%	43.6%	6.31***
Affiliated Analyst	2.9%	4.0%	4.7%	4.9%	2.82***
All Star Analyst	24.2%	29.6%	30.8%	34.9%	6.40***

Z Statistics for Medians are from Wilcoxon Sign Ranked tests.
Significant using a two tailed test at * 1% level ** 5% level *10% level**

"While prior studies have largely focused on assessing the impact of change in quality of information, we aimed to measure the impact of change in access to information."

pre-FD setting were unable to maintain their superiority in the post FD world.

What accounts for this? We set out to examine the characteristics of analysts in these four groups by looking at three characteristics. We identified analysts as belonging to a "large" brokerage if their firm was ranked among the top 10 investment banks in 1999. Second, we identified analyst as affiliated analysts if they worked for the same firm that was the lead underwriter in the company's IPO.

Finally, we used *Institutional Investor's* 1999 rankings of all-analysts to see how all star analysts performed in the post-FD setting. The results are presented in **Panel B** of **Table 3**.

It turns out that analysts who were top analysts in the pre-FD environment were significantly more likely to belong to work for brokerage houses than bottom analysts (43.6% vs. 32.3%). Further, top analysts were more likely to be affiliated analysts than bottom analysts (4.9% vs. 2.9%), and more likely to be classified as all-star analysts (34.9% vs. 24.2%). These results are interesting because such analysts have been alleged to have much greater access to firms than other analysts. And the fact that top analysts were unable to maintain their advantages in the post-FD setting may reflect the diminished value of such linkages after the passage of the regulation.

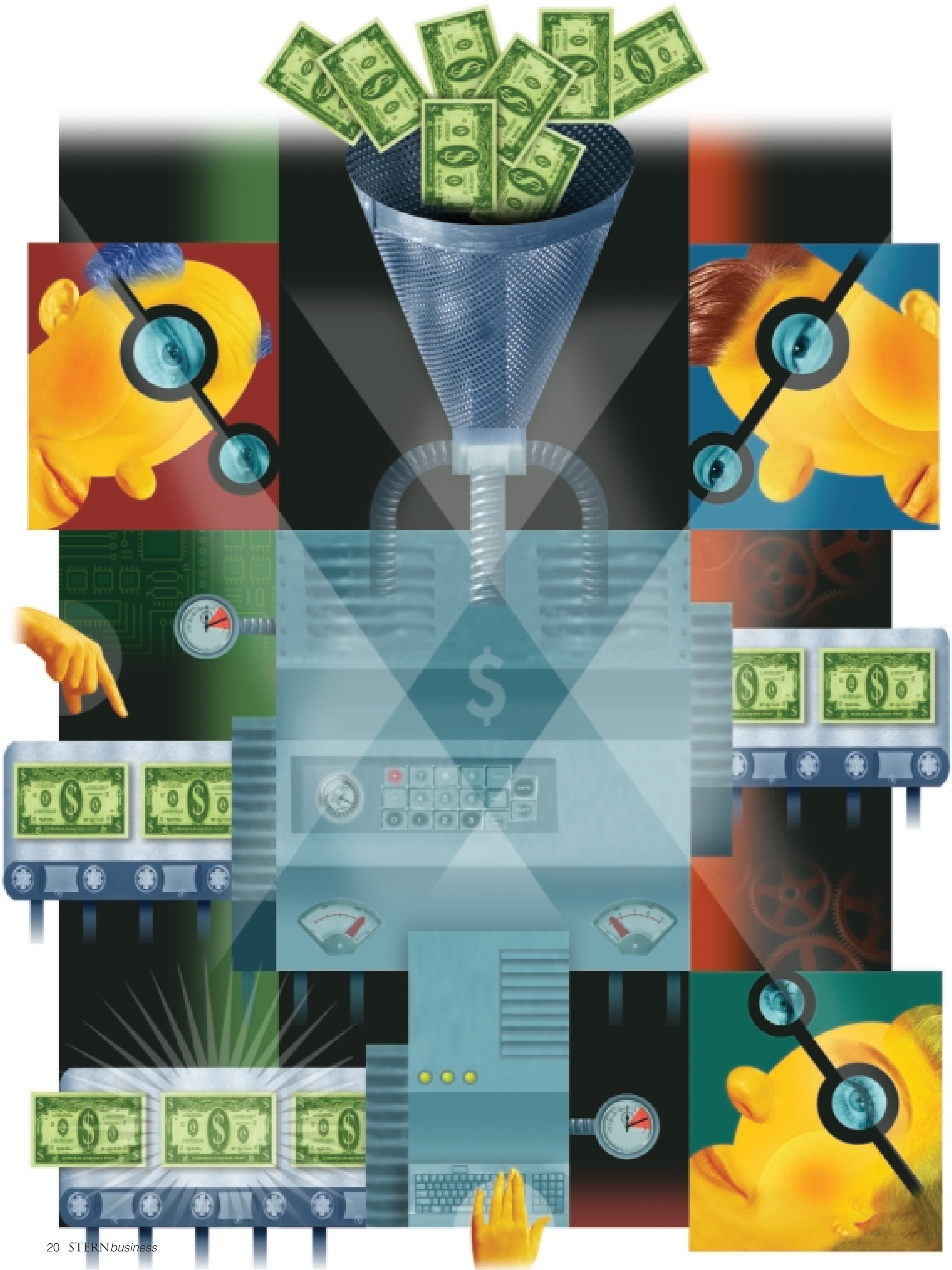
A Level Playing Field

Reg FD had two important goals at its core – to level the informational playing field in the capital markets, and to cut the umbilical cord that appeared to exist between managements of firms and analysts following the firms. And all without causing undue dislocation and disruption in the markets. Has it met those goals?

While absolute forecast error has increased after the passage of Reg FD, the impact of the regulation itself is insignificant after one controls for macroeconomic factors such as the downturn that started in late 2000. Further, while the precision of public information does appear to have declined after Reg FD, this has been compensated for by the increased precision of private information, reflecting the greater efforts of analysts in private information gathering and analysis. Finally, the fact that well-connected all-star analysts were unable to maintain their superior performance in the post-FD period suggests that all types of analysts are now having to prove their worth through their wits and not through their connections to executives.

PARTHA S. MOHANRAM *is an assistant professor of accounting at NYU Stern.*

SHYAM V. SUNDER, *Stern Ph.D. 2002, is an assistant professor of accounting at the Kellogg School of Management at Northwestern University*



Yes, There is a New Economy

The dot-com phenomenon may have been a bust. The Nasdaq hovers around 1400. Chastened venture capitalists are struggling to stay afloat. And many options are as deep underwater as the wreck of the Titanic. But the information technology revolution of the past few decades has produced some significant macroeconomic changes – and it should continue to do so in the years to come.

By **Thomas F. Cooley** and **Mehmet Yorukoglu**

The past two decades have witnessed extraordinary changes in the way we work, live, and communicate. Information and knowledge now move and spread at speeds that would have been unthinkable only 30 years ago. In the past decade, these changes were accompanied by strong economic growth and rising productivity. Analysts, pundits, social thinkers, and economists put forth many interpretations of these developments. Some argued that we were in the midst of a new industrial revolution driven by information technology. What's more, they argued, in this "New Economy" the conventional wisdom of the old bricks-and-mortar economy no longer applies. A more modest view held simply that technology has changed in important ways and we must analyze how these changes affect pricing, markets, and productivity. For their part, skeptics – and there were a few – argued that the information technology boom does not even rank with the great innovations of the twentieth century.

We set out to investigate some of these claims by using the tools of modern macroeconomics. We set up a model of how an economy looks and functions when on its long-term growth path. And then we analyzed how that economy would change when an information technology revolution hit. In addition, we examined some concrete historical data to measure the extent to which some of these hypotheses have been borne out.

To understand the background of the debate over the existence of the New Economy, we first need to understand the role of information and its availability in the economy. Information is a central attribute of goods. The key feature of information is that, once it is produced, it can be used repeatedly with little additional cost. Software that costs hundreds of millions of dollars to develop can be copied on a CD for a few cents. Similarly, a $100 million sports event – an NBA final or a World Cup soccer match – can be enjoyed by an additional sports fan with almost no extra cost. Because the production of information itself is human-capital intensive, in an information age, human capital will become a more important determinant of economic success. Indeed, human capital investment decisions play an important role in the nature of the goods that are produced and have important implications for the distribution of income.

"The key feature of information is that, once it is produced, it can be used repeatedly with little additional cost. Software that costs hundreds of millions of dollars to develop can be copied on a CD for a few cents."

Information is, in effect, a key component of the production process. And different goods have different levels of information content. Goods are produced with two types of intermediate input: information inputs and non-information inputs. Information inputs have a marginal cost of zero, while the cost of non-information inputs is always non-zero. This framework implies a very broad notion of information. Essentially anything that once produced can be reproduced costlessly is information. For our purposes books, databases, software, magazines, music, stock quotes, Web pages, and scientific knowledge are all information. It is obvious that in an information age, information will become more important than other bricks-and-mortar inputs, and will become a larger part of consumption goods.

We can also characterize all products in terms of their information intensity. Consider, for instance, the production process for delivering knowledge by teaching. Teaching involves non-information inputs like buildings and equipment that need to be provided to a marginal student at a positive marginal cost. The teaching activity itself, though, is an information input that is performed once, regardless of the number of students in a classroom or on a network. When one considers the shares of information and non-information inputs in the total cost of teaching, the share of information inputs (cost of teachers) outweighs the share of non-information inputs. So teaching is information intensive. In an information age, when access to students is less limited by the need for physical inputs, the information intensity of teaching increases. In contrast, for goods such as consumer durables and producer durables – i.e. washing machines or machine tools – a larger portion of total inputs is likely to be non-information intermediate inputs. Accordingly, the manufacture of these goods is a less information intensive production process.

Long Term Growth

What does a stable, growing economy look like before an information revolution hits? In this so-called steady state, the prices of new products decrease as they get older because the imitation cost declines through time and patent rights disappear. The patent owner prefers higher volume rather than a higher price as more and more people can afford it. In the steady state, the average age of products people consume changes across income levels. Those in the lowest percentiles of its income distribution consume a subset of older products. In this model economy, only agents above the 27th percentile have enough income to buy newer products.

In equilibrium, newer goods are more expensive and they include a larger patent fee in their price. The patent fee paid to the patent owner, in turn, covers the product development cost. Agents who consume newer products with higher patent fees in them are thus making the product development investments for the whole society. Conversely, those in the lowest percentiles essentially pay no product development costs. In this example, approximately 24% of the total consumption expenditures of the richest 1% goes to pay the product development costs for the entire society.

This economy grows along a balanced path, creating innovation and wealth at a predictable rate. Throughout history, of course, there have been periods when unexpected technological advances wrought fundamental economic and social transformations. In the past 30 years, of course, there has been just such a breakthrough. This time it came in the technology of information production. And the events of the past few decades raise the question: How does an information revolution alter or change the dynamics of a growing economy?

More Innovation

First, we would expect to see an increase in innovation. When the breakthrough in information technology occurs, agents realize that providing information-intensive goods to the market will be cheaper in the future. And that creates an opportunity to make more profits from the ownership of patents on high-information goods.

One way to document the growth of innovation is by looking at investment in new product development. In our model, the ratio of investment in new product development to output should rise from an initial level of 5.5% at the beginning of the breakthrough to above 15%. This high level of investment would continue for nearly 20 years, after which it falls back to its initial steady state level. These large investments in new product development cause the growth in the number of new products to surge from an initial 1.5% level before the breakthrough to more than 7% after the breakthrough. Most of the new goods introduced will be information-intensive goods.

When we examine recent data, it is clear that the so-called New Economy of the past several years has been characterized by a dramatic increase in the number of new products. One way of quantifying innovation is through trademark data. Trademarking a product or a service is a relatively costly and time-consuming process; businesses won't bother to trademark products unless there's a sufficiently high probability that it will distinguish the product from rival products. And a trademark right can last indefinitely if the owner continues to use it.

Table 1 shows the number of new trademarks issued between 1903-1997 on a log scale. As seen, there was a significant period of growth both before and after World War I, and then a 20-year decline during the Great Depression and World War II. The number of new trademarks issued annually was relatively level until the 1980s, when it began to increase dramatically. By this measure, at least, innovation has risen sharply in the New Economy.

"When the breakthrough in information technology occurs, agents realize that providing information-intensive goods to the market will be cheaper in the future. And that creates an opportunity to make more profits from the ownership of patents on high-information goods."

Slowing Productivity Growth

There are other economic consequences to the rise in innovation. New product development uses economic resources. The increase in the amount of labor allocated to new product development is an investment in future output and welfare. But conventional productivity measures do not take into account the investment in creating new information-intensive goods. And that leads to a conclusion that some might regard as counterintuitive. In our model, this dynamic leads to an observed slowdown in measured productivity – a slowdown in growth that could last for almost 20 years. After this temporary slowdown, however, the cost-lowering benefits of the breakthrough in information technology kick in, resulting a 20-year period of high growth in measured productivity. Eventually, measured productivity continues to grow at the initial 1.5% a year level. However the gains in measured productivity are permanent.

Greater Inequality

With the improvements in the high-information goods, producers of these goods – agents with high human capital – will become more productive as a group compared to the low human capital agents who produce low information goods. Accordingly, the income gap between these two groups will increase. In essence, then, the efficiency increase in the distribution technology benefits the highest output, highest income, highest human capital agents the most.

Given this, one would expect the income gap between the rich and the poor to widen after a technological breakthrough. Our model suggests that by the time 25 years have elapsed, the income gap between these two groups should increase by about 35%. And when we examine recent data, we see that beginning in the 1970s and continuing in the 1980s and 1990s, income inequality in the U.S. did increase dramatically. Similar patterns

TABLE 1. New Trademarks (log scale)

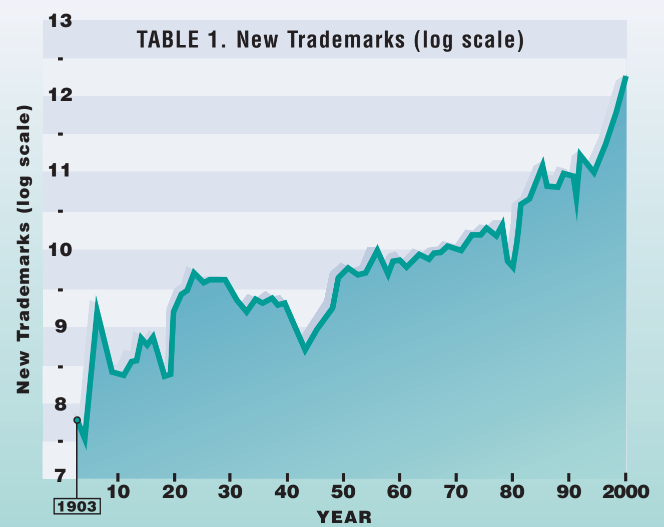


TABLE 2. Revenue of Football Teams in British League

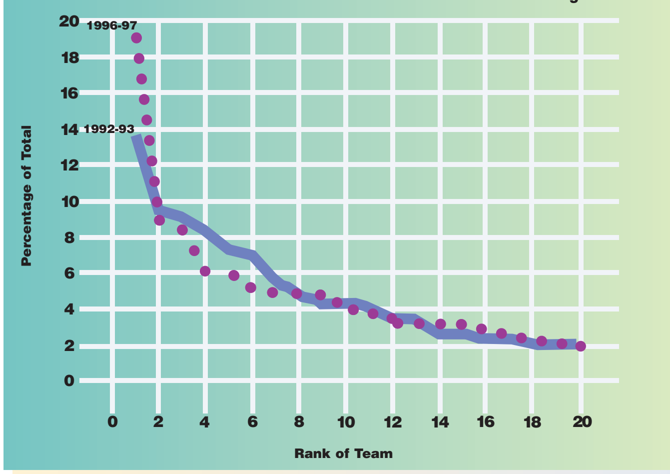


TABLE 3. Years To Adapt By 25% of Households

Invention	Year Invented	Years
Electricity	1873	46
Telephone	1876	35
Automobile	1886	55
Airplane	1903	64
Radio	1906	22
Television	1926	26
VCR	1952	34
Microwave Oven	1953	30
Personal Computer	1975	16
Cellular Phone	1983	13
Internet	1991	7

have been observed in other countries that are members of the Organization for Economic Cooperation and Development (OECD).

Of course, some of this rise has been due to an increase in the wage premium for skilled workers. In a 1997 study, Jeremy Greenwood of the University of Rochester and Mehmet Yorukoglu linked this observation to an information technology revolution beginning in 1974 and noted that similar patterns were observed in previous industrial revolutions. Many analysts seem to have settled on the explanation that this rise in inequality across skill groups is largely due to skill-biased technical change.

But there is a slightly different causal interpretation of the rise in inequality that is linked to information: the growth in winner-take-all markets. In 1981, the late economist Sherwin Rosen predicted that new technologies, by increasing the scope of the market for the most talented performers, would increase the inequality of incomes. Another argument holds that information inputs allow markets to expand in scope, and therefore the rewards for the most successful competitors increase dramatically. Thus, the rise in inequality is directly linked to growth in the information content of goods.

This dynamic can be seen in **Table 2**, which shows the revenues of teams in the British Premier Football League for the period 1992-1993 and 1996-1997. As seen, the most successful teams received an increasing share of the revenues. The change coincided with a change in this period of the information content of the product. A sports channel was introduced, which made the games of all teams more accessible to the viewing public. This increased the exposure of the most successful teams and resulted in their having a larger share of the revenues. Similar phenomena are prevalent in other professional sports and in many other markets.

New Product Diffusion

In this economy, the rich will consume more than the poor. But that's not the crucial distinction between the consumption habits of rich and poor. What matters is that the rich will consume the high price new varieties of goods that the poor cannot afford. Over time, as the goods get older, the price falls and the income of the poor grows to the point where they can afford the newer goods. The welfare difference between the rich and the poor naturally then depends upon how closely the poor follow the rich in consuming new goods.

After the information breakthrough, with the boom in new high-information goods, the average age of goods consumed by the rich falls. But as time goes on, the prices of high-information goods fall at a more rapid rate than the prices of low-information goods. (The price of software falls more rapidly over time than, say, the price of sneakers.) After a few years the price of high-information goods falls sufficiently that the poor can afford them. Once the economy converges to the final steady state, the gap between rich and poor is permanently narrowed.

This dynamic would also result in the more rapid diffusion of new information intensive products into household's consumption bundles. **Table 3** shows the time elapsed from the date of important innovations to the point at which 25% of households have them as part of their consumption bundles. What is striking is that the time to adoption has declined dramatically for more recent innovations. It took 22 years for 25% of households to acquire radios, but only seven years for 25% of households to get online.

Falling Prices

As diffusion increases, prices for the reproduction and distribution costs of information intensive goods fall.

Table 4 provides estimates of the share of production, reproduction, and distribution costs as a percentage of total cost for various types of media. By definition these are all high information content goods. Reproducing and distributing newspapers, a classic old media product, eat up 58.5% of total costs. But reproducing and distributing data on the Internet, the ultimate new media product, takes up just 1% of total costs.

In part because of such declines, the prices consumers ultimately pay for information intensive goods also would be expected to fall in an economy affected by an information technology breakthrough. And that is precisely what has happened. For most categories of software – a highly information intensive good – the price declines very rapidly after its development. Between 1990 and 1997 the average rate of price decline for spreadsheets was around 29% a year not adjusted for quality improvements. In the same period the rate of price decline for word processing programs has been around 23% annually.

TABLE 4. Declining Prices Of Information Intensive Goods

Invention	Production Cost	Reproduction Cost	Distribution Cost	II + III
Newspapers	20.0	39.5	19.0	58.5
Magazines	29.5	28.1	6.6	34.7
Public Service TV	55.9	0	9.2	9.2
Commercial TV	68.9	0	7.1	7.1
Internet	99	0	1	1

The Poor Get Richer?

The results so far have shown that an information revolution, by easing the constraints that prevent the more able from capturing a larger market and a bigger share of the pie, increases income inequality. Does this imply that the poor are made worse off? Well, yes and no. Welfare is calculated by figuring how much compensation as a percentage of income each group would require to be indifferent between being an agent in the information age and an agent in the extended path of the old economy – assuming continued productivity growth. Making these calculations enables us to measure how much better or worse-off each group of agents are made with the breakthroughs of the information age.

Our model shows that the well-being of the rich increases sharply starting from the early days of the information age. After all, as producers of information intensive goods, they are becoming more productive with the improvements in the distribution technology. And they get to consume these new information toys right away.

For those in the lowest decile of the income distribution, things do not change very dramatically at first. At the beginning the new information intensive goods are expensive and beyond the reach of the poor. The only benefit for the poor during the early years is that the old information goods are becoming cheaper. As time passes, the mass of new information intensive goods produced at the beginning of the information age become cheaper, and the poor start to benefit from them. After almost 20 years from the dawn of the information age, a long era of 30 years begins during which the welfare of the poor increases sharply. The increase is so dramatic that after 40 years or so the welfare gains of the poor outstrip those of the rich. It is important to note that the rise in welfare is due entirely to the fact that those in the upper tail of the income distribution paid the development costs of this shower of new high-information products.

A New Economy

Much has been written about the New Economy and the consequences of the information technology revolution. A great deal of the discussion and debate has been shrouded in hype and rhetoric. But a rigorous examination of the data, and of how our economy works, shows that in fact some characteristics of our economy have changed in important ways. And while it won't cure the ills of poverty and inequality, the New Economy will ultimately shower benefits on Americans, rich and poor.

In spite of the sharp increase in inequality associated with an information age, our analysis implies that the welfare of all groups in society will increase with an information revolution precisely because of the increased speed of diffusion of new products throughout the economy. Perhaps even more striking about these findings is the implication that the effects of the information revolution will continue to be felt and influence economic well being for decades to come. Thirty years from now, Americans may consider the Internet and the personal computer to be older technologies, and will likely take them for granted. But they will still be benefiting from the forces these innovations set into motion.

THOMAS COOLEY *is the Paganelli-Bull professor of economics and Dean of NYU Stern.*
MEHMET YORUKOGLU *is an assistant professor of economics and social sciences at the University of Chicago.*

Balancing Act

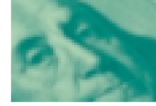
Despite the scandals that have surrounded Enron, Arthur Andersen, and several other companies, Joshua Ronen believes the venerable accounting profession can reform and redeem itself.

In the past year, accounting has emerged as a prominent force in the investment and regulatory world. The saga of Arthur Andersen's involvement in the Enron scandal and a series of alleged accounting improprieties have undermined investor confidence and led to calls for reform. The issues surrounding auditor independence, earnings management, and accounting standards are famously complex. But Professor Joshua Ronen, who has taught accounting at NYU Stern since 1973, is an experienced and lucid observer of the accounting scene. A former editor-in-chief of the *Journal of Auditing, Accounting, and Finance*, and a former director of the Vincent C. Ross Institute of Accounting Research at Stern, Ronen has proposed reshaping the relationship between auditors and public companies. In an interview with STERN*business*, he helped shed light on how accounting has come to capture headlines, and how the profession could be reformed.

STERN*business*: *Why don't we start with the Enron story? Was it a question of the accountants abetting corrupt behavior by the executives? Or the other way around?*
Joshua Ronen: It's difficult to tell. My guess is that this was a mutually enforcing creative approach, because essentially Arthur Andersen received millions of dollars in helping Enron structure the limited partnerships and special-purpose entities through which all these transactions occurred. So did the outside lawyers. It's conceivable that Arthur Andersen had explained to the Enron people the possibility of such entities and some very smart and creative people at Enron caught on to the idea.

SB: *One of the issues that surfaced was so-called "earnings management," the way companies either manipulate or selectively interpret results to reach a desired goal. Why do we have this phenomenon and how should the public view it?*
JR: Financial engineering by corporate executives in order to produce earnings, or manage earnings, has been going on for a very long time, but I think recently it's been happening with far greater intensity simply because of the increasing availability of earnings forecasts by analysts. With the prevalence of these forecasts, there has arisen the need to beat the forecasts, or, rather, a great aversion to falling short of the forecasts. And this has produced a very strong incentive for corporate executives to manage earnings. On the average, I would say that if you fall short of a forecast, at least in recent years, the company suffered a penalty in the marketplace of about 20 to 40 percent. The fear of litigation and the fear of the penalty in the market induce companies to manage earnings. Now, this, of course, is a self-destructive mechanism because you cannot manage earnings forever. Ultimately, the truth will come out. A possible rational explanation of this seemingly ruinous behavior is that the earnings-management executives expect not to stay with the company long enough to face the "deluge." At the same time, they do not fear loss of reputation: they would continue to be favored by shareholders and investors striving for short-term speculative profits.

SB: *When it comes to these instances of accounting problems, is it a case of individual bad actors, or is it a function of a system that has inherent problems built into it?*
JR: Well, there is an inherent conflict of interest. If accountants are paid by the company to whose financial statements they attest, they would have a great deal of temptation not to resist a client who would like to present a positive picture of the financial statements. In the case of



"If accountants are paid by the company to whose financial statements they attest, they would have a great deal of temptation not to resist a client who would like to present a positive picture of the financial statements."

Enron, for example, when Andersen received an annual audit fee of $25 million, with promise of an annual stream of fees of such magnitude into the foreseeable future, that's a very large sum even for a firm like Arthur Andersen.

SB: *We like to think our accounting and disclosure systems here in the United States by and large are the most elaborate in the world. Is that still the case, or are there some basic flaws that have cropped up?*
JR: The United States capital markets and disclosure rules and accounting standards are the most sophisticated and elaborate in the world. But, even so, the standards are sufficiently flexible to allow a lot of leeway for earnings management. And one of the problems with the standards is that the Financial Accounting Standards Board (FASB), in order to try to reflect more of economic reality and the proliferation of financial instruments and derivatives, has allowed more intangibles to creep into the financial statements. Once you do that, you provide a larger, or more flexible, set of opportunities to manage earnings. And since valuations of intangibles are not verifiable, auditors cannot audit them effectively. One of the solutions, as radical as it may seem, is to separate the presentation of non-verifiable assets and results – intangible future projections that cannot be verified mostly because they consist of private information – and the verifiable, which are past transactions that can be audited and verified.

SB: *Is there an alternate model, whereby the accountant would be paid by the state or by a third-party?*
JR: Yes. And this what I've advocated. One possibility is to have financial statements insured by insurance companies. The insurance companies would hire the auditors and pay the auditors. The auditors would provide reports on the basis of which the insurance carrier can decide whether or not to provide the coverage to the companies requesting the coverage. The coverage amount, which directly covers investors for losses as a result of omissions or misrepresentations, and the premiums paid by the clients, would be disclosed in the financial statements. Obviously, higher coverage and a small premium would be a signal of better quality financial statements. The companies would want this coverage because that would signal credibility and quality and in turn, decrease the cost of their equity capital.

SB: *The accountants would still be doing the same sort of things but their check would be coming from someone else?*
JR: They essentially would be hired by the insurance carriers.

SB: *And they can continue to do consulting work?*
JR: Yes, because the consulting work wouldn't pose a conflict of interest anymore. Simply because if they allow that connection to contaminate their audit, then they would risk losing multiple audit assignments from their own client, which is the insurance carrier.

SB: *What about the debate over the continued self-regulation of the accounting industry?*
JR: If you self-regulate, but if the profession as a whole does not have the incentive to self-regulate effectively, then we have a problem. And since the auditors themselves are regulating themselves, the conflict of interest is still there. We cannot allow regulators, or a supervisory board, to be paid by the profession which consists of the same auditors who have the conflict of interest. So I think we need something other than self-regulation.

SB: *In light of recent events, are your students asking different types of questions, or expressing doubts, about what it means to become an accountant?*
JR: On the one hand, accounting all of a sudden becomes more important. Witnessing the drastic effect that accounting issues have on the marketplace, as reported in the press, makes accounting seem much more important. It's no longer that boring subject that they thought it was. On the other hand, there is this issue of ethics, and what are accountants doing, and the issue of independence and conflict of interest. Overall, I find much greater interest by students in the accounting issues. They are curious about it.

SB: *Where are we in the arc of these accounting-related scandals? Is Enron the high point?*
JR: I think we will see many more such instances. It's likely that the additional cases we find will not be the same size, but there are probably a larger number of companies where we will find similar revelations. That's because the techniques used by Enron – primarily the use of the special purpose entities whose results were not consolidated – can be used by others. In fact, Enron was selling some of these schemes to other companies. And even without buying the ideas from Enron, the ideas are there. As long as a loophole exists it will be exploited.

JOSHUA RONEN *is a professor of accounting at NYU Stern.*

GRAND

By **Sally Blount-Lyon**

ILLUSION

CONTRARY TO POPULAR BELIEF, FREE MARKETS NEVER WERE FAIR

Until recently, most business people possessed a bedrock of faith in the efficiency, power, and fairness of markets. And a great deal of it was justified. When trade occurs freely, the maximum amount of wealth is created for the largest number of people. There is no more effective social system for organizing people and allocating resources than markets. But while markets are efficient, there's nothing inherently fair about them.

Yet, many smart people have fallen prey to this belief. For the past two years, John Jost of Stanford University and I have conducted research on peoples' attitudes toward markets. Our conclusion: many intelligent people are prone to the "fair market illusion." That is, they have tended to believe – incorrectly – that market outcomes are inherently fair and that the market process of determining how resources are allocated is a fair one.

What Is Fairness?

Of course, the concept of fairness is quite complex. Psychologically, the idea emanates from social comparison processes – our tendency to compare ourselves with our people – and the need for control and predictability in life. As psychologist Melvin Lerner demonstrated in the 1960s, people have a need to believe that life is controllable, and that life's outcomes are fair. But life isn't "fair." People's life circumstances are quite diverse and subject to chance events. Thus considered, any sense that fairness exists at all is an illusion – albeit a widespread one!

As a consequence, social psychologists have spent a considerable amount of energy over the last 20 years trying better to understand the nature of our fairness illusions. In the process, psychologists have identified three types of fairness judgments that people tend make: outcome, procedural, and process.

Regarding outcomes, fairness can be thought of as a judgment that people make regarding the acceptable degree of equality (or inequality) across parties' payoffs in particular situations. As an example, people often think of even splits as fair. Psychologist Morton Deutsch has identified three types of outcome fairness that people tend to make: based on equality, equity (in proportion to earned rights or inputs), and need (given first to those in need). As he found, equality norms are most prevalent in friendships – i.e., we generally split restaurant bills evenly. Equity norms, by contrast, are more common in business relationships. People generally find it fair that those who invest more receive a greater share of returns.

Fairness judgments are also often made regarding the procedures used to generate outcomes, particularly when it may not be possible to achieve outcome fairness. Procedural fairness norms help organize expectations about how scarce resources will be distributed across many people. For example, people often perceive that flipping a coin is a fair way to determine between two people who will get a one-of-a-kind item. Lotteries, first-come-first-served lines, and rationing are also commonly accepted fair procedures. Psychologist Gerald Leventhal has identified several characteristics commonly associated with fair procedures. These include consistency across people, being based on accurate information, correctable in the case of error, structured to suppress bias, and reflecting prevailing ethical norms.

People also apply fairness judgments to evaluate how social interactions unfold – i.e. the process. In social interactions, people like to feel respected and that their needs have been given adequate consideration. When this does not happen, people say that they were unfairly treated.

Applying Fairness to Markets

Understanding fairness perceptions in markets is especially challenging, because some aspects of markets appear "fair," and others do not. For example, one of the fair aspects of markets is that they allow everyone equal access. Theoretically, anyone can participate, regardless of gender, race, or background. On the other hand, because the way people participate in markets is through economic currency, markets seem to have an unfair income bias. Because buyers who have more money can afford to pay more for goods, they tend to get more in a market system. It is this income bias that motivates governments to prohibit certain goods, such as donor organs, from being allocated through markets.

"Psychologically, the idea [of fairness] emanates from social comparison processes – our tendency to compare ourselves with other people – and the need for control and predictability in life."

Sometimes, instead of saying that markets are fair, people use the term "fair market price." Here, market price typically refers to available information about what other people have recently paid for a similar good or service, or the price at which other sellers are offering a similar item. In thick markets – such as soda or personal computers – prices vary little, and it is relatively easy to identify what is perceived as a prevailing market price. In thin markets, where pricing is more variable, such as fine art or nuclear fuel, identifying a prevailing market price is more difficult.

Many people characterize a prevailing market price as the "fair market price." While that price may intuitively "feel" good, there is nothing particularly fair about it. Yes, it does represent a market clearing price – that is, a price at which many buyers and sellers are willing to exchange. But there is nothing inherently just about that point. In theoretical terms, it simply represents a point in two-dimensional, price-quality space where the two abstract lines (supply and demand) cross. While that point is efficient, no economist worth his or her degree would ever claim that that point is intrinsically fair. Consider, for example, an unregulated monopoly. There may be a well-defined market price, but the seller typically garners most of the surplus. Is that fair? Probably not, and that's why governments often seek to regulate monopolies.

Besides, supply and demand curves don't explicitly exist in real life. No one ever gets all of the buyers and all of the sellers in a market together at the same time to ask them (a) how many units they each want to buy or sell, and (b) what the maximum (or minimum) price is that they are willing to accept. Further, no one then takes that information and aligns all of these prices in descending order (for buyers) and ascending order (for sellers) to see where these two plots intersect. The supply-demand framework is a theoretical model that captures some important nuances about markets – but it is not what real life looks like. And by and large, it is not how markets actually work.

In the end, our research suggests that, to the extent that fairness is assumed in markets, it has more to do with procedural fairness than with outcome or process fairness. Transacting at the prevailing market price feels good, because you feel you are being treated in a just manner. Enacting a market price-based transaction implies a procedure that is consistent across bargainers, free of bias, based on data that is representative and relevant, and is culturally appropriate.

Biased Judgements?

Interestingly, there is substantial research that finds that the degree to which people associate market outcomes with fairness may be subject to cognitive biases and contextual framing. For example, it has been found that people typically perceive that market outcomes are more fair when they result in wage increases than wage decreases. In addition, market outcomes are considered more fair when they lead to sudden decreases in buying prices rather than sudden increases. In addition, there is a status quo bias at work. Situations that don't change feel more fair than situations that do. Prices that do not change, or change only slightly, are usually perceived as most fair.

Research also finds that people tend to favor the fairness norms that favor their own interests. In market contexts, this tendency has at least two implications. First, when market outcomes favor one party over another, the party who benefits is more likely to use the "markets-are-fair" rationalization to justify the outcome. The more advantaged party is more likely to rationalize his comparative win, because "everyone agrees that markets are fair." Second, this tendency means that in thin market contexts – those in which pricing is perceived to vary – people tend to selectively anchor on "comparables" that favor their own position and believe in the inherent fairness of that information as a reasonable reference point for resolving the situation.

"Procedural fairness norms help organize expectations about how scarce resources will be distributed across many people. For example, people often perceive that flipping a coin is a fair way to determine between two people who will get a one-of-a-kind item."

In a clever paper studying teacher contract negotiations, Linda Babcock and her colleagues at Carnegie Mellon University presented data that vividly demonstrates this bias. Specifically, they found that mean teacher salaries in school districts that unions view as being comparable to their own tend to be significantly higher than mean teacher salaries in districts that school boards view as being comparable to their own. Babcock and colleagues also found that strike activity is positively correlated with the size of the difference between the comparables that a union and school board bring to the table.

Research that I have conducted with Margaret Neale of Stanford University and Melissa Thomas-Hunt of Cornell University shows that in thick market contexts, the fair market illusion often leads people to overweight the validity of market-based data. We told negotiators in our research laboratory that they were negotiating the hypothetical sale of either an antique carousel horse or a new stereo. We told them how much they could afford to spend, and what they thought the item was worth. They were also given common information about the price at which a single, similar transaction had recently closed. When negotiating for the antique, the bargainers were much less influenced by the single piece of market data than when they were when negotiating for the stereo. People assumed that stereos are more commodity-like, and bargainers in both roles mistakenly used the market data as a proxy for market price. They assumed that it was the "right" and "fair" way to resolve the negotiation – even though it represented only one other recent trade. In the stereo context, both buyers and sellers fell prey to the fair market illusion to a degree that overweighted the available market data in setting price.

To examine the fair market illusion more deeply, my colleague John Jost and I have been collecting survey data from undergraduate students, MBA students, and executives at Stanford University, the University of Chicago, and New York University for the last two years. And we have found the "fair market illusion" to be rampant among people well-educated in economics. For example, the average MBA student is likely to agree just as strongly with the statement, "The free market system is a fair system," as with the statement, "The free market system is an efficient system." Training in economic courses does not seem to improve the correctness of these answers between the first and second years.

We did, however, find that within these populations, some people are more prone to the belief than are others. For example, we have found that the degree to which people fall prey to the fair market illusion is strongly correlated with the degree to which people report being politically conservative rather than liberal. It is also strongly correlated with espoused beliefs that hierarchies are natural and social inequality is inevitable.

Together all these findings have two important implications. First, they suggest that many people trained in business schools are leaving with an incorrect understanding of what markets are and what markets aren't. Markets are about creating wealth and allocating resources efficiently – not necessarily intelligently or compassionately. Markets are not intrinsically just, intelligent, or moral. Free trade can not by itself make sure that the poor get fed, the best ideas receive funding, and the world becomes a qualitatively better place.

Further, when people believe that markets are fair, they are prone to systematic processing errors and bandwagon effects. The fair market illusion leads people to overweight readily available market data when making financial decisions and become overconfident of their decisions. This tendency lends some insight into the inflated stock market valuations from two years ago. While many stocks were trading at particularly high prices, those prices were clearly not sensible or intelligent, and certainly not "fair."

SALLY BLOUNT-LYON *is professor of management at NYU Stern.*

Foreclosure

The Rise and Uncertain Future of Mezzanine Financing and Land Banking

Through the use of techniques like mezzanine financing and land banks, developers of large residential real estate projects have been able to borrow and still keep debt off their balance sheets. Now that investors are eyeing off-balance sheet debt with a greater level of suspicion, will these tactics continue to rise?

By **Jeanne Calderon**

Real estate development is the art of using other people's money. From Donald Trump to small-town builders, developers typically strive to use as much borrowed cash and as little of their own funds as possible. Doing so lets them diversify holdings and minimize exposure to the risk of loss, particularly if the lender does not require personal guarantees. In recent years, this desire has lead to the development of creative financing techniques in large-scale residential development. Trends such as mezzanine financing and land banking enable developers to shift land-acquisition and development debt off their balance sheets. In the wake of the Enron debacle, as investors and regulators begin to clamp down on off-balance-sheet financing, these controversial methods are receiving more scrutiny.

In traditional real estate financings, borrowers give a mortgage on their property to lenders in exchange for funding. Although many real estate loan transactions involve only one mortgage – the "first mortgage" or "senior mortgage" – borrowers frequently obtain additional financing through a second mortgage, often referred to as the "junior mortgage." To prevent borrowers from becoming over-leveraged, lenders typically use a loan-to-value ratio, under which the first mortgage holder limits its loan to a certain percentage of the property's appraised value. The junior mortgage holder may then lend an additional amount, usually at a higher interest rate. The first mortgage holder has the more secure rights of recovery in a foreclosure or bankruptcy action.

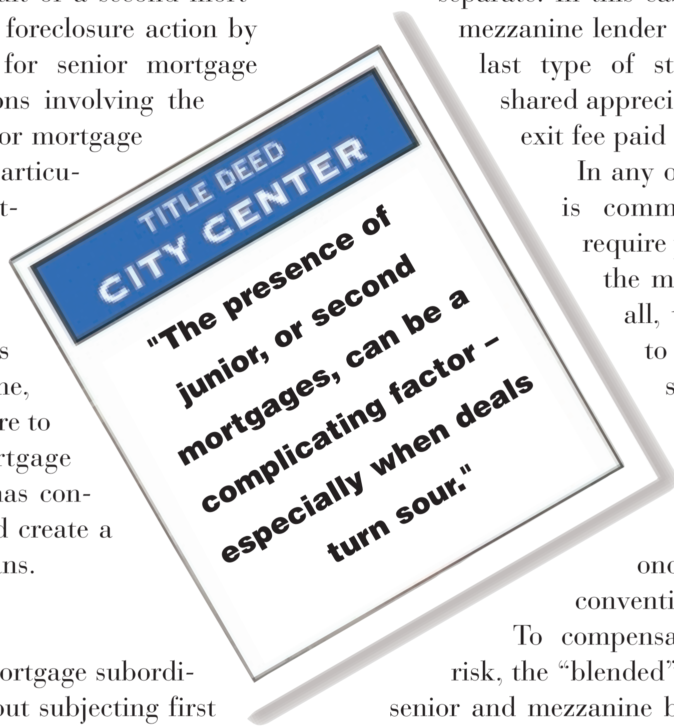
The bank typically funds between 70 percent and 85 percent of the purchase price for the acquisition of land. To ensure that developers have a significant financial commitment to the project, many banks now require developers to fund a substantially greater portion of the acquisition from their own funds. The same bank generally also commits to funding the development – i.e. the seeking and obtaining of governmental approvals and building of infrastructure such as roads and sewers – and the


TITLE DEED
CITY CENTER
BUY..............$$$
LEASE...............$$
RENT..................$
PROPERTY TAX
CITY CENTER
CEO
MAKE REAL ESTATE DECISION
GO
SUBURBAN PLAZA
SUBURBAN PLAZA
IMPROVE CORP IMAGE
REMODEL
MAIN STREET
500
100
50
50

construction of the homes. The lender also may require the developer's principals to guaranty the developer's obligations to the lender, including the repayment of the debt. In this instance, the lender is a secured creditor – i.e. the borrower's obligations are secured by a mortgage on the property.

The presence of junior, or second mortgages, can be a complicating factor – especially when deals turn sour. Junior mortgage holders often have the financial ability to obstruct a first mortgage foreclosure, even when borrowers can't. Meanwhile, the default of a second mortgage and the commencement of a foreclosure action by its holder can create problems for senior mortgage lenders. In addition, in transactions involving the securitization of a portfolio of senior mortgage loans, rating agencies have been particularly concerned about the bankruptcy risks posed by junior mortgages.

As a result, since the early 1990s, the use of junior mortgages has decreased. At the same time, however, developers' need and desire to borrow more funds than mortgage lenders are willing to lend them has continued to rise. And that has helped create a market for so-called mezzanine loans.



Next Stop: The Mezzanine

Mezzanine loans provide non-mortgage subordinate financing to developers, without subjecting first mortgage lenders to all the negative aspects of subordinate mortgage financing. Mezzanine loans, which can be made by investment banks, stock funds, banks, and insurance companies, typically supply financing of between 50 percent and 90 percent of the project's required equity contributions or capital structure cost. Unlike plain vanilla mortgages, mezzanine financings take a variety of forms, including hybrid financial products with equity characteristics, such as a participating return and equity kickers. In the case of equity kickers, the lender's stated return may be supplemented based on the performance of the borrower or the project.

There's another crucial difference: mezzanine lenders generally don't lend to the corporate or legal entity that has taken out the mortgage on the land. Rather, they extend credit to the partners, members, or other equity owners of the borrower – as individuals or as a group – and take a pledge of their equity interests in the borrower. Less frequently, the mezzanine lender may take a preferred equity position in the borrower directly. This interest entitles the lender to distributions of excess cash flow after debt service, ahead of any distributions or other payments to the borrower's principals. Yet another approach combines a senior mortgage with mezzanine financing at a combined loan-to-value ratio of 90 percent to 95 percent – at a rate that may be blended or kept separate. In this case, the senior lender and mezzanine lender are the same entity. This last type of structure may contain a shared appreciation or equity kicker, an exit fee paid by the borrower, or both.

In any of the above structures, it is common for the lender to require personal guarantees from the mezzanine borrower. After all, the borrower's obligation to repay the debt is not secured by the real estate. Consequently, the mezzanine lender's interest is exposed to greater risk than a second mortgage lender in a conventional mortgage situation. To compensate the lender for such risk, the "blended" interest rate paid by the senior and mezzanine borrowers is greater than the rate paid to a secured mortgage lender. And while senior mortgage debt is generally at a fixed rate, the interest rate on a mezzanine loan may fluctuate. Also, the mezzanine lender may insist on a certain level of control over the borrower's business as a means to protect its investment. But that level of control must be limited to avoid subjecting the lender to fiduciary responsibility and other liabilities.

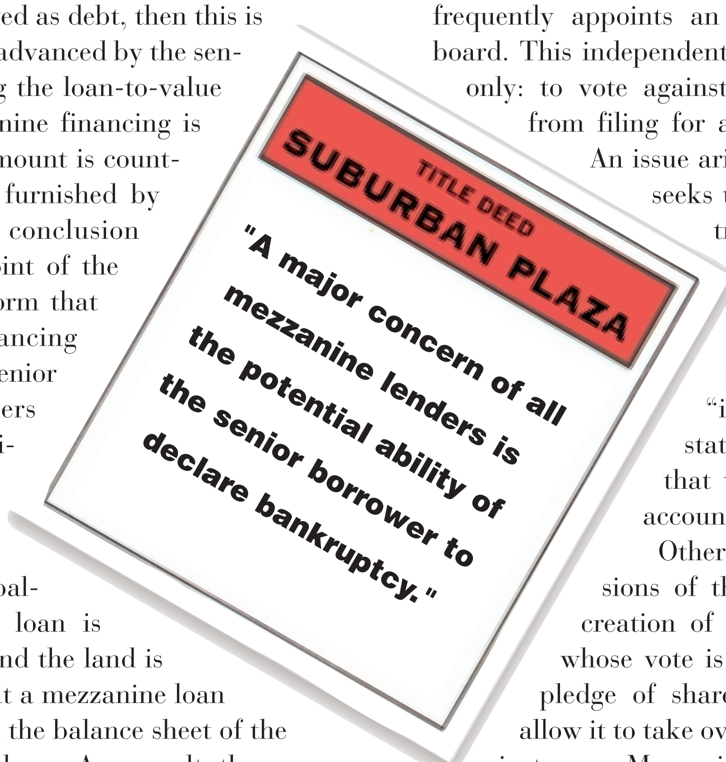
The first and most critical hurdle to overcome in mezzanine financing is whether the senior lender will permit it and, if so, under what terms and conditions. As in conventional financing, typically the senior lender will require the borrower to provide equity from her own funds or assets, rather than by means of further indebtedness. This hurdle pivots, in part, on whether the mezzanine financing is viewed as debt or equity. If the mezzanine financing is viewed as debt, then this is added to the debt to be advanced by the senior lender in calculating the loan-to-value ratio. But if the mezzanine financing is viewed as equity, the amount is counted towards the equity furnished by the borrower. The conclusion depends on the viewpoint of the lender as well as the form that the mezzanine financing takes. In addition, the senior and mezzanine lenders enter into an intercreditor agreement to address their respective rights.

On the developer's balance sheet, the senior loan is reflected as a liability and the land is reflected as an asset. But a mezzanine loan appears as a liability on the balance sheet of the borrower – not the developer. As a result, the mezzanine debt does not adversely affect the developer's net worth and liquidity. The interest expense allocable to the senior loan is treated as an interest expense on the developer's statement and the mezzanine loan interest is treated as an interest expense on the statement of the mezzanine borrower. Both types of lenders recognize the corresponding amounts as interest income.

The interest of the senior lender is similar to that of the senior lender in a conventional real estate financing. But because the mezzanine lender is not a lender with respect to the entity that owns the property, it has no interest in the property. Instead, the lender's interest varies depending upon the type of mezzanine structure. For example, the mezzanine lender may have a security interest in the shares of stock, partnership interest, or other equity interest in the entity that owns the property.

A major concern of all mezzanine lenders is the potential ability of the senior borrower to declare bankruptcy. The senior lender has a high priority as a secured creditor of the bankruptcy estate, whereas the mezzanine lender has no security interest in the borrower. Furthermore, the borrowers under the mezzanine loan may have guarantees or other obligations that are triggered by the bankruptcy of the senior borrower.

In an effort to deal with this risk, the senior borrower frequently appoints an "independent" director to its board. This independent director exists for one purpose only: to vote against allowing the senior borrower from filing for a reorganization in bankruptcy. An issue arises where the mezzanine lender seeks to appoint a director who is not truly independent – i.e. who may have some relationship to the mezzanine lender. In that case, the director's vote may be challenged under the "interested director" provisions of state corporate law, with the result that the vote will not be taken into account.

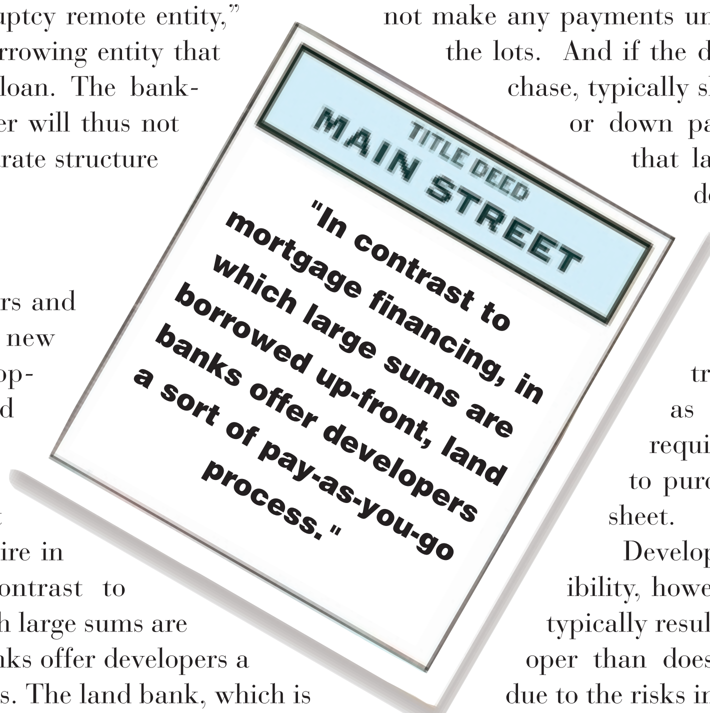


Other techniques to control key decisions of the senior borrower include the creation of a special class of shareholders whose vote is required on major issues, or a pledge of shares to the mezzanine lender to allow it to take over the senior borrower in certain instances. Mezzanine lenders holding "kicker" or similar interests also focus on having rights to control any action by the borrowers that may adversely affect the value of those residual or participatory interests. Within the loan documents, some lenders seek detailed veto and control rights that amount to participation in routine business matters.

Debt or Equity?

Whether the mezzanine financing is viewed as "debt" or "equity" has a profound impact on a variety of issues. Senior lenders, as well as borrowers, find useful legal ambiguity in these elements of mezzanine loans. The equity characteristics – such as kickers – expose the mezzanine lender to challenges from the senior lender and the mezzanine borrower. They may argue that the mezzanine lender is in fact equitably subordinated to competing lenders, or is not in fact a lender. This may create defenses to foreclosure and may also limit the mezzanine lender's rights if a bankruptcy petition does succeed. Challenges based on the claim that the mezzanine debt is in fact equity, or that the mezzanine lender is an insider of the borrower by virtue of the appointment of the independent director and other controls discussed above, are starting to surface. Thus, the techniques used to control bankruptcy risk may in fact increase the risk of loss to the mezzanine lender in an eventual enforcement action.

It has become increasingly common for mezzanine lenders to require that the principals of the senior borrower form a new entity to act as the mezzanine borrower. This mezzanine borrower entity generally is structured as a so-called "bankruptcy remote entity," that is separate from the borrowing entity that obtains the first mortgage loan. The bankruptcy of the senior borrower will thus not have any impact on the separate structure of the mezzanine borrower.



Pay As You Go

In recent years, developers and lenders have created a new means of funding development: land banks. In a land bank transaction, a developer locates a parcel of undeveloped real estate that it wishes ultimately to acquire in its developed state. In contrast to mortgage financing, in which large sums are borrowed up-front, land banks offer developers a sort of pay-as-you go process. The land bank, which is typically an investment bank or other financier unrelated to the developer, acquires the property. (As regulated entities, commercial banks generally are prohibited from engaging in such transactions.) At the same time, the developer enters into an agreement to acquire the building lots from the land banker, on a periodic basis, after the lots are improved. Land banks are most prevalent in areas such as the Sunbelt.

The land banker funds the costs associated with the development of the project's infrastructure. Sometimes, the land banker retains the developer to shepherd the land through the government approval process and to construct the infrastructure. Typically the developer is paid a guaranteed maximum price plus a fee. The developer then buys the improved lots from the land banker, and often obtains financing for the purchase of the improved lots from a conventional lender. The purchase price is a fixed amount per lot, frequently based on a predetermined formula designed to result in the land banker achieving a certain internal rate of return on its total investment.

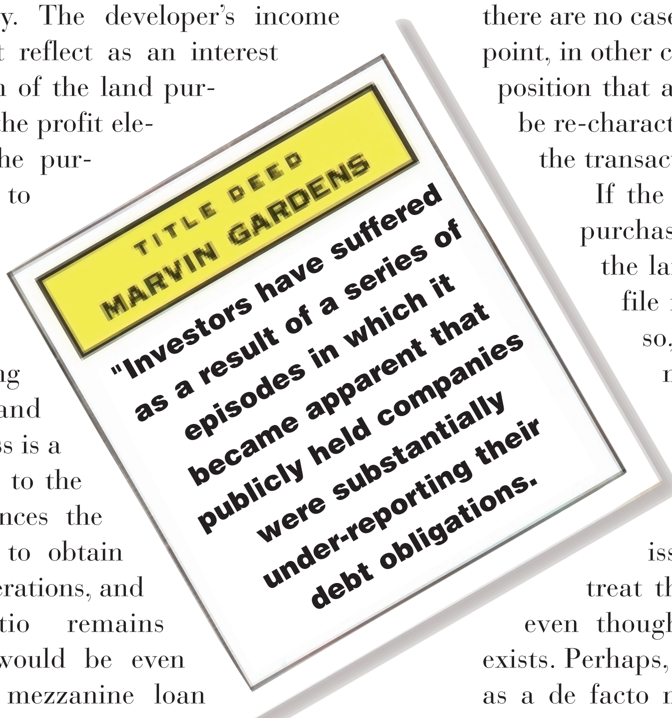
Under this structure, the developer's acquisition of the property is deferred until after the property is developed and improved. And since the developer typically has the option (rather than the obligation) to purchase the lots, the developer is subject to less risk than in a conventional mortgage or mezzanine financing. The developer does not make any payments until and unless she purchases the lots. And if the developer decides not to purchase, typically she merely forfeits the deposit or down payment. One of the reasons that land bank contracts typically do not provide for their specific performance in the event of a developer's default is that the developer would face a greater risk that the transaction will not be viewed as a sale, and thus would be required to reflect the obligation to purchase the lots on its balance sheet.

Developers pay a price for such flexibility, however. Land bank transactions typically result in higher costs to the developer than does mezzanine financing. And due to the risks involved and the limited number of land bankers in the market, the use of land banks is typically reserved for those instances where the developer is able to locate for purchase property which is priced under the market. Often times the property involved is distressed property sold at a dramatic discount.

Costs and Benefits

Compared with mortgages and mezzanine loans, the land bank structure results in the greatest leveraging of the land purchase price by the developer. The only cash payment by the developer at the outset of the transaction is the down payment or deposit. Periodic interest payments are not due during the development process. As the developer purchases and closes on lots, the purchase price includes a portion allocable to the land purchase price and the balance allocable to the built-in "interest." Although the built-in "interest" in a land bank results in a higher price for the lots, the developer has less risk because she defers the payment until she is more likely to need the land for construction of a home for resale. The built-in "interest" rate tends to be significantly higher than in the conventional mortgage situation, but is in a similar range to the rate charged by mezzanine lenders.

When it comes to balance sheets, the developer does not reflect the land as an asset because it merely has the contractual right to purchase it. Once the developer takes down a lot, the land is reflected as an asset. And the mortgage financing that the developer obtained for acquisition and construction of the individual lots becomes a liability. The developer's income statement does not reflect as an interest expense the portion of the land purchase price that is the profit element portion of the purchase price payable to the land banker.



Keeping the land and a corresponding liability off its books during the acquisition and development process is a tremendous benefit to the developer. It enhances the developer's ability to obtain financing for its operations, and loan-to-value ratio remains stronger than it would be even compared to the mezzanine loan structure. This arrangement is particularly useful for public developers, as their earnings per share are not diluted when the land is not producing income. At least one publicly traded builder, Lennar Corp., has established an affiliate that acquires the land and owns it through the development process until the public builder is ready to use the land for construction and resale to its customers.

There are pitfalls to this approach. The land bank must be carefully structured to ensure that the deal is treated as a sale between the land banker and developer, and not re-characterized as a loan. If that happens, the developer loses the benefits of "off balance sheet" financing because it would have to reflect a large liability on the balance sheet.

If properly structured, the land banker should be respected as the owner of the property for income tax purposes, until the closing on the sale of the relevant portions of the property to the developer. As such, the land banker recognizes ordinary income from the sale of the lots as the closings on the lots occur. No portion of the purchase price is allocable to interest, with respect to either the land banker or the developer.

However, there may be a risk that the Internal Revenue Service will attack the land bank as merely a financing device rather than a true "sale." Although there are no cases, regulations or other interpretations on point, in other contexts, the courts have upheld the IRS's position that a transaction structured as a sale should be re-characterized to reflect the underlying nature of the transaction.

If the developer defaults on its obligation to purchase all or a portion of the property from the land banker, the developer might seek to file for bankruptcy protection. When doing so, it might assert that the transaction was merely a financing device and request that the court treat the property as an asset of the bankruptcy estate of the developer. If the court were to grant relief to the developer, an interesting issue would be whether the court would treat the land banker as a secured creditor – even though no mortgage or security agreement exists. Perhaps, the court would recharacterize the deed as a de facto mortgage. This is all speculative, since there have been no reported decisions supporting this approach.

Quite apart from legal challenges, there is a larger existential question surrounding the growth of mezzanine loans, land banks, and other off-balance-sheet financing techniques. Investors have suffered as a result of a series of episodes in which it became apparent that publicly held companies were substantially under-reporting their debt obligations. As a result, the entire financial community is now shining a spotlight on innovative financing techniques. And as investors and lenders demand simplicity and clarity in balance sheets, borrowers may find that the benefits of off-balance sheet financing may no longer outweigh its costs.

JEANNE A. CALDERON *is clinical associate professor of business law at NYU Stern.*

The Hot Seat:

Corporate Directors in the New Era of Accountability

By **Patricia Barron**

Serving on a company board used to be a high-paying perk-laden privilege. But in the current crisis atmosphere surrounding corporate governance, the scrutiny of directors has intensified. The glare, and the new demands being made on directors, may make those cushy positions somewhat less comfortable.

Corporate governance is a buzzword on the lips of commentators, investors, analysts, and government officials. In light of the failures of publicly held companies such as Enron and Global Crossing, and the uncovering of executive shenanigans at Tyco and Adelphia Communications, people are rightly questioning how rogue or unsupervised executives ran their companies into the ground. After all, the boards of directors – groups of well-compensated, well-regarded experts and business leaders themselves – were supposed to exercise oversight over executives' activities, ratify business decisions, and generally represent the interests of the true owners of the company: shareholders.

The reaction to the breakdown in corporate governance at some of America's largest firms is now playing out. Civil and criminal penalties await some now-disgraced executives, and lawsuits are piling up against boards. Meanwhile, groups like the New York Stock Exchange (NYSE), the National Association of Securities Dealers (NASD), the Securities and Exchange Commission (SEC), and several other groups and individuals are putting forth recommendations to set new standards for good corporate governance.

These recommendations focus primarily on mechanics and process. At issue are topics such as board independence, the leadership of the board, audit committees, and shareholder approval of equity-based pay plans. Improving performance in these areas can be an important component of restoring the shattered trust of many investors. But an examination and evaluation of some of the proposals on the table shows that there is more to good corporate governance than simply rules and standards.

Declaration of Independence

The independence of directors – individually and collectively – from the company and management is one of the fundamental pillars of good governance. Not only should directors be independent in fact – i.e. they should not work for a company or its affiliates – they should also avoid any situation that can damage the perception of their independence. Individual independence means being free of any ties to the company, especially financial ties. (Many directors held up by companies as "independent" actually perform consulting or legal work for the company.) But the definition of independence could also include the absence of other factors such as personal relationships that might cloud independent thought and action. For example, directors who run charities that receive large donations from companies and their executives, or who are related by marriage to an executive, or who are old college friends of the chief executive officer may not be truly independent.

Today, the expectation is that a majority of the board will be composed of outside, independent directors, and that not more than one or two insiders will serve on the board. Indeed, this stipulation was one of the components of the NYSE's recent proposals on corporate governance. Within the board, there are three key committees that are expected to be composed solely of outside directors: the audit, compensation, and governance committees.

Another characteristic of board independence is that committees and the full board should be free to hire outside experts to support their deliberations. In addition, there have been calls for directors to meet in executive session – i.e. without any member of management present – at each meeting. The impetus behind all the proposals to have truly independent boards is to structurally shift power away from management and to the board, to ensure that the board is supervising management, and not the other way around.

One way to ensure separation, some critics argue, is to separate the two positions of chief executive officer and chairman of the board. (At many companies, the same person serves both functions.) Having a non-executive chairman on the board is more along the lines of the European governance structure. Doing so would allow someone who is not a member of management to lead the board. Another possibility would be to nominate a lead director who plays some of the role of the chairman, especially in regard to setting the board agenda, chairing executive sessions, and possibly stepping into the breach in time of crisis.

The Audit Committee

The spotlight on the audit committee is hardly surprising given the spectacular demises through bankruptcy or seriously damaged corporate and personal reputations that have resulted from the "engineering" of income statements and balance sheets, and questionable financial arrangement with senior executives. But the issues that critics now want audit committees to focus on go beyond technical compliance.

The first issue is "transparency," the ability to understand readily the nature and health of the business from the financial statements and accompanying notes and discussion. Secondly, there are the issues of the management of risk and credibility. The greatest concerns tend to focus on aggressive revenue recognition practices and off-balance sheet items that may mask an underlying financial weakness.

The recommendations for audit committees primarily concern the selection and management of the outside audit firm. The NYSE, for example, has proposed that the audit committee have the sole authority to select the outside auditor. Some more moderate proposals call for the chief financial officer to remain involved, while other positions favor a full partnership between the committee and management. There have also been calls for the audit committee to meet with the auditor quarterly in executive session.

As with the board, the issue of auditor independence from management is front and center, along with the elimination of any potential conflicts of interest. To that end, many critics – including former Securities and Exchange Commission Chairman Arthur Levitt – have called for auditing firms to be barred from providing consulting services to the companies that they audit. Others have called for prohibiting accounting firms from undertaking systems development contracts. In addition, the practice of auditing firms accepting internal auditing roles at firms for whom they conduct external audits has also been appropriately called into question. Other measures under discussion are designed to ensure that the auditing firm cannot become too close to management by requiring a mandatory rotation of the audit responsibility among firms after a defined period, or by having a formally established external body review and monitor the work of auditors.

The Compensation Committee

Executive pay plans, especially the use of stock grants and options, are thought to be one of the root causes of short-term myopia and financial legerdemain. To bring the use of equity-based compensation under control, the NYSE has proposed that shareholders approve equity-based compensation plans, and to limit insider stock sales and improve the speed of reporting of those sales. Others have called for companies to treat such compensation as an expense on their balance sheets. Linked with this, and also to the view that management frequently ignores shareholder proposals, is a recommendation that brokers may not vote their customers' shares in a bloc unless they have each customer's explicit permission.

"The impetus behind all the proposals to have truly independent boards is to structurally shift power away from management and to the board, to ensure that the board is supervising management, and not the other way around."

Of course, most of these recommendations are already recognized as the hallmarks of at least the skeletal framework of good governance, and are practiced by many boards. Many large and not-so-large companies have implemented these practices and live them. What is missing from much of the current dialogue is the flesh on the bones of that skeleton that truly makes boards strong advocates for the shareholder.

Flesh and Bones

At the heart of good governance are the character and competence of the directors, the way the directors work as a board, and the board's partnership with management. Openness and trust among the board and with management provide the underpinning. Most boards already know that they, not management, have the power and that they can and should exercise it as required to ensure that shareholders receive a good return on their investment. And most directors realize that effective governance is not about structure and process, but about character, courage, and competence – qualities that rules and regulations cannot legislate.

The question then becomes how directors can and should fulfill their responsibilities as fiduciaries for the shareholders. Each director has to accept ownership for her knowledge of the business, although not without management's ongoing assistance. Effective directing requires that each director understand the key drivers of value in the business, along with the company's competitive position and the areas of significant risk. Armed with that understanding, directors are equipped to provide the constructive challenge that will fortify the strategy and help with the oversight of its implementation.

Each director must have an untarnished reputation for

unassailable integrity, along with an area of competence that can help the board and management in decision-making. The courage to resist "group-think," to ask tough questions, to take a lone position, and to require outside experts and advisors to the board, as needed, is also a prerequisite. And yes, all directors should be squeaky clean, in fact and in perception, when it comes to their independence.

Selecting the leadership of the company is where integrity and trust begins. The chairman of the board must set the tone with clearly stated expectations for uncompromising integrity. The chairman has to "walk the talk" and must be forceful in communications to the organization. Management must have in place a comprehensive set of policies and programs that reach every employee to reinforce the requirement for ethical behavior. And those policies and programs, and the results, should be shared with the board at least annually.

"What is missing from much of the current dialogue is the flesh on the bones of that skeleton that truly makes boards strong advocates for the shareholder."

Remarkably, in the discussions of corporate governance since the Enron and Global Crossing implosions, while much has been said about the use of stock grants and options in the compensation of executives, there has been relatively little said about the compensation committee's role in providing appropriate rewards and incentives for performance. The critical task is to ensure that the compensation of senior executives is firmly linked to the key deliverables for successful implementation of the strategy, to the company's competitive position, and to the sustained growth of shareholder value. Stock grants and options may well be a key component of the compensation plan and certainly link management to shareholder objectives. (This stock link to shareholder objectives is also essential for the directors.)

Every member of the board, not just the audit committee, should know the major accounting practices of the company and ensure that the positions being taken adequately reflect the nature of the business and its inherent risks. The board has to be unrelenting in ensuring that the management is focused on the quality of the earnings in all its work, undiminished by its accounting practices. Technical adherence and accuracy may well not be the total equation. With the audit committee taking the lead, the board and the outside auditors have to ensure that the financial reporting for the outside world is clear and accurately represents the performance of the company in a way that can be easily understood, but without revealing too much to the competition. And it must recognize that more complex businesses might require that the users of the reports may need more than a passing knowledge of the areas important to the success of the company.

Crisis management must also be on the board agenda. Internal and external risks that threaten the corporation have to be anticipated. Despite all prevention, a crisis can still occur without warning. So plans for dealing with crises of different kinds have to be laid out. The health of the enterprise, its employees, and its community is paramount. The board role is to ensure that management has adequate plans in place.

A strong board will be composed of truly independent outsiders, with one or, at the most, two insiders. It will work in a constructive partnership with management, but will be decisive if management fails in any of its commitments. Its directors will be compensated primarily in stock and with the addition of their individual stock purchases, will be linked, along with management, to all shareholder objectives. The board will not approve the application of the firm's resources to financial arrangements for senior executives that are clearly in the executives' interest rather than that of the shareholders. Finally, a strong board will conduct a periodic evaluation of its performance from the encompassing perspective of sustained enhancement of shareholder value.

So many boards already fulfill all of these responsibilities, and more. And the investing public and oversight institutions have to be wary of expecting that imposing corporate governance rules and regulations will be a panacea for preventing greed, unethical behavior, and criminal acts. Executives with those bents are a distinct minority, and they may well work their way around any prohibition. As we all know so well, behavior cannot be legislated, and an overreaction to the absence in those few of a moral compass lacking a true north would be misguided.

American boards have set the standards in corporate governance best practice and over the past two decades have continued to raise the bar. Without question, all directors have had forceful recent reminders of the nature of their roles and responsibilities and many boards, in response, have done more than a superficial assessment of how they are working. These reminders may well provide the impetus to have the boards who have yet to do so adopt those best practices. The challenge is to keep a watchful eye open for further substantive opportunities for raising the bar again.

PATRICIA BARRON *is clinical associate professor of information systems, entrepreneurship, and innovation at NYU Stern.*

Brand New: Wal-Mart's Foray Into Private Labels

Private labels have come a long way since the low-quality, low-priced, generic canned goods of the 1970s. Today, the world's largest retailer is taking on its biggest customers at their own game, developing an ever-increasing number of private-label goods. Who will emerge victorious from this clash of retail titans?

By **Tim Condon**

Like all successful companies, retailing giant Wal-Mart faces the dilemma of trying to find opportunities significant enough to sustain high growth rates. After all, the company is already the largest company in the United States with $183 billion in domestic sales in 2001. In recent years, however, the Arkansas-based retail behemoth has seen same-store sales growth settle in at 5 percent to 6 percent, faced stiffer retail competition, found fewer rural locations in which to open new stores, and reported mixed success in international markets. In response, Wal-Mart has aggressively embraced a newer strategy: private labeling.

Private labels are essentially brands that are owned or licensed by retailers and often manufactured by private label manufacturers. The push for private labels is a move typical of Wal-Mart founder Sam Walton, providing customers with more options at lower prices. But the gambit requires a delicate balancing act by Wal-Mart and the branded manufacturers that supply Wal-Mart, for the strategy pits these allies against one another. To aggravate matters, Wal-Mart has extended its private labels beyond conventional store brands like Sam's Choice cola. Indeed, its newer private labels are nearly indistinguishable from nationally branded competitors:

White Cloud toilet tissue and diapers, GE Small Appliances, and Ever Active batteries. These Wal-Mart private labels spend little on advertising and research but offer nearly the same quality as their branded competitors. Since they allow Wal-Mart to create and capture value that has traditionally gone to branded manufacturers, those manufacturers must now dream up new ways to create value for the consumer.

Wal-Mart: Past, Present, and Future

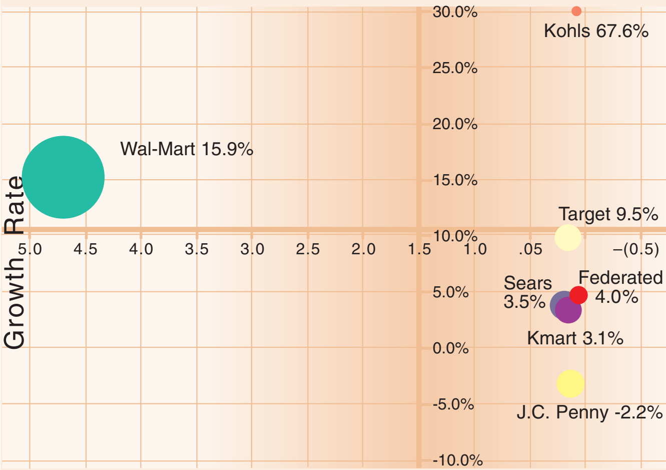
Since its founding in 1962 – the same year that Target and Kmart were founded – Sam Walton's brainchild has grown to dominate the discount shopping sector (**Chart 1**). Just 13 years after it started offering food, Wal-Mart is now America's largest grocery retailer with an 11 percent share. It has surpassed Toys "Я" Us to grab a 19 percent share and become the largest toy retailer. So powerful is the 3,244-store chain that the most prominent consumer packaged goods firm, Procter & Gamble (P&G), now tallies 15 percent of its sales – about $6 billion annually – in Wal-Mart's aisles. P&G, however, accounts for only 3 percent of Wal-Mart's sales. Most other branded manufacturers similarly rely on Wal-Mart.

As recently as 1989, Wal-Mart was second to Kmart

CHART 1:

Market Sector for Selected Retailers

(Growth rates based on 1999 & 2000 annual revenues)



Notes: Actual growth rates on chart. Size of bubbles based on 2000 revenues

in discount retail sales. However, Wal-Mart's lower-cost rural locations and its highly efficient distribution and inventory management system allowed it to achieve enormous economies of scale and purchasing power. These competitive advantages allowed Wal-Mart to pass cost savings to the consumer. Thus, Sam Walton was able to capture value by offering a variety of nationally branded products at the lowest prices in order to satisfy United States consumers' love affair with branded products.

Over time, Wal-Mart's managerial and technological innovations have diffused into the competitive marketplace. As a result, discount retail competitors have increasingly closed the pricing gap on similar products. In response, Wal-Mart is now leveraging its significant penetration – an estimated 60 percent of U.S. households shop at Wal-Mart – to make an aggressive push into private label products.

"Wal-Mart is now leveraging its significant penetration -- an estimated 60% of U.S. households shop at Wal-Mart -- to make an aggressive push into private label products."

Changing Tides in Branding War

Wal-Mart's push coincides with an increased willingness of consumers to choose among several different brands. As innovation has become less significant, particularly in low involvement purchase categories such as paper towels and baby wipes, formerly second-tier competitors have caught up to the innovators. In many instances, consumers have traded brand loyalty – buying Lysol, and only Lysol, again and again – for the concept of brand repertoire. Brand repertoire is the set of acceptable competing brands in a category for a given consumer – Lysol, Formula 409, or Clorox, for example. Often the final purchase decision is made from this set based on availability, price, or occasion.

More important, consumers' brand loyalties have started to move from product loyalty to destination loyalty. And the Wal-Mart brand commands intense loyalty among its target. It is not unusual for a Wal-Mart store to pull customers from 30 to 40 miles away. For much of America, visiting Wal-Mart has become a ritual, akin to attending church on Sundays. In 2001, consumers averaged 5.66 trips to Wal-Mart in a given four-week span, and 7.13 trips per four weeks in December, according to one store manager. This change in consumer mindset has given Wal-Mart more power over branded manufacturers. After all, any brand removed from Wal-Mart shelves faces severe consequences.

Wal-Mart's Private Label Strategy

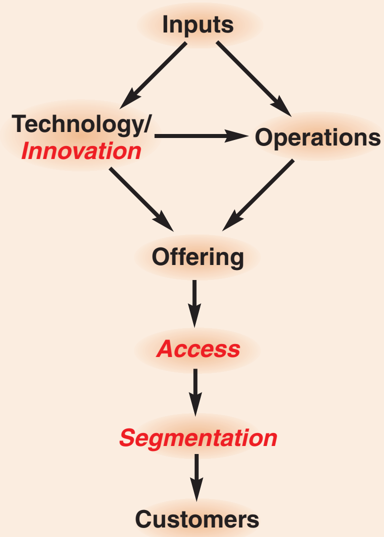
As the technology and assets needed to manufacture consumer products such as paper towels, chocolate chip cookies, and trash bags become more easily accessible, the advantages afforded by having superior inputs, superior technology, and superior operations tend to disappear. Value then shifts to those who provide either superior access or superior segmentation, or to those who can continually provide substantial innovation. Clearly, Wal-Mart's initial strategy has been to enter commodity-like categories and leverage its enormous access to consumers in order to create and capture value.

Thus, Wal-Mart works with non-branded manufacturers like Paragon Brands to create parity products at lower costs. Instead of plowing money into advertising or new product innovation, Wal-Mart uses low-cost additions such as flashy packaging and creative names to offer compelling alternatives.

As of the 2001 annual meeting, Wal-Mart offered 1,259 private label products – up 12 percent from the previous year. Wal-Mart's website indicates that that number is now greater than 2,000 and that the company is actively recruiting brand marketers. A recent walk through Wal-Mart stores indicates that Wal-Mart is taking several approaches to its private label push.

FIGURE 1:

Sources of Competitive Advantage



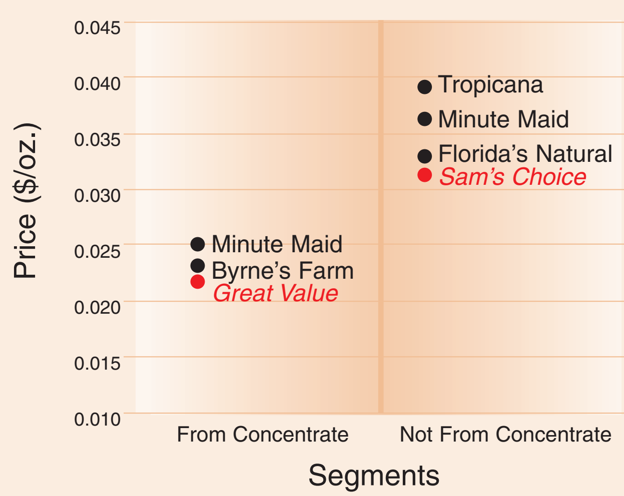
The majority of Wal-Mart's private label products are either value store brands or premium store brands. Value store brands, such as Great Value food and beverages and Equate pharmacy products nearly always represent the opening price point in their respective categories and communicate this value to the consumer through basic packaging and multiple category offerings. These brands often look like and sit near their nationally branded competitors in Wal-Mart stores.

Wal-Mart's premium store brand, Sam's Choice, also spans multiple food and beverage categories, but often competes with a higher quality product in a premium category or segment. Sam's Choice usually represents the opening price point of a premium segment of the category. The orange juice category analysis (**Chart 2**) demonstrates how Sam's Choice and Wal-Mart's value brands often dictate the range between value and premium segments. The presence of these private labels effectively caps the prices that branded alternatives can command in each segment. These brands target the price-conscious consumer who has low brand loyalty in specific categories.

Wal-Mart has also developed high quality private labels that look, feel, and act like nationally branded products. These premium packer brands are typically placed on the shelf with little to no advertising, identifying price/quality gaps not necessarily at the opening price point. These brands typically compete in categories where branded manufacturers use minimal innovation in an attempt to keep prices high. The most prominent example is the White Cloud brand of toilet tissue and diapers, a brand that P&G abandoned in the early 1990s and Wal-Mart licensed in 1999. It now sits on the shelf competing against P&G's Charmin and Pampers. Other examples are Wal-Mart's line of Ever Active batteries and its purchase of the GE Small Appliances name. None of these brands displays the Wal-Mart name and each is virtually unrecognizable as a private label. A recent in-store promotion for White Cloud

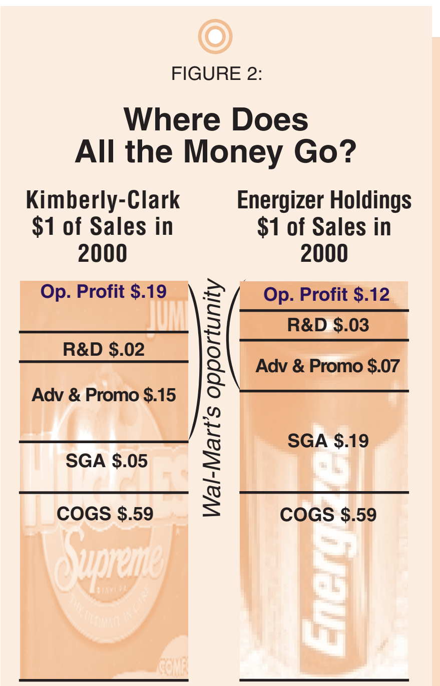
CHART 2:

Category Analysis: Orange Juice in Wal-Mart



Note: Wal-Mart brands italicized and in red demonstrates the full power of Wal-Mart's control over access to the consumer. Wal-Mart allowed consumers to touch, squeeze, and handle open rolls of Charmin, Cottonelle, and White Cloud toilet paper. This comparison brilliantly communicated to the target at the point of purchase decision that White Cloud is functionally equivalent to the category's top two brands. Such efforts, which cost Wal-Mart virtually nothing, effectively undermine the value proposition for brands such as Angel Soft, which are more expensive, but less advertised.

Therein lies the opportunity for Wal-Mart. As noted in **Figure 2**, a typical branded manufacturer achieves an operating profit of 11 to 19 cents on every sales dollar after spending between 10 and 17 cents of that dollar on advertising, promotion, and research and development. We can project from these figures that Wal-Mart has a cushion of 21 to 36 cents on the dollar, which it can share with the consumer in the form of lower prices.



Source: Company 10-k reports

Plainly, Wal-Mart's private labels are proving that consumers are willing to give up product brand loyalty to save money. The question now is how the various players will react to this new trend.

Wal-Mart's Next Moves

Since Wal-Mart represents between 15 percent to 50 percent of many major branded manufacturers sales, it is often able to coerce branded manufacturers into handing over detailed data on new production introductions up to a year before these products hit the shelves.

"Wal-Mart has also developed high quality private labels that look, feel, and act like nationally branded products."

This has allowed Wal-Mart to bring quickly to market private label imitations that are of similar quality and lower cost. However, Wal-Mart likely does not have the culture or the research and development facilities to become a true innovator across thousands of categories.

Indeed, Wal-Mart has little incentive to immediately undermine the top brands. Premium brands innovate to create the newest product offerings, and Wal-Mart needs to offer these new products in order to continue providing the consumer with a superior choice. Perhaps more important, premium brands at higher price points establish a reference point for consumers against which Wal-Mart brands are evaluated.

One solution may be for Wal-Mart to purchase or to take significant equity stakes in smaller, innovative branded manufacturers across a number of categories. These companies, such as Dial or Pfizer's Adams unit, would benefit from Wal-Mart's data on customers and competitors. In exchange, they would effectively become Wal-Mart private labels, relying on little to no advertising to enhance the value proposition for consumers.

In low involvement categories where innovation is minimal, however, Wal-Mart may act more aggressively. It can use its access to and special relationship with consumers to induce trial for its private brands at critical life change points such as the purchase of a new home or the birth of a child. Reaching consumers at these critical junctures often translates into greater brand loyalty, which results in significantly greater sales and profitability per customer.

The Branded Response

Branded manufacturers must find some way to minimize the impact of Wal-Mart's enormous control over access to the consumer. Since Wal-Mart's private label activities are already moving outside the store (mothers of newborns receive samples of White Cloud diapers in some hospitals), branded manufacturers have to move quickly to continue investing in new product innovations and new methods of reaching consumers.

One means of doing so may be for brand managers to borrow a page from Jack Welch's playbook. The former CEO of General Electric transformed the manufacturer by pushing its divisions to offer higher-margin, value-added services. Just so, brand managers may have to view their brands as potentially offering products and services to the target consumer. Arguably the most successful brand at this is Disney, whose consumer products range from clothing to action figures and are complemented by the firm's entertainment services.

By successfully offering consumers services outside retail stores, branded manufacturers may avoid their enormous reliance on Wal-Mart to sell products. Is the Tide brand limited to a laundry detergent or can it be extended to provide solutions for the millions of consumers who drag their dirty laundry to the laundromat every week? Can Lysol extend its brand to include a home maid service? Some branded manufacturers may leave manufacturing altogether, and instead focus on building and licensing their brands and designs as Martha Stewart does.

Since only some mega brands will be able to pull off a strategy that combines products and services, branded manufacturers will need to reallocate resources to their top brands and either eliminate or drastically change their smaller brands.

Who Will Win?

It is difficult not to believe that Wal-Mart has the upper hand. Wal-Mart may use its competitive advantages to dominate with private labels in the low involvement, low innovation categories. Similarly, it can use its influence over branded manufacturers to gain access to new product innovations and penetrate the market in higher involvement, higher innovation categories.

"Branded manufacturers must find some way to minimize the impact of Wal-Mart's enormous control over access to the consumer."

Collectively, however, branded manufacturers may have to look only at the penetration of private labels in the U.K. market to anticipate their fate. Private label shares in U.K. supermarkets approach 60%. Of course, U.K. consumers do not share the same obsession with individual expression, as manifested through the widespread use of brands. However, the increased growth of private labels in the U.S. – private labels now account for 20% unit volume in the three major retail channels – indicates that at some level individualism is no longer threatened by using private label paper towels instead of Brawny.

Of course, there are risks for Wal-Mart. The entire Wal-Mart brand may be threatened by a private label manufacturer's failure to maintain an acceptable quality, or worse, produce a defective product, as was the case with a batch of Ol' Roy dog food that made dogs ill. In addition, Wal-Mart's tactics have angered some branded manufacturers and have provoked claims of a monopoly stifling innovation. Most of these claims have been found to be baseless, but the recent bankruptcy filing by Kmart may prompt the Justice Department to take a closer look.

Regardless of the ultimate winner in the battle of the retail giants, there already has been at least one clear winner in this struggle to provide branded products at lower prices: the American consumer.

TIM CONDON *received his MBA from NYU Stern in May 2002, and now works in the advertising department of* The Washington Post. *This article was written under the supervision of Professors Marco Protano and John Czepiel.*

end paper

Copy Cats

By **Daniel Gross**

Napster, the Internet site where people swap digitally-encoded music, was among the most controversial creations of the New Economy. The file-sharing technology gave individuals the ability to copy a product that costs $15.99 – for free. The music industry screamed "piracy," and sued Napster. While Napster ultimately filed for bankruptcy in June 2002, other file-sharing sites are still functioning. If unchecked, many in the music business argue, they could destroy a cherished American industry.

Over the past half century, several new technological breakthroughs have allowed for the cheaper, and easier, copying of copyrighted entertainment. In each instance, incumbents complained about the destructive, potentially illegal, even immoral nature of the technology – but they ultimately survived.

In 1959, when Xerox introduced its 914 copier, companies suddenly had the ability to make quick, neat, cheap copies of printed material. The number of copies made in the U.S. rose from an estimated 20 million in the mid 1950s to 14 billion in 1996. Authors feared that people would no longer buy books. "Xerography is bringing a reign of terror into the world of publishing, because it means that every reader can become both author and publisher," the media critic Marshall McLuhan wrote in 1966.

Of course, that never panned out. Why? Just try copying an 800-page Stephen King book – it's not worth the time, it costs money, and it won't look nearly as good as the real thing. Indeed, 36 years after McLuhan's warning, people are still snapping up books. Last year, U.S. book sales totaled $6.37 billion, up from $4.66 billion in 1992.

Next came the VCR in the 1970s. With the ability of individuals to rent and play videotapes, many in Hollywood feared that first-run films would fade away. That didn't happen either. U.S. box office receipts have risen every year since 1991, when they stood at just $4.8 billion, to a record $8.4 billion last year. Why? The movie-going experience is qualitatively different: the large screen, the smell of popcorn, the social aspect. Besides, watching the latest installation of the Star Wars saga 10 months after its big-screen debut on a 19-inch television screen just doesn't cut it.

Which brings us back to the music business, where the new technology may indeed prove truly threatening. Swapping a digital file and burning a CD is less time-consuming than copying a 600-page book. And if you've got the right equipment, a song obtained for free via the Internet delivers a sound quality similar to that of a store-bought CD. Sales of CDs and tapes have declined in recent years.

All of which means that the record companies must adapt to the new technology rather than try to snuff it out via litigation. (Even a thousand lawsuits won't put file-sharing software into a vault.) Some bands have found that making a single song available on the Internet for free can help boost sales. And, in fact, the Internet will doubtlessly prove to be a lower-cost means of marketing and distribution. The Rolling Stones may not like it, but for that unknown garage band, file-sharing may be the ticket to stardom.

DANIEL GROSS *is editor of* STERN*business.*

NEW YORK UNIVERSITY
NYU STERN
LEONARD N. STERN SCHOOL OF BUSINESS

Office of Public Affairs
44 West Fourth Street, Suite 10-83
New York, NY 10012