The McGraw·Hill Companies

APRIL 27, 2009 | BUSINESSWEEK.COM

BusinessWeek

WHAT GOOD ARE Economists ANYWAY?

TECH LOOKS POISED TO LEAD A RECOVERY

CREATIVE DESTRUCTION AT PEPSI

BIOFUELS: WHY BIG OIL MAY BE THE BIG WINNER

HOW DO YOU EFFICIENTLY DELIVER FEED TO A FARMER WHO KNOWS ALL HIS ANIMALS BY NAME?

Conventional wisdom would tell you small farms can't operate as efficiently as large ones. But in Poland, Cargill is going beyond the conventional to help small livestock farmers compete. Large farms in Europe have traditionally had the advantage of feed delivery services while small producers must travel to dealers to buy the few bags they require. So Cargill worked with feed dealers to bring the store to the farm, on trucks that efficiently deliver small feed orders on a regular schedule. The dealers get new customers and farmers get service they never thought possible. This is how Cargill works with customers.

collaborate > create > succeed™

food, agriculture & risk management solutions

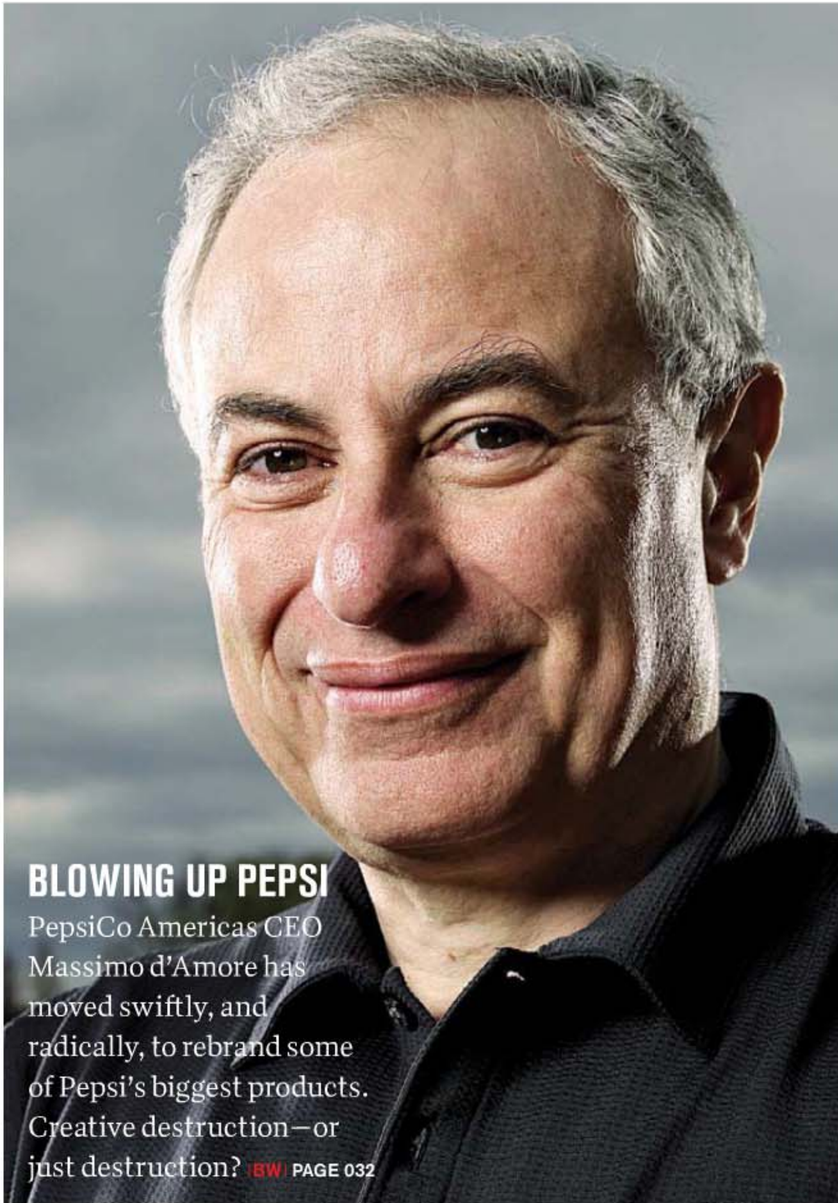
POWER MEETS PLAY

Whether you're hauling hardware or hockey gear, the Ridgeline's powerful 250-horsepower VTEC® engine and innovative lockable In-Bed Trunk® are up for practically any challenge. **THE RIDGELINE**

HONDA IS THE OFFICIAL VEHICLE OF THE NHL®

honda.com 1-800-33-Honda. RTL model shown. ©2008 American Honda Motor Co., Inc. NHL and the NHL Shield are registered trademarks of the National Hockey League. ©NHL 2008. All Rights Reserved.

BusinessWeek



BLOWING UP PEPSI
PepsiCo Americas CEO Massimo d'Amore has moved swiftly, and radically, to rebrand some of Pepsi's biggest products. Creative destruction—or just destruction? BW PAGE 032

(ABOVE) DAVID YELLEN/REDUX

004 THE BUSINESS WEEK

004 **NEWS YOU NEED TO KNOW**

008 **BUSINESS OUTLOOK** Jim Cooper sees signs that consumer demand may be stabilizing

009 **NUMBERS** Few small companies are escaping this bear

010 **BTW** Piracy insurance; startup founders living together to save cash; pharma flees the Web

012 **FACETIME** Maria Bartiromo talks to Obama economic adviser Larry Summers

014 NEWS

014 **TECH** Why it could lead a recovery

016 **IBM** Its new business helps companies put their data to work

019 **BANKS** Strong first-quarter results may not be sustainable

021 **STUDENT LOANS** A sweeping overhaul could hurt lenders

022 **PENSION FUNDS** CalPERS and others are wading into toxic assets

024 **CONSUMERS** Wooing shoppers worried about their jobs

026 IN DEPTH

026 **WHO NEEDS ECONOMISTS?** Why they failed to predict the global economic crisis

030 **THREE ECONOMIC IDEAS TO WATCH**

032 **BLOWING UP PEPSI**

038 **BIOFUEL BUBBLE** Startups are sprouting everywhere, but most will fail, and Big Oil may steal the show

044 WHAT'S NEXT

044 **INFO TECH** Investing during slumps has worked for Intel in the past, but this time shareholders aren't so sure

046 **STRATEGIES** GE Capital's win-win partnership with Hyundai has become a model for GE

048 **AUTOS** Washington's new fuel rules could encourage carmakers to produce bigger vehicles

050 **AUTOS** Trouble even in Toyota City

058 BW 50 **FINANCE** ICE is the leading exchange in the new market for credit default swaps

061 **FINANCE** Santander's grand plan to break into U.S. retail banking

063 PERSONAL BUSINESS

063 **MONEY REPORT** Copper's climb; movie theaters thrive; MGM Mirage

064 **HOW TO PLAY IT** The safest ways to bet on biofuels

065 **INVESTING** Using the real estate bust to become a landlord

066 **INVESTING** Your losses could pay off at tax time

068 **INSIDE WALL STREET**

069 OPINION

069 **BOOKS** Beattie: *False Economy*

071 **TECH & YOU** Steve Wildstrom on making your screen more like a desk

072 **MEDIA CENTRIC** Jon Fine says the ad collapse is even worse locally

073 **FEEDBACK** Readers see themselves in our tales of agita at the office

076 **THE WELCHWAY** Jack and Suzy Welch advise a new, jobless MBA

073 **CORRECTIONS & CLARIFICATIONS**

074 **COMPANY INDEX**

THE BUSINESS WEEK

EDITED BY HARRY MAURER & CRISTINA LINDBLAD

'SIGNS OF PROGRESS' VS. SIGNS OF SLUMP

President Barack Obama vowed to rebuild the U.S. economy on a foundation of rock. Good thing, too, because the structure is still shaky, according to a slew of economic reports. Obama's Apr. 14 speech at Georgetown University called for five pillars on which to base a recovery: Wall Street regulation, education, renewable energy, containment of health-care costs, and long-term deficit reduction. While Obama said he sees "signs of economic progress," the recession shows plenty of staying power. Demand is so soft that companies are being forced to cut prices almost across the board. In March, producer prices dropped 1.2% and consumer prices fell 0.1%, posting their first annual decline since 1955. What's more, retail sales in March sank 1.1%, and industrial production slid 1.5%. The **Fed** added a smidge of cheer: Its Beige Book report on regional conditions on Apr. 15 said that 5 of its 12 banks saw "moderation in the pace of decline."

| BW | PAGE 008 "Consumer Spending Steadies—For Now" and PAGE 012 "Larry Summers on Whether Those Rays of Economic Daylight Are Real"

BAILOUT MANEUVERS

When Washington unveiled plans to subject big banks to "stress tests" to see how they would fare if the economy got even worse, regulators indicated the results would stay secret to avoid spooking investors and setting off bank runs. Now, Uncle Sam is thinking again, on the theory that keeping investors in the dark could torpedo confidence if word leaked out about which banks got bad grades, said *The New York Times* on Apr. 15. Meantime, *The Wall Street Journal* reported that **Treasury** may name **Herb Allison,** the former **TIAA-CREF** chief brought in to run **Fannie Mae** last fall, to head the financial stabilization office. That would leave another high-profile vacancy at the government-run housing giants, which have seen a rush for the exits in recent months.

| BW | PAGE 019 "Banks Aren't in the Clear Yet"

-0.4%

Consumer prices in March fell year-on-year for the first time since 1955

Data: Labor Dept.

At Georgetown, Obama energetically defended his economic moves

(OBAMA) GERALD HERBERT/AP PHOTO

Goldman's Blankfein plans to pay back $10 billion to the feds

EVAN VUCCI AP PHOTO

GOLDMAN: GOLDEN?
Goldman Sachs CEO Lloyd Blankfein is trying awfully hard to make his firm look like the last man standing amid the wreckage. On Apr. 14, Goldman posted a better-than-expected first-quarter profit of $1.8 billion, and the next day it raised $5 billion in a stock offering. It aims to use the proceeds to pay back the $10 billion in bailout money it got last fall. But critics didn't take long to find blemishes in Goldman's carefully crafted image. For starters, much of the profit came from an outsize gain in bond and commodities trading, which many view as unsustainable. The results also excluded a nearly $1 billion loss in December, which Goldman was able to obscure by shifting to a more traditional quarterly reporting system that runs from January to March. Others say that if Goldman is doing so well, why not return the $13 billion in bailout money it got through **AIG?**

"Goldman, Give It All Back"
businessweek.com/magazine

WEIGHING GM'S FATE
It's beginning to look a lot like bankruptcy for **General Motors**—largely because of its bondholders. Thousands of them collectively hold $28 billion in debt, and they're in for an ugly haircut. GM proposed that bondholders accept two-thirds of the value of the debt in stock. The Treasury Dept. wants them to get even less in order to clean up GM's balance sheet and allow it to qualify for more government loans. The problem is getting roughly 90% of those noteholders to sign off on the

Find things you didn't know were lost, like productivity.

Nextel Direct Connect® with GPS tracking.
Only on the Now Network.™

1-800-NEXTEL-9 sprint.com/nextel

Certain features available for corporate-liable accounts only. Features may require additional subscriptions or fees. GPS: Requires GPS and Java-enabled phone. Environment may limit GPS location info. Coverage not available everywhere. Nextel National Network reaches over 274 million people. Offers not available in all markets/retail locations or for all phones/networks. Other restrictions apply. See store or sprint.com for details. Screen image simulated. ©2009 Sprint. Sprint and the logo are trademarks of Sprint. Research In Motion, the RIM logo, BlackBerry® the BlackBerry® logo and SureType® are registered with the U.S. Patent and Trademark Office and may be pending or registered in other countries—these and other marks of Research In Motion Limited are used with permission. Other marks are the property of their respective owners.

The People's Bank of China slowed its bond purchases early this year

deal. If they won't, Chapter 11 may be the company's only option. *The New York Times* said on Apr. 13 that Treasury told GM to prepare for a filing by June 1.

WELLPOINT'S Rx

Consumers aren't the only ones afflicted by rising health-care costs: Insurers feel the pain, too. So one of them, Wellpoint, decided to unlock shareholder value by bailing on the pharmacy benefits management (PBM) business. On Apr. 13, WellPoint agreed to sell its PBM unit, which manages drug costs for insurers and employers, to **Express Scripts** for $4.7 billion. That vaults Express Scripts over **CVS Caremark** into the No. 2 spot in the business, behind **Medco Health Solutions.**

BEIJING'S BOND APPETITE

Is China turning cold to U.S. Treasuries? Despite Beijing's recent grumbling about the dollar losing its value, the answer is: probably not. In the first quarter, China topped up its world-leading $1.95 trillion hoard of foreign reserves by a measly $7.7 billion, compared with a $153.9 billion increase in the same period last year. And in the first two months, China actually unloaded some Treasuries and other bonds. But the main reason appears to be the dramatic drop in exports and slower foreign direct investment. In March, purchases revved up again as the trade surplus jumped to $18.6 billion from $4.8 billion in February.

VANISHING ADS

Global advertising spending is poised to slump 6.9% this year—the most in a generation, according to an Apr. 14 forecast from **ZenithOptimedia,** a unit of giant **Publicis**. In the U.S., spending across major media will fall an even more precipitous 8.7%, reflecting the hit corporate profits are absorbing in the recession. The one bright spot will be digital: Online spending is expected to increase 8.6% worldwide. But that's still a far cry from the 21% growth of online ads in 2008.

ZenithOptimedia

A PENSION FRAUD PLEA

New York Attorney General Andrew Cuomo has landed a guilty plea in the state pension fund scandal. That could boost pressure on others involved, including some big-name investment firms. On Apr. 14, Dallas hedge fund manager **Barrett Wissman** pleaded guilty to state securities fraud charges and will cooperate with the probe by Cuomo and the **SEC.** Wissman admitted illegally accepting millions of dollars from investment firms, among them **Carlyle Group,** in exchange for using his political contacts to secure investments from state pension funds. Carlyle has denied wrongdoing. In March, Cuomo and the SEC brought charges against two aides to the state's former comptroller, **Alan Hevesi.** The two, **Hank Morris** and **David Loglisci,** have maintained their innocence.

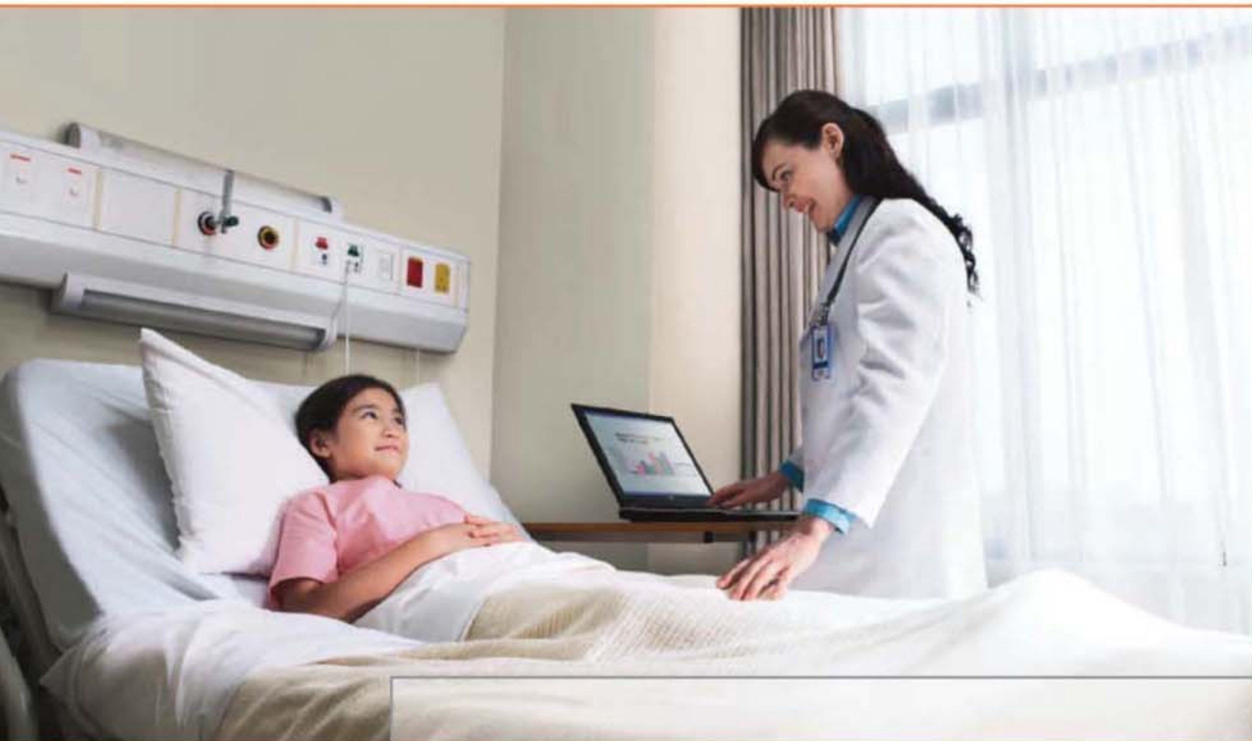
SELLING OFF SKYPE

EBay wants to offload its Web-phone unit, Skype, but apparently no one's coming up with the right number. So on Apr. 14 the online auction house said it will spin out Skype in an IPO scheduled for the first half of 2010. Analysts think the IPO could take place as early as January and fetch $3 billion to $5 billion. EBay **CEO John Donahoe,** admitting that Skype hasn't mixed well with eBay's other operations, called it "a great stand-alone business." A sale could still happen. On Apr. 11, *The New York Times* reported that Skype co-founders **Janus Friis** and **Niklas Zennstrom** are talking with private equity firms about funding to buy their baby back.

"EBay Unveils Skype IPO Plans"
businessweek.com/magazine

EBay's Donahoe said he'll spin off Skype as an IPO sometime in the first half of 2010

(FROM TOP) JASON LEE/REUTERS; SAUL LOEB/AFP/GETTY IMAGES



NEC's advanced communications solutions put you in charge when it matters most.

Finally, a communications solution capable of providing up-to-date patient information whenever and wherever it is needed.

NEC's Unified Communications provide a dynamic and realistic connection among individuals, devices, applications, and data. Based on a combination of innovative technologies and advanced solutions, its mobility and flexibility enables people to experience greater efficiency and productivity – in any industry.

Integrated IT and networking solutions like these have made NEC a world leader, and your reliable business partner.

Regardless of the communications solution your business demands, you are assured of one thing. NEC empowers you through innovation.

www.necus.com/uc

IT SERVICES AND SOFTWARE NETWORKING AND COMPUTING SEMICONDUCTORS IMAGING AND DISPLAYS

©NEC Corporation 2008.
NEC and the NEC logo are registered trademarks of NEC Corporation.
Empowered by Innovation is a trademark of NEC Corporation.

Empowered by Innovation NEC

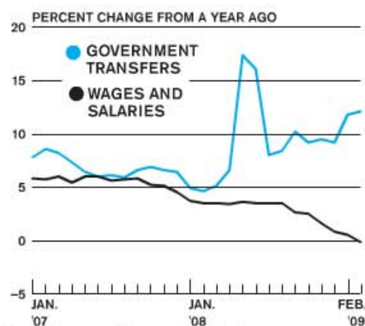
CONSUMER SPENDING STEADIES—FOR NOW

Government support has helped households offset the weak labor market. The key question: Can they hang on long enough for business to come back?

As consumers go, so goes the economy. Over the past couple of decades, their spending patterns have accounted for more than 70% of the ups and downs in yearly economic growth. So it's natural to assume that as the job market goes, so go consumers. However, that's not always true, especially right now. Even amid massive job losses in the first quarter, household demand shows every sign of stabilizing. After dropping at a 4.1% annual rate in the second half of last year, real consumer spending appears to have grown about 1% last quarter. Weak retail sales in March, which may have been depressed by this year's late Easter on Apr. 12, followed solid gains in January and February, especially excluding autos.

The key question is: Will this stabilization continue? If it does, businesses will quickly eliminate their excess inventories and feel less need to slash output and payrolls. If it doesn't, companies will keep cutting back, prolonging the recession.

The signs are hopeful. Right now, the labor markets, which account for 60% of household earnings, are not the only influence on consumer spending. Income from wages and salaries is down 0.2% from a year ago, after yearly growth of 3.5% this time last year and 5.7% two years ago. However, the other 40% of income is up about 9% from last year, and that pace is set to pick up through midyear.



Data: Bureau of Economic Analysis, IHS Global Insight

Much of that strength reflects government support from so-called automatic stabilizers, such as unemployment insurance, which ramp up payments to households as times get harder. Total government payouts to consumers are up 12% from a year ago, including an extra-large 5.8% annual cost-of-living adjustment for Social Security recipients, reflecting last year's runup in gas prices. Also, tax refunds through March are up nearly 30% from last year. Over the past six months, public support has more than offset lost labor income: Wage-and-salary income has fallen by $89 billion, but government transfers have increased by $127 billion (chart).

Washington's $787 billion stimulus package offers further substantial income support starting this month. The Making Work Pay tax credit, mostly paid out via lower withholding, will boost take-home pay for lower and middle income families. Another feature of the package is a one-time $250 payment in May to all Social Security recipients. Together these two programs will add about four percentage points to the annualized growth rate of aftertax income in the second quarter.

In addition to government help, falling gas prices have lifted buying power, while the combination of sharply lower mortgage rates and Washington's housing program are encouraging refinancing, which is putting more money in people's pockets. Spending also turns on consumer confidence, which may have found a floor thanks to hopeful signs from Wall Street and a few recent economic reports.

Economists are quick to note that much of the income support consumers are now getting will have faded by the second half. The withholding boost and Social Security COLA will continue, but the effect on income from the one-time Social Security payment will reverse in the third quarter. Also, inflation will pick up, as the gasoline effect plays out, creating a drag on buying power. Plus, households are still saving more of their incomes as they deal with lost wealth.

All this means job markets need to stabilize in the second half. However, stanching the flow of job losses depends on the success of government programs in shoring up both consumer spending and business expectations. In March the Business Roundtable's CEO Economic Outlook Index fell to the lowest level since the survey began in 2002. The CEOs said improved consumer confidence and demand are crucial to jump-starting the economy.

Right now a growing number of economists believe, because of Washington's efforts, the worst of the recession may soon be over. The real trick, though, will be to convince business executives. |BW|

BRAD TRENT; CHART BY LAUREL DAUNIS ALLEN

FEW SMALL COMPANIES ARE ESCAPING THIS BEAR

By Tara Kalwarski/Charts by Laurel Daunis-Allen

The recession has doled out equal-opportunity punishment, hitting small companies, such as those in the Russell 2000 index, as hard as the larger ones in the Standard & Poor's 500. But some small outfits have defied the bear with big revenue gains.

–3.9%

Change in employment in March over one year earlier at nonfarm private-sector businesses with fewer than 500 on the payroll. Those with 500 or more saw a 4.7% drop.

Data: ADP

A Time for Growth: Some small companies have managed to expand rapidly in the recession.

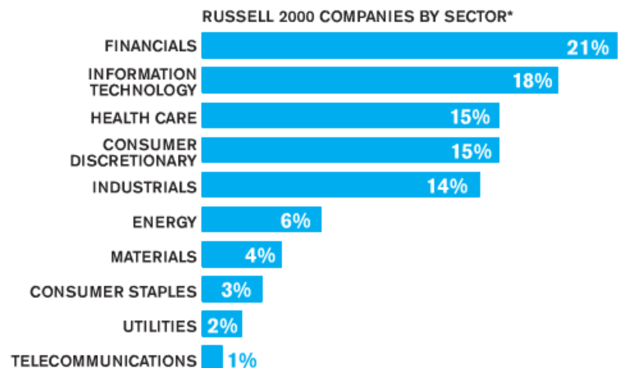
SMALL COMPANY REVENUE WINNERS*

COMPANY	SECTOR	TOTAL REVENUE, MILLIONS OF DOLLARS 2007	2008
CELL GENESYS	HEALTH CARE	$1.4	$94.6
BPZ RESOURCES	ENERGY	$2.4	$63.0
ENER1	INDUSTRIALS	$0.3	$6.9
ALICO	CONSUMER STAPLES	$5.2	$114.0
U.S. GEOTHERMAL	UTILITIES	$0.1	$1.6

*Selected nonfinancial Russell 2000 members with high year-over-year growth in 2008

Data: Capital IQ, *BusinessWeek*

Finance Heavy: One-fifth of Russell 2000 companies are in the financial sector. Just 1% are in telecom.



Data: Capital IQ

*By number of companies, as of Apr. 8

SURPRISINGLY IN SYNC

The Russell 2000 held up for a little longer than the S&P 500 in 2008 before ultimately suffering a 35% drop, just about as steep as the 38% fall for the large company index.

Data: Bloomberg

EDITED BY DEBORAH STEAD

Attacks on ships like the *Maersk* have insurance costs soaring

ROBERTO SCHMIDT/AFP/GETTY IMAGES

HEDGING BETS ON THE HIGH SEAS

As the latest ship seizures off the coast of Somalia demonstrate, piracy has not let up following the Apr. 12 rescue of the *Maersk Alabama*'s captain—despite the deaths of three of the pirates holding the cargo ship captive. "Until there's a solution in Somalia, the pirates will be as earnest as ever," says Joseph Keefe, editor-in-chief of *The Maritime Executive*. Also likely to be undiminished: the cost of insuring trips through East Africa's Gulf of Aden. Last year, bands of brigands in the region attacked 100 ships, capturing 42 of them, according to shipping journal *Lloyd's List*. In their wake, the price of kidnapping insurance—which typically covers an attack's crisis management, legal fees, and ransom (including the cost of the drop)—has soared for shippers, which are already struggling in the recession. "It could be $30,000 to $50,000 for a one-way transit," says Peter Townsend, head of the London-based marine hull unit of insurance broker Aon. "It used to be a fraction of that."

Aon is now leading a move by a few insurers to create a new, equally pricey, kind of pirate insurance. For the past few months, Townsend's team has been creating "loss of hire" policies aimed mostly at shippers plying East African waters. The idea is to cover the loss of earning capability—a ship's daily leasing fee and cargo—should pirates seize the vessel. The price of such coverage, sold for single trips, is typically set at about 75% of what a ship owner gets for a day's lease. (Leasing day rates have been $25,000 to $40,000 in the policies Townsend has placed with insurers so far.) The new coverage, which aims to make up losses incurred in up to 60 days of captivity, costs a bit less if the policyholder makes efforts to repel pirates. There's a price break for a hull that rises high—say, 15 feet—from the water line, as well as discounts for speedy engines, decks ringed by barbed wire, and fire hoses manned 24/7 when the ship is in transit. The price is set "a few days before the vessel goes to transit," Townsend says, so it can be reduced further if there's been a piracy lull in the preceding few months. As yet, Townsend has had inquiries but "not many orders" for the policies. That may change. "In the absence of a better solution," says Keefe, "it wouldn't surprise me if people started buying the coverage."

18

Number of ships seized by Somali pirates this year as of Apr. 15

Data: International Maritime Bureau

STARTUPS IN THE HOUSE

The latest cost-slashing trend for the geekerati? Taking a page from the past (think Bill Hewlett and Dave Packard) and bunking together to get their startups off the ground. According to adherents, "going lightweight" cuts monthly expenses by up to two-thirds. "We looked at the economy and said, 'This is the right thing for us to do,'" says Adam Bouhenguel, who lives in a "super-geeked-out" Boston apartment with Josh Wilson, his co-founder at Tsumobi.com, a maker of social networking software for mobile devices. Also in Boston are Dan Haubert, 25, and Tom Davis, 24, who moved in together to launch TicketStumbler.com, which aims to be the Expedia of sports and concert tickets. The "ugly dump," says Haubert, lets them "live and run a business on a few thousand a month." Then there's Marcus Nelson, 37, who co-founded UserVoice.com, an online suggestion box. Last year, Nelson, his wife, Emily, and their two children moved from Wasau, Wis., to a Santa Cruz (Calif.) beach bungalow with partner Richard White, 28. "We sleep with our laptops," says Nelson, who estimates that monthly expenses come to $15,000, a third of what they might be with separate living and office spaces. Are venture capitalists taking note of such frugalities? Longtime Silicon Valley angel investor Ron Conway says he is: "I love to invest in scrappy entrepreneurs." *–Michelle Conlin*

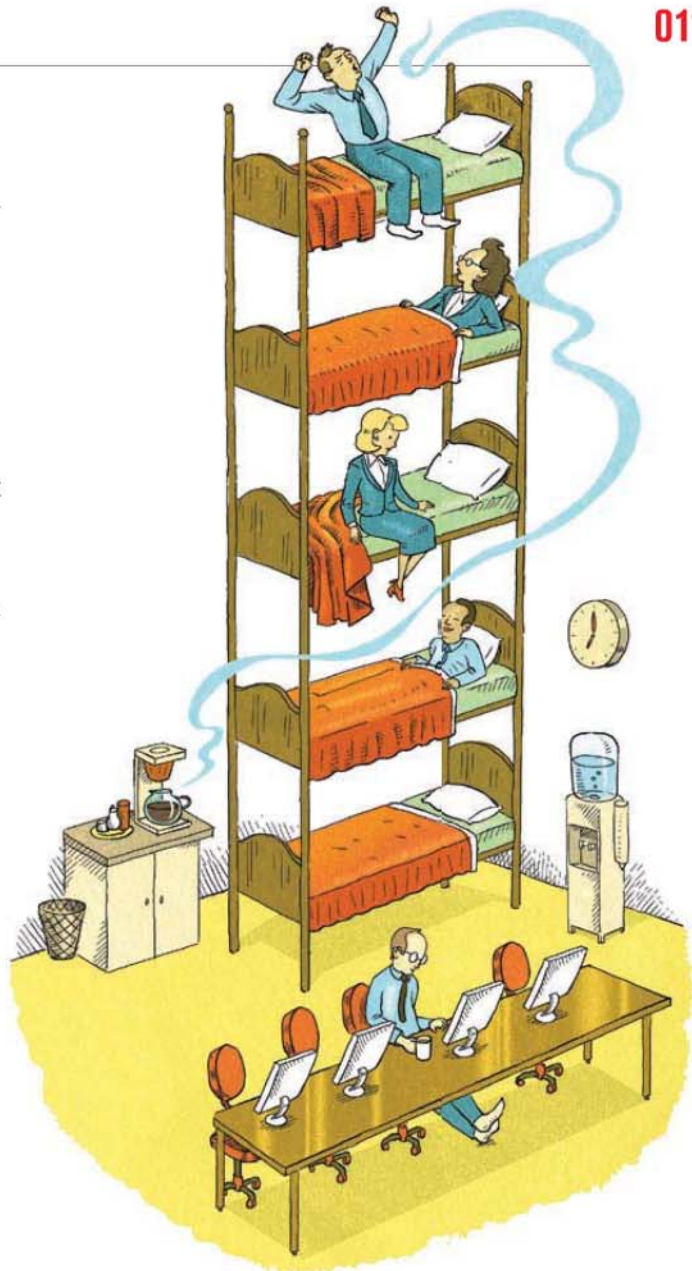


ILLUSTRATION BY WESLEY BEDROSIAN; LAUREN NICOLE/GETTY IMAGES

PHARMA FLEES THE NET

NOT FOR WOMEN WHO ARE NURSING, PREGNANT OR MAY BECOME PREGNANT. MAY CAUSE DROWSINESS, HEADACHES, NAUSEA. IN CASE OF DIZZINESS, DO NOT OPERATE A VEHICLE. OTHER SIDE EFFECTS MAY INCLUDE...

Paid drug ads recently disappeared from search engine pages. The reason: On Apr. 3, the Food & Drug Administration sent warning letters to 14 of the world's biggest drug companies decreeing that such banner ads must include information about risks. The problem is there's no room for such lengthy warnings on the tiny ads. Marketing experts say drugmakers long assumed it was O.K. to have warnings be one mouse click away, a rule discussed—but not put in writing—at the only FDA forum held on Internet ads, in 1996. Pharma companies spend just 3% of their ad budgets on the Web, though several are experimenting with blogs, YouTube videos, and Twitter feeds. Reacting to the new FDA demand at a pharma forum on Apr. 8, Jeffrey Francer, a spokesman for industry group PhRMA, called on the FDA to initiate a public process to draft Internet ad rules "rather than regulating by warning letter in an area where there is now a lack of clear standards." *–Catherine Arnst*

LARRY SUMMERS ON WHETHER THOSE RAYS OF ECONOMIC DAYLIGHT ARE REAL

No one in Washington is saying flat-out that the economy has turned a corner, but the Obama Administration is busily making the case that encouraging signs are starting to pop up. On Apr. 9, Larry Summers, director of the National Economic Council, pointed to positive indicators in a speech before the Economic Club of Washington, and five days later at Georgetown University, the President did the same. Is this more than a cheerleading exercise to boost public confidence? I talked with Summers after Obama's speech.

MARIA BARTIROMO
The President today talked about glimmers of hope in the economy, though he added that we are in for some tough news ahead when it comes to unemployment. Where has the growth been coming from most recently and where are the weak spots that remain?

LAWRENCE SUMMERS
Two months ago, you couldn't find anything positive. Every statistic was running negative, and you had a sense of an economy in free fall. I think today the picture is more mixed. There are obviously still problems in the financial market and weakness in housing. But production is now pretty clearly running below sales...which will be followed by an inventory cycle that can be a source of strength. You have a more mixed picture in terms of consumer spending, in part because the stimulus in the Recovery & Reinvestment Act is coming into people's paychecks [page 8]. You have the fiscal policy coming online. You know, gov-

(TOP) BRAD TRENT; DAVID DEAL/REDUX

ernment almost never gets a positive surprise in how much things cost, but it's actually turning out that we're going to be able to do a lot of these infrastructure projects—and 2,000 have already been started—cheaper than we'd expected. That means more employment, more ability to do things.

"EVIDENCE SUGGESTS [TAX CUTS FOR HIGH EARNERS] HAVE VERY LITTLE STIMULATIVE BENEFIT. SO YES, WE ARE PREPARED TO LET THOSE TAX CUTS EXPIRE"

The budget the President put forth suggests the economy will see 4% growth in 2011. Are you expecting that?
The President made the forecast several months ago in the context of the budget. It was pretty much a consensus forecast at the time. We will revisit the forecast, as governments always do, a couple times a year, and at that point, we'll be in a position to discuss a new forecast.

So if we were to see the economy not grow at 4%, would you be prepared to suggest that perhaps he should pull back his plans to raise taxes on the highest earners?
Let's just be clear here because what you said is not quite correct. The President isn't taking any action to raise taxes. Current law calls for [the Bush tax cuts for high-income earners] to expire [in 2011]. And the President does believe—and he is surely right in this conviction—that given the magnitude of the debt problems the country faces, we can no longer afford those tax cuts for a very small fraction of the population. If you look at the long-run fiscal burden imposed by those tax cuts, it's as great or greater than the entitlement programs that generate so much discussion, and the evidence suggests [the cuts have] very little stimulative benefit. So yes, we are prepared to let those tax cuts expire.

Tax protestors in Harrisburg, Pa.

CAROLYN KASTER/AP PHOTO

Even if we were not to see the growth expectations...
I don't want to get into speculating on every hypothetical. Right now, there is a massive program that has been put in place on the fiscal side, on the credit side, on the recapitalization side, on the housing side. And our focus is implementing that program as strongly and as effectively as we possibly can for maximum benefit to this economy.

When do you expect to see growth in the economy?
Well, you know, many forecasters are looking for growth in the latter part of this year. And as I mentioned earlier, the inventory cycle points in that direction. But no one can make forecasts with complete confidence. What's really important is making sure that we have a sound foundation for long-term growth. And that's why some of the issues the President spoke about in his speech regarding financial regulation, health care, energy, infrastructure investment, are so profoundly important, so that we can enjoy an economic expansion that, frankly, unlike its predecessors is much less based on bubbles in financial markets.

The blogosphere is full of posts about taxpayer money being used to protect Goldman Sachs because so many people involved in the bailout have ties to the firm. Do you think Goldman has gotten special treatment?
Oh, look, I'm not in a position to comment as an expert on what took place before the Obama Administration came in. But I think people have to look very carefully before making allegations of that kind. And certainly some of the most publicized allegations don't stand up to scrutiny at all. I can assure you that President Obama has insisted that Treasury Secretary [Timothy] Geithner make sure that the rules are administered without fear or favor and with tremendous transparency so the American people can see where every dollar goes and any kind of favoritism is avoided.

In his *New York Times* column last Sunday, Frank Rich raised the question of whether you can be a fair broker of the bailout after having been paid $5.2 million by hedge fund D.E. Shaw and earning $2.7 million in speaking fees from Citigroup and Goldman. Do you think you have a conflict of interest?
I don't think so. But much more relevant than what I think is [the opinion of] the Office of Government Ethics, which isn't comprised of a bunch of political appointees but is made up of long-serving people who are in charge of judging integrity and to whom we all fully disclose all of our past activities. Their judgment was that for the broad range of financial issues that I'm involved in at the NEC, there was not a conflict. I would be the first to say that people can't judge their own ethics, and that's why there is a more elaborate set of rules than any Administration has ever had around conflicts of interest. | BW |

Maria Bartiromo is the anchor of CNBC's Closing Bell.

016 IBM's new shingle: Analytics
019 Bank profits may be fleeting
021 A new deal for student loans
022 Pensions bet on toxic assets
024 Wooing unemployed consumers

TECH: LEAN AND READY TO SPRING

The Internet bust taught tech companies not to get stuck with full warehouses and bloated job rolls

By Peter Burrows

After bearing the brunt of the economic downturn at the beginning of this decade, the technology sector looks as if it may be among the best positioned to benefit when the global economy recovers from the current recession.

Of course, that's partly because it's not tech's bubble that burst this time. Real estate and finance have that distinction. Yet tech companies also appear to have learned tough lessons from the Internet bust that have helped them manage through the latest slump. Many cut costs and made other hard choices early on, and now look poised to profit if corporate and consumer demand begin to climb. "Have we learned from previous mistakes? Absolutely," says Niklas Savander, executive vice-president at phone giant Nokia. "Not everyone has managed perfectly, but I would say the tech industry has managed it better than others."

Investors are betting that's the case. The tech-heavy Nasdaq has rallied in the past month and is up 5% for the year, while the Standard & Poor's 500-stock index and Dow Jones industrial average are down. Shares in Cisco Systems, IBM, Research In Motion, and Apple have risen at least 10% in 2009. "Right now, the stocks are on the bargain table," says Jerome I. Dodson, CEO of Parnassus Investments. "If there is even a small increase in demand, I suspect that tech stocks will take off."

These could be misplaced hopes. If the economy continues to slide, tech companies won't see much benefit from their belt-tightening and other moves. And the economic outlook remains cloudy. Tech retail sales, for example, slid 10% in March, according to government data, far worse than the 4.1% drop in February. "It's still pretty ugly," says Bill Whyman, senior managing director at International Strategy & Investment.

Tech companies have taken a number of steps to position themselves for a recovery. They've laid off workers, closed facilities, and outsourced even more of their production. Many companies have also hoarded cash for years, even in the face of investor complaints. Now as other companies scramble for financing, tech giants such as Cisco, Apple, IBM, and Microsoft have billions on hand for acquisitions, research and development, and other long-term plans.

Perhaps most important is how aggressively tech companies have managed production and inventories. Whyman figures that while hardware sales fell 5.8% from the third to

CASH STASH

Tech giants are weathering the downturn with money in the bank

COMPANY	
CISCO	$26.7 billion
APPLE	$25.6 billion
MICROSOFT	$20.7 billion
GOOGLE	$15.9 billion
IBM	$12.9 billion
INTEL	$11.8 billion
HP	$10.2 billion

Data: International Strategy & Investment

ANDY MARTIN

fourth quarter of last year, inventories dropped even faster, by about 9%. It's a sign tech companies quickly throttled back on making new PCs, mobile phones, and chips in anticipation of weak demand, saving themselves from having to write off excess inventory, as they had to do in years past.

Take Cisco. In April 2001 the networking giant made one of the more painful confessions of the Internet bust: It had let so much networking gear pile up in inventory that it had to take a $2.5 billion charge for equipment no one would ever buy. Ever since, it's been working to make sure such a thing never happened again. Supply chain chief Angel Mendez is grilled at monthly reviews by CEO John T. Chambers and other top brass, and Cisco has half the inventory it did in 2001 even though it is twice as big. "It didn't take John eight years to start asking questions [about inventory levels]," says Mendez. "He asks about every eight minutes."

Nokia, Intel, and others also slowed production last fall within weeks or even days of seeing demand slide. They brought supply chains—often involving dozens of companies—to near hibernation. A few shut down. David Yoffie, a vice-president at server maker Rackable Systems, sent an e-mail to hundreds of partners last November telling them to stop all production immediately. "Customers had hit the brakes hard," he says.

SMARTPHONES, THE SMART BET

It takes more than a wary eye to pull off such feats. Robert B. Carter, chief information officer at FedEx, says high-tech and life sciences companies have "the most advanced supply chains of any industry," thanks to investments in new technologies and talent. Just as Apple customers can go online to track exactly where their new iPhone is en route to their door, tech companies and their suppliers, manufacturers, and distributors typically share the same real-time view of actual demand.

That's led to other innovations. In the past, companies only air-freighted goods when inventories of a hot product ran out. Now, that's become quite common for small, light, high-end products. Although air mail is 10 times more expensive than shipping by boat, the products arrive in a day or two instead of three weeks, so they can be shipped after a customer places an order rather than in anticipation of demand. "If there is a spike in demand we can increase production. If not, we don't overbuild," says Liam Casey, CEO of PCH International, which helps Western companies produce and distribute products from China.

Still, even the leanest companies need growth to turn investors' heads.

Research In Motion's shares have risen more than 50% this year in part because of strong revenue growth in the latest quarter (page 68). And because it cut inventory so drastically, the outlook for both sales and profits is promising. Some big phone companies have no more BlackBerrys on hand for their subscribers, says Neil Mawston, an analyst at Strategy Analytics in London. "Because of the de-stocking, there's going to be a restocking," he says.

Some see signs of better times in even the most savaged segments of tech. Take chips, where many companies took a huge hit by cutting production to less than 50% of capacity, vs. 80% in flush times. "A lot of them over-corrected in the fourth quarter," says Wedbush Morgan analyst Patrick Wang. But having taken that tough medicine, they're now positioned to sell the latest chips when big customers begin to rebuild their own stocks.

And yet the cautious optimism about the economy in recent days could well prove false. Wang says most companies admit they can safely forecast just a month into the future now, as opposed to four months in normal times. Companies such as Intel (page 44) have stopped forecasting their revenue because of the lack of visibility. "There are lots of signs that things are getting less bad," says Whyman. "But we're not out of this yet." BW

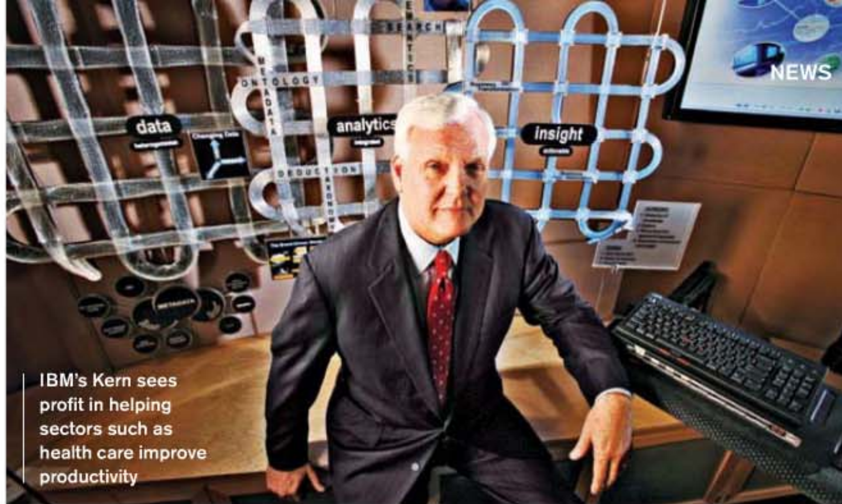
–With Dexter Roberts in Beijing

Business Exchange

Read, save, and add content on BW's new Web 2.0 topic network

A Wave of Tech M&A?
While valuations are still low, the strongest tech companies may go on the hunt for acquisitions. On Apr. 14, ZDNet's Between the Lines blog proposed seven deals that might happen, including a Microsoft purchase of Palm and a Google acquisition of Skype from parent eBay.

To see ZDNet's prognostications and add your picks, go to **http://bx.businessweek.com/mergers-and-acquisitions/**



IBM's Kern sees profit in helping sectors such as health care improve productivity

BIG BLUE GOES INTO ANALYSIS

IBM has created a new analytics unit to tap into the one area of the tech market expected to grow this year

By Steve Hamm

When Riswan Khalfan, chief information officer at TD Securities, set out to improve the performance of the bank's options-trading system last year, he couldn't find ready-to-use technology suitable for the job. So he agreed to let his company become a test subject for a research project at IBM called "stream" computing. The technology, developed over half a decade by a team of 70 scientists and engineers at IBM Research, allows companies to analyze data as it's being received—rather than having to place it first in a database.

In TD Securities' case, stream computing lets it handle 5 million pieces of options trading data per second, analyze them on the fly, and make automated trading decisions. That compares with the 1 to 2 million per second rate the bank typically handles on its current trading system. "In this business, quicker decisions are better decisions," says Khalfan. "If you fall behind, you're dealing with stale data and that puts you at a disadvantage." The bank is now considering switching its entire trading system to the new technology.

Stream computing is just one part of IBM's biggest foray into business consulting since it acquired PricewaterhouseCoopers Consulting seven years ago. The company is creating a new unit, IBM Business Analytics & Optimization Services, that will advise corporations on how to better analyze data and make smarter decisions. The group's staff of 4,000 consultants will mine IBM's research and software divisions for algorithms, applications, and other innovations to do the job.

IBM's most direct rival in business analytics consulting may be Hewlett-Packard. The Silicon Valley giant formed a business unit two years ago and fields nearly 3,000 consultants.

4,000
Consultants assigned to IBM's new business analytics service

"We respect what they're doing in this space, but we're not afraid to go head-to-head with them," says Giuliano Di Vitantonio, global marketing chief for HP's business intelligence solutions group.

IBM also faces stiff

CHRIS CASABURI

WANT TO GET A GRIP ON DATA ENTRY?
TRY USING TWO HANDS.

Introducing the Sharp® MX-Series with Full-size Keyboard.

These stylish MFPs make data entry easier than ever. That's because they're the only MFPs with a standard full-size retractable keyboard*, to simplify repetitive scanning tasks and e-mail entries. Not to mention a big, colorful 8.5" LCD touch screen, to help manage document workflow and navigate stored files. Plus, Sharp OSA® technology delivers seamless access to anything on your network right from the control panel. What's more, the MX-Series comes with Sharp's award-winning security suite for superior protection. So why are you still using a mini-screen keyboard, when you can step up to the real thing? To learn more, visit sharpusa.com/documents

WORK WITHOUT LIMITS

SHARP

Sharp and Sharp OSA are trademarks or registered trademarks of Sharp Corporation. All other trademarks are trademarks or registered trademarks of their respective owners. © 2009 Sharp Electronics Corporation. All rights reserved.
*Keyboard not available on all models

Promote yourself to

The CEO of TCB

Become a Chief Executive Officer of Taking Care of Business. Send emails with Wi-Fi, dominate a spreadsheet using Microsoft® Windows Mobile® or even go to text town in a full-QWERTY keyboard session. People will respect your "taking care of business" attitude.

$199

after $100 mail-in rebate and service activation on 2yr. agreement

trēo pro™ by palm

The smartphone for smartpeople

sprint.com/treopro

Within wireless coverage area only. Requires data services at additional cost. Wi-Fi within range of Wi-Fi hotspot using 802.11b/g wireless connection. Some Wi-Fi hotspots require fee for usage. Attachment support includes viewing and editing native Microsoft® Word and Excel® files. May require up to a $36 activation fee/ line of credit approval & deposit. Up to $200 early termination fee/line applies. $399.99 (two-year price) - $100 mail-in rebate- $100 instant rebate =$199.99 (final price). Taxes and services charges excluded. No cash back. Mail in rebate requires a $25 or higher data add-on or Everything plan with data and two-year agreement. Instant savings requires activation at the time of purchase. Line must be active 30 consecutive days. Allow 10 to 14 weeks for rebate. ©2009 Palm, Inc. All rights reserved.

competition in the software end of the business from Oracle and SAP. All three companies bought business intelligence software players during the past two years and have roughly comparable capabilities. An even tougher contender for IBM is SAS Institute, a specialist in data mining. IBM can't match SAS' ability to analyze huge storehouses of corporate information. Still, IBM's consulting arm installs a large amount of SAS software for clients—so the two companies are partners as well as competitors.

BRIGHT SPOT

Competition is heating up because analytics is one of the few bright spots in an otherwise subdued technology market. Overall demand for corporate technology is expected to shrink this year, but the market research firm IDC forecasts 3.45% growth for the $23 billion market for business analytics software in 2009. The firm expects 2% growth in the $45 billion analytics consulting business.

Analytics revenues are rising because it's one of the most strategically important fields in corporate computing. Executives analyze their sales patterns so they can do a better job of targeting customers with specific products and advertising. They pick apart and modify operations to make them ever more efficient. Increasingly, they want to slice and dice data as quickly as it comes into their computing systems to make more accurate forecasts of future sales and shifting market conditions. "Now more than ever, leaders need to know what's really going on in their businesses," says IDC analyst Dan Vesset.

Creation of the new IBM unit is the first major move by Frank Kern since he took over IBM's Global Business Services division in January. He sees rich opportunity for the company to profit if it can help improve productivity in sectors such as transportation, electric utilities, and health care. "We're at the beginning of a new wave," says Kern. "We've begun to instrument the world [with sensors and other devices that collect information], but now we have to take that data and analyze it." |BW|

BANKS AREN'T IN THE CLEAR YET

For multiple reasons, strong first-quarter earnings may not be sustainable for the industry

ILLUSTRATION BY DAN PAGE

By Theo Francis

A few months ago, a teetering U.S. banking system seemed ready to take down the global economy. Now the stocks of the biggest banks have been on a tear, following rosy earnings announcements by Wells Fargo and Goldman Sachs.

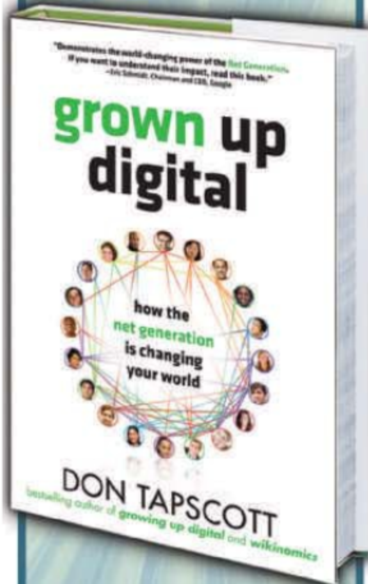
But the strong first-quarter numbers may not be as strong an omen as they seem. Analysts expect a good chunk of the industry's gains to prove fleeting, leaving banks to grapple with the grim economy and investors to deal with stock market fallout. "Bank earnings benefit from a number of things that don't have a lot to do with fundamentals," says Fred Cannon, chief equity strategist at investment bank Keefe, Bruyette & Woods.

Consider the refinancing boom, which was triggered by record-low mortgage rates. The flurry of activity helped propel Wells to a $3 billion gain this quarter and will likely boost other banks as well. But the trend may quickly peter out since there's a limited pool of people who can refinance their loans. Among the borrowers who don't typically qualify: the one in five owners who are underwater on their mortgages, meaning their homes are worth less than their loans.

The record-low rates are goosing bank earnings in other ways. Many banks service the mortgages in large investment pools, collecting homeowners' monthly payments and distributing them to investors. The value of those servicing contracts go up and down, and banks buy securities to hedge against those movements. When rates fall, the securities can rise in value, often faster than the banks mark down the value of the contracts. In those cases, banks book profits.

That mismatch, says Ed Najarian, head of bank research for institutional broker ISI Group, probably helped Bank of America and Wells in the first quarter. But such gains are hard

"A MUST READ... if you understand the Net Generation, you will understand the future."
—The New York Times



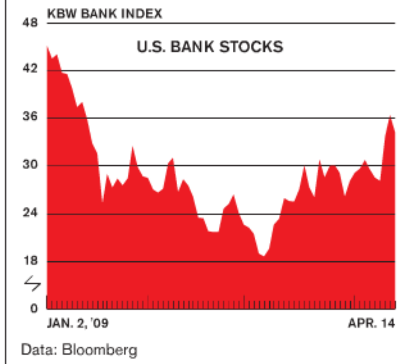
"A portrait of this generation that is ENTERTAINING, OPTIMISTIC, AND CONVINCING."
—The Economist

"A THOUGHTFUL ANTITHESIS to entrenched and sometimes alarmist managerial opposition to internet-influenced behaviours."
—The Financial Times

Download a chapter at grownupdigital.com

Available everywhere books are sold

BOUNCING BACK



Data: Bloomberg

to repeat. "While [Wells'] mortgage revenue will stay strong at least in the second quarter, they're unlikely to get another hedge gain," Najarian says. A spokeswoman for Wells Fargo, which plans to release more details about its profits on Apr. 22, declined to comment. A spokesman for BofA declined to comment ahead of the bank's Apr. 20 earnings announcement.

New accounting rules may have come to the banks' rescue as well. Early in April, banks got the O.K. to use their own judgment in valuing assets, rather than relying on depressed market prices. The result: Banks may have raised the value of their toxic assets in the first quarter, thereby increasing earnings. "You could have paper gains that are offsetting real losses during the period," says Donn Vickrey, co-founder of research firm Gradient Analytics.

Then there's case the of Goldman Sachs' missing month. On Apr. 13, the bank reported eye-popping profits of $1.8 billion for the first quarter. Not bad, but Goldman switched to a calendar year from a fiscal one ending Nov. 30. That meant December, and its $780 million loss, was an orphan—omitted from the results for both the full fiscal year of 2008 and the first quarter of 2009. A Goldman spokeswoman said the company was required to switch to a calendar year when it became a bank holding company last fall.

Nonetheless, analysts are raising doubts about whether Goldman's profits will persist. The trading unit accounted for much of the gains, while the other groups remain lackluster. "Given the extent to which [Goldman's] earnings was concentrated...coupled with weak economic conditions and capital markets turmoil, we believe it would be premature to conclude that a sustained turnaround is under way," Scott Sprinzen, an analyst at Standard & Poor's, said in an Apr. 14 report.

Bank earnings aren't entirely flimsy. The growth in customer deposits could prove lasting. Banks can also borrow at close to 0% from the Federal Reserve and lend money at much higher rates, profiting handsomely on the difference. A few firms, including JPMorgan Chase, may take the quarter to increase reserves for bad loans, sacrificing profits to bolster their books.

The earnings pop comes in the nick of time: Officials have been putting big banks through their paces, analyzing the results of "stress tests" to gauge how banks will fare in a worsening economy. The prospect of healthy profits may reassure regulators that a bank can replenish its capital, unaided over time. (The U.S. could release details in early May.)

Still, banks remain plagued by fundamental uncertainties—chiefly the toxic assets that they have been unable or unwilling to shed. Ultimately, sustainable earnings will depend on the health of the economy. "The economy needs to stabilize," says James Cassel, vice-chairman at investment bank Ladenburg Thalman. "I don't think we've hit the bottom yet." | BW |

–With Tara Kalwarski in New York

Business Exchange

Read, save, and add content on BW's new Web 2.0 topic network

Bonus Bonanza

Revenues aren't the only thing on the rise at Goldman Sachs. Total compensation jumped 18% at the investment bank in the first quarter from the same period the previous year, according to an Apr. 13 article in the *Financial Times*. Because Goldman cut 4,000 people, the average pay per employee is up 25% to $168,000.

To read the full article, go to **http://bx.businessweek.com/goldman-sachs/reference/**

Michigan State aid officer Meyers now works directly with the government

A NEW DEAL FOR STUDENT LOANS

The Obama Administration aims to cut private lenders such as Sallie Mae and Citigroup out of the game

By Jessica Silver-Greenberg

Last summer the government desperately wanted to keep private lenders in the student loan market. Now, President Barack Obama plans to cut out the middlemen as part of a sweeping overhaul of the federal loan program. While students stand to benefit from the switch, already-hobbled lenders, including Sallie Mae, Bank of America, and Citigroup, would likely lose billions of dollars in profits.

Currently, the government distributes education funds through two sources: private lenders and its own in-house program. Each school decides which of the options to make available to its students. Financial companies have been big beneficiaries of the system, collecting huge fees from the government; in the last school year private student lenders handed out nearly 80% of the $65 billion in federal funds. By lending directly to college-bound students, the U.S. figures it can save $94 billion over the next decade and reroute the extra money to needy student borrowers. "The proposal allows us to focus on what we do best, acquire capital for loans—and that saves taxpayers money," says Robert Shireman, a senior adviser in the Administration.

This change, which could take effect in 2010 if Congress gives the O.K., would be a major blow to student lenders. Private-label loans—those without the backing of the U.S.—have already dried up amid the credit crunch. This new proposal, part of the President's budget, threatens the core of lenders' profits. Student lending giant Sallie Mae, the nation's biggest private player, disbursed $19 billion in federal loans last year, roughly 70% of its total volume. That's why the industry is gearing up for a fight. "We believe there are alternative ways to reach the President's education goals," says Sallie Mae spokeswoman Martha Holler. Says Michael Reardon, a student lending executive at Citi: "Schools and borrowers will not enjoy the many critical benefits without private-sector involvement."

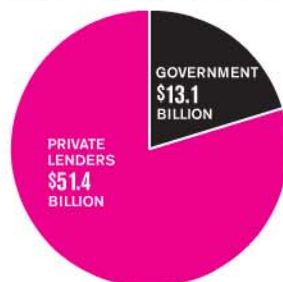
Analysts say the industry's arguments may not carry much sway. Lenders insist that they provide valuable services, including running financial-literacy programs that help students budget payments. But the default rate for federal student loans made by private lenders is 7.3%, compared with 5.3% for direct federal loans, according to the Education Dept. Critics contend that the program is simply a freebie for private lenders. "This is the last vestige of Soviet-style capitalism," says Barmak Nassirian, a director at the American Association of Collegiate Registrars & Admissions Officers, an education nonprofit.

Already, private lenders are feeling the pinch as more schools decide they don't need the middlemen. The trend gained steam after New York Attorney General Andrew Cuomo investigated the cozy relationship between private lenders and financial aid officers a couple of years ago. Since the credit crisis, it has only accelerated. Some 1,624 colleges and universities now bypass the private lenders and go straight to the government for money, including Pennsylvania State University, Northeastern University, and Indiana University. That's up from 1,075 last year.

Michigan State University made the switch in the fall. After several lenders exited the industry, harried parents started calling the financial aid office, worried that their children wouldn't get the necessary money. To assuage those fears, the school opted to deal directly with the government's direct-loan program instead of working with private lenders. "Our students have peace of mind that they will get their loans," says Val Meyers, associate director of financial aid at Michigan State. "We haven't had any complaints." BW

THE MIDDLEMEN

FEDERAL STUDENT LOANS* (BY LENDER)



Data: Department of Education *2007-08 school year

STEPHEN VOSS; CHART BY LAUREL DAUNIS-ALLEN

PENSIONS WADE INTO TOXIC ASSETS

CalPERS and other public funds, eager to boost returns, may invest billions. But at what risk to investors?

By Nanette Byrnes and Christopher Palmeri

Over the past 18 months, the investments of public pension plans—the retirement security for 22 million police officers, firefighters, teachers, and their survivors—have lost a combined $1.3 trillion. But now some fund managers think they may have hit gold: the government's programs to clean up toxic assets. With a federal backstop on losses and expectations of double-digit returns on some investments, many think they're a good bet.

On Apr. 15 the $175 billion California Public Employees' Retirement System (CalPERS) said it is looking at buying troubled assets that Citigroup and other financial companies are trying to offload. Two weeks earlier a group of public pension fund managers met with Sheila C. Bair, chairman of the Federal Deposit Insurance Corp., to talk about investing in banks' toxic assets. "We had more people interested than could fit into the room," says Orin S. Kramer, chairman of the New Jersey State Investment Council.

The FDIC, along with the U.S. Treasury, is trying to solicit buyers for the holdings through a program called the Public-Private Investment Program (PPIP). Public funds also may potentially invest in the Term Asset-Backed Securities Loan Facility (TALF), created by the Federal Reserve Board in November to support investing in asset-backed securities tied to consumer and small business loans.

Offering a stake to public-sector players appeals to regulators. Washington has been criticized for structuring deals so that taxpayers shoulder much of the risk while private investors are offered handsome returns. If taxpayer-funded public pension funds can benefit from the upside as well, the programs may be less controversial. Trent May, chief investment officer of the $4.6 billion Wyoming Retirement System, says investors expect returns of 15% to 20% on TALF funds. "If this is successful, not only do we reap returns on the TALF investments, but if it gets the economy moving, that would be good for our other investments, too."

$1.3 trillion

Cumulative losses of public pension plans over the last 18 months

Data: Center for Retirement Research at Boston College

But should public pensions dabble in toxic assets? FDIC spokesman Andrew Gray says the government is interested "in getting a broad range of investors to participate." The value of these complex assets remains elusive, though. Even with the government taking on most of the risk, a worsening economy could mean more of the assets go bad, leaving investors with losses.

"A TOTAL BREACH OF DUTY"

Public pension plans are desperate to boost returns. Many increased their exposure to equities in recent years. While the value of their assets has fallen sharply, obligations are rising. A recent study of 59 state pension plans by Wilshire Associates shows a $237 billion shortfall between assets and obligations.

Even so, some remain skeptical that pension money will pour into toxic assets. Bryon T. Sheets, a partner with San Francisco-based Paul Capital Partners, argues that many state funds lack the staff to analyze complicated, illiquid investments. And taxpayer advocates such as Ted Costa, CEO of People's Advocate, a conservative group in Sacramento, say the idea is irresponsible: "To invest in anything so shaky it just brought down our country is a total breach of fiduciary duty."

For now much of the pension interest in toxic assets is what Sherry Reser calls "very exploratory." Reser, a spokeswoman for CalSTRS, California's $114 billion teachers' pension fund, says her fund is moving 5% of its portfolio from equities to mortgage loans or other assets from distressed sellers. "The PPIP may certainly meet our criteria," she says, but not without a thorough vetting. "We want to make sure the only distress is the seller's." BW

–With Theo Francis in Washington

HENRIK DRESCHER

When your FINANCIAL *world feels* OUT OF CONTROL, *you need* SOMEONE *to depend on.*

NOW IS A GOOD TIME TO KNOW THE PRINCIPAL.® These days, you need a strong partner to make things feel more manageable. For nearly 130 years, we've been helping people plan for their financial futures in all kinds of markets. Through recession and recovery, challenge and opportunity, we've relied on a disciplined, long-term investing approach to keep things on track. No tricks, no shortcuts. Just solid investments and solutions tailored for the long run. And easy-to-use tools that help you look ahead, regain control and start to get your feet back on the ground.

WE'LL GIVE YOU AN EDGE®

To learn more, contact your financial professional or visit principal.com

©2009 Principal Financial Services, Inc. "The Principal," "Principal Financial Group," the Edge design, "We'll Give You an Edge," "Principal Bank," "Princor" and the illustrated character are registered service marks of Principal Financial Services, Inc. Insurance issued by Principal Life Insurance Company. Securities offered through Princor Financial Services Corporation, (800) 247-1737, member SIPC and/or independent broker/dealers. Securities sold by a Princor Registered Representative are offered through Princor.® Bank products offered through Principal Bank,® member FDIC, Equal Housing Lender. Principal Life, Princor, Principal Bank and Principal Financial Services, Inc., are members of the Principal Financial Group,® Des Moines, IA 50392. Insurance and annuities are not FDIC insured, not obligations or deposits of Principal Bank, not guaranteed by Principal Bank, and may be subject to investment risks, including possible loss of the principal invested. #1745032011

024

WOOING THE WORRIED

Companies are reaching out to skittish consumers by promising breaks to those who lose their jobs

By Amy Feldman

Companies looking to give a jolt to sales are aiming squarely at the fear factor. Automakers, airlines, and clothing retailers, among others, are trotting out a slew of guarantees, rebates, and freebies pitched at those who worry about getting laid off. In fact, the practice has become so prevalent that consultants have already coined a term for it. "We are calling this 'altruism marketing,'" says Michael J. Silverstein, a senior partner at the Boston Consulting Group in Chicago, who estimates that at least 100 major companies have such marketing programs in the market or ready to launch.

For companies desperate to part skittish customers from their cash, it's a win-win proposition. Most of the programs require little if any additional spending. And even if sales are few, there's tons of good PR. But if offers of free suits and complimentary health care for laid-off workers sound too good to be true, it's because sometimes they are. Read the fine print and you may find you'll need to produce reams of documentation to prove that you're down on your luck. |BW|

JetBlue

The carrier is fighting the so-called staycation trend with its "promise program." JetBlue will completely refund the cost of tickets purchased between Feb. 1 and June 1 for ticket buyers who lose jobs. While the airline won't say how many people are signing up, a spokeswoman says refunds will be available for up to nine people sharing an itinerary.

▲ Hyundai

In December, Hyundai kicked off a program that lets buyers who lose their jobs in their first year of ownership return their car with no harm to their credit. In March it sweetened the deal, offering to make three months of payments before reclaiming the car. Sales rose 0.5% in the first quarter. General Motors and Ford have since launched similar schemes.

Bank of America

The nation's largest bank in April introduced fee waivers for customers who have lost their jobs. It will waive monthly account maintenance fees for three months and refund or waive insufficient funds and overdraft fees on a case-by-case basis. The bank also will soon roll out a $10 fee for small overdrafts for all customers—a bargain compared with its usual $35 charge.

▲ Jos. A. Bank

The men's clothier promised to refund the cost of buying a suit during its $199 sale from Mar. 16 to Apr. 9—and let the customer keep the threads—if he loses his job before July 1. But there's a ton of paperwork involved. University of Chicago marketing professor Jean-Pierre Dubé is betting the company will win out, as consumers often can't be bothered to file for rebates.

FedEx Office

FedEx Office invited job hunters to print their résumés free of charge at more than 1,600 locations on Mar. 10, its first nationwide free print program. Nearly 24,000 people showed up and printed more than 853,000 copies. At roughly 20¢ a page, the giveaway amounted to some $200,000 in foregone revenue. The company says it might repeat the exercise.

▲ Walgreens

Lose both your job and your health insurance? On Apr. 1, Take Care clinics in 343 Walgreens stores started seeing existing patients gratis from 11 a.m. to 3 p.m. weekdays as long as they show they're unemployed and uninsured. Cofounder Peter Miller says data systems pinpointed when the clinics weren't busy and could offer free care at minimal additional cost.

ILLUSTRATION BY BARRY BRUNER

If your small business doesn't have tech people, it does now.

Dedicated Small Business Specialists are in every Verizon Wireless store, all at no extra charge.

Our experts will:
- Help you choose the right mobile email solutions.
- Show you how to use business technology to your advantage.
- Have you up and running before you leave the store.

BlackBerry Storm™ $199.99
With 2-yr activation on voice plan with email feature or email plan.

Buy ANY BlackBerry® and get any other BlackBerry® FREE

Free BlackBerry Smartphone of equal or lesser value. New 2-yr activation on voice plan with email feature or email plan req'd per phone.

One of the many tools in the **Verizon Wireless Small Business Toolbox.**

Call 1.800.VZW.4BIZ Click verizonwireless.com/smallbusiness Visit your local Verizon Wireless store

Activation fee/line: $35.
IMPORTANT CONSUMER INFORMATION: Subject to your Major Account Agreement or Customer Agreement, Calling Plan, rebate form and credit approval. Up to $175 early termination fee/line and other charges. Device capabilities: Add'l charges apply. Offers and coverage, varying by service, not available everywhere. Network details and coverage maps at verizonwireless.com. While supplies last. Shipping charges may apply. Limited-time offer. ©2009 Verizon Wireless.

WHAT GOOD ARE ECONOMISTS ANYWAY?

By Peter Coy
Illustration by Ronald J. Cala II

Why they failed to predict the global economic crisis—and why their help is still crucial to a recovery

Economists mostly failed to predict the worst economic crisis since the 1930s. Now they can't agree how to solve it. People are starting to wonder: What good are economists anyway? A commenter on a housing blog wrote recently that economists did a worse job of forecasting the housing market than either his father, who has no formal education, or his mother, who got up to second grade. "If you are an economist and did not see this coming, you should seriously reconsider the value of your education and maybe do something with a tangible value to society, like picking vegetables," he wrote on patrick.net. ¶ Take that, you pointy-headed failures! Go jump off a supply curve! ¶ To be fair, economists can't be expected to predict the future with any kind of exactitude. The world is simply too complicated for that. But collectively, they should be able to warn of dangers ahead. And when disaster strikes, they ought to know what to do. Indeed, people pay attention to economists at times like this precisely because of their bold claim that they know how to prevent the economy from sliding into a repeat of the Great Depression. But seven decades after the Depression, economists

"I HAVE BEEN GOING FOR 40 YEARS OR MORE WITH VERY CONSIDERABLE EVIDENCE THAT [MY IDEOLOGY] WAS WORKING EXCEPTIONALLY WELL" ALAN GREENSPAN, OCT. 23, 2008

still haven't reached consensus on its lessons. The debate has only intensified in recent weeks.

To fight the downturn, Federal Reserve Chairman Ben Bernanke, Treasury Secretary Timothy F. Geithner, and National Economic Council Director Lawrence Summers are attempting an unprecedented combination of massive fiscal stimulus and extreme monetary policy. If it produces a sustained recovery—and there are some early signs of hope—they will look like heroes. For now, though, it's disturbing that they've had to resort to policy measures that in scale and scope are way outside what the economics profession had studied or even contemplated in recent years.

The rap on economists, only somewhat exaggerated, is that they are overconfident, unrealistic, and political. They claim a precision that neither their raw material nor their skill warrants. Too many assume that people behave like the mythical *homo economicus,* who is hyperrational and omniscient. And they take sides in quarrels that freeze the progress of research. Those few who defy the conventional wisdom are ignored.

Critics are scathing. Nassim Nicholas Taleb, the scholar of rare events who wrote *Fooled by Randomness* and *The Black Swan*, says: "We have to build a society that doesn't depend on forecasts by idiotic economists." Says Paul Wilmott, a quantitative finance expert: "Economists' models are just awful. They completely forget how important the human element is."

In the face of such withering criticism, it's tempting to ignore the whole profession. But that won't do. For one thing, getting out of this mess and making sure it doesn't happen again will require the very best thinking of a generation. Macroeconomists—that is, those who specialize in business cycles and growth—have made important contributions. For example, research in the 1970s helped many countries eliminate chronic high inflation by highlighting the importance of having a strong, independent central bank.

Even now, progress is being made. Scholars of all stripes are belatedly getting up to speed in modern finance. Because they are trained to think of financial markets as efficient, most economists weren't primed to spot the dangers posed by lax mortgage lending, overleveraged financial institutions, and impenetrably complex derivatives. "The time is absolutely right for new ideas to come in, much as they did in the 1930s and the 1970s," says Roger E.A. Farmer of the University of California at Los Angeles.

Besides, even if you're suspicious of economists' value, they are impossible to ignore. Here's why: Every idea you can think of for coping with this crisis is based on some supposition about the way the world works. Whether you realize it or not, all of those suppositions come out of one school of economics or another. As the British economist John Maynard Keynes wrote: "Practical men, who believe themselves to be quite ex-

THE RISE, FALL, AND RISE OF FISCAL POLICY

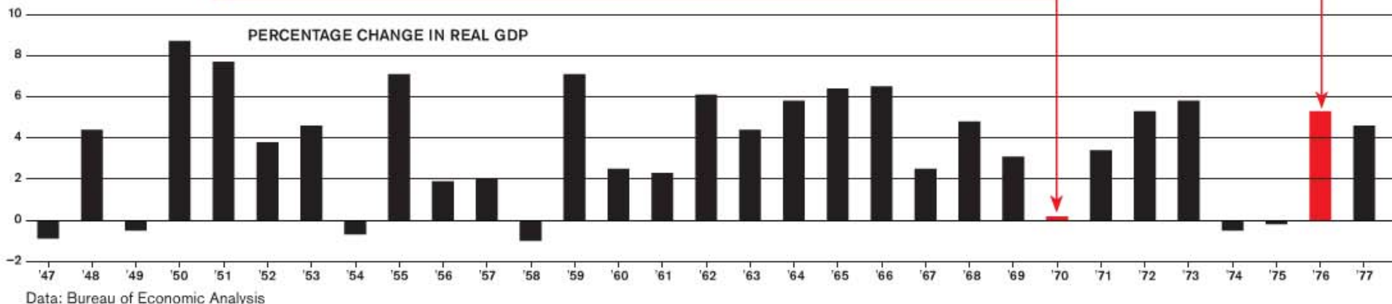
From the 1930s through the 1960s, most macroeconomists agreed that government-spending increases and tax cuts—so-called fiscal policy—were essential for avoiding deep recessions. But over time, the conventional wisdom swung to the idea that interest rate cuts by the Federal Reserve—monetary policy—were the best way to fight downturns.

Nobel prize, 1970

First published by McGraw-Hill in 1948, **Paul Samuelson's** best-selling textbook teaches two generations of students that government can fight economic downturns by boosting spending and cutting taxes.

Nobel prize, 1976

Starting in the mid-1960s, **Milton Friedman** convinces most of the economics profession that the Great Depression was mainly the result of actions by the Federal Reserve, playing down the importance of New Deal spending.



Data: Bureau of Economic Analysis

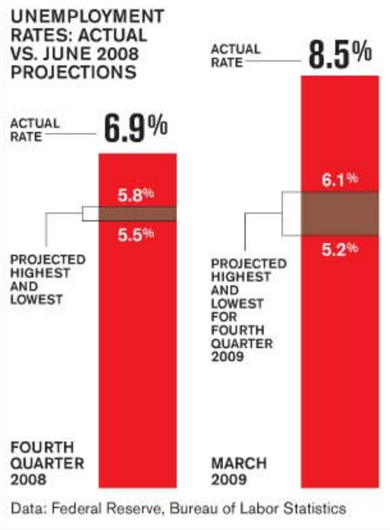
empt from any intellectual influence, are usually the slaves of some defunct economist."

So we had all better hope that the profession can get its act together. It won't be easy, because this crisis is rubbing salt in old wounds. It is reopening debates about one of the most contentious questions in macro, namely, the ability of government deficit spending (i.e., fiscal policy) to stimulate demand and get people back to work.

In January the fight over fiscal policy broke out in public after then-President-elect Barack Obama made what probably seemed to him a safe claim, saying: "There is no disagreement that we need action by our government, a recovery plan that will help to jump-start the economy." Not long after, some 250 conservative economists, in an open letter published in major newspapers, wrote: "With all due respect Mr. President, that is not true." Middlebury College economist David C. Colander, who himself is suspicious of the stimulus package, says: "The debate is reasonable. What's unreasonable is that we're undertaking it at this time" rather than decades ago.

THEY MISSED THE RECESSION

Unemployment is a critical measure of an economy's health. But official economic projections by the Federal Reserve in June 2008 gave no sign of the coming disaster.



Data: Federal Reserve, Bureau of Labor Statistics

Economists' worst sin is hubris. In the 1960s, free-market economist Milton Friedman persuaded virtually the entire profession that the Great Depression was caused by the Federal Reserve. That seemed to imply that better policy by the Fed, guided by economists, would prevent a recurrence. Bernanke, then a governor of the Federal Reserve, said as much in a 2002 speech for Friedman's 90th birthday that acknowledged the Fed's role in the Depression. He told Friedman: "You're right, we did it. We're very sorry. But thanks to you, we won't do it again." Famous last words.

Believing in the power of the Fed, economists mostly stopped researching the use of fiscal policy to fight recessions or depressions. What's more, recessions had become rarer and milder—the so-called Great Moderation. So who needed stimulus? Says New York University economist Xavier Gabaix: "Up until a year ago, you would look very old-fashioned if you were talking about optimal fiscal policy."

Mainstream economists' adherence to orthodoxy was also apparent in their casual dismissal of worries about bubbles in housing and stocks. Former Fed Chairman Alan Greenspan denied that a national housing bubble was even possible, since housing was not a single national market. He also brushed off the dangers of Wall Street concoctions such as derivatives. Only last year did he concede he was wrong. In Senate testimony, he said he was shocked to have found a "flaw" in his ideology, adding: "I have been going for 40 years or more with very considerable evidence that it was working exceptionally well."

Politics compounded the trouble. As a rough first cut, you can divide macroeconomists based on how concerned they are about economic instability. One group, in the tradition of Keynes, worries about self-perpetuating economic declines that leave the economy in a deep trough it can't escape. Members of this group say government needs to break downward spirals with the kinds of aggressive policies the U.S. is following now—cutting interest rates and raising government spending. The group includes Paul R. Krugman, the Princeton University economist and Nobel laureate; NYU's Nouriel

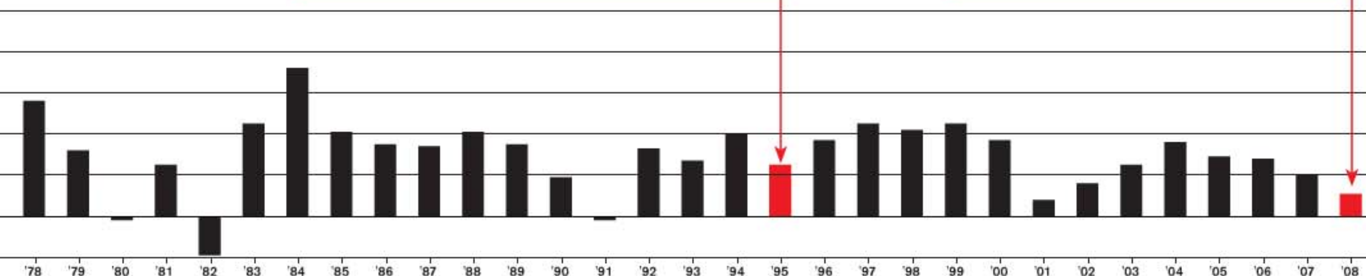
Nobel prize, 1995

In a series of papers in the 1970s, **Robert Lucas Jr.** makes the persuasive case that large-scale government attempts to stimulate the economy are unlikely to succeed over time.

Nobel prize, 2008

Going back to earlier ideas, **Paul Krugman** argues for the importance of large-scale government spending to avoid a sustained depression.

Data: *BW*



(TOP) ROBERTS/BLOOMBERG NEWS; (BOTTOM LEFT TO RIGHT) HULTON/GETTY IMAGES; RESSMEYER/CORBIS; HESTOFT/CORBIS; EMMERT/AFP/GETTY IMAGES

"YOU'RE RIGHT, WE DID IT. WE'RE VERY SORRY. BUT THANKS TO YOU, WE WON'T DO IT AGAIN" BEN BERNANKE, IN A SPEECH ON MILTON FRIEDMAN'S 90TH BIRTHDAY ACKNOWLEDGING THE FED'S ROLE IN DEEPENING THE GREAT DEPRESSION, NOV. 8, 2002

Roubini, who was early in predicting a severe recession; and Yale University's Robert J. Shiller, who predicted the housing bust and the tech-stock bust.

Other economists have more confidence that the economy is self-equilibrating. They believe low interest rates and heavy deficit spending will be ineffective while leaving the U.S. with a mountain of debt. Count Harvard's Robert Barro in this camp, along with Chicago's Robert E. Lucas Jr., Arizona State University's Edward C. Prescott, and the University of Minnesota's Patrick J. Kehoe and V. V. Chari. No surprise, the equilibrium school mainly leans Republican, and the interventionist school seems to be crawling with Democrats.

Before this crisis, it seemed that economists might resolve their differences. The oft-combative Krugman, in the first edition of his textbook *Macroeconomics* in 2006, wrote that "the clean little secret of modern macroeconomics is how much consensus economists have reached over the past 70 years."

The mood now is uglier. On the left, Krugman says: "This is really fairly shameful, that we should be wasting precious months as a profession retracing debates that were settled 70 years ago." On the right, John H. Cochrane of the University of Chicago dismisses those who advocate Keynesian stimulus, saying: "Professional economists, the guys I hang out with, are not reverting to ancient Keynesianism any more than physicists are going back to Aristotle when they can't understand how fast the universe is expanding." There are some middle-of-the-roaders, such as Columbia University's Michael Woodford, who argue that macroeconomists are converging on a methodology for asking questions. But even Woodford agrees that "recent debates don't particularly make the field look unified."

The easiest criticism of macroeconomists is that nearly all failed to foresee the recession despite plenty of warning signs. In early September 2008, the median growth forecast

Sargent says people and businesses make decisions based on "fragile beliefs"

LESSONS FROM THE FRONT

Three economists offer new ideas to keep the current crisis from recurring

By Peter Coy

Is macroeconomics worthless? Far from it. Here are three economists trying to draw lessons from the global economic crisis so the world does a better job of keeping growth on track next time.

Hyun Song Shin, 49, Princeton University

Big Idea: The Federal Reserve should pop credit bubbles early by raising interest rates.

The financial crisis arose, in large part, because companies and households borrowed too much. Shin faults macroeconomists for developing models that didn't allow for the possibility of risks such as a bubble in lending or a deterioration of credit standards. "Over the past 10 years our mainstream colleagues in macroeconomics have somewhat neglected finance," he says. The economists at the Federal Reserve, too, weren't looking at the right problems, says Shin: "These things crept up behind the backs of the central bankers. It was a blind spot."

Shin says the Fed should nudge rates up when credit is expanding rapidly. He's looking for data that give hints of trouble, such as heavy secured borrowing by financial firms. Creating better models of the economy is "not easy, but I think it's too defeatist to say it's impossible," says Shin.

Roger E.A. Farmer, 54, University of California at Los Angeles

Big Idea: The Fed should make large-scale purchases of equities to restore investor confidence and get the economy back on track.

Farmer thinks Fed stock purchases would be more effective than the Obama Administration's deficit spending. He frets that if the government puts more money in the public's pockets via increased spending or tax cuts, people won't spend it as long as they feel poor because of stock market losses.

The answer, in Farmer's view, is for the Fed to set a target for how high it wants the stock market to be by a certain date, then commit to buying enough shares (through broad-based index funds) to hit that target. Higher stock prices will make people feel wealthier and spend more, creating prosperity. Symmetrically, he would have the Fed sell to hold down prices in boom times.

Similar ideas have been tried before in Hong Kong, Taiwan, and Japan. They've had mixed results but are credited with helping to rescue Hong Kong from the Asian financial crisis in

(LEFT TO RIGHT) MOLLY RILEY/REUTERS; CHRIS CRISMAN

for the fourth quarter was 0.2%, according to a survey by *Blue Chip Economic Indicators*. The actual outcome was a 6.3% annualized decline. The Fed didn't do any better. In July 2008, Fed officials projected unemployment in the fourth quarter of 2008 would end up between 5.5% and 5.8%. The actual number was 6.9%. Their projection for the fourth quarter of 2009, done at the same time, was for a range of 5.2% to 6.1%. Today, with unemployment at 8.5%, most forecasters expect the rate to be nearing double digits by the end of 2009.

Now that fiscal policy is back on the table, economists are fighting over the size of the ripple effect—or "multiplier"—of increased government spending. Interventionist economists think multipliers are large when the economy is operating below capacity—and it certainly is now. According to a Fed report on Apr. 15, one-third of manufacturing's productive capacity is going unused, the biggest share on record back to 1948.

Obama Administration officials believe that their fiscal policy is on the right track. The stimulus program "is putting a little more energy into the consumer," National Economic Council Director Summers told Maria Bartiromo (page 12). "Two months ago you couldn't find anything positive." Christina D. Romer, Obama's chief economic adviser and a historian of the Depression, said in March that "at some point, recovery will take on a life of its own." Until then, she said, government should watch closely "to make sure the private sector is back in the saddle" before easing off.

Other economists say increased government spending may actually depress private employment. At a Council on Foreign Relations event on Mar. 30, Chicago's Lucas called the Administration's multiplier math "kind of schlock economics."

The truth is, even backers of stimulus can't be sure it will work. As World War II ended, many economists worried that growth would lapse as military spending fell. Sewell Avery, the CEO of Montgomery Ward, was so anxious about a postwar depression that he refused to open new stores. Economists still aren't sure why he was wrong, so they can't say reliably whether fiscal stimulus will end this recession or just interrupt it. "Is it possible to engineer a durable recovery with fiscal expansion, or are you just buying time?" asks Krugman, who favors coupling stimulus with drastic action to fix the banks.

What, then, is the way forward? Once this crisis is past, the next agenda for macroeconomists will be to help make the economy far more robust—enough to survive the blunders of politicians, bankers, and economists of the future. Taleb, the scholar of unpredictability, notes that nature achieves robustness through a redundancy that economists would consider wasteful: two hands, two eyes, etc. Blake LeBaron of Brandeis University suggests preventing huge crises by tolerating small disturbances, the way foresters use controlled burns to eliminate flammable underbrush. Perhaps out of the ashes of failure will emerge a better macroeconomics profession. | BW |

–With Jane Sasseen and Theo Francis in Washington

1998. "I get a lot of interest from other economists," he says, "but it takes a long while for new ideas to spread."

Thomas Sargent, 65, New York University and Hoover Institution

Big Idea: The economy is volatile, in part, because households and businesses hold "fragile beliefs" that shift quickly.

In the 1970s, Sargent was one of the thinkers behind "rational expectations," which says that ordinary people can correctly anticipate the range and likelihood of possible future outcomes.

Sargent now says that theory was an oversimplification. In real life, he explains, households and businesses are highly uncertain. Developments such as an unexpected government action or a major company going bust can cause people to drastically revise their beliefs about what might happen next.

The good news: Beliefs may shift back again through unexpected positive events. Sargent is not willing to say how that might happen, but he notes that in the early 1980s the Federal Reserve was able to lower the public's expectations about long-term inflation. That, in turn, caused actual inflation to fall, ending a period of stagflation.

Business Exchange

Read, save, and add content on BW's new Web 2.0 topic network

New Priorities

In a Mar. 12 blog post, economist Arnold Kling predicts that in the future macroeconomists will be less concerned about monetary policy and more focused on financial institutions and regulatory policy. One area of study, says Kling, should be "what, if anything, the government can do to prevent episodes of over-confidence or under-confidence in financial institutions." Too little confidence creates a lending drought, while too much leads to bubbles, he argues.

To read Kling's post, go to **http://bx.businessweek.com/economic-analysis/reference/**

BLOWING UP PEPSI

By Burt Helm
Photograph by David Yellen/Redux

PepsiCo Americas CEO Massimo d'Amore has been rebranding Pepsi's core products top to bottom. Creative destruction—or just destruction?

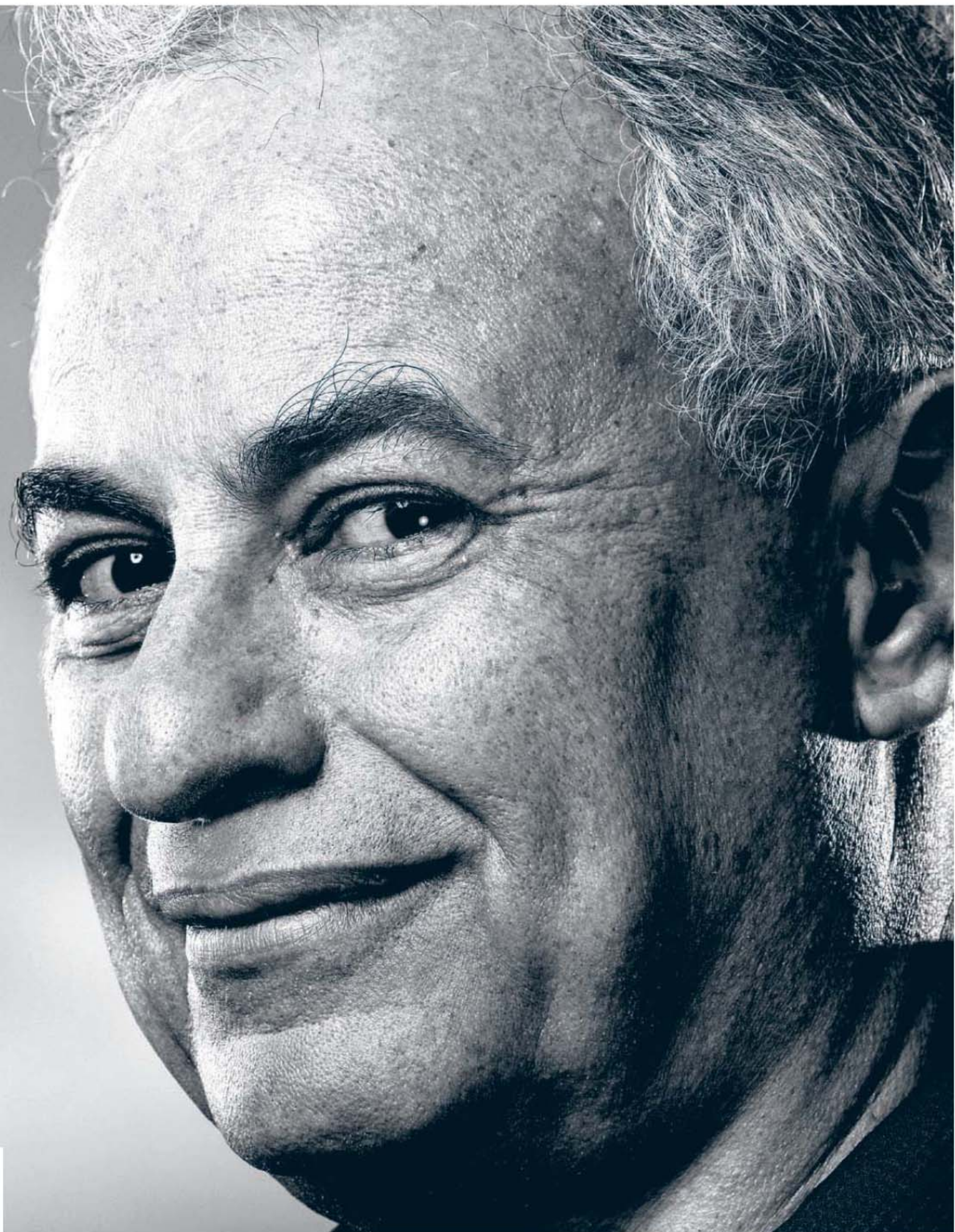
In 14 years at PepsiCo, Massimo F. d'Amore has muscled through his share of tough jobs. In New York in 2000 he marshaled PepsiCo's successful takeover battle for Gatorade's parent company, Quaker Oats. In 2002 he boosted PepsiCo's sales and profits in Latin America even as the Argentine economy disintegrated. In the following years the Latin America operations grew faster than Coca-Cola's.

Now, d'Amore (pronounced da-more-ay) is tackling his biggest challenge yet: shoring up PepsiCo's North American beverage business. While Americans consume nearly twice as much soda per person as any other developed nation (49 gallons a year), they are drinking less and less these days. According to John Sicher of industry watcher *Beverage Digest*, Pepsi shipped 1 billion cases of Pepsi in 2007, down 29% from 2000. In recent years, PepsiCo has looked for growth in the juices, bottled water, and fruity sodas consumers increasingly prefer. That helped the North American beverage unit boost profits 6%, to $2.2 billion in 2007, on revenues of $10.2 billion. But starting last year, as the recession deepened, sales of noncarbonated drinks began suffering along with soda.

Not one to fiddle in the margins, d'Amore has taken drastic action. His audacious solution: tear down and then rebuild PepsiCo's biggest beverage brands, which, besides Pepsi, include Gatorade, Tropicana, and Mountain Dew. And he is doing this all at once. D'Amore's ambitious agenda brings to mind the Obama Administration's theory that it would be a shame to waste a crisis. His calculation is that a more powerful and enduring Pepsi will emerge from this creative destruction. D'Amore is willing to try new things even if it upsets traditionalists. And rather than cherry-pick a few priorities, he has taken on seven brands.

Since becoming CEO of PepsiCo Americas Beverages 16 months ago, d'Amore has not been shy. Gatorade, Tropicana, and Pepsi, which had long operated as independent fiefdoms, have been jammed into one operating division. And he has put himself at the center of brand management—hiring and firing ad agencies, helping conceive TV commercials, and even editing them. His hands-on style has alienated veteran marketing executives, and since his arrival several have left. D'Amore concedes he may have bruised egos but says: "We needed to implement this change fast."

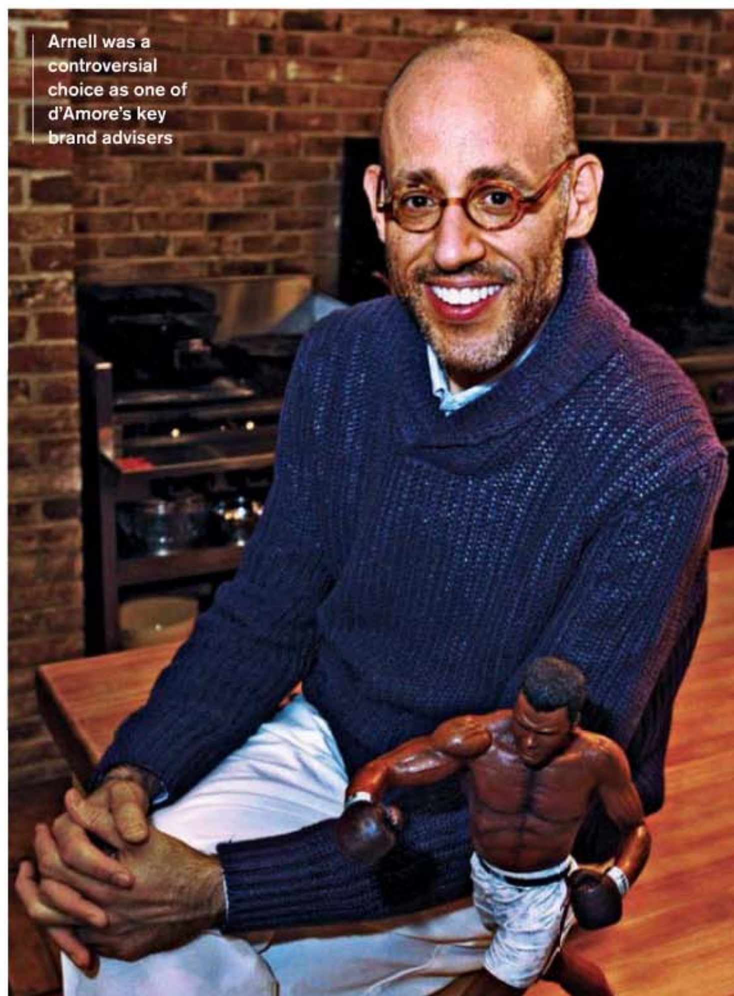
D'Amore aims to bring a more cohesive approach to each brand



It's a risky strategy, and d'Amore, 53, has already stumbled, most glaringly when a consumer backlash forced him to scrap new Tropicana packaging. If he fails, his tactics may well have ripped apart a storied marketing department and made PepsiCo weaker. If he succeeds, he'll have strengthened a famous brand and made himself a contender to succeed PepsiCo CEO Indra K. Nooyi.

In the fall of 2007, Nooyi was wrestling with a dilemma. Since becoming CEO the previous year, she'd been selling PepsiCo as a growth company. But while Frito-Lay and the international operations were doing well, Pepsi, the name on the door, was in decline. She needed someone to shore up cola and take a hard look at other beverages found wanting. She had in mind just the man for the job: Massimo d'Amore.

Nooyi had noticed him in the '90s when she ran corporate strategy and he was chief marketing officer of the International Division. An engineer with a creative bent, d'Amore had both sides of the brain working. "He could look around the bend better than anybody else," recalls Nooyi. She figured d'Amore, an Italian, would see the U.S. market with fresh eyes, just as she had upon emigrating from India. "People who didn't grow up in [the U.S.] are students of this culture," Nooyi says. "It's almost like when you convert, you're more passionate about the cause because you converted." On Oct. 3, 2007, Nooyi and d'Amore were in Venice for meetings. During a break she asked him to walk with her in the gardens of the Hotel Cipriani. Would he run the beverages unit? she asked. Days later, d'Amore said he would.



Arnell was a controversial choice as one of d'Amore's key brand advisers

ALAN ZALE/THE NEW YORK TIMES/REDUX

UNIFIED APPROACH

When d'Amore settled into his new office at PepsiCo's Purchase (N.Y.) headquarters a month later, the global economy was starting to deteriorate. Some executives might have scaled back their ambitions in the face of the downturn. Not d'Amore. To save costs and give him the agility to make decisions, he wanted to consolidate his control of Gatorade, Tropicana, and Pepsi by forming them into one operating unit. Then he planned to refurbish the beverage brands he deemed promising. A series of brand extensions in recent years, he believed, had turned PepsiCo's beverage lines into a hodgepodge of products with no unifying theme. D'Amore wanted to bring a more cohesive approach to each brand.

Nooyi wondered if he should consolidate first and wait a year to rebrand everything. D'Amore, keen to put rivals on the defensive, assured her he could do both. Simultaneously unleashing multiple ads and designs, he argued, would captivate consumers and induce customers to place large orders.

D'Amore informally called his undertaking The Big Bang. It was an apt metaphor. He was proposing not just devising new ads and slogans for seven separate brands but redesigning 1,121 different bottles, cans, and other packages. And he wanted to have the reconceived products on store shelves in seven months to coincide with the 2009 Super Bowl, when PepsiCo was planning to unveil several new commercials.

Never had the company attempted to overhaul so many products so quickly. The danger was clear: In January consumers would walk into supermarkets and find that nearly all of their favorite PepsiCo beverages looked dramatically different—and they might hate the changes. What's more, d'Amore's team wouldn't have time for the exhaustive market research that usually helps mitigate such risks.

Companies often perfect each stage of a rebranding plan before moving on to the next one. For example, the design agency typically settles on a logo before handing off to the people working on the package. To save time, d'Amore decided to adopt the so-called concurrent model: design the logos, create the packaging, shoot the TV commercials, and so forth simultaneously. He acknowledges that this is riskier but in-

sists the enhanced speed and agility are worth it. "Aiming for perfection is the enemy of good progress," d'Amore says. And if getting the project done in time meant inserting himself in the creative process—highly unusual for a CEO—then so be it. After all, he had marketing experience.

D'Amore wouldn't do all of this on his own. When he needed advice, he'd call on marketing and brand experts he had met over the years. They would help him formulate his thinking and provide outside perspective. D'Amore chose as a top adviser Manhattan branding guru Peter Arnell, whose Arnell Group is part of the advertising giant Omnicom Group. D'Amore had worked with Arnell before. Still, it was a controversial choice. Depending on whom you talk to, Arnell is either a genius or all sizzle and no steak. He has had successes, including the launch of the DKNY brand. And he dazzles clients with his erudition. But it has been years since he scored a hit, and his recent work, including a line of Muhammad Ali snack food for Mars, has fared poorly. D'Amore, who counts Arnell as a friend, defends his choice: "We value his ability to connect the dots."

One of the first Arnell-d'Amore productions was a TV spot for SoBe Lifewater, a beverage d'Amore wanted to reposition to take on Coca-Cola's vitaminwater. It was an early glimpse of d'Amore's management style. After giving the job to Arnell Group, he fired SoBe's existing ad agency, Bartle Bogle Hegarty. He and Arnell then cooked up the idea for the ad together—a sendup of Michael Jackson's *Thriller* video featuring lizards dancing with model Naomi Campbell. Later, d'Amore flew to Los Angeles to help edit the commercial.

Before long, d'Amore decided Arnell should help him get the cola business growing again. Pepsi needed to be more clearly defined, d'Amore believed. It should be more tied to pop culture, as it was back in the '80s when Jackson starred in Pepsi's commercials.

When d'Amore and Nooyi invited Arnell in to talk cola, no other Pepsi marketing people were present. Nooyi knew exactly what she was looking for. "The iPod is an elegant product people like to be seen with," she recalls telling Arnell. "I want Pepsi to be an elegant product people like to be seen with." Arnell was jazzed. "The objective was very, very clearly laid out," he recalls. "We needed to rejuvenate, reengineer, rethink, reparticipate in popular culture."

But how could they turn a can of fizzy sugar water into a design icon? Arnell and his clients decided to start by redesigning the Pepsi logo. One doesn't do such a thing lightly. The project needed a name: It was dubbed Breathtaking. And Arnell needed inspiration. After meeting with Nooyi and d'Amore, he set off on a five-week world tour of trendy design houses.

On the PepsiCo campus, meanwhile, d'Amore's shakeup was causing considerable sturm und drang. Insiders say some executives resented the boss's tendency to shut them out and instead rely on Arnell's counsel. One recalls feeling "d'Amoralized." Key people were leaving, including chief marketing officer Cie Nicholson and the head of Gatorade. Then, on July 23, 2008, came news that the economy was taking a serious toll on the division—second-quarter operating profit had fallen by 7%. The upshot: During the first two full quarters of d'Amore's tenure, PepsiCo's North American beverage sales were the weakest in history. "We have to retool and reteam," d'Amore told analysts.

Old (left) and new: Nooyi wanted a sleek and minimalist look, "like the iPod"

Twelve days later, Arnell presented his new logo to a handful of executives at PepsiCo headquarters. Arnell gave one of his trademark performances. He traced his design not just to Pepsi's days as a local brand in New Bern, N.C., but to the touchstones of Western civilization: the golden ratio, the Parthenon, Mona Lisa's smile, Einstein's theory of relativity, and, of course, the iPod. He explained how his smooth new circle, which would replace the 3D look of the old logo with simple matte colors, mimicked the minimalist lines of Apple's music-and-video player. The logo's upturned curves, he said, were like emoticons: Diet Pepsi was a "grin," Pepsi was a "smile," Pepsi Max a "laugh." Months later the presentation would leak online, to be pilloried by bloggers as so self-indulgent that many concluded it had to be a satire. But d'Amore liked what he saw, particularly the smiles. "They brought humanity to the logo," he says.

But much remained to be done if d'Amore was going to make his deadline. With the Super Bowl just a few months away, he appointed three PepsiCo veterans to key positions. Ralph Santana, who headed Pepsi's sports and entertainment promotions, would run Pepsi; Frank Cooper III, a hotshot in charge of Mountain Dew—one of the few growing brands in Pepsi's portfolio—would oversee all carbonated soft drinks; and David A. Burwick, who had served as chief marketing officer earlier in the decade, would return from the International Division to be CMO of all beverage brands in North America. D'Amore says he had planned the promotions for a while as part of his reorganization. The replacements also came at a time when d'Amore's Big Bang was falling behind schedule.

Cooper, for one, saw the challenge clearly. "The main charge was simple: It was to get Pepsi into the conversation again within the culture," he says. "[But] the only part of the puzzle clearly in place was Arnell reinventing the Pepsi graphics." Burwick, the new CMO, concluded Pepsi needed a new "brand manifesto."

Cooper huddled with a brand consultant. Here's what they cooked up: "We're done being all things to all people," they

D'AMORE WANTED NOT ONLY NEW ADS AND SLOGANS FOR 7 BRANDS BUT A REDESIGN OF 1,121 BOTTLES, CANS, AND PACKAGES—ON SHELVES IN 7 MONTHS

wrote. "We are going to reach out to one very special demographic, the real you. The demographic of people who march to the beat of their own drum, who say no even when it's unpopular, who say yes even when it's an uncomfortable change, who change a hundred-year-old brand icon because the new one is simply more beautiful and fitting for our times."

Pepsi had its manifesto. Now it needed commercials for the Super Bowl. D'Amore was unsatisfied with the ads proposed by BBDO Worldwide, PepsiCo's agency of 48 years. And he wanted a bigger agency than Arnell's to handle the work. So he showed the manifesto to Lee Clow, creative director at TBWA\Chiat\Day, which already had the Gatorade account. A few weeks later, Clow presented his team's concept. D'Amore liked it enough to propose a showdown between Chiat and BBDO. The winner would become Pepsi's main agency.

Cooper (left) heads all carbonated beverages; Burwick is chief marketing officer for North America

The face-off took place in November at Calloway House, an old Colonial on the PepsiCo campus. In his presentation, Clow tapped into the Obama campaign. Proposed billboards featured words like "Optimismmm." Another showed people passing a bottle of Pepsi from one generation to the next. The tagline: "Every Generation Refreshes the World." Pepsi would sell youth, as it always had, but it would implicitly assure boomers they were still cool. A few days later, BBDO had its shot. D'Amore took a few minues to decide: Chiat had the gig. BBDO chief Andrew Robertson, who turned 48 that day, recalls: "I've had better birthdays."

By Jan. 15, Americans could see in stores the results of a hectic year's worth of work. Gatorade bottles featured a giant G, which PepsiCo hopes will become as iconic as Nike's swoosh. SoBe Lifewater's lizard mascot was now larger. And big stacks of Pepsi cans and bottles featured Arnell's new logo. The response was mixed. Consumers hated Arnell's redesigned Tropicana carton, which included a cap that looked like an orange. After receiving mounds of irate letters, Nooyi decided to cancel the repackaging. Design critics said the Pepsi logo's "smile" would be lost on the average person. But the Pepsi Super Bowl commercial made *USA Today*'s much-watched annual Top 10 list.

D'Amore and Nooyi say PepsiCo doesn't expect to see results until the second half of this year. So far the company says there have been glimmers of hope: Its surveys show consumers have become more positively disposed toward SoBe Lifewater, Pepsi, Sierra Mist, and Mountain Dew since the rebranding. Most promising, Pepsi has gained market share against Coca-Cola in the U.S., says *Beverage Digest*'s Sicher. But cola sales still fell in the first quarter. And despite all the new advertising, Pepsi, like Coke, is losing market share to private-label brands. D'Amore is undaunted. "Breaking new ground is always controversial," he says. "Our opportunity [is] to change the rules." | BW |

Business Exchange

Read, save, and add content on BW's new Web 2.0 topic network

Much Ado About...?

When a bootleg copy of Peter Arnell's proposal for the revamped Pepsi logo began circulating online, some viewers initially suspected that it had to be a hoax. The 27-page memo, complete with charts and diagrams, reads in some parts as if it were the work of a college student majoring in art and humanities, complete with references to the golden ratio and magnetic fields.

To view the presentation, go to **http://bx.businessweek.com/pepsico-inc/reference/**

DAVID YELLEN/REDUX

Now under construction

You're looking at the future of renewable energy. Masdar City in Abu Dhabi, United Arab Emirates. The world's first zero-waste, carbon-neutral city powered entirely be renewables. Where hundreds of the world's most innovative institutions like G.E. and M.I.T. are coming together to solve our energy future. It's happening now and it will change everything.

{ Be part of the equation }
MasdarCity.com

THE BIOFUEL BUBBLE

By John Carey
Illustrations by Pictolo.com

The world is awash in startups working to replace fossil fuels and corn ethanol with better biofuels. Most will fail, and Big Oil may steal the show

THE OUTLOOK FOR ENERGY

It's a bold vision: Replace billions of gallons of gasoline not with ethanol from corn or other food crops but with biofuels made from plants, such as prairie grass in Tennessee pastures or algae percolating in Florida. Such a move would slash dependence on oil, create thousands of jobs, and reduce emissions that contribute to global warming. In the U.S., the idea has powerful political support. Congress has decreed that the country must be using 21 billion gallons of "advanced" biofuels a year by 2022. Washington is backing that goal with tax breaks, loan guarantees, and scores of millions of dollars in grants, with more support expected in upcoming energy bills. These inducements and the vast potential market have stimulated investments of more than $3 billion and spawned a new industry.

More than 200 companies, from 12-person startups to oil giants, are developing next-generation biofuels using a bewildering array of technologies. Pilot and demonstration plants are operating or are under construction from Florida to California. "We can have it all: more fuel, more food, and fewer carbon emissions," says John B. Howe, vice-president of Verenium, a Cambridge (Mass.) company that makes ethanol from sugarcane waste at a demonstration plant in Jennings, La.

Yet behind the very real innovations and investments, the brash claims and the breathless headlines, lies an inconvenient truth. Replacing petroleum with biofuels is a tough business. Even as the industry develops, many of the companies—probably most—will not survive. "We've seen a venture capital-led bubble," says Alan Shaw, CEO of Codexis, a Redwood City (Calif.) manufacturer of enzymes used to make drugs, chemicals, and biofuels. "I cannot see how the small companies can build a business and still get a return to their original investors. The numbers just don't add up."

Nor will many Americans soon be filling their gas tanks with these next-generation fuels. Industry executives concede they'll fall far short of the mandated 2010 level of 100 million gallons of biofuels made from cellulosic materials such as prairie grass or cornstalks. Meeting the 2022 goal is also unlikely. It would require not only building hundreds of fuel factories—at a cost of $500 million or more each—but also surrounding each one with thousands of acres of land planted with energy crops such as prairie grass. "We're talking about a fairly substantial transformation of the rural economic landscape," says Jack Huttner, vice-president of DuPont Danisco Cellulosic Ethanol, a joint venture of Danisco and DuPont that is building a demonstration plant in Tennessee.

These difficulties don't mean advanced biofuels aren't coming, or that they won't play a crucial role in fighting climate change. But everything will happen more slowly than many venture capitalists say. And the probable winners will be those with deep pockets and patience, such as Royal Dutch Shell, BP, DuPont, agriculture giant Archer Daniels Midland, or the rare startup with revenues from another business, such as making drugs. For the rest, the demonstration biorefineries now being built are more like high-stakes auditions than a step in the process of becoming commercial biofuels producers. "The business model that makes sense for most of us is demonstrating the technology and getting it into the hands of those who have balance sheets," says Bill Roe, CEO of biofuel producer Coskata in Warrenville, Ill.

Yet even with this strategy, there's a problem for individual companies: There could be a glut of innovative biofuel technol-

ogies, from clever microbes to processes using heat and chemicals. As startups stumble, big companies should be able to snap up technologies on the cheap, when and where they need them.

For the companies that do succeed in building a business, the irony is that their success will only increase the challenges. Right now the feedstocks of plant or waste materials needed for biofuels are cheap. BlueFire Ethanol Fuels hopes soon to break ground on a facility in Lancaster, Calif., that will use paper trash and other municipal waste. CEO Arnold R. Klann figures he'll make ethanol for $1 per gallon by getting the waste he needs for free—or better. "If communities are paying Waste Management to take their waste away, they can pay me to take it, too," he says. Trouble is, the economics will change. Rising biofuel production, or the burning of biomass to generate electricity, will drive up demand and prices for the raw material, just as production of corn ethanol helped raise the price of that crop. "Biomass is cheap right now because no one wants it. As people want it, it will become more expensive," says Robert Chess, chairman of OPX Biotechnologies in Boulder, Colo., which is engineering microbes to make chemicals and fuels.

THE DIFFICULTIES DON'T MEAN BIOFUELS WON'T BE COMING, BUT THE WINNERS ARE LIKELY TO BE THOSE WITH THE MOST PATIENCE AND THE DEEPEST POCKETS

More important, the laws of supply and demand mean that replacing a significant amount of gasoline with biofuels would drastically lower the demand for gas. That, in turn, would cause the price of gas to plunge, making biofuels less competitive. The 5% drop in gasoline use in the second half of 2008 (compared with the previous year) helped push down the average price at the pump from $4.14 per gallon to $1.74, dampening enthusiasm for biofuels. "Low oil prices have a numbing effect on consumers and their interest in this area," says David C. Aldous, CEO of Colorado's Range Fuels, which is building a plant in Soperton, Ga. Imagine what would happen if tens of billions of gallons of biofuel were to become available. The world could be awash in cheap oil and gas.

It has happened before. In the early 1980s, higher-mileage cars and an economic downturn sent petroleum prices swooning, killing off many renewable-energy efforts, including those supported by Big Oil. Avoiding that scenario today requires an additional policy step: raising the cost of using fossil fuels through taxes or limits on carbon dioxide emissions. "The major thing holding us back is the lack of a price on carbon," says Jim McMillan, a biofuels expert at the National Renewal Energy Laboratory (NREL) in Golden, Colo.

The crucial need for putting a price on carbon emissions is also a reminder that the industry is still pretty much a government creation. "The reason why renewable fuels exist at all is because politicians have decided they meet policy objectives. The whole market is 100% political," says Jeff Passmore, executive vice-president of Ottawa-based Iogen, the first company to make ethanol from a cellulosic feedstock—in this case, wheat straw. Those policy objectives: reducing energy depen-

BIOFUELS: THE NEXT GENERATION

As corn-based ethanol hits roadblocks, all eyes are turning to advanced biofuels. These, too, face difficult challenges, but that's not stopping a host of startups.

	THE FEEDSTOCKS (mainly cellulose-rich material, but also algae)				THE FUELS	
	MUNICIPAL OR AGRICULTURAL WASTE	WOOD	ALGAE	SWITCHGRASS, MISCANTHUS, AND OTHER SPECIALIZED ENERGY CROPS	ETHANOL	BUTANOL AND OTHER MORE GASOLINE-LIKE PRODUCTS
PROS	Cheap for now	Adequate supply in Southeast and other parts of the U.S.; easy to harvest	Potential for high yields per acre	Potentially vast supply; can improve soils; small carbon footprint	Can sell it into existing market	Can be added to gasoline in large amounts and used in existing pipelines
CONS	Supply too limited to make billions of gallons	It's harder to extract cellulose from wood than from other feedstocks	Scale-up is challenging; typically requires source of CO_2 to bubble through algae	Challenges in establishing, harvesting, and delivering to biorefinery	Limits on how much can be added into gasoline now	Greater technological challenges; higher costs than ethanol
THE PLAYERS	BlueFire Ethanol (trash); POET (corncobs); Verenium (sugarcane residue)	Range Fuels, Coskata	Algenol, Sapphire Energy, HR BioPetroleum, Solix, PetroAlgae	DuPont Danisco (switchgrass); Verenium ("energy" cane); Iogen (wheat straw)	POET, Range, Mascoma, Verenium, Algenol, DuPont Danisco, Coskata, Qteros, others	DuPont, BP, Gevo, Virent, Amyris

dence, fighting climate change, helping farmers, and creating jobs. But government policy can be fickle. Philip New, head of biofuels for BP, isn't so much worried that advanced biofuel technology won't pan out as he is that "the world might lose its enthusiasm for supporting these technologies through the difficult interim years," he says.

Even if the political winds do blow steady, however, the carnage on the path to the future's billions of gallons of advanced biofuels is likely to be great, with many companies and technologies losing out in the competition or being gobbled up by a few deep-pocketed survivors. Here's why:

COLOSSAL QUANTITIES

The first challenge is growing enough green plant material. The numbers are daunting. Producing 30 billion gallons of fuel takes 300 million or more tons of plant material. That's more than the total weight of cars and light trucks sold in the U.S. over the past 10 years. Growing this much cellulose would take at least 30 million acres of land. "I think the biggest problem for everybody is how are we going to grow, gather, store, and treat the biomass," says Brent Erickson, lobbyist for the Biotechnology Industry Organization.

Some industry executives doubt it's possible to grow that much plant biomass. "You can't make 16 billion gallons a year from cellulose," says Paul Woods, CEO of Algenol Biofuels in Naples, Fla. Woods is opting for algae instead. His plan: put "bioreactors" containing saltwater and blue-green algae out in the sun, and add CO_2 and nutrients. Out comes ethanol.

Scores of other companies are also jumping into algae. For most, though, the bubble will burst. "There's a huge amount of hype in algae," warns NREL's McMillan. Experts at BP have looked over the entire field of algae competitors and found none they deemed worth investing in. "If they can make it work, it would be fabulous," says BP's New. "But I think there are still fundamental issues with algae." Not least, it's challenging to grow it in open ponds and troughs, where it's exposed to bird droppings, fungi, bacteria, and voracious microbes that feed on algae "like a pack of jackals at a buffet," says Fred Tennant, vice-president of business development at PetroAlgae in Melbourne, Fla.

As a result, some biofuel players are looking at other sources of nonfood material. One of the cheapest sources now is garbage, such as the municipal waste that BlueFire Ethanol plans to use. Corn ethanol producer POET aims to make ethanol from corncobs. Weyerhaeuser is exploring growing energy crops in its forests, along with using wood waste. Range Fuels will tap into forests in the Southeast for its Georgia facility.

The problem is that making 21 billion or more gallons, the 2022 mandate, is likely to be far beyond the capacity of the startup companies—even if the recession eases and financing becomes more available. Jack Huttner, overseeing portions of the DuPont Danisco cellulosic ethanol plant in Vonore, Tenn., argues that the task requires a vast new agricultural enterprise. Biofuels companies will have to organize farmers to grow millions of acres of a dedicated energy crop like switchgrass or "energy cane," a low-sugar cane. "I'm concerned about organizing basically a new economy," Huttner says. The big players have a better shot at this than the startups.

HOW TO PLAY IT 064

Large financial resources and patience will also be essential when it comes to turning these enormous amounts of cellulose into liquid fuel. It's a far more complex process than fermenting starch or sugar into alcohol, which humans figured out how to do millennia ago, and there are a number of possible technologies. Typically, the cellulose must first be broken down into sugars, which are then fermented. To do this, some companies, including Range, use what NREL's McMillan calls "a big sledgehammer"—heat. BlueFire breaks up the cellulose with acid. Others employ man-made enzymes or microbes to convert it to sugar—or in some cases, directly into ethanol or other fuels. Still others, such as Virent Energy Systems, use mineral catalysts to turn feedstock into fuels.

The rivalry is intense. "The biological processes are the winners," argues William Frey, CEO of Qteros, which is developing a microbe to turn cellulose directly into ethanol. Heat or chemicals can't be used economically, he believes. Range CEO David Aldous disagrees. Biology is too finicky to handle the variety of feedstocks that a biorefinery might see, he says. Who's right? BlueFire's Klann asserts that so far, "no one is bright enough to know which technology will rise to the top."

That's why Big Oil is hedging its bets. Shell is joining up with Iogen, which already has a pilot plant making cellulosic ethanol; with Codexis, a producer of man-made enzymes; with algae company HR BioPetroleum; and with Virent. "This advanced technology is risky stuff," says Graeme Sweeney, executive vice-president for future fuels and carbon dioxide at Shell. "I stay awake at night because tomorrow it could all be changed."

Processes that work well in the lab often run into problems when scaled up to commercial size. Iogen found that enzymes that effectively convert

THE PROCESSES (converting feedstock to fuel)

BIODIESEL AND JET FUEL	HEAT, CHEMICALS, OR MINERAL CATALYSTS	BIOLOGICAL (ENZYMES AND/OR MICROBES)
Works with existing infrastructure	Potential to use wide range of feedstocks; catalysts can produce variety of fuels	Depending on feedstock, the process is very energy-efficient
May be difficult to produce economically	May take more energy than biological processes and may require additional purification steps	Has to be adjusted for each type of feedstock; enzymes are still costly
PetroAlgae, Solazyme (from algae); Amyris, LS9, Gevo, OPX (from any sugar)	Range Fuels, Coskata (heat feedstock to make gas); BlueFire Ethanol (strong acid, microbial fermentation); Virent (catalysts)	Solazyme (algae); Mascoma, Qteros (one-step microbes); Iogen, DuPont Danisco, Verenium (enzymes, microbes)

pure wheat straw to sugars fail when faced with 1,000-pound bales laced with dirt, dead mice, and stones. "We've been at this many years. We've learned that the more you know, the more you discover that you don't know," says Iogen's Passmore.

Among the major players, two of the most promising efforts are the DuPont Danisco joint venture in Tennessee and BP-backed Verenium, which plans a commercial cellulosic ethanol facility in Florida. Both of these already have expertise in every step of their complicated processes, putting them ahead of startups that only have some of the pieces. "The dilemma with all the [small] technology players is that in the end, they have to plug into someone else's system," explains BP's New.

A shift in power to Big Oil is already happening in the traditional corn ethanol business, where low prices have led to the idling of more than 20% of capacity. VeraSun Energy, one of the largest U.S. ethanol companies, filed for Chapter 11 in October. Guess who bought seven VeraSun plants at bargain prices? Valero Energy, an oil refiner with a $119 billion in revenue.

But don't expect the giants always to be fans of ethanol. True, refiners need a certain amount of it to meet the federal mandates. But ethanol—whether from corn or new sources—is about to run head-on into something called the "blend wall." Right now much of the gasoline in the U.S. contains 10% ethanol, which works fine in today's cars and trucks. Automakers worry that higher levels will damage engine components. So they will void the warranties of most vehicles running on richer ethanol blends. With the U.S. now consuming 137 billion gallons of gasoline a year, the total market for any kind of ethanol—corn, algae, or cellulosic—hits a hard limit at about 13 billion gallons. Going beyond that requires a whole new infrastructure, from car fuel lines to gas pumps.

That's one reason for the growing interest in newer, non-ethanol biofuels. "Oil companies really don't want to invest a lot in ethanol infrastructure. They'd much rather develop a different molecule," says Nathanael Greene, biofuels expert at the Natural Resources Defense Council, an environmental group. Whether that molecule is a type of alcohol called butanol (which DuPont and BP are working on) or other hydrocarbons more similar to gasoline, these fuels are compatible with existing refineries, pipelines, and vehicles. So some startups are designing microbes that can turn sugar from any source into diesel, gasoline-like molecules, or jet fuel. Colorado's Gevo, for instance, has an innovative business plan to add technology to corn ethanol factories to change the end products into fuels that are closer to gasoline or diesel.

The future of biofuels, therefore, probably looks like this: Farmers will grow millions of acres of switchgrass and other energy crops on land not taken out of food production. Those crops will help fight global warming and improve soil quality by adding carbon to the soil, and they can be processed into low-carbon fuels that are seamlessly delivered to filling stations and pumped into the gas tanks of trucks and cars. In other words, over the long term, we're probably not talking about ethanol—nor about a triumph of tiny startups.

As for the rest of the companies, some of their technologies may find a role, but most are not likely to make it. For many people, this conjures up the bubbles that enveloped biotechnology and the Internet in the late 1990s, when many companies failed. Now in next-generation biofuels, predicts Codexis CEO Shaw, "the only people who are going to be able to survive this are the Big Oil companies." | BW |

BUSINESSWEEK.COM | An online special report takes you on a video tour of a next-generation ethanol plant and updates the debate over corn ethanol. You'll also find an interview with Graeme Sweeney of Royal Dutch Shell, see how alternative energy is faring in the green-energy mecca of Emoryville, Calif., and find a slide show on promising biofuel ventures. Go to businessweek.com/go/09/biofuel

Business Exchange

Read, save, and add content on BW's new Web 2.0 topic network

The Climate for Biofuels

Advanced biofuels will be important in the fight against global warming. But their economic viability hinges on whether Washington implements a climate policy that puts a price on CO_2 emissions, thus raising the relative cost of gasoline compared with low-carbon biofuels. As *The New York Times* reported on Apr. 11, the Obama Administration is moving cautiously: "Addressing climate change appears to be slipping down the President's list of priorities." Obama is letting Congress take the lead for now, but his Environmental Protection Agency is preparing for climate regulation in case Congress doesn't act.

For this story and others on the topic, go to **bx.businessweek.com/global-climate-change/reference/**

Departures from 22 North American gateways.

Connections to over 170 European destinations.

Making the world seem ever smaller.

All for this one moment.

Daddy

Love Amy

Get a virtual feel for the service that makes Lufthansa Europe's #1 airline when you visit **lufthansa.com/moments**. Log on today for your chance to win the European trip of a lifetime.*

*See lufthansa.com/moments for complete terms and conditions.

There's no better way to fly.™

Lufthansa

046 GE's auspicious Hyundai gambit
048 Rules may breed gas guzzlers
050 Trouble in Toyota City, too
058 ICE: Winning with transparency
061 Santander's grand U.S. game plan

INFO TECH

Intel Tries to Invest Its Way Out of a Rut

The strategy has worked before, but shareholders fear that the chipmaker's aggressive approach may not pay off this time

By Cliff Edwards

When CEO Paul S. Otellini said earlier this year that Intel would invest $7 billion to upgrade its U.S. manufacturing plants, it looked like an example of the world's dominant chipmaker making aggressive moves while others struggled. But behind the scenes, top executives and directors were engaged in fierce debate. Though the company has a long history of investing heavily during downturns, several board members questioned whether the traditional strategy still made sense, say sources familiar with the discussions. Not only did the economy look rougher than at any time in Intel's history, but in recent years the company's huge investments haven't helped its stock.

Otellini prevailed on the investment issue. But the board extracted concessions: Directors pressed him to slash expenses, with 6,000 layoffs and the closing of several aging factories. Merit payouts were eliminated. And the compensation committee, led by former Federal Communications Commission Chairman Reed Hundt, tied executive pay to stock market performance more tightly than ever before. Base salaries have been frozen, and other compensation—stock options and grants that often total 10 times salary—will be determined by how Intel shares do relative to a basket of peers. The moves "are intended to focus employees at this critical inflection point on creating sustained increases in our stock price," Hundt's committee wrote in the company's proxy statement.

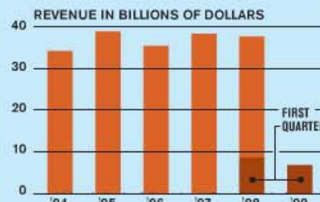
Otellini may have a tough time claiming all his money. Intel is still far and away the preeminent maker of the chips powering PCs, with a market share of 82%—near its all-time high. The company also has a new family of more sophisticated chips that is winning converts, from Apple and Cisco Systems to General Electric. But investors are unimpressed. The company's stock has dropped nearly 40% over the past five years as big institutions such as Fidelity Investments, T. Rowe Price, HSBC Holdings, and BlackRock dumped the majority of their holdings. "Intel is kind of stuck in limbo," says David Eiswert, a portfolio manager with T. Rowe Price.

Their concerns were fueled by Intel's first-quarter earnings report on Apr. 14. Although Otellini called a bottom in PC demand, Intel's net income tumbled 55% and he declined to provide revenue guidance for the year.

The question for investors is the same one Otellini and his board tangled over: Can Intel still afford to lead the technology industry the way it has in the past? For decades, Intel poured bil-

INTEL'S RECENT STRUGGLES

Revenue growth has slowed...



...and its returns have slid...

*NET INCOME BEFORE EXTRAORDINARY ITEMS DIVIDED BY COMMON EQUITY **MOST RECENT 12 MONTHS

(TOP) ILLUSTRATION BY JOHN RITTER; PHOTOGRAPHIC REFERENCE BY DANIEL ACKER/BLOOMBERG NEWS

CEO Otellini's compensation will be tightly tied to Intel's stock performance

lions into its plants to crank out ever-more-powerful microprocessors. Customers scrambled to get PCs with the latest chips as soon as they came out, paying a premium that boosted Intel's profits so it could start the investment cycle all over again.

But few customers focus on chip speeds anymore. They're fast enough. At the same time, PC sales are slowing. Intel's virtuous circle looks as if it could break down. Revenues last year, at $37.6 billion, were about the same level as in 2005. Last year's net income, at $5.3 billion, was 40% lower than four years earlier. Investors openly question whether it's time for Intel to ease up on its capital investments. "This company is at the stage where people are wondering what the growth potential is," says analyst Uche Orji of UBS.

Otellini has no interest in slowing down. Instead, he's intent on reviving sales in Intel's core PC business while guiding the company into brand-new growth markets. He sees a promising opportunity to diversify with a new family of chips called Atom for any gadget that needs processing power and access to the Internet, from a Web-connected television to a cash register at Wal-Mart that accesses current prices and offers shoppers customized coupons. Such businesses could add $10 billion to Intel's sales by 2011, he says. "[Atom is] an entry vehicle to be able to use the best of our technology to go into new markets," Otellini says.

ONCE BITTEN

Many large investors are skeptical because they've been burned by Intel's diversification plans before. The company spent tens of billions in the late 1990s trying to push into new markets during the heady dot-com years, only to write off most of the investments after the bust. Then in late 2003, it allowed rival Advanced Micro Devices to get the jump on Intel's main profit engine, the lucrative corporate server market, with energy-efficient, high-performance chips that customers loved. Intel clawed its way back two years later. But investors point out it had only AMD to beat amid a massive jump in demand from China, India, and other developing economies.

Today Intel faces headwinds from a weak global economy, and in the growth businesses it's targeting, a slew of deep-pocketed, seasoned incumbents including Qualcomm, Texas Instruments, and Nvidia. The big clash will be over new types of mobile-computing devices, from advanced cell phones to inexpensive netbooks to just-emerging products in between. This market could be twice as big as the traditional PC market.

Qualcomm and others are using a rival chip architecture, created by a company called ARM Holdings, that can run all day without draining a device's

...pushing down its stock

Data: Company reports, Standard & Poor's Compustat, Bloomberg

CHARTS BY RAY VELLA/BW

battery life, unlike Intel's chips. The rivals are also courting Microsoft and other developers to create consumer-friendly software that runs on their chips before Intel can strike. Eiswert at T. Rowe Price says the sheer number of competitors presents a challenge: "It's all of them against Intel."

Intel needs to make heavy investments so that Atom can become as energy-efficient as those from the ARM camp by next year. Without lower-power chips, Intel may well see device makers turn to competitors. "It's a race right now to see who will get there first," says Qualcomm CEO Paul E. Jacobs.

C-SUITE CHANGES

Intel's board is making Otellini and his team stake much of their pay on success. This year, the top 21 executives received "outperformance stock units," in place of their usual stock options and restricted stock. The value of the units, which vest over three years, will be pegged to how Intel's stock performs relative to the 15 tech companies in the S&P 100 index, including IBM, Hewlett-Packard, and Microsoft. It's not just this year's pay on the line either. Otellini holds options on 5.6 million Intel shares, from grants dating back to 1999. All of them are under water.

The CEO and his team face more independent board oversight, too. In January, Jane E. Shaw, 69, a former pharmaceutical executive, was named to take over as chairman next month from Craig Barrett, the former Intel CEO. It will be the first time that an outsider has taken that role. Shaw, Hundt, and other board members declined requests for interviews.

Yet the company's executives have a clear view of their long-term goal. In January, at the chipmaker's annual gathering of its sales team at the Venetian Resort Hotel Casino in Las Vegas, Executive Vice-President Sean M. Maloney, who heads sales and marketing, told employees Intel was not insulated "from the mother of all downturns." But Intel's risk-taking, he said, has paid off with world-changing technologies. "The worst thing for us to do is avoid experimenting, trying new stuff to expand the market," Maloney says. |BW|

–With Peter Burrows in San Francisco

STRATEGIES

What GE Capital Learned in Korea

Teaming up with Hyundai has gone so well that the partnership is a model for GE ventures worldwide

By Moon Ihlwan

Seoul

Not long ago, Korea was a slog for GE Capital. The financing arm of the U.S. conglomerate spent six years offering personal and auto loans and leasing office equipment at its wholly owned subsidiary in Korea but never managed to capture much market share. So the company dropped its traditional avoidance of minority stakes in joint ventures and folded its operations into two financing subsidiaries of Hyundai Motor. The result? The pair are among GE's most profitable businesses. "GE has really seen this [Korean success] as a bit of an eye-opener," says Bernard van Bunnik, GE's top executive in Korea.

Today the Korean operations are models for GE's marketing and branding strategies worldwide. Seoul has become a destination for management-training groups from the company's Crotonville leadership development center in Ossining, N.Y. In February, for instance, four GE executives spent two days there meeting with the venture's managers to try to determine a formula for successful partnerships.

Just as important, GE's experience in Korea has spurred a rethink of a key company strategy. Before the Hyundai deals, GE strongly preferred manage-

PHOTOGRAPH BY JAE-HYUN KIM; CHART BY DAVID FOSTER

Chung, president of both ventures, says: "We haven't encountered any real clash"

ment control in joint ventures. But since 2004, GE has invested a total of $3 billion in the two companies and now holds 43% of each: Hyundai Capital, the carmaker's auto-financing arm, and its credit-card affiliate, HyundaiCard. Today the Korean operations represent GE's biggest minority investment on the planet, and they have inspired similar arrangements such as the 2007 purchase of 25.4% of Bank of Ayudhya in Thailand.

GE was willing to take a chance on Hyundai because its 75% share of the Korean car market offered huge potential for auto loans. It was a good bet. The Korean operation contributed 5.1% of GE's worldwide consumer-finance profits in 2008. The return on assets for the two companies in 2008 was 2.66%, among the best of any GE business.

TWO-WAY LEARNING

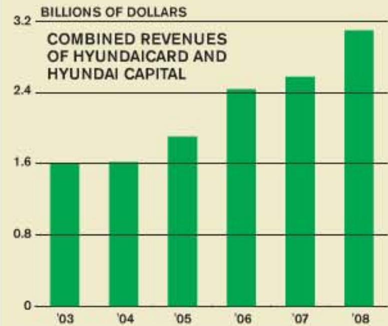
GE wasn't expecting such smooth sailing in its voyage with Hyundai, which has a spotty record of corporate governance. So the Americans stationed dozens of managers in key positions in the joint ventures, and both parties had veto power on all critical decisions. But neither side has had to veto anything. "We haven't encountered any real clash in management," says Ted Chung, president of both ventures, which operate virtually as one company. "In fact, we've been asking GE to dispatch more people because we want to learn more from them."

That learning has gone both ways. Chung says Hyundai originally sought an investor to make up for losses in its credit-card business. But he now calls the capital injection "the smallest contribution of all the benefits we've enjoyed." More important, Chung says, was GE's risk-management and financial knowhow, as well as its "uncompromising implementation of ethics, its interest in talent, and its management philosophy."

And GE has learned from Hyundai's marketing chops. To give the brand cachet, Chung hired noted designers Karim Rashid and Léon Stolk to develop a distinctive look for the company's cards, worked with design consultant IDEO to revamp and simplify its bills and Web site, and asked Dutch design firm Concrete Architectural Associates to create a more welcoming atmosphere at customer service centers. To nurture exclusivity, Chung set up "Super Matches" in sports ranging from figure skating and gymnastics to cycling and tennis, where megastars such as Rafael Nadal and Roger Federer face off in nationally broadcast competitions.

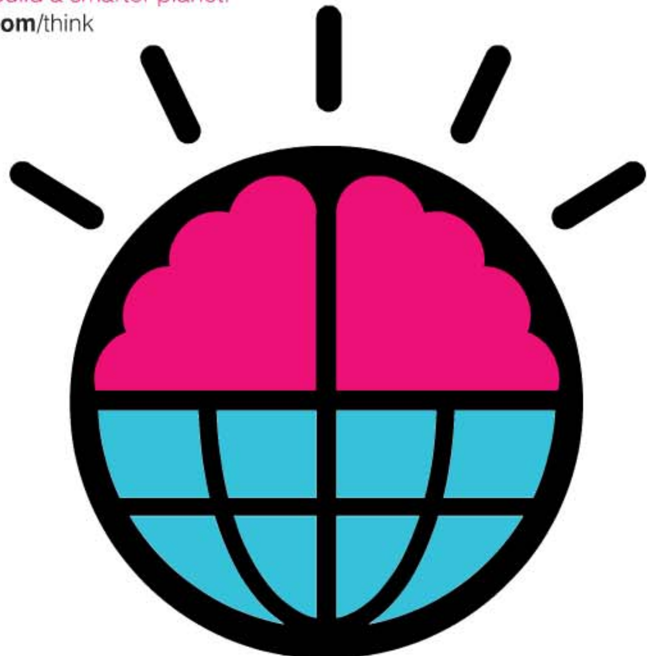
Hyundai also woos clients with discounts on its vehicles. HyundaiCard lops as much as $380 off the price of a car, which consumers then pay back by accumulating points that equal 2% of purchases with the card. That encourages holders of multiple cards to use HyundaiCard as their primary plastic. It seems to work: Average monthly spending by those customers is 37% higher than that of ordinary card users. HyundaiCard "has used design and branding to differentiate itself in a very crowded market," says GE's van Bunnik. That, he says, helps to make the Korean ventures "a benchmark for GE Money." | BW |

KOREAN STAR



Data: GE, HyundaiCard, Hyundai Capital

Healthcare providers lose $100 billion each year to fraud.
A smarter planet needs smarter insights.
Let's build a smarter planet.
ibm.com/think



New Fuel Rules May Breed More Guzzlers

Washington's revised standards could actually encourage carmakers to build bigger vehicles

By David Welch

By the end of this year, the Obama Administration will finalize new rules designed to force car companies to build vehicles that travel farther on a gallon of fuel. Too bad the rules will discourage automakers from manufacturing the kind of small cars that the Obamaites favor and, in some cases, encourage carmakers to do exactly the opposite. That's right: make some models bigger.

President Barack Obama is only partly to blame; he inherited a fuel-saving scheme from President George Bush and the last Congress. When lawmakers were considering revising long-standing regulations two years ago, the auto industry pushed back. As a result, the legislation, while forcing a significant boost in fuel economy, has loopholes big enough to drive a truck through. Obama has finalized rules for 2011 based on Bush's proposed regulations, which run until 2015. Now, Obama is working on what will likely be tougher rules that will run through 2020. "The Obama Administration has an opportunity to close a bunch of loopholes," says Daniel Becker, an environmental lobbyist in Washington. "Hopefully they will."

It won't be easy. The regulations are so complicated as to defy quick or simple remedies. The new (and not necessarily improved) version of the rules classifies vehicles by size and assigns them a specific mileage target. So now, starting in 2011, a big SUV

TO GO GREEN, MORE RED

Debt-ridden GM and Chrysler may take big Energy loans

By David Welch

One of the Obama Administration's key requirements for keeping General Motors and Chrysler alive is that both companies cut their debt drastically so they can become viable. And yet the Energy Dept. is gearing up to lend them billions more dollars.

This is less crazy than it sounds. The Energy loans are aimed at helping GM, Chrysler, and Ford retool themselves as makers of fuel-efficient vehicles. But while an infusion of tax dollars could help the Detroit Three be globally competitive, it also would just replace some of the debt that the government is helping GM and Chrysler shed. (Ford so far has a much stronger balance sheet.)

Under the current proposal, Chrysler and the U.S. Treasury Dept. aim to winnow down the $23.8 billion the automaker owes creditors to $10.5 billion. But the company has requested an additional $6 billion from Treasury and $6 billion more from Energy to make more efficient cars. That would replace most of the debt Chrysler wants to shed and bring its borrowings back to $22.6 billion. For a company so weak it is being asked to merge with Fiat to survive, this may not be a winning strategy. "It's not a viable company," says an industry consultant, Maryann N. Keller. "They don't have the product plan and the people to make it."

GM's case is far less dire, but those green dreams could add a heavy slug of debt to its balance sheet, too. The government and GM are trying to negotiate deals that would wipe away much of the $28 billion it owes bondholders and at least half of the $20 billion it owes a retiree health-care fund. But GM has requested $8 billion more in loans from Energy for its fuel-efficiency push, not to mention $30 billion-plus from Treasury to help it survive until cratering U.S. auto sales recover.

Unless GM goes into bankruptcy or the feds swap a big chunk of government debt for equity—both of which are real possibilities—GM could end up a restructured company with lower labor costs, fewer brands, but lots of debt.

$22.6 billion

Chrysler's estimated debt after it receives Energy and Treasury loans. That's not much less than it owes now.

Data: *BusinessWeek*

RICHARD MIA

such as the Chevrolet Tahoe will have to hit a relatively tame 21 mpg, while Toyota's Avalon sedan will have to hit 25 mpg.

Sounds reasonable, doesn't it? But say a big SUV misses its target by one mile per gallon. A carmaker could just make the vehicle a bit larger, allowing it to hit an easier fuel economy target. So General Motors may benefit with its new and efficient Chevrolet Cruze compact, due out in a year, because it's bigger than the car it replaces.

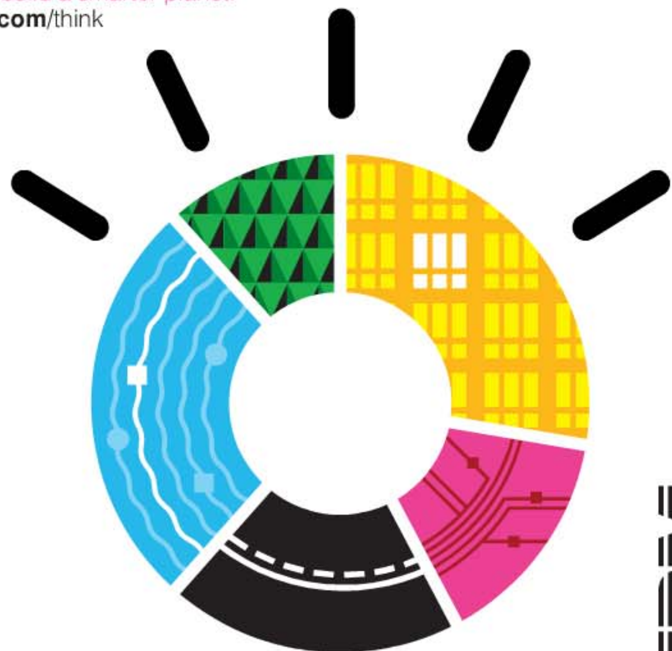
FOLLOWING CALIFORNIA?

Toyota Motor faces the same calculations. Under the Bush rules, by 2011 the company's thrifty little Scion xD must get 40 mpg, but it currently misses the mark by two miles per gallon. Meanwhile, Toyota's Avalon sedan, the biggest in the automaker's line, gets a rating of 29 mpg and beats its 2011 target by 1 mpg. "The system doesn't do anything to encourage smaller vehicles," says Tom Stricker, Toyota's director of technology and regulatory affairs. And even if gasoline prices rise again and prompt consumers to look for smaller cars, he says, the new rules give automakers less incentive to sell more of them.

The rules are particularly hard on European carmakers. Mercedes-Benz and BMW get about 70% of their U.S. sales from passenger cars. But because cars are in a different category than SUVs, the targets are harder to meet. BMW may have to introduce expensive new technology or smaller engines so its popular 3-series sports sedan meets the new targets. Theoretically, says Tom Baloga, the automaker's vice-president for engineering, European automakers could decide to build more SUVs, which have easier targets, to attempt to boost sales while remaining in compliance. "Cars are going to get bigger," Baloga says, "as companies try to take advantage of the situation."

Revising the new rules and closing the loopholes will be difficult at this point. But there is one thing the Obama Administration will likely do: force automakers to hit higher overall mileage targets than the Bush plan calls for. The President is under pressure from California, which wants to set its own greenhouse gas rules—regs that are tantamount to higher fuel economy standards. Obama campaigned saying he would allow it, but automakers want one standard nationally. People familiar with the negotiations between the feds and industry representatives say a compromise is in the works that, starting in 2012, would move national fuel economy standards closer to California's request. That could push the nation's overall target to about 40 mpg (instead of 35 mpg) by 2020.

There is a simpler, more effective solution. European countries have reduced oil use by taxing gasoline heavily. Consumers there tend to buy small cars because fuel costs as much as $8 per gallon. Some members of Congress have talked about raising gas taxes in the U.S. But lawmakers need to get reelected, and new taxes are unpopular. So Washington will probably stick with its imperfect fuel economy rules for a long time. |BW|



There's Even Trouble In Toyota City

Like Detroit, it's too reliant on a single industry, and the unimaginable could happen—plant shutdowns

By Ian Rowley and Hiroko Tashiro

TOYOTA CITY, JAPAN

This corner of Aichi prefecture has long been Japan's answer to Detroit. It was in Aichi that Kiichiro Toyoda tore apart an imported Chevrolet to see how it was built, then created what he called the Model A1. In 1938 Toyoda opened a car factory in an Aichi town called Koromo, then in 1959 the town took the name of the corporate citizen that would grow into a global powerhouse. More recently, Toyota City has prospered even as Motor City has deteriorated. By 2008, Toyota had dethroned General Motors as the world's biggest carmaker, confirming Toyota City—not its sister city Detroit—as the true center of the auto world.

Yet for Toyota City, life at the top isn't going as well as many might have hoped. As the global economy wobbles, Toyota City is suffering from what locals have dubbed *Toyota Shokku*. Toyota Motor expects to finish $3.5 billion in the red for the financial year that ended Mar. 31, its first loss since 1950. Although Toyota City isn't nearly as bedraggled as Detroit, some 70% of its 422,000 residents rely on the auto industry for their livelihoods, so when Toyota suffers, its hometown suffers too.

Almost overnight, Toyota City has turned from a symbol of Japan's manufacturing muscle into a hard-luck tale of excessive reliance on a single company and industry. Sidewalks are empty as retail sales have dropped by 20% over the past year, and on a recent afternoon staff outnumbered shoppers at the Matsuzakaya department store. The local government, long accustomed to fat tax revenues from Toyota and its affiliates, last year saw corporate tax receipts fall by 96%. "Things are very tough," says Fabio Sadaki Nakanishi, owner of the Foxmart supermarket in an area called Homi-danchi, home to many Japanese-Brazilians who have been laid off as work has dried up.

And the pain is spreading throughout Aichi prefecture. More than half of Toyota's Japanese production is in Aichi, whose economy could shrink by more than 10% this year if the carmaker's sales don't recover. Although few full-time workers have lost their jobs, Toyota has shed about 6,000 contract employees in the past year, and some are saying the company could be forced to cut Japanese production permanently. "Maybe it's even time to...take the hard step of shuttering some plants in Japan," says Chris Richter, an analyst at brokerage CLSA in Tokyo. Toyota declined to comment on the prospect of plant closings.

If the yen stays strong, one brokerage predicts losses at Toyota could swell to $11 billion in this fiscal year

For many in Toyota City, the automaker's new boss provides a ray of hope. Akio Toyoda, grandson of Kiichiro Toyoda, is slated to succeed Katsuaki Watanabe as president in June. Locals are convinced that Toyoda, a true car buff, wouldn't close plants in the area. "Toyota is a global company, but its spirit is local," says Kenji Nishino, chief of a local shopkeepers' group. "They take good care of employees so it is unimaginable [that Toyota would shut plants]."

Not everyone is so optimistic. Toyota's losses could swell to $11 billion in the year ending next March if the yen stays strong, CLSA predicts. And workers at some of the 12 Toyota plants in and around Toyota City are the company's best paid; a typical 30-year-old factory hand here earns a base salary of roughly $3,000 a month, 22% more than similar workers at Toyota's Kyushu subsidiary in western Japan. Toyota watchers say two older plants that build vehicles primarily for the Japanese market are likely candidates for closure—and that Toyoda may be the only person who could get away with taking such a step. "If the current situation continues, Toyota will have

(LEFT) JAMES WHITLOW DELANO/REDUX; (RIGHT) FRANCK ROBICHON/EPA/CORBIS

no choice but to...shut down a factory," says Seiji Teramoto, the author of a recent company history and longtime Toyota reporter for the regional *Chunichi Shimbun* daily. "Only Akio Toyoda, as a founding-family member, can do it."

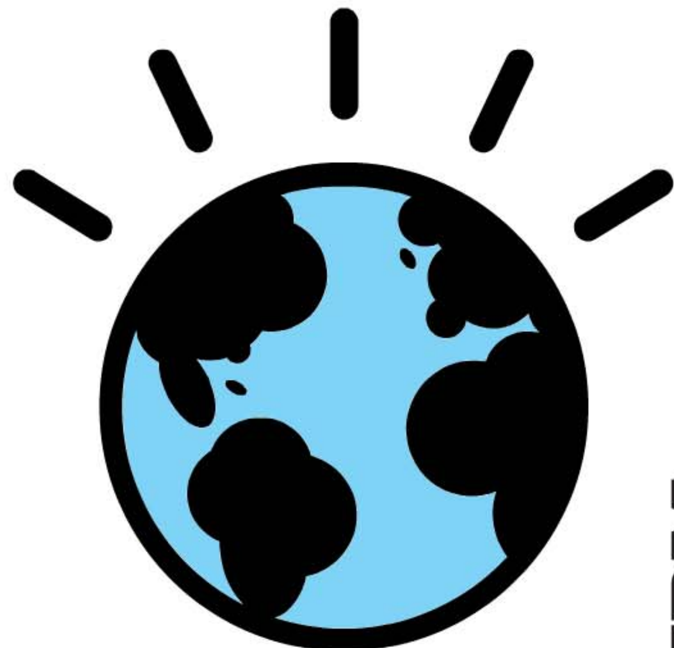
Factory shutdowns would spell bad news for the 1,500-plus companies that make components for Toyota and its suppliers. At parts maker Denso, one worker grumbles that overtime cuts and furloughs have cost some employees $1,000 a month out of pocket. And he says there's no shortage of empty seats in the staff canteen since the company laid off hundreds of contract workers. "The mood has become somber," he says, noting that the local train station is busier than ever between 5 p.m. and 6 p.m. as workers no longer toil late or go for a drink after their shift.

The local branch of Hello Work, Japan's unemployment bureau, may be the busiest storefront in town. While job-seekers queue inside, Hideo Saito crouches on the sidewalk, smoking. The 43-year-old spent eight years at Sango, a maker of mufflers and exhaust pipes, but was always considered temporary because he was hired via employment agencies. Laid off in January, he was left homeless because his temp agency also provided a dormitory for workers. Now, Saito is more cautious: He has turned down part-time work in hopes of landing a full-time job with more security. "I don't want to go through this again," Saito says.

Akio Toyoda, grandson of the company founder, takes over as president in June; Toyota City (far left)

The city's grandees are fighting back. The chamber of commerce—headed by Toyota President Watanabe's elder brother—has launched a campaign to encourage people to buy Toyotas. "In Toyota City, Let's Drive a Toyota!" posters urge passersby. A few even believe some good can come from the *Toyota Shokku*. In nearby Nagoya, mayoral candidate Masahiko Hosokawa says the crisis creates an opportunity for the region to wean itself from its reliance on Toyota. "We have to change the character of the economy," Hosokawa says. One step in that direction: Mitsubishi Heavy Industries is planning to build a new regional jet airliner in Aichi. But given the bounty Toyota has provided for the area over the decades, the challenges ahead will still be daunting. "The mountain was very high," Hosokawa says, "but the valley is very deep." BW

On a smarter planet,
the question isn't what can we do.
The question is what will we do?
Let's build a smarter planet.
ibm.com/think



IBM, the IBM logo and ibm.com are trademarks of International Business Machines Corporation, registered in many jurisdictions worldwide. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.

Information Security: An Executive Guide

By Bob West, CEO, Echelon One

We are at a unique point in history. In the midst of the most severe economic downturn since the Great Depression, we face another significant challenge.

Our technology infrastructure has significant vulnerabilities and with technology at the foundation of most organizations, businesses could cease to function if their systems were compromised. What would happen if a major financial institution lost its ability to conduct business? What if medical records were tampered with and patients received medication that would normally help them but now caused a life-threatening allergic reaction?

These scenarios are realistic and are issues senior executives and board members are not speaking about or well-versed in for a variety of reasons. In this, and future special sections, we will communicate the security and risk issues we face, why they are relevant to leadership teams and what can be done to address these issues.

This is a period of great adversity and in these times opportunities also arise. We believe that by addressing security along with economic issues globally, we can create an environment that is resilient, transparent and will allow us prosper over the long term. Along with the other compelling topics, this special section features several fictional scenarios written by best selling author, Richard Clarke who believes that truth is better told in fiction, and fiction is the best way to appreciate the potential consequences of a cyber breach.

Section Sponsors

Echelon One, LLC
Executive Security Intelligence

RSA CONFERENCE 2009
APRIL 20-24 | MOSCONE CENTER | SAN FRANCISCO

New Security Threats and Vulnerabilities Render Traditional Security Moot

In recent months, CIOs have been subjected to a shock about the vulnerability of their enterprise systems. "We're hearing this wherever we go: public sector, private sector, universities," says Raimund Genes, CTO Core Tech & Anti-Malware with Trend Micro. Genes attributes the scary new security environment to a number of causes.

- Advances in web-based threats and changes in user habits seem to have galloped past the ability of traditional security technologies to protect current systems.
- Cash-strapped CIO staffs tend to react to a new generation of threats rather than pro-actively preparing for them.
- The global recession has made the bad guys—malware writers—hungrier than ever.

However, while security threats are increasing in frequency and severity, most technologists are behind the curve in how they meet new security risks.

"For example," explains Genes, "many large enterprises regard email attachment scanning as their mainstay protection from outside threats. That may have been an adequate measure to take four or five years ago. But our data shows that in the current environment, over 60 percent of malware on enterprise networks come from phishing-type http links in email."

Moreover, today's threats are driven by a profit motive. "Criminals today, don't just want to wreak havoc…they want to monetize their malware. As with all criminal enterprises, they do not want to be caught or disturbed in the process. So they operate under the radar."

The good news is that there are technologies that can help. Trend Micro will be demonstrating these at this year's premier security event, RSA Conference. New endpoint security solutions powered by the company's cloud-client security infrastructure, the Trend Micro Smart Protection Network, block threats in the cloud, before they have a chance to reach corporate networks and endpoints.

What The Corner Office Needs To Know About Information Security

For years – and despite a steady and concerted effort to communicate the contrary – C-level executives and business unit leaders have seen security as a necessary evil. It is a mindset that a growing number of industry experts say should change...particularly as organizations respond to the current economic environment. But if this change is going to happen, the security profession must be associated with delivering business value.

"Executives need to start thinking of Information security as an enabler of business processes instead of a barrier to progress," says Michel Emelianoff, VP Enterprise Security Solutions at Alcatel-Lucent. "A mature eco-system of network access controls is necessary for good security as well as good governance, risk and compliance management," he says.

By integrating data protection and accountability into new business processes, security professionals can not only protect key resources, but also allow organizations to pursue new opportunities with a higher level of confidence.

"For instance, at Alcatel-Lucent, we have developed technologies and processes that ensure individual users connect to network resources in a consistent and compliant manner," explains Emelianoff. "This allows enterprises to create profiles that automate the privileges and responsibilities users have across the enterprise based on their role within the organization. It is how you ensure that a supply chain specialist in an enterprise with a $25,000 per day transaction limit can't game the system and spend $50,000 per day."

Cyber Threats: Fact or Fiction?

Stealing Secrets: Corporate Battles

General Cars had worked for years on developing the latest in eco-friendly vehicles. The release date was fast approaching for the Bolt, an electric car whose state-of-the-art design and cutting edge engineering was predicted to revolutionize the automobile industry and make GC billions of dollars in revenue. Six months ahead of the Bolt's scheduled release, Mizdo, the major Asian automaker, released a car with a similar engine to the Bolt. GC deduced that Mizdo was able to infiltrate its system and gain access to sensitive design information about the Bolt. Having been undercut in the market, GC stock prices plummeted and the company lost millions in revenue.

This capability allows security and risk managers to deliver tremendous business value to the organization. But it also means that the image of the information security professional needs to change.

Enabling and empowering the increasingly mobile workforce offers an excellent opportunity to demonstrate the business value that security departments can bring to bear for organizations.

"Today, a laptop goes missing every 53 seconds, and newspaper headlines scream of lost and compromised data" says Emelianoff. "Alcatel-Lucent has developed technology that enables enterprises to manage and secure mobile laptops and the data they contain 24x7, regardless of the power state of the laptop and regardless of end-user participation.

"We can then allow executives to control how these devices are used in the field. And if an asset is lost or stolen, we can take control of the data remotely and immediately. This means improved visibility, reduced risk, and increased policy compliance. That is business value."

To learn more about how available security technologies can address strategic business issues, visit Alcatel-Lucent at the RSA Conference, April 20-24 in booth #317.

40 Million

Credit Card Numbers Stolen from TJX

98,930 Affected In Forever 21 Data Breach

Trojan horse captures data on 2,300 Oregon taxpayers ■ 5C

Hotel Chain Falls Victim to 14,000 Data-Stealing Malware incidents

University of Indianapolis Hacked: 11K Student, Faculty, Staff Records Stolen

4C

6,700 Data-Stealing Malware Infections Plague US Healthcare Company

60% OF BUSINESSES ARE HIT BY CYBERCRIME.*

Think your data isn't as attractive as theirs?

THINK AGAIN.

Data-stealing malware is on the rise. These new Web threats are stealthy, fast, and after your corporate and financial data—threatening your brand and risking your reputation. They are infiltrating the most secure businesses and yours could be next. But with on-premise or hosted solutions and services powered by the Trend Micro™ Smart Protection Network, you'll be ready. This unique cloud-based security infrastructure protects you by blocking threats before they can reach your network and damage your business. The Smart Protection Network—it's security made smarter.

▸ **Download our eBook and learn how malware can evade your current security solutions and what you can do to block them at trendmicro.com/thinkagain.**

Securing Your Web World

*According to reports from the U.S. Department of Justice.
©2009 Trend Micro Inc. All rights reserved. Trend Micro and the t-ball logo are trademarks or registered trademarks of Trend Micro Inc. All other company and/or product names may be trademarks or registered trademarks of their owners.

Information Security: An Executive Guide

Protecting Brand Reputations as Well as Information Resources

Companies today are not only inter-dependent economically, they are interconnected technologically.

The security implications of this are extreme. A breach can not only threaten the integrity of information systems, but can seriously compromise carefully crafted relationships and reputations.

"That is why information security has become such a strategic concern," explains Eva Chen, CEO of Trend Micro. The task before security professionals and business unit managers is daunting, however, as the nature of threats and vulnerabilities become more complex and devious.

"Malware is now perpetrated by intelligent and determined cybercriminals," she explains. "And the sophistication displayed by these rogue players is astounding."

Cybercriminals now use multiple threat vectors to propagate and manage their attacks. They assault business and consumer networks via the web, e-mail, and other forms of digital communication that provides hackers with a way to embed illegitimate code onto unsuspecting computer systems. Because the threats are integrated and coordinated, it is no longer enough to put in place point solutions for each type of attack. Instead, organizations need an equally coordinated defense.

"That is why Trend Micro has developed an enterprise security strategy that is based on what we call the 'Smart Protection Network,'" says Chen. "We have developed a way to correlate threats from multiple vectors by analyzing and providing protection against multiple components of an attack. We are able to effectively integrate feedback from our anti-spam, anti-malware, webcrawlers, honeypots and other technologies to provide a current and coordinated security risk management posture," she points out.

By combining messaging, file and web security services, businesses get the benefit of integrated threat intelligence across all three threat vectors. The result is real-time protection against the largest possible number of threats in the fastest possible time.

Cyber Threats: Fact or Fiction?

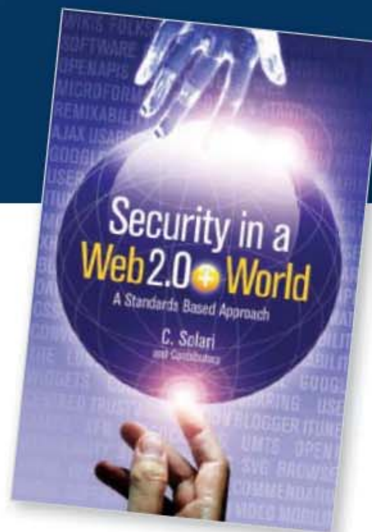
Counterfeit Drugs: Risk Of Contamination

An e-mail with an attachment was sent to an employee at Callusp, a large pharmaceutical company that produces a widely used blood thinner, called Hepatin. Clicking on the attachment in the e-mail released an insidious piece of code that exfiltrated sensitive data out of Callusp and directed it to a terminal in Canada. It was unclear what the hackers wanted – the patent and formula of the drug or something more malicious and lethal. Either way, the cyber vulnerabilities of Callusp proved to be destructive to the company's profitability.

To learn more about how these security technologies work together in integrated products, solutions and SaaS service offerings, visit Trend Micro at the RSA Conference, April 20-24 in booth #2017.

Web Sites to Watch

www.alcatel-lucent.com
www.trendmicro.com
www.us-cert.gov
www.scmagazine.com
www.secureitlive.com
www.rsaconference.com



Security in a Web 2.0+ World by C. Solari

Network convergence, cloud computing, and other phenomena of the Web 2.0 era are exposing ICT security to new and dangerous threats and causing a re-evaluation of traditional security methods.

In Security in a Web 2.0+ World, noted network security expert Carlos Solari and co-authors explore the current systemic vulnerabilities of information systems and make a strong case for taking a rigorous standards-driven approach to designing security into products at the very earliest stage of their development.

Security in a Web 2.0+ World looks at the perplexing issues of cyber security and provides a guide to information security and standards in the Web 2.0+ era. Solari highlights new security standards (ISO/ITU) that provide manufacturers and developers with a means to create products and services that can meet the challenges to security posed by emerging technologies. By implementing standards-based development, companies are able to demonstrate the level of maturity their security solutions have achieved and instill confidence in their customers.

Lead author Solari joined Alcatel-Lucent Bell Labs in 2006 after spending nearly 23 years in some of the most highly trusted operational roles within the U.S. government: Army Officer, FBI Senior Executive and White House CIO. In his current role as VP, Quality, Reliability and Security at Alcatel-Lucent, Solari applies the breadth of his experience in national security, law enforcement and public safety to addressing security in a Web 2.0+ world.

Meet the author and pick up a free signed copy of 'Security in a Web 2.0+ World' at the RSA Conference, April 20-24 in Alcatel-Lucent booth #317

Sandra Toms LaPedis Area VP/GM, RSA Conference

Can you talk about the importance of gathering industry professionals at a major venue?

Anyone who has engaged in face-to-face dialogue with an industry colleague will tell you that no technology can replicate the relationship-building power of those interactions. In talking to our attendees, we have learned that people specifically come to RSA Conference not just for the important content and programming, but to talk with peers, meet industry luminaries, and join impromptu hallway discussions. Especially for the information security industry – one that changes daily – timely education is the most critical component in understanding the security issues that matter and how to react to them.

What trends are you seeing in the security industry with respect to how people consume information and how is web 2.0 Changing the landscape?

Today there are myriad ways for information to be created and shared. Recently, the information security industry has seen dozens of groups crop up on LinkedIn and Facebook, an entire network of security bloggers emerge and a dramatic increase of relevant conversations on Twitter.

For us, 2008 was the first year that RSA Conference offered media credentials to bloggers. We also utilized Twitter in 2008 and will "tweet" more around the 2009 event to effectively connect with our attendees. RSA Conference has its own LinkedIn and Facebook group pages where members can connect, discuss trends and receive Conference updates.

What is different this year at the RSA Conference and what sets it apart from past years?

A goal for RSA Conference 2009 is to demonstrate how innovative our industry can be. As such we've created Innovation Sandbox, an exciting new program where participants can explore the technologies that promise to transform information security. Attendees can collaborate on solutions to tomorrow's security challenges, preview products still in development and vote for the most promising ideas and technologies.

"Dozens of groups crop up on LinkedIn and Facebook, an entire network of security bloggers emerge and a dramatic increase of relevant conversations on Twitter.

Welcome to the Swap Exchange

Jeffrey Sprecher's ICE is the front-runner in the new frontier for exchanges: credit default swaps

BW 50

By Joseph Weber

Jeffrey C. Sprecher, a former race-car driver, knows all about outmaneuvering competitors. In the late 1990s the head of the scrappy IntercontinentalExchange (ICE) persuaded energy behemoths to trade on his new electronic platform instead of relying on the leader, Enron. After Enron collapsed a few years later, ICE took off. Sprecher's brainchild is now the second-largest futures exchange in the U.S., behind CME Group. His latest race: a bid to control the burgeoning market for credit default swaps. "We have the benefit of being entrepreneurial," says 53-year-old Sprecher. "It allows us to move quickly."

Credit default swaps are the new frontier for exchanges. The esoteric instruments—whose values are pegged to the performance of an underlying security or index—are essentially insurance policies if borrowers fail to make debt payments. The market for such instruments became so large and complex in recent years that some firms lost track of their deals. The government has spent months untangling the web of contracts sold by insurer AIG. That's why industry players, at the behest of regulators, are pushing to create a more transparent exchange, not unlike those for stocks and bonds.

CUTTING THE RISK

So far, only ICE has a system up and running, with CME Group, NYSE Euronext, and Eurex planning to launch similar ventures in the coming months. In March, Sprecher started ICE Trust, a clearinghouse for credit default swaps that processes and guarantees trades between firms. If one party goes belly-up, the clearinghouse covers the losses. Such operations "remove the risk" if one firm defaults, says Kevin McPartland, an analyst for researcher Tabb Group.

Critics say ICE's trading platform has its flaws. For one, the exchange is open only to members, a group that's restricted to financial firms worth at least $5 billion. Hedge funds and smaller firms have to team up with a member if they want access. ICE Trust won't be an auction, at least initially; rather member banks will make deals among themselves. Some fear that will mean nonmembers won't necessarily get the best prices on the ICE platform.

Sprecher says ICE is able to move more quickly than larger rivals such as CME Group

To dominate this market, Sprecher will also have to fend off rivals. CME Group, which has joined up with hedge fund Citadel, plans to entice big banks to its exchange by cutting costs and expanding the list of traded instruments. CME says it will allow firms to trade swaps tied to the performance of indexes (like ICE) but also swaps tied to individual companies. "We are bringing to market a very comprehensive offering, much broader than you'll find in some other ventures," says Kimberly S. Taylor, a group president at CME.

Sprecher's head start is critical. Already, ICE has lured the likes of Citigroup, Goldman Sachs, and JPMorgan Chase, which owns stakes in the venture along with six other big banks. The market could prove especially lucrative. The fees charged by exchanges for credit default swaps could reach $140 million annually. That would be a big boost for ICE, which earned $300 million last year and nabbed the No. 17 spot on the BusinessWeek 50 list of top corporate performers. Says Sprecher: "The game isn't over." | BW |

Industry players and regulators want a more transparent system for trading credit default swaps to avoid another debacle like AIG

ANN STATES

Why high performers shine even when the sun doesn't.

It's a challenging environment. But while some organizations struggle to survive, others will emerge even stronger. How can you give your company an edge? Making the right decisions, based on your unique strengths, is more critical than ever. Whether your goal is maintaining your market position or improving it, flawless execution is a must. Having worked for decades with the world's most successful companies – through up cycles and down – we have the experience to help you come out on top. At a time when it's tougher than ever to be a Tiger, it's even more crucial to know what it takes. Talk to us to see how we can help.

accenture.com

• Consulting • Technology • Outsourcing

accenture

High performance. Delivered.

© 200[illegible] Accenture. All rights reserved.

It's what's next.

Introducing

EDGE

The **BusinessWeek** Solution

BusinessWeek's EDGE is an innovative new leadership development program combining our world-class, insightful content with cutting-edge weekly training tools.

Whether you're an HR professional, involved in mentoring, or a motivated leader, **EDGE** can help you grow your greatest asset and develop future leaders. This easy-to-use solution can inspire more enlightened awareness of global trends, highly developed leadership and management practices, broader strategic thinking and a deeper understanding of how decisions impact profitability.

Every successful business needs an EDGE. Get yours with BusinessWeek.

To learn more, contact:

Philice LeBow at 212.512.6432, philice_lebow@businessweek.com
Elizabeth Egbert at 212.512.4137, elizabeth_egbert@businessweek.com

Think globally. Lead globally. Get the EDGE. SUPPORT FUTURE FORWARD THINKING. CREATE VISION. Make every day a learning experience.

BusinessWeek

FINANCE

Santander's Grand U.S. Game Plan

The Spanish bank's takeover of Sovereign should help it muscle into U.S. retail banking

By Mark Scott

MADRID

Spain's Banco Santander has every right to be smug. While rivals were jumping into investment banking and complex derivatives, Santander stuck largely to its plain-vanilla retail operations in Europe and Latin America. That extra-safe strategy helped Santander rack up $11.7 billion in profits last year even as its peers were hemorrhaging cash.

One place Santander has largely avoided is the U.S., but that's about to change. The bank in October paid $1.9 billion for the 75% of Reading (Pa.)-based Sovereign Bancorp that it didn't own already. Emilio Botín, Santander's 74-year-old chairman, plans to use Sovereign's 747 branches and 2 million customers in the Northeast to muscle his way into U.S. retail banking. That will involve spending some $400 million by 2012 to upgrade back-office technology, retrain staff in marketing techniques, and consolidate a far-flung management team. The deal will make the U.S. Santander's No. 3 deposit base, behind Britain and Spain.

While the expansion may be a gamble in these tough economic times, Santander has a strong track record in acquisitions. In Spain, Britain, and Latin America, the bank has followed a similar strategy: Buy a small stake in a local player to get to know a market, then jump on bigger game when they come up for sale. In the past two years, Santander has spent some $31 billion on nine deals across three continents.

"Botín always has been a hunter," says Robert Tornabell, former dean of ESADE Business School in Madrid.

But cracks are appearing just as Botín embarks on this U.S. adventure. In 2008 the bank's nonperforming loans doubled, to $8.9 billion—2% of Santander's portfolio—and they're expected to double again this year as Spain, Britain, and Brazil hit the skids. A $3.1 billion loss related to Bernard Madoff's $65 billion Ponzi scheme also has tarnished the bank's credibility. "Even Santander's conservative retail banking model won't do well in the current climate," says José Manuel Campa, a finance professor at IESE Business School in Madrid.

Not so, says Santander Chief Financial Officer José Antonio Alvarez. He says bad-loan provisions—mandated by Spain's central bank—will ensure that Santander can weather the crisis. He also notes that Santander has a healthier loan book than most of its rivals. "We only invest in markets that we understand well," Alvarez says.

Santander's successful marketing techniques are being rolled out at Sovereign's 747 branches across the Northeast U.S.

And Botín knows how to squeeze every last dollar, euro, and pound from customers. Branch managers use in-house technology, dubbed Parthenon, that provides constant updates on clients. The system analyzes accounts and suggests products, such as credit cards or home equity loans, that customers are likely to want. And it flags clients who are falling behind so the branch can work out a payment plan. "We know who pays and doesn't pay, and the exact services to sell," Esther Sanchez, a manager with Santander unit Banesto in Madrid, says as she thumbs through client files.

Botín: His M.O. is to buy a small player, learn the market, then wait for a bigger deal

GROWING PAINS

Santander plans to replicate the strategy at Sovereign. Last year productivity at 30 branches around Philadelphia jumped by 50% when managers started using Santander's selling techniques. That pilot program has been expanded across all Sovereign branches, a move Santander expects could net the bank $215 million in savings over the next three years.

Still, Sovereign carries some risks. Santander already has written down $2 billion of Sovereign's questionable assets. And the Spaniards want to get rid of a further $10 billion in loans by yearend. Despite those growing pains and its troubles back home, Santander remains confident about the U.S. "It's not about luck," says Juan Rodríguez Inciarte, the bank's strategy chief. "We make decisions at the right time." | BW |

PIERRE-PHILIPPE MARCOU/AFP/GETTY IMAGES

BE PART OF THE PREMIER GATHERING OF INDUSTRY INSIDERS AND POLICY EXPERTS INVOLVED IN SHAPING TECH POLICY

Tech Policy Summit

MAY 11-13, 2009 — SILICON VALLEY

Join Tech Policy Central and BusinessWeek in the San Francisco Bay Area, May 11-13, for the 3rd annual Tech Policy Summit where prominent leaders from the private and public sectors will meet to examine critical policy issues impacting technology companies and consumers. Register online at TechPolicyCentral.com and save $100 with this discount code: **4BWEEK.**

BusinessWeek's Steve Wildstrom

Hosted by BusinessWeek technology columnist Steve Wildstrom, the 2009 Summit will focus on strategies for accelerating innovation and economic growth with an in-depth look at the latest developments in broadband deployment, smart grid technologies, digital privacy, spectrum access, network neutrality, patent reform and more.

Co-located with The Free! Summit and TPS: Broadband Innovation, Tech Policy Summit offers you a chance to network with an exclusive group of thought leaders while gaining a better understanding of how the innovation policies of the Obama administration and Congress stand to impact the tech sector.

Featuring over 60 speakers, including:

Rep. Mike Honda
Congressman, D-CA
House of Representatives

Ellen Miller
Executive Director
Sunlight Foundation

John Doll
Acting Director
Patent & Trademark Office

Hon. Rachelle Chong
Commissioner
CA Public Utilities Commission

Craig Newmark
Founder
Craigslist.org

Judith Estrin
Author and CEO
JLABS

Chris Kelly
Chief Privacy Officer
Facebook

Dr. Prith Banerjee
SVP of Research
HP

SIGN UP AT TECHPOLICYCENTRAL.COM TODAY TO SECURE YOUR SPOT! SAVE $100 WITH DISCOUNT CODE 4BWEEK

Sponsors include:

064 How to Play It: Biofuels
065 Life Management: The making of a landlord
066 Investing: Harvesting tax losses
068 Inside Wall Street

MONEY REPORT

COPPER'S CLIMB

Finished copper in a South African mill. Demand from China should support prices

Copper prices jumped 5% on Apr. 13, continuing a four-week rally. The metal—an economic bellwether because it is used for wiring in home appliances, buildings, and telecom networks—has an average price of $2.14 per pound, well below its 2007 high of $3.07. Josephine Jiménez, manager of the **Victoria 1522 Fund,** which focuses on emerging markets, expects prices to keep rising since production capacity is limited and demand is still robust from China, the world's biggest copper consumer. Plus, copper is a play on inflation since it's used for minting coins, says Jiménez—"and there is a serious shortage of coins." The purest copper play: The **iPath DJ AIG Copper Total Return Sub-Index** exchange-traded note, which holds futures contracts, says Matt Hougan, editor of IndexUniverse.com. (Exchange traded funds—ETFs—typically mimic market indexes; ETNs are more like bonds and have credit risk.) Another option: the **PowerShares DB Base Metals ETF,** with 40% in copper. *–Lauren Young*

18%

Rise in MGM Mirage stock after its Apr. 13 agreement with lenders

Data: Bloomberg

CREDIT CRUNCH

MGM'S ODDS

After MGM Mirage reached an agreement with lenders on Apr. 13 that avoided a cutoff in credit, the casino operator's shares rose 18%. The spike can be attributed to short-covering, as traders who bet on MGM's imminent insolvency rushed to cover positions. While traders are still betting MGM won't resolve all its debt woes soon, Union Gaming Group's Bill Lerner notes it has billions in collateral to back any amended loan and is trying to sell casinos to raise cash. And with MGM Nevada's largest employer, Washington could pressure lenders to renegotiate. If that happens, Lerner says, expect another price spike. *–Ben Levisohn*

STOCKS

BOX OFFICE BUYS?

While the economic news continues to be grim, things are looking up for Hollywood. As in the Great Depression, consumers are looking to the local cinema for a lift. Led by *Hannah Montana: The Movie* from Disney, box office receipts for Easter weekend were up 61% from the same period last year. Through Apr. 13, box office numbers for 2009 are up 14% from a year ago. That's good for the studios, but even better for theater operators **Regal Entertainment**, **Cinemark Holdings,** and **Carmike Cinemas,** which collect about 45% of receipts, says Steve Birenberg, president of Northlake Capital Management.

Stocks of theater operators jumped after solid first-quarter box office results, but Birenberg says continued box office strength will prompt analysts to hike profit estimates in the short term. Over the long run, investors are reassessing moviegoing trends. "People assumed for years that home theater and DVDs were killing off the business," says Birenberg. "Now we're seeing that's not true, and [the business is] much more stable and sustainable than investors thought." *–Aaron Pressman*

ANTHONY B. BANNISTER/RIO TINTO GROUP/BLOOMBERG NEWS

THE BIOFUEL BUBBLE

(FROM PAGE 038)

By Joseph Weber

Investing in biofuels, as in most cutting-edge tech, can be treacherous. Ask anyone who snapped up stock in VeraSun Energy, a Sioux City (S.D.) company that briefly thrived as an ethanol titan. Investors paid up to 30 a share in mid-2006, only to see holdings vanish when the company filed for bankruptcy protection last fall amid plunging ethanol prices, bad bets on corn futures, and a credit crunch.

Now, with such giants as DuPont, BP, Weyerhaeuser, Chevron, Archer Daniels Midland, Deere, and Monsanto driving to develop successors to corn-based ethanol, the smartest—and safest—way to wager on alternative fuels may be to bypass startup companies in favor of old standards with a broad business base. These companies hope to churn out next-generation fuels in commercial quantities in three to five years at the earliest.

Even while its fortunes have declined with ethanol prices, ADM, the national leader in ethanol, has been working with Deere and Monsanto to turn cornfield waste (everything except the grain) into fuel. Separately, ADM plans to build mills in Brazil to process sugarcane into ethanol. A leader in biodiesel production in Europe, the Decatur (Ill.) agribusiness giant has also just teamed up with Canadian Bioenergy of North Vancouver, B.C., to investigate building a canola-based biodiesel plant in Alberta.

At about 27 a share, down from nearly 49 a year ago but up from less than 14 last fall, ADM stock may be worth a look, analysts say. Citing the company's brainpower, financial strength, and diversified grain-processing infrastructure, analyst Kenneth B. Zaslow of BMO Capital Markets suggests the market's short-term view may be discounting ADM's "unique ability not only to weather but also to thrive in a global economic slowdown."

BUSINESSWEEK.COM
To comment on How To Play It stories and see the related video interviews, go to businessweek.com/go/09/playit

Revenue at ADM and other companies will likely be boosted by government mandates that require an increasing percentage of biofuels be mixed into gasoline. Such rules, which let producers count on steadily rising ethanol sales, may have already been factored into the stocks' prices.

Like ADM, DuPont is seeking alternatives to ethanol made out of corn grains. With Danish sugarmaker Danisco, DuPont plans to open a pilot plant in Tennessee by yearend to use corncobs and switchgrass as raw materials for ethanol. Separately, DuPont, BP, and Associated British Foods are building a plant to derive ethanol from wheat, and the chemical company is working with BP to develop an alternative called biobutanol. Now under 27 a share, DuPont stock trades at around half its 52-week high. Even without biofuel breakthroughs, several analysts like DuPont's prospects. "DuPont was investing in this early and is one of the bellwethers in the industry," says Jefferies analyst Laurence Alexander.

Finally, Weyerhaeuser and Chevron are working to turn forest underbrush and switchgrass into ethanol. The forest-products company, which has access to 6.4 million acres of land in the U.S. and 15.2 million acres in Canada, wants to cultivate the fast-growing grass among its trees. Harvesting grass between trees is difficult, however—one of many hurdles that makes investing in biofuels a game only for the hardy and the patient. BW

BETTING ON BIOFUELS

COMPANY (TICKER)	PRICE	P-E*	COMMENT
Archer Daniels Midland (ADM)	$26.91	6.88	Major ethanol and biodiesel player wants to turn corncobs and stalks into ethanol
Associated British Foods (ABF**)	629 pence	N/A	Producing ethanol from sugar beets
BP (BP)	$39.92	6.0	Working with DuPont on biobutanol, an ethanol substitute
DuPont (DD)	$26.81	12.2	Teaming up with BP and other companies on ethanol and biobutanol
Monsanto (MON)	$83.07	20.3	Researching production of cellulosic ethanol from corncobs and stalks
Weyerhaeuser (WY)	$29.71	N/A	Joint venture with Chevron to use switchgrass as a raw material for ethanol

*Trailing 12-month price-earnings ratio; WY had a net loss for the trailing 12 months. Prices as of Apr. 13
**Trades on the London Stock Exchange Data: Companies

REAL ESTATE

A LANDLORD IN THE MAKING

By Christopher Palmeri

I was chased by a wild dog. I saw a home so stripped someone had even taken the front door. I attended a foreclosed-home auction that featured cheerleaders yelling in my ear. Finally, in March, I closed on a home I'm now renting out as an investment property. I paid $125,000; it had sold for $345,000 four years ago. In my one-year search, I came to expect surprises and to realize that even a good credit score doesn't get you far.

One thing I learned: Avoid foreclosure auctions. The homes need lots of work, and most buyers don't have time to do proper inspections. Ditto for "short sales," where an owner tries to sell a home for less than what he owes the bank. There are too many decision-makers involved. I made an offer on a short sale. Nine months later it's still on the market.

I began my search in my Los Angeles neighborhood, but even with a big down payment, prices hadn't fallen enough to produce positive cash flow for a rental property. So I searched Realtor.com for homes in suburbs a train ride away that seemed likely to have job growth. I found a two-bedroom, one-bath Spanish-style bungalow listed for $129,000 in Ontario, Calif. I offered $123,000; we settled on $125,000.

I figured getting a loan would be easy. I have good credit, no debt, cash in the bank, and a job. I was pre-approved for hundreds of thousands of dollars. Bank of the West wanted to charge me five points—a $5,000 fee to borrow $100,000. Says a bank spokesman: "Higher points for an investment property reflect the higher risk on that mortgage." A rep at a major national bank said it wasn't "competitive at loans under $100,000." LendingTree.com promised to find me five offers in 48 hours. Two days later it said it couldn't help.

Ultimately, an independent broker, Los Angeles' Legend Mortgage, found me a loan with an institution I had never heard of, Burlingame (Calif.)-based Provident Funding Associates. I had to put down more than planned: 25%. And I'm paying 6.2% and one point in fees, more than the 5%, without points, I would have paid if the house were to be owner-occupied. Provident put me through the wringer. Bank statements, tax returns, notarized interspousal escrow instructions. At one point, I was scraping and painting a house I didn't own because the lender wanted damage repaired. I was out about $1,000 for inspections and other work before I was even sure I was going to get the loan.

The bank that owned the property wasn't much fun, either. With such properties, banks offer a tight window for you to cancel your purchase based on inspections—seven days, in my case. And the bank wanted me to pay $100 a day if I didn't close on the agreed day. This led to stress—and requests for waivers—on my end. On the bright side, bank-owned properties commonly sell "as is," but with mine the bank paid more than $5,000 for a new sewer line, termite abatement, and other repairs.

Then it was time to rent it. I checked similar properties on Craigslist, then underpriced the rent at $1,100 a month to get a tenant fast. I had 16 interested parties in a few days. Some of the stories were heartbreaking—families living in cramped apartments and on food stamps just wanting a house for their kids. I showed it to two people and took an application from one, verifying employment and paying $30 to MySmartMove.com to check his credit.

In the end, my total cash investment was $47,000. Payments—taxes, insurance, everything—will be $750 a month (plus any repairs). If my tenant pays me for a year, I'll get a 9% return, not including tax advantages or price appreciation. If being a landlord is a hassle, the hope of a 9% return will ease the pain. BW

Realtor.com
The official site of the National Association of Realtors has 4 million properties listed for sale

Google.com
Type an address into Google Maps, and under the "Street View" section you can get a photographic look at the neighborhood without having to drive there

Craigslist.org
Check out what similar properties are renting for and then list yours for free

MySmartMove.com
For $30, you can get a credit report on a prospective tenant, with their consent

ILLUSTRATION BY GLUEKIT

TAXES

YOU CAN WIN BY LOSING

By Amy Feldman

There are few upsides to the investment losses you've suffered over the past year. But there is one: If you're smart about taxes, you can eke out more returns from your portfolio this year and enjoy tax-free gains for years to come.

Investors don't like to take losses, but savvy investment managers know just how much tax management is worth. A study by money manager First Quadrant in Pasadena, Calif., based on a widely diversified portfolio, found that tax-loss harvesting—the regular culling of a portfolio to get the most out of losses—could add as many as seven percentage points to the return in the first year; even after 25 years it could add 0.3 percentage points, a still-significant amount.

"As an investor, you want to take losses all the time to the extent that you can," says Andrew Berkin, senior equity researcher at First Quadrant and co-author of that study. "An individual investor can carry forward losses indefinitely, so while none of us know what the markets are going to look like or when they are going to recover, there are going to be plenty of opportunities to have gains."

To understand how to benefit from tax-loss harvesting, you need to know how the tax rules work. The key point is: The tax code lets you offset gains with losses. You first match short-term gains (on investments held for one year or less) with short-term losses, and long-term gains (those on investments held more than one year) with long-term losses; only then do you determine what the net effect of your losses and gains will be.

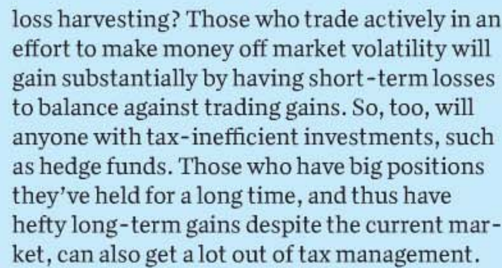
Because long-term gains are taxed at the favorable capital-gains rate of 15%, and short-term gains are taxed at regular income-tax rates of up to 35%, short-term losses are more valuable. If the result of matching gains and losses is a net loss, you can take up to $3,000 against your income. If you have a larger net loss than that, you can roll it over—in tax lingo, it's a capital-loss carryover—to offset gains in 2010 and beyond. If the tax rates on capital gains or income rise, as most tax experts believe they will, taking capital losses now will be worth more in the future, since they can offset gains that would be taxed at a higher rate.

Consider what this means in real life: If you book a long-term capital gain of $10,000 this year without an offsetting capital loss, you'll owe the IRS $1,500 even if you have thousands of dollars in paper losses in your portfolio. If you take an equivalent $10,000 capital loss, you'll owe no capital gains. And if you take a $13,000 loss, you can book that $3,000 net capital loss against regular income, for an additional savings (in the 35% tax bracket) of $1,050. Your total tax savings for this simple move: $2,550.

Most people only take losses at the end of the year. But the smarter tax strategy is to harvest them throughout the year

Who gains the most from tax-

ZOHAR LAZAR



loss harvesting? Those who trade actively in an effort to make money off market volatility will gain substantially by having short-term losses to balance against trading gains. So, too, will anyone with tax-inefficient investments, such as hedge funds. Those who have big positions they've held for a long time, and thus have hefty long-term gains despite the current market, can also get a lot out of tax management.

HARVEST TIME?

Of course, you'll want to make sure taxes aren't your only motivation for selling; a sale should, first and foremost, be based on a sound investment strategy. With the mix for many investors altered by the market volatility, it's not a bad time to see what your portfolio looks like now vs. the asset allocation you intended. Since it's tax time, you have a good sense of whether you already have a stockpile of capital losses from last year, or whether you didn't take enough of them despite the market's decline. "A lot of people are going to have capital-loss carryforwards from 2008, so before you make a decision about loss harvesting you need to see how much of a loss carryforward you already have," says John Battaglia, director of private-client advisers at Deloitte Tax.

One smart strategy is to use losses from the sale of a stock you no longer like to offset gains from the sale of another stock you do like. By doing this, and then buying back the stock you like, you will readjust the cost basis on which future taxes will be calculated, while paying no tax on the difference between your original cost and that new basis. (To be sure this is worth doing, take transaction costs into account.) "That puts you in a much more advantageous position in the future," says Douglas Rogers, chief investment officer at Laird Norton Tyee in Seattle and author of *Tax-Aware Investment Management: The Essential Guide*.

To get the most out of those losses, you'll need to be savvy about just how you account for them on your taxes. The IRS allows taxpayers a number of methods for calculating the cost basis of investments, which can result in wildly divergent tax bills for any one year. First Quadrant, which manages all their portfolios on a tax-efficient basis, argues that the best way to book capital gains and losses is with highest in, first out (or HIFO). This method assumes the most expensive shares are sold first, generating the smallest capital gains and the largest capital losses. Especially if your position is large, identifying specific shares will get the most tax benefit from your portfolio and be worth the record-keeping aggravation.

If you are taking losses now, don't forget the wash-sale rule. That's the tricky IRS regulation that prohibits you from taking a loss on an investment if you buy new shares within a period that begins 30 days before the date of the sale and ends 30 days after—a total of 61 days. Dividend reinvestments and automatic purchases count toward the wash-sale rule. While you can't buy the exact same stock or fund during that period, you could sell one actively managed large-cap mutual fund and buy another one.

If you are stockpiling losses, how much is the right amount? That's a question only you can answer. But if you plan to be investing for many years and expect the market to recover eventually, that amount may be higher than you think. "After 2000-2002, people said, 'I have all the losses I can use for the rest of my life,'" recalls First Quadrant's Berkin. "But as the markets recovered there were plenty of gains and plenty of opportunities to use those losses." | BW |

TAX STRATEGY TIPS

Capital losses will be worth more in the future if capital-gains rates go up, as many expect. Having losses to match with those gains will be even more important.

OFFSET GAINS

Offset capital gains with capital losses throughout the year, and remember that you can take a $3,000 net loss against income.

STOCKPILE LOSSES

Consider stockpiling losses to offset future gains when the market recovers—you can use that "capital-loss carryover" for the rest of your life

FACTOR IN COSTS

Pay attention to trading costs—and to your investment strategy—when evaluating which investments to take losses on

CONSIDER A FUND

Many mutual funds have sizeable tax losses on their books that they can use against future capital gains. These include top funds like Harbor International Growth and Longleaf Partners

Data: *BusinessWeek*, Morningstar

BETTING ON THE BLACKBERRY

The recession is a big challenge for Research In Motion (RIMM), but the maker of BlackBerry smartphones is coming through loud and clear. RIM posted better-than-expected results in its fourth quarter and predicted encouraging numbers for the next quarter. "Despite the recession, its growth hasn't slowed," says David Weissman, senior tech analyst at Zacks Investment Research, who rates RIM a buy. On Apr. 15 the stock jumped to 63.90, up from a 52-week low of 35 on Mar. 9. It hit 148 last June. The bears had predicted the weak economy would cripple sales. But that didn't happen because of "a shift in consumer preference toward feature-enhanced devices, away from ordinary mobile handsets used mainly for voice telephony," notes Weissman. That dovetails nicely with BlackBerry phones' e-mail and Web access. With 54% of the market, it's "the most powerful [smartphone] brand in North America," he says, and it's gaining share in Europe, Latin America, and Asia.

ON THE MOVE AT RIM

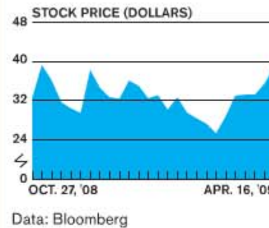
Data: Bloomberg

Ittai Kidron of Oppenheimer, who rates RIM outperform, says performance is driven by product launches (such as Storm, its first touchscreen device) and strong subscriber growth. He upped his profit forecast to $4 a share for fiscal 2010 (ending next Feb. 26), on sales of $14.5 billion, and $4.67 for 2011 on $16.4 billion, vs. 2009's $3.51 on $11.1 billion.

BUSINESSWEEK.COM | Inside Wall Street is posted at businessweek.com/investor at 5 p.m. EST on Thursdays.

Unless otherwise noted, neither the sources cited in Inside Wall Street nor their firms hold positions in the stocks under discussion. Similarly, they have no investment banking or other financial relationships with them.

TARGET SCORES



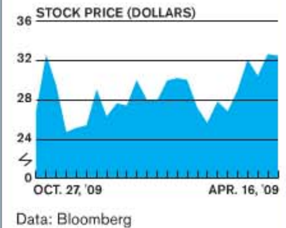
Data: Bloomberg

Target Looks Bulletproof

The recession continues to batter retailers, prompting most analysts to shun the group. Yet Target (TGT) has held up well: Shares closed at 38.55 on Apr. 15, up from 25 just a month ago. Target, whose 1,600 stores are popular for their "cheap-chic" merchandise, "has done a good job of managing expenses and inventory levels," says Robert Drbul of Barclays Capital, who rates it overweight. Its "strong franchise and solid customer loyalty remain intact," he notes. (Barclays did banking for Target.) "Target could post double-digit yearly average earnings growth over at least the next five years."

Mark Miller of investment firm William Blair rates it outperform even as he sees fiscal 2010 earnings easing to $2.32 a share from 2009's $2.86. For 2011, he sees earnings of $2.58. Target is a play on investor sentiment, which he expects to improve when consumer spending picks up.

RIDING HIGH AT AMERICAN TOWER



Data: Bloomberg

American Tower Stands Tall

Those spindly spires that seem to have sprouted up everywhere spell robust earnings for American Tower (AMT), the No. 1 operator of such communications installations in North America. AMT's shares are on fire, soaring to 32.45 from a trough of 19 on Nov. 21. AMT leases antenna space on its towers to wireless service providers and radio and TV companies, which sign 5-to-10-year contracts. AT&T, Sprint, Verizon, and T-Mobile account for 60% of AMT's revenues.

Robert Becker of Cohen & Steers Global Infrastructure Fund, which owns shares, likes AMT's defensive nature, with 95% of its cash flow coming from long-term contracts. His 12-month price target is 40.

James Moorman of Standard & Poor's, who rates AMT a strong buy, says it benefits from wireless carriers' constant need to improve network quality and coverage. | BW |

BRAD TRENT; CHARTS BY DAVID FOSTER

071 Tech & You
072 Media Centric
073 Feedback
076 The WelchWay

BOOKS | JACK EWING

Why Nations Sink or Swim

A provocative contrarian finds that countries' choices—not the luck of the draw—largely determine their fates

RAFAEL RICOY

The U.S. is the world's largest economy while Argentina is a serial debt defaulter with a history of dictatorship. Things could have gone the other way. Both countries had ample land, natural resources, and a flood of immigrants, Alan Beattie argues in *False Economy: A Surprising Economic History of the World*. But Argentina was cursed with huge landholdings bestowed on Spanish colonizers. Instead of entrepreneurial farmers, Argentina's estates bred an indolent ruling class with little interest in taking the sorts of risks that modernize an economy.

Beattie, world trade editor for the *Financial Times*, aims to confront the idea that "our economic future is predestined and that we are helplessly borne along by huge, uncontrollable, impersonal forces." The way countries develop is as much a function of the choices made by ruling elites as it is of markets or natural resources, he says.

Beattie, who studied history at Oxford University and economics at Cambridge, draws on both disciplines to overturn assumptions about the evolution of the global economy. For example, the data do not support the belief that Islamic societies inherently perform worse than other nations, or for that matter that there is any correlation between religion and growth. Malaysia has both a strong Islamic identity and a modern economy. Religion is an obstacle only when develop-

ment is blocked in God's name, often in self-defense by those who hold power, Beattie argues.

And corruption isn't necessarily a barrier to growth, in Beattie's eyes. The late Indonesian strongman Suharto oversaw rapid development even as he and his cronies grew rich on bribes and preferential deals. China's growth has taken place amid pervasive corruption. As long as the officials taking bribes can deliver what they promise, "it simply becomes a tax."

Beattie avoids writing like an economist, despite a stint at the Bank of England and the book's subject matter. He wants to entertain and provoke, sounding only half-facetious when he calls giant pandas "incompetent, inefficient, piebald buffoons" that should be allowed to "die out." Giant pandas evolved to depend exclusively on marginally nutritious bamboo. In economic terms, they're "path dependent"—locked into a situation that limits them. Beattie admires cats,

Suharto: Beattie cites Indonesia as an example of economic growth despite corruption

who gave up their free-roaming ways to carve out a niche hunting rats and snuggling with humans.

Beattie himself roams freely through the corridors of history and economic theory. Pandas lead him to India, where he sees path dependence in the nation's stubborn caste system. The benefits of India's info tech success mostly go to those who already have access to education, he says. China, where a person is more likely to rise on merit, has better economic prospects.

Thomas Friedman, author of the best-seller *The World Is Flat*, isn't mentioned by name, but where Friedman saw blossoming globalization in a connected world, Beattie sees huge distortions caused by misguided trade pacts and greedy interest groups. Thus, Peruvian asparagus farmers can undercut their California rivals because of policies intended to discourage cocaine cultivation. Beattie reserves special wrath for the U.S. cotton industry, which he blames for derailing international trade talks last year that would have benefited billions of people. U.S. negotiators were under the sway of 10 cotton-state senators, and they made unacceptable demands, Beattie asserts. "The future of the global trading system was held ransom by a sector that produces less than 1% of the country's national income."

False Economy is full of insightful nuggets, such as Beattie's account of how the profligate ways of the Portuguese in India opened the door for the British. But it's not always clear how these digressions fit into his central argument; sometimes they even punch holes in it. We can be masters of our own fate, he seems to say, except when we're prisoners of history. Beattie sees Russia stuck in a tradition of authoritarianism and state property ownership that dates to the Mongolian conquest in the 13th century—and he has little faith that it can ever break free.

***False Economy: A Surprising Economic History of the World* by Alan Beattie; Riverhead Books; 321 pp.; $26.95**

Toward the end, Beattie quotes Shakespeare: "Our remedies oft in ourselves do lie, which we ascribe to heaven: the fated sky." So the Bard and Beattie agree. But is the idea that we can determine our economic destinies really such a surprise to the rest of us? Maybe that notion would have raised eyebrows a year ago, before the ripples from decisions made in financial circles swamped so many nations. | BW |

Business Exchange

Read, save, and add content on BW's new Web 2.0 topic network

Golden Oldies

On the off chance you can't name the major players in Britain's Bullionist Controversy or hold forth on the influential School of Salamanca, a visit to the New School's History of Economic Thought Web site can set you straight. More than 300 capsule biographies of economists dating back to the 16th century, plus oodles of links, make this a great jumping-off point.

Find the page at **http://bx.businessweek.com/economic-analysis/reference/**

MUCHTAR ZAKARIA/AP PHOTO

TECH & YOU | STEPHEN H. WILDSTROM

Thinking Outside the Desktop

A Windows add-on called BumpTop makes your PC screen function more like a real desk

If you were to sit down in front of an original 1984 Macintosh, the tiny black-and-white screen would feel quaint and the icons crude, but the screen would still seem familiar. The basic tools for interacting with computers haven't changed in any fundamental way in a quarter-century. Maybe it's time to rethink that.

When it comes to the desktop, computer operating systems, whether Windows, Mac OS X, or Linux, have used the vast increases in computing power, graphics capability, and screen resolution in mostly trivial ways. Translucent windows and icons that offer a glimpse of what's inside are nice, but they hardly affect how we interact with computers. Some of the core metaphors of the design seem badly out of date. Take file folders. I have thousands on my computers, and that's about the only place I use them anymore; there are file drawers in my office I haven't opened in years.

Meanwhile, products not burdened by the PC's legacy have been experimenting with new ways for humans to control them. Apple's iPhone set off a revolution in so-called user interfaces by allowing you to manipulate objects on the screen in nearly all menus by touch. Some iPods will reshuffle the order of songs when you give the device a good shake. Resizing a picture by stretching it with your fingers is vastly more intuitive than using a mouse to point and click.

I've been pondering the present and future of user interfaces since discovering an alternative Windows desktop called BumpTop from Bump Technologies (basic version free, $29 for a premium version with extra features).

I don't know that BumpTop is the answer, but it is thought-provoking. Like other efforts over the past three decades, its central idea is a desktop, but it's a lot more like a real desk than anything you are used to.

BumpTop starts with a 3D view of a cubicle-like desk with vertical walls at the sides and back. Objects—pictures, documents, songs, sticky notes, program icons—can be moved freely around the desktop or stuck up on the walls. BumpTop is a natural for a touchscreen, but it also works satisfactorily with a mouse.

The metaphor of the folder is replaced by a much more natural one: the pile. You can stack desktop objects of different sorts into arbitrary piles or you can automatically group objects, such as photos or Microsoft Word documents, by type. You can fan the items in a pile out across the desktop or cause them to appear in a grid, more like a traditional window for viewing files. And the desktop icons can do more than just sit there. For example, if you "toss" a photo at the Facebook icon, you initiate the process for uploading a picture to your Facebook page.

"Folders" are replaced by "piles" that can be stacked, fanned out, or viewed as a grid. And icons do more than sit there

To see BumpTop in action, just search for the term on YouTube. But as you watch, keep in mind that the program is just a shell stuck on top of Windows. So it suffers the great disadvantage of all such add-ons: Once you open any program, you're back in the standard Windows interface, which seems even more blah and boring than it did before.

This is one reason both Apple and Microsoft avoid sweeping design changes. Even after the relatively modest moves from Windows 3.1 to Windows 95 (1995) and from Mac System 9 to Mac OS X (2001), it took several years to get all the programs upgraded so they could really take advantage of the changes.

This explains why Windows 7 restricts itself to incremental changes in the appearance of Windows. It's a significant improvement over Vista, but in evolutionary and mostly subtle ways. We know less about Apple's plans for the next version of OS X, but the company has said its focus is on under-the-hood changes. I'm afraid it will be a long time before anything as imaginative as BumpTop becomes standard on desktops. | BW |

BUSINESSWEEK.COM

For past columns and online-only reviews, go to businessweek.com/go/techmaven.

(FROM TOP) BRAD TRENT; EDWIN FOTHERINGHAM

Local Media Are Getting Slaughtered

Ad spending is way worse than at the national level—and it won't necessarily come back

This is a different kind of recession—one that started quietly in late 2007, before the very big bangs hit the very big banks. It's driving a different kind of U.S. ad cycle as well. ¶ There are two kinds of ad outlets: national (including, among others, broadcast TV and cable networks) and local (including, among others, newspapers and radio).

It's not unusual for one sector's fortunes to fare better than the other in an ad downturn, as is the case with national this time around. And whichever segment goes into a recession first—observers say local markets, in this case—also generally comes out first. But some say the pattern may not hold this time, and a recovery in local markets won't mean an automatic bounceback in local ad revenues.

Part of the issue is that local advertising encompasses several media in severe generalized declines, such as newspapers and yellow pages. Such media also suffer uniquely when the purely local ad category of real estate sours, and local lacks a sector that's significantly outperforming the rest, as national cable markets are doing. Michael Nathanson, an analyst with Bernstein Research, believes cable networks' ad revenue dropped 4% in the first quarter of '09. Not great, but media buying firm Zenith Optimedia expects overall U.S. ad spending to drop 8.7% this year, and Nathanson estimates that local TV stations' ad declines will exceed 25%.

VANISHING AUTO ADS

There are also the oddities of how ad dollars are divvied up. Each May, in the rite known as the upfronts, advertisers commit well over half of the billions they spend on network TV for the next 12 months. This means many current dollars were allocated to TV in more sanguine times. (This year's upfronts will prove an excellent dipstick check of big advertisers' moods.)

Automotive advertising has been a drag on everything—Ford Motor and Chrysler each cut ad spending more than 33% in 2008, according to TNS Media Intelligence. But the rapid pullback late last year hit the local sphere especially hard, as the spigots on auto dealership advertising suddenly shut tight. To cite one vivid example, Meredith Corp. disclosed in late January that it expected ad revenue at its 12 local TV stations to be down 40% in the first three months of this year, driven by a 70% drop in auto advertising. (Local TV stations are not helped by comparisons with 2008, in which hundreds of millions were spent on political advertising. But even with all that coin, local stations still had a lousy 2008.)

Meanwhile, the relative steadiness of ad buys from companies that sell soap and shampoo—the Procter & Gambles, Unilevers, and Colgate-Palmolives of the world—are buoying the properties in which their ads are concentrated. According to *Media Industry Newsletter*'s data, ad page counts in the traditional women's service magazines *Redbook* and *Ladies' Home Journal*—the warhorses that are routinely proclaimed dead by coastal media types—have shown remarkable stability this year. Ad pages at many glitzier titles, including *Vogue*, *Gourmet*, and *Martha Stewart Living*, are down 30% or more. (A senior magazine executive told me last month that "30% down is the new 'up.'" He was joking, kind of.)

The ad migration to newer media continues. And since advertisers typically don't spend as much online as they did elsewhere, it's all but inevitable that even the stronger national media built around video—network TV and cable—will eventually have to get by with less. But it's hard to see huge advertisers wholly reworking nine-figure ad budgets quickly; institutional inertia and fear of the unknown will stop a General Motors from, say, dropping all TV ads in order to build a bunch of promotional Web sites. This is not true for small local advertisers, who can more easily slash a bantam-size budget; recall how quickly those car dealer ads disappeared.

There's one wild card: the next wave of local online-only players, which includes Web directory Yodle and consumer review site Yelp. They may be growing too quickly to be ignored in favor of, say, another radio ad, and they might—might—become the first such players to pull in significant ad dollars. That, too, will depress established local media revenues. On top of the built-in advantages national outlets enjoy over local players, add this: The biggest anomaly to this ad cycle is that those advantages may persist for a long time. | BW |

BUSINESSWEEK.COM

For Jon Fine's blog on media and advertising, go to businessweek.com/innovate/FineOnMedia.

(FROM TOP) BRAD TRENT; SCOTT MENCHIN

How to reach *BusinessWeek*

LETTERS FOR FEEDBACK
We prefer to receive letters via e-mail, without attachments. Writers should disclose any connection or relationship with the subject of their comments. All letters must include an address and daytime and evening phone numbers. We reserve the right to edit letters for clarity and space and to use them in all electronic and print editions. E-mail: bwreader@businessweek.com
Fax: (212) 512-6458

BUSINESSWEEK.COM
The full texts of *BusinessWeek* and *BusinessWeek* Top News, as well as *BusinessWeek* archives starting in 1991, are available on the World Wide Web at: businessweek.com and on America Online at keyword: BW

THE WORKPLACE
COPING WITH HIGH ANXIETY

Desperate times breed desperate behavior. That was our conclusion in "Are People in Your Office Acting Oddly?" (What's Next, Apr. 13), which chronicled the agita coursing through office corridors in this recession. Readers saw their co-workers (and themselves) in the descriptions of the favor-currying and of bizarre rivalries prompted by layoff fears. One letter writer, though, took issue with the idea that bad times can breed innovation. *–Michelle Conlin*

Can you blame the employees? Isn't this exactly what all those "specialists" advise us to do in times of crisis? Not to be shy about our accomplishments? To make ourselves known and heard? To get facetime with bosses?

Screen name: tiddle

Managers allowing this kissing up are not doing their jobs. When I tell my boss, "I just wanted to let you know I completed XYZ," his response is: "O.K., let's move on." A quick way for managers to fix the problem of such employees: Give a lower mark on reviews—for "lack of independence."

Screen name: JBM

Calm, focus, and balance are the best conditions for quality work. Bosses need to learn how to handle job-security concerns without forcing a flurry of [lower-quality] activity.

Screen name: Owner

I've noticed exactly what the article states: Most of my employees are showing a new and improved attitude—even the slackers.

It's unfortunate that it takes a downturn to motivate people, but I guess that's human nature.

Screen name: BossMan

It's not really true that desperate times can breed creativity. They breed only a survival instinct. As renowned psychologist Abraham Maslow pointed out, basic needs need to be fulfilled before people are able to be creative.

Michael Wogalter
RALEIGH, N.C.

ENERGY
SMART GRIDS NEED SMARTER CONSUMERS

Regarding "The Static Over Smart Grids" (What's Next, Apr. 13): Variable-rate energy pricing makes sense only if consumers can monitor their usage and actual pricing in real time, on their home computers, say. This would prevent sticker shock and enable consumers to take steps to conserve energy.

Barry Stevens
ARLINGTON, TEX.

TAXES
TOO COMPLEX FOR COMPLIANCE?

It is a sad commentary that tax preparers can charge \$300 to \$400 for 10 minutes of work and that 60% of tax returns are handled by paid preparers. ("Toxic Taxes," In Depth, Apr. 13). When preparers trumpet the size of refunds rather than the legitimate minimization of taxes paid, something is radically wrong.

Is it any wonder that fraud enters the picture when a filer is considering whether there is a better deal to be had somewhere in the [new] tax code's fine print? The code's complexity—arising from misguided attempts toward social engineering or fairness—is undercutting a foundation of our society: voluntary compliance with the law.

Michael Lewis
FANWOOD, N.J.

CHINA
LURING THE WEST WITH LAX POLLUTION LAWS

Regarding "Chinese Polluters Point to Western Demand" (What's Next, Apr. 6): It is disingenuous for the Chinese to blame the West for locating [polluting] factories in China. Lax pollution laws are one reason it has been cheaper to produce goods in China. Such rules were kept weak in order to attract Western manufacturers. Now that China has made billions in foreign exchange, it can use this money to update its laws. Then perhaps the playing field will be more level.

Karl Weinrich
BRIDGEWATER, MASS.

CORRECTIONS & CLARIFICATIONS

"Dollar Strategies" (Personal Business, Apr. 13) incorrectly identified Aaron Gurwitz as a strategist at Barclays Capital. He is head of global strategy at Barclays Wealth, the British bank's wealth-management arm.

"H-1B Visas: It's Time for an Overhaul" (Opinion, Apr. 13) should have specified that the \$50,000 median yearly wage of new H-1B recipients applies to those working in the computer field.

ANDY MARTIN

REACH POTENTIAL FRANCHISE OWNERS.

Over 550,000 BusinessWeek readers are likely to start or buy a new business over the next 12 months.

Reserve space in our franchise advertising directory today.

ON SALE: MAY 22

ISSUE DATE: JUNE 1

AD CLOSE: MAY 4

PLEASE CONTACT:

Maryanne Ventrice, Sales Manager
212-512-6214
Maryanne_Ventrice@BusinessWeek.com

Rhonda Merrill, Sales Manager
212-512-3148
Rhonda_Merrill@BusinessWeek.com

Jodie O'Connor, Sales Manager
212-512-2825
Jodie_O'Connor@BusinessWeek.com

BusinessWeek

Source: MRI Doublebase 2008

COMPANY INDEX

This index gives the starting page for a story or feature with a significant reference to a company. Most subsidiaries are indexed under their own names.
Companies listed only in tables are not included.

A ADM (ADM) 38, 64
AIG (AIG) 4, 58
Algenol Biofuels 38
AMD (AMD) 44
American Tower (AMT) 68
Amyris 38
Aon (AOC) 10
Apple (AAPL) 14, 32, 44, 71
ARM Holdings 44
Arnell Group (OMC) 32
Associated British Foods (ASBFY) 64
AT&&T (T) 68

B Banco Santander (STD) 61
Bank of America (BAC) 19, 21, 24
Bank of Ayudhya 46
Bank of the West 65
Barclays (BCS) 68, 73
Bartle Bogle Hegarty 32
BBDO (OMC) 32
Bernstein Research (AB) 72
BlackRock (BLK) 44
BlueFire Ethanol (BFRE) 38
BMO Capital 64
BMW 48
Boston Consulting 24
BP (BP) 38, 64
Bump Technologies 71

C Canadian Bioenergy 64
Carlyle Group 4
Carmike Cinemas (CKEC) 63
Chevron (CVX) 64
Chrysler 48, 72
Cinemark (CNK) 63
Cisco (CSCO) 14, 44
Citadel 58
Citigroup (C) 12, 21, 22, 58, 61
CLSA 50
CME Group (CME) 58
CNBC 12
Coca-Cola (KO) 32
Codexis 38
Cohen & Steers 68
Colgate-Palmolive (CL) 72
Concrete Architectural 46
Coskata 38
Craigslist 65
CVS Caremark (CVS) 4

D Danisco 38, 64
Deere (DE) 64
Deloitte Tax 66
Denso 50
D.E. Shaw 12
DuPont (DD) 38, 64

E eBay (EBAY) 4
Expedia (EXPE) 10
Express Scripts (ESRX) 4

F Facebook 71
Fannie Mae (FNM) 4
FedEx (FDX) 14, 24
Fiat (FIATY) 48
Fidelity Investments 44
First Quadrant 66
Ford (F) 24, 48, 72

G GE (GE) 44, 46
Gevo 38
GM (GM) 4, 24, 48, 50, 72
Goldman Sachs (GS) 4, 12, 19, 58
Google (GOOG) 65
Gradient Analytics 19

H Hello Work 50
HP (HPQ) 16, 44
HR BioPetroleum 38
HSBC (HBC) 44
Hyundai 24, 46

I IBM (IBM) 14, 16, 44
ICE (ICE) 58
IDC 16
IDEO 46
Intel (INTC) 14, 44
Iogen 38
ISI 14, 19
Iteros 38

J Jefferies (JEF) 64
JetBlue (JBLU) 24
Jos. A. Bank (JOSB) 24
JPMorgan Chase (JPM) 19, 58

K KBW (KBW) 19

L Ladenburg Thalmann 19
Laird Norton Tyee 66
Legend Mortgage 65
Lending Tree 65
LS9 38

M Mars 32
Mascoma 38
Medco Health (MHS) 4
Mercedes (DAI) 48
Meredith (MDP) 72
MGM Mirage (MGM) 63
Microsoft (MSFT) 14, 44, 71
Mitsubishi Heavy Industries 50
Monsanto (MON) 64
MySmartMove 65

N Nike (NKE) 32
Nokia (NOK) 14
Northlake Capital 63
Nvidia (NVDA) 44
NYSE Euronext (NYX) 58

O Omnicom (OMC) 32
Oppenheimer (OPY) 68
OPX Biotechnologies 38
Oracle (ORCL) 16

P Palm (PALM) 14
Paul Capital Partners 22
PCH International 14
PepsiCo (PEP) 32
PetroAlgae (PALG) 38
POET 38
Procter & Gamble (PG) 72
Provident Funding 65
Publicis 4
PwC 16

Q Qteros 38
Quaker Oats (PEP) 32
Qualcomm (QCOM) 44

R Rackable Systems (RACK) 14
Range Fuels 38
Realtor.com 65
Regal Entertainment (RGC) 63
RIM (RIMM) 14, 68
Royal Dutch Shell (RDS) 38

S Sallie Mae (SLM) 21
SAP (SAP) 16
Sapphire Energy 38
Skype (EBAY) 4
Solazyme 38
Solix 38
Sovereign Bancorp (SOV) 61
Sprint Nextel (S) 68
Strategy Analytics 14

T Tabb Group 58
Target (TGT) 68
TBWA\Chiat\Day 32
TD Securities 16
TicketStumbler 10
T-Mobile (DT) 68
Texas Instruments (TXN) 44
TNS Media Intelligence 72
Toyota (TM) 48, 50
T. Rowe Price (TROW) 44
Tsumobi.com 10

U Unilever 72
Union Gaming 63
UserVoice.com 10

V Valero Energy (VLO) 38
VeraSun (VSUNQ) 38, 64
Verenium (VRNM) 38
Verizon (VZ) 68
Virent Energy 38

W Walgreen (WAG) 24
Wal-Mart (WMT) 44
Waste Management (WMI) 38
Wedbush Morgan 14
WellPoint (WLP) 4
Wells Fargo (WFC) 19
Weyerhaeuser (WY) 38, 64
William Blair 68
Wilshire Associates 22

Y Yelp 72
Yodle 72
YouTube (GOOG) 71

Z Zacks Investment 68
ZDNet 14
ZenithOptimedia 4

BusinessWeek (USPS 080 900)
APRIL 27, 2009 (ISSN 0007-7135) S T Q ISSUE NO. 4128
Published weekly, except for one issue in January, February, March, July and August by The McGraw-Hill Companies, Inc. **Founder:** James H. McGraw (1860-1948). Periodicals postage paid at New York, N.Y., and at additional mailing offices.
Executive, Editorial, Circulation, and Advertising Offices: The McGraw-Hill Companies Building, 1221 Avenue of the Americas, New York, N.Y. 10020. Telephone: 212-512-2000.
Postmaster: Send address changes to BusinessWeek, P.O. Box 8418, Red Oak, IA 51591-1418. Canada Post Publication Mail Agreement Number 40012501. Return undeliverable Canadian addresses to: DHLGM Ltd., 2-7496 Bath Road, Mississauga, ON L4T 1L2. Email: bwkcustserv@cdsfulfillment.com
Registered for GST as The McGraw-Hill Companies, Inc. GST #R123075673.

Copyright 2009 by The McGraw-Hill Companies, Inc. All rights reserved.

Title registered in U.S. Patent Office. European Circulation Office, McGraw-Hill House, Shoppenhangers Road, Maidenhead, Berks SL6 2QL, England. Telephone: +44 (0) 1628 502900; Fax: +44 (0) 1628 630545.
Officers of The McGraw-Hill Companies, Inc.: Harold W. McGraw III, Chairman, President, and Chief Executive Officer; Kenneth M. Vittor, Executive Vice President and General Counsel; Robert J. Bahash, Executive Vice President and Chief Financial Officer; Elizabeth O'Melia, Senior Vice President, Treasury Operations.
Single Copy Sales: Call 800-298-9867 or email: busweek@nrmsinc.com.
Subscriber Services: Call 800-635-1200 or log onto our website: http://www.businessweek.com/custserv/manage.htm.
Photocopy Permission: Where necessary, permission is granted by copyright owner for those registered with the Copyright Clearance Center (CCC), 222 Rosewood Drive, Danvers, MA 01923 or email the CCC at info@copyright.com.
Custom Reprints: For customized bulk reprints of BusinessWeek articles, contact The YGS Group at 800-360-5549 or email: businessweekreprints@theYGSgroup.com.
PRINTED IN THE U.S.A.

BusinessWeek MarketPlace

For Ad Rates and Information Phone: (312) 464-0500 • Email: MMiller@classifiedinc.com

Office Products

The Odor Free Office Bathroom

Eliminate Personal Bathroom Odors With Just 'a Drop

Just one drop *before* you go and **personal odors** disappear immediately *before* they can escape into the air

All You Leave is A Fresh Eucalyptus Scent.

Environmentally Friendly made from plant extract

Making Life Pleasant For All Workers

Justadrop.net/office

30 day money back guarantee. Not sold in stores. 888-887-3468

Watches

RUFUS LIN DESIGNS

BOTTA

UNO 24 USD $380

An entire day at a glance.

www.rufuslin.com Free catalog: 1-866-75-RUFUS

Business/Career Opportunities

ENERGY EFFICIENCY BUSINESS

Start your own business as an **Energy Management Consultant**. UK manufacturer with a range of cutting-edge technologies proven to significantly reduce energy consumption in commerce and industry seeks overseas distributors.

+44 (0)1872 223000 or www.somars.com

Timeshares

TIMESHARES

60-80% Off Retail!

Best Resorts & Seasons

Call for Free Catalog!

1-800-941-2054

www.holidaygroup.com/bw

MarketPlace Advertisers

The *BusinessWeek* MarketPlace...

- Advertise in the ***BusinessWeek* MarketPlace** and reach nearly 5 million responsive readers.
- Reaches more business professionals than any other business magazine.

Call **312-464-0500** or email

MMiller@classifiedinc.com

To manage your subscription go to: www.businessweek.com/subs/cs/ Or call: 1-800-873-8504

Exercise Equipment

EXERCISE IN EXACTLY 4 MINUTES PER DAY

$14,615

Most people think that the **4 minutes** and the $14,615 price must be mistakes. They are not. Since 1990 we have shipped over 4800 ROM machines from our 82,000 sq. ft. factory in North Hollywood, CA. People first rent it for 30 days at $2500 to try it. Rental applies to purchase. Then 97% buy it.

Find out why this is the least expensive exercise **www.PleaseDoTheMath.com**

Order a **FREE** DVD from **www.FastWorkout.com** or call (818) 504-6450

Business Services

ONLINE DATABASE

Integrate Customers - Suppliers
Affordable - Secure - Flexible
Easy to Use - Robust

www.konduit.com
1-866-566-3848

Business Services

SOURCING SERVICE TO CHINA

(David Chang, CPA 20 yrs experience)

Licensing, Import/Export, Production, Shipping (door-to-door), Acct/Tax. Specialize in textile, scrap metal, furniture. COPPER PRODUCT MANUFACTURER. LOOKING FOR COPPER #2, 150 to 200 tons/week.

davidchangcpa@yahoo.com
www.davidchangcpa.com

No phone calls, please.

Business Services

Logocare™

LOGO DESIGN
- Unlimited Designs
- 1-3 Day Turnaround
- 5 Designers
- Money Back Guarantee

WEB DESIGN
- Marketing-Driven Designs
- Unlimited Revisions
- Super Fast Turnaround
- Money Back Guarantee

877.918.9188
www.logocare.com/bizweek

Logo Design. Website Design. Brochure Design. Mascot Design

Crazy for a Job

New MBAs without work have three options. We like the boldest one best

In about a month, I'll have an MBA—but no job. I'm at a respected school, my GPA is 3.5, I've got two years of retail consulting experience and great references, and I've been doing all the right things to get hired. Please help.

Anonymous
CHICAGO

What a terrible bind you're in—you and thousands upon thousands of others. Word is that at some business schools upwards of 30% of this year's grads, even in top-tier programs, have yet to land positions. Recruiters just aren't coming to campuses like they used to, and if they are, it's for "informational" purposes only. Word also is that many companies, hit by worsening results and alarmed by dire forecasts, have delayed start dates for their MBA hires or rescinded their offers altogether. It's not a jungle out there, it's a wake.

But you didn't ask for sympathy. You asked for advice.

And so allow us to pass along the exact three recommendations we offered a twentysomething MBA friend we met up with this week, who is, like you, still empty-handed and beginning to feel desperate.

You can settle and learn to love it. You can go a little crazy. Or you can do your own thing.

Settling first, because it's the fastest and easiest.

Look, you already know you're probably not going to get the kind of job—in terms of industry, title, and salary—you were dreaming of the day you started your MBA, back when trees grew to the sky. But there is, very probably, a job out there, here or abroad, that offers you a reasonable amount of relevant experience and a livable salary.

You could accept that job. And more important, even with its disappointment factor, you could embrace it, working ardently to innovate processes, improve your team, and make yourself indispensible by constantly overdelivering. In your case, you might work at a retail store of some sort, with the goal of having your stellar performance eventually land you in management and get you noticed at headquarters. Sure, the day-to-day work of ringing up sales might seem like a pitiable return on your MBA investment at first. But think career strategy. Being a star performer at virtually any solid organization is a ticket up or onto a better opportunity elsewhere. In time, your humility—and results—will likely be rewarded.

Now for going a little crazy, which is the approach we prefer in the current circumstances but still recommend with trepidation. Because not everyone can pull off a highly targeted beg-and-plead campaign while remaining likeable, and that's basically the program we're suggesting. With this option, you pick the one or two places you've always wanted to work (or the two executives you'd give a kidney to work for) and repeatedly make your case to them in the most creative, appealing, and persuasive way you can—with letters, e-mails, phone calls—just to get a five-minute interview. Which you then have to nail with your brilliant insights and positive energy.

The settle option and the startup option both have merit. But the crazy option can put an MBA in the right place from the start

Yes, this is a long-shot strategy. But when it works—and here's why we like it—you'll be starting your career in the right place. And you'll have experienced the kind of hunger it takes to get ahead.

Finally, if settling and a little craziness don't work for you, there's starting your own business. Figure out what you know and what you're good at, find a friend who brings something to the table—like brains, contacts, seed capital, or very little need for sleep—and then, like entrepreneurs the world over, get out there and hustle. If consulting becomes your gig, for instance, take jobs for $5,000 or $10,000, or negotiate with clients for a percentage of the increased revenues you bring in or the savings you create. You know the drill, and you probably know the risks, too. The current climate makes becoming an entrepreneur an extraordinary act of courage, and only you know if you have the mettle.

Not to sound harsh; we're just trying to be realistic. These are unprecedented times for MBAs, as they are for any job seeker, requiring unusual levels of self-awareness. The global economic crisis will likely last another year or two, and there's no point in waiting and hoping for a miracle.

You really just have three options. Make a choice and press on. | BW |

BUSINESSWEEK.COM |

Jack and Suzy look forward to your questions. You can e-mail them and view their new Web site at welchway.com. For their PODCAST, go to businessweek.com/search/podcasting.htm

BRAD TRENT; ILLUSTRATION BY PETER ARKLE

GLOBAL TRANSACTION BANKING

Times are changing. Your expectations shouldn't.

During these challenging times, you need to be able to rely on your bank. Deutsche Bank's intelligent risk management and institutional strength empower us to continue providing a reliable platform for our clients' success. But it is more than just business as usual. Our increased investment in transaction banking products and services gives you the edge when it comes to mitigating risk, saving money and building for the future.

www.db.com/gtb

Best Transaction Bank 2009 – Asia Pacific
The Asset's Triple A Transaction Banking Awards

Trustee of the Year 2008
International Securitization Report ISR Awards

#1 in Western Europe
Euromoney Cash Management Poll 2008

Best at Cash Management in North America
Euromoney Awards for Excellence 2008

A Passion to Perform. Deutsche Bank

This advertisement has been approved and/or communicated by Deutsche Bank AG. The services described in this advertisement are provided by Deutsche Bank AG or by its subsidiaries and/or affiliates in accordance with appropriate local legislation and regulation. © 2009 Deutsche Bank AG.

HELLO STATUS. GOODBYE QUO.

Introducing the new Dell™ PowerEdge™ Server Solution, featuring a new generation of intelligent server processors with the Intel® Xeon® Processor 5500 Series. And the industry's best performance per watt. If you thought you knew Dell, think again.

Customized. Personalized. Recognized. Dell ranked #1 in server customer satisfaction.*

Future proof design. Dramatically reduce your power consumption and run more efficiently in your data center.

Reduced deployment time. The world's only server with instant-on embedded systems management. No media required.

GET THE FACTS. MAKE THE SWITCH.
CALCULATE YOUR SAVINGS AT DELL.COM/Switch

*TBR x86-based Server Customer Satisfaction Study, Q4, February 18, 2009.

Intel, the Intel logo, Xeon and Xeon Inside are trademarks or registered trademarks of Intel Corporation in the U.S. and other countries.