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WAL-MART'S MOMENT | THE NEW FACE OF FORECLOSURE

BusinessWeek

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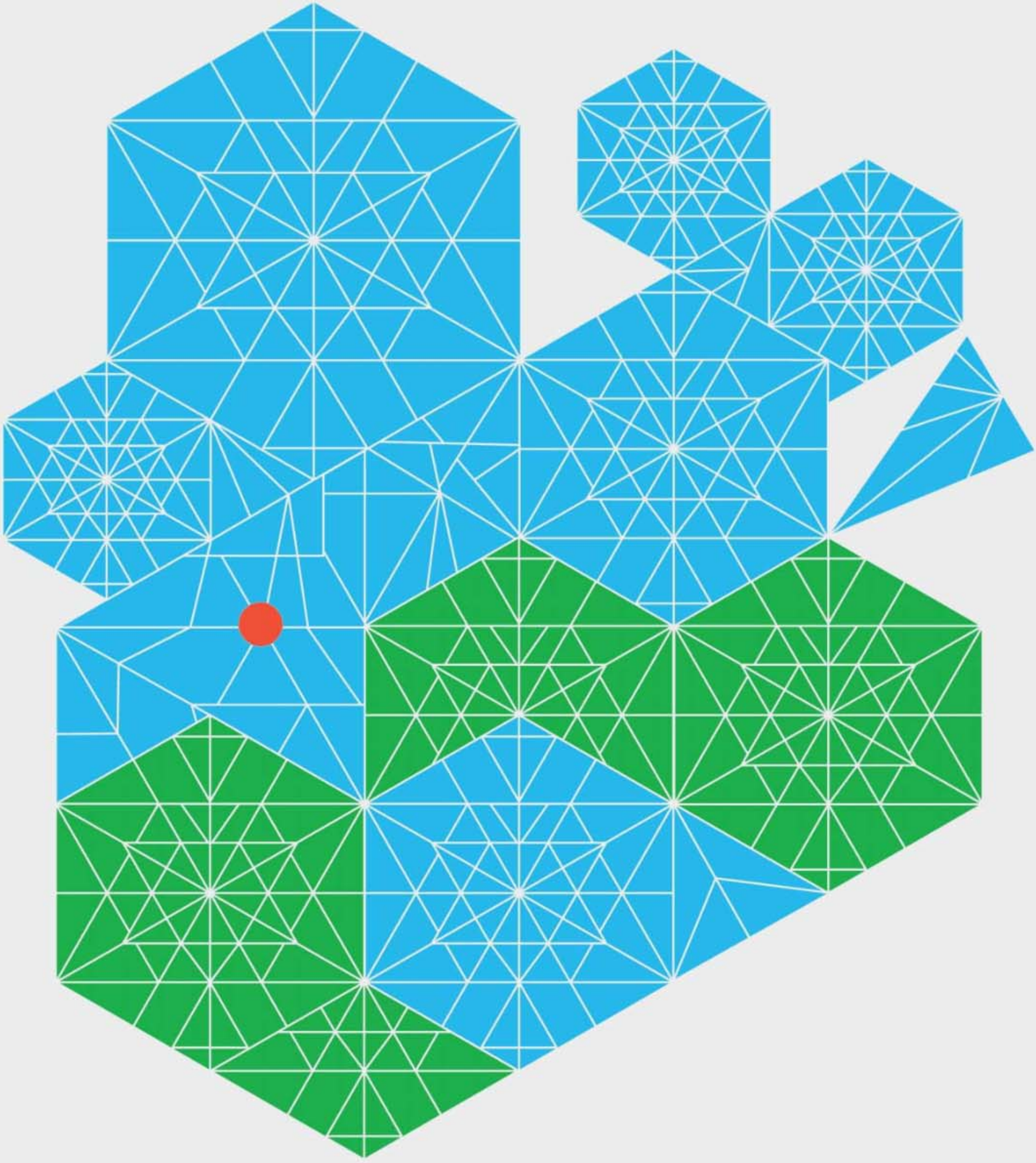
CLOUD COMPUTING 2.0

INNOVATION, INTERRUPTED

How America's failure to capitalize on innovation hurt the economy—and what happens next

BY MICHAEL MANDEL



Genentech sales rep Michael Roh gets medical data fast with cloud computing

(COVER) RODRIGO CORRAL DESIGN; (ABOVE) BRIAN SMALE

IN DEPTH

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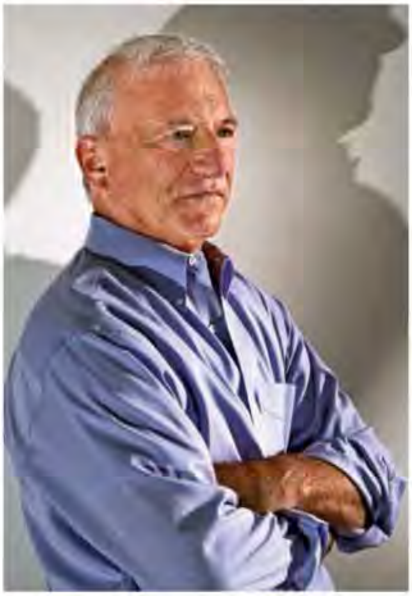
WAL-MART'S MAGIC MOMENT

With the economy squeezing everybody, Wal-Mart is pulling in more upmarket shoppers. And new CEO Michael Duke is moving aggressively to hang on to them when recovery rolls around. | BW | PAGE 051



LABOR'S LOSS?

The SEIU's Andrew Stern is embroiled in union infighting that could torpedo what many regard as organized labor's golden opportunity to regain long-lost influence. | BW | PAGE 028

(LEFT TO RIGHT) OWEN SMITH; CHRIS USHER

THE BUSINESS WEEK

EDITED BY HARRY MAURER & CRISTINA LINDBLAD

At a GM dealer that closed in Easton, Md., all that remains is the sign

ECONOMICS & POLICY

CHAPTER 11 FOR GM

The cultural revolution that **General Motors** has long needed could be around the corner. The company filed for bankruptcy protection on June 1, seeking to ditch weak brands, some $27 billion in bond debt, and billions in retiree health-care costs. If the reorganization goes according to plan, the company will emerge with four core brands—**Buick, Cadillac, Chevrolet,** and **GMC**—and also with a cleaner balance sheet. The federal government will own 60% of the company, with the Canadian government, the **UAW,** and bondholders holding the rest. The company also reached a deal to sell its **Hummer** brand to China's **Sichuan Tengzhong Heavy Industrial Machinery** and sold a majority stake in its European **Opel** unit to parts maker **Magna International.** GM hopes to motor out of Chapter 11 within three months, but rival **Chrysler's** own bankruptcy exit is being delayed by dissident creditors who are appealing the in-court sale to Italy's **Fiat.**

A PIVOTAL PATENT CASE

The **U.S. Supreme Court** is going to grapple with what might be called "the method mess." The Justices announced on June 1 that they would take up a key issue in intellectual-property law: What kind of "business methods" are entitled to patent protection? Over the past decade, many financial, consulting, and e-commerce firms have rushed to patent such processes as ways to structure financial products, manage organizations, or transact Web business. In agreeing to review what's known as the **Bilski** case—involving a method for hedging risk in commodities trading—the high court is venturing into a hot dispute. A ruling isn't likely until next year.

THEY STILL LOVE T-BILLS

Everyone, it seems, is fretting about the dollar, but few seem

5.7%

U.S. personal savings rate in April, the highest in 14 years

Data: Commerce Dept.

JIM WATSON/AFP/GETTY IMAGES

to be doing anything about it. Despite mounting anxiety about U.S. creditworthiness, the foreign appetite for Treasuries looks undiminished. The Fed's holdings of Treasuries on behalf of foreign banks and institutions grew $68.8 billion in May, or 3.3%. **Brad Setser,** an economist at the **Council on Foreign Relations,** crunched numbers and found that, Beijing's protestations aside, China continued to add to its stockpile of T-bills through the first quarter even as it shifted out of other types of dollar assets. Other members of the BRIC club of countries—Russia and India—also kept buying Uncle Sam's paper, though not on the same scale as China. Brazil, on the other hand, has scaled back a bit. Look for Setser's updates every quarter.

Council on Foreign Relations

HOME BUYER HELP

Blamed for worsening the housing bubble, zero-down-payment loans largely vanished when the market crashed and Congress blocked seller financing for government-backed loans. But now, under a program announced May 29, the **Federal Housing Administration** will be the one forking over money at closing. The idea is to let first-time home buyers apply the $8,000 tax credit provided under the stimulus package directly to closing costs. That will cover most costs even for homes above the national median price of $169,000. Officials hope it will help revive the market, and the industry predicts 40,000 new sales from the move. Critics warn that defaults and foreclosures rise when buyers get down-payment help, likely because they have little at stake.

"FHA Loans: Return to 0% Down"
businessweek.com/magazine

GEITHNER IN CHINA

If this visit is any indication, the Obama Administration seems inclined to make nice with Beijing. **Treasury Secretary Timothy Geithner** wrapped up two days of high-level meetings on June 2, maintaining a conciliatory tone throughout. Rather than directly addressing the volatile issue of the dollar's future role as a reserve currency, he said: "I believe the Chinese expect the dollar to be the principal reserve currency for a long period of time, as do we," though he did pledge that Washington would cut its fiscal deficit. At the close of the

Geithner in Beijing: He pledged that the U.S. would cut its budget deficit

ANDY WONG/POOL/GETTY IMAGES

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visit, the Treasury said the next round of the new **U.S.-China Strategic Economic Dialogue** will be held in Washington at the end of July.

FINANCE

REMODELING THE DOW

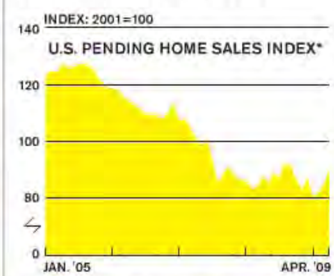
It didn't suit the blue-chip image of the **Dow Jones industrial average** to continue to include the stocks of bankrupt **General Motors** and ward-of-the-state **Citigroup.** So Dow owner **News Corp.** said on June 1 that it's casting them out of the list of 30 in favor of **Cisco Systems** and **Travelers.** Cisco, a tech stalwart, has an A+ credit rating. Travelers, a property and casualty insurance company that was once part of Citi, kept its assets safe in the financial crisis and is still rated A-. Cisco trades around 20 and Travelers at 40-plus, compared with less than 4 for the discards. The higher prices will tend to make the Dow move more erratically because of the way the average is calculated. But that's a minor blemish compared with the better reputations of the new stocks.

STRATEGY

A DISCOUNTER STRUGGLES

Quick: What's the biggest airline in Europe by both market cap and number of passengers? If you're thinking one of the major national carriers, think again. It's onetime upstart **Ryanair,** which recently overtook **Lufthansa** in the passenger department, with 58.5 million in 2008, vs. the German stalwart's 56 million. Ryanair has hit a downdraft recently, announcing on June 2 that it's posting an annual loss for the first time: $239 million for the year ended March. **CEO Michael O'Leary** pointed out that much of the loss stemmed from a writedown of Ryanair's 30% stake in **Aer Lingus.** He also did his best to ease the sting by saying he's

HOUSE HUNTING



*Tracks contracts for purchase of existing homes
Data: National Association of Realtors

IDEAS TAKING AIM AT OUTSOURCERS ON U.S. SOIL

A new bill in Washington, introduced by **Senators Dick Durbin (D-Ill.)** and **Chuck Grassley (R-Iowa),** could jeopardize the business models of such outsourcing firms as **Wipro** and **Infosys.** The legislation aims at tightening the rules for companies in the U.S. that hire skilled workers from abroad on temporary work visas, known as H-1Bs and L-1s. The most controversial provision would bar companies with more than 50 employees in the U.S. from landing any additional work visas if more than half their stateside workforce is made up of H-1B or L-1 visa holders. The bill is likely to be considered alongside immigration reform later this year, and it's unclear whether it has the support to become law. **Som Mittal,** president of the **Nasscom** trade group that represents India's outsourcers, says the proposal is misguided. If enacted, it would stop virtually all the major Indian outsourcers from bringing new employees into the U. S. "Both U.S. and Indian industry would suffer," he says. **Azim Premji,** chairman of **Wipro,** says India is likely to take action if the bill passes in its current form. "There is no way our government can take it lightly," he says. "[The tech services industry] is a vital piece of the economy."

Tata consulting staff in Florida

"Work Visa Bill Threatens Indian Outsourcers" businessweek.com/magazine

ST. PETERSBURG TIMES/ZUMA PRESS; CHART BY ALBERTO MENA/BW

012 EXECUTIVE SUMMARY

pondering a bid for Lufthansa, though not anytime soon. He also plans to add 40 aircraft to his fleet and slash ticket prices by an average of 20%. O'Leary, who likes to say that any publicity is good publicity, added that he's dropping an idea he floated a few months back: charging overweight passengers extra. The notion was widely denounced, and now he says it would be tough to enforce.

"Ryanair Goes into the Red and Mulls Bid for Lufthansa" businessweek.com/magazine

TECHNOLOGY

HIRING HANKY-PANKY?

Federal sleuths wonder whether U.S. tech titans are engaging in a practice of "Don't hire, don't tell." According to *The Washington Post* on June 3, the **Justice Dept.** has launched a probe into whether a wide range of high-tech companies violated antitrust laws by agreeing to avoid actively recruiting each other's employees. The inquiry focuses on **Google, Yahoo, Apple, Genentech,** and many other tech outfits. The probe is said to be in the early stages, with no certainty that a lawsuit will be filed.

GOING AFTER MICROSOFT

Critics call it a rearguard action and meddling by a power-mad bureaucracy, but fans argue it will level the playing field. *The Wall Street Journal* on May 30 said the **European Commission,** a longtime Microsoft antagonist, may force the software giant to preinstall Web browsers from rival makers, such as **Firefox, Chrome,** or **Opera,** onto **Windows** computers sold in Europe. The goal would be to boost alternatives to **Internet Explorer,** thus trimming Microsoft's power to dictate standards for Web sites. Both the company and the commission declined to comment.

LEADERSHIP

MERKEL'S BLAST

German Chancellor Angela Merkel reinforced her street cred as a fiscal conservative when she hosed the **U.S. Federal Reserve,** the **Bank of England,** and various other international institutions for flooding the world with liquidity. On June 2, Merkel complained to an audience in Berlin that the "all-powerful" Fed had pressured a reluctant **European Central Bank** to make bond purchases to encourage more bank lending and pleaded for "a return to a policy of reason." Otherwise, she warned, "in 10 years we'll be back in exactly the same place." Merkel seems still to be sore that the financial crisis forced Germany to bail out many of its banks, widening a budget deficit she had spent much of her term trying to eliminate.

Merkel lambasted the U.S. Fed and other central banks for loose monetary policy

AXEL SCHMIDT/AFP/GETTY IMAGES

DREAMING BIG IN TURKEY

A "mad genius." That's what *BusinessWeek Turkey* dubbed designer and architect **Hakan Gursu** in its May 31 cover story. Gursu's Ankara-based firm **Designnobis** has racked up scores of awards in the past couple of years. Among its creations are the **Fire Knight** vehicle, which sprays soil instead of water to extinguish forest fires, and **Volitan,** a "sailboat" powered by solar energy. Now Gursu is dreaming on a much bigger scale. He has drafted a blueprint for a mini city in Ankara, **Designopolis,** that will house research and development laboratories and light manufacturing, along with residential units and such amenities as health clubs and restaurants. Gursu is already signing up investors. The price tag? A cool $1 billion-plus. If it gets off the ground, Designopolis could help Turkey overcome its reputation as a laggard in innovation.

THE CEO CONUNDRUM

The great debate over how much chief executives matter rages on. One landmark study from 1972, for instance, found that decisions by CEOs explained just 14.5% of the variance in corporate profits among a sample of 167 companies. More recent research seems to show that leadership matters less in oldline industries, where the pace of change is slow, than in, say, the tech sector. Such bosses as **Steve Jobs** of **Apple** are the furthest thing from titular figureheads: They have the power to make or break a company. Also, studies show that having the right man or woman in the corner suite may be more important in bad times than in good.

The Atlantic

Men with Erectile Dysfunction (ED) are discovering that VIAGRA can help them get and keep harder erections, which can lead to more satisfying sexual experiences. Ready to get the message? ***Read all about it at viagra.com.*** Then ask your doctor if VIAGRA is right for you.

Viva
VIAGRA®
(sildenafil citrate) tablets

VIAGRA is prescribed to treat erectile dysfunction. We know that no medicine is for everyone. Don't take VIAGRA if you take nitrates, often prescribed for chest pain, as this may cause a sudden unsafe drop in blood pressure.

Talk with your doctor first. Make sure your heart is healthy enough to have sex. If you have chest pain, nausea, or other discomforts during sex, seek medical help right away. As with any ED tablet, in the rare event of an erection lasting more than four hours, seek immediate medical help to avoid long-term injury.

In rare instances, men taking PDE5 inhibitors (oral erectile dysfunction medicines, including VIAGRA) reported a sudden decrease or loss of vision, or sudden decrease or loss of hearing. It is not possible to determine whether these events are related directly to these medicines or to other factors. If you experience any of these symptoms, stop taking PDE5 inhibitors, including VIAGRA, and call a doctor right away.

The most common side effects of VIAGRA are headache, facial flushing, and upset stomach. Less common are bluish or blurred vision, or being sensitive to light. These may occur for a brief time. VIAGRA does not protect against sexually transmitted diseases including HIV.

Please see Important Facts for VIAGRA on the following page or visit viagra.com for full prescribing information.
For free information, including questions to ask your doctor, call 1-888-4VIAGRA (1-888-484-2472).

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.FDA.gov/medwatch or call 1-800-FDA-1088.

Pfizer

IMPORTANT FACTS

VIAGRA® (sildenafil citrate) tablets (vi-AG-rah)

IMPORTANT SAFETY INFORMATION ABOUT VIAGRA

Never take VIAGRA if you take any medicines with nitrates. This includes nitroglycerin. Your blood pressure could drop quickly. It could fall to an unsafe or life-threatening level.

ABOUT ERECTILE DYSFUNCTION (ED)

Erectile dysfunction means a man cannot get or keep an erection. Health problems, injury, or side effects of drugs may cause ED. The cause may not be known.

ABOUT VIAGRA

VIAGRA is used to treat ED in men. When you want to have sex, VIAGRA can help you get and keep an erection when you are sexually excited. You cannot get an erection just by taking the pill. Only your doctor can prescribe VIAGRA.

VIAGRA does not cure ED.

VIAGRA does not protect you or your partner from STDs (sexually transmitted diseases) or HIV. You will need to use a condom.

VIAGRA is not a hormone or an aphrodisiac.

WHO IS VIAGRA FOR?

Who should take VIAGRA?

Men who have ED and whose heart is healthy enough for sex.

Who should NOT take VIAGRA?

- If you ever take medicines with nitrates:
  - Medicines that treat chest pain (angina), such as nitroglycerin or isosorbide mononitrate or dinitrate
- If you use some street drugs, such as "poppers" (amyl nitrate or nitrite)
- If you are allergic to anything in the VIAGRA tablet.

BEFORE YOU START VIAGRA

Tell your doctor if you have or ever had:

- Heart attack, abnormal heartbeats, or stroke
- Heart problems, such as heart failure, chest pain, or aortic valve narrowing
- Low or high blood pressure
- Severe vision loss
- An eye condition called retinitis pigmentosa
- Kidney or liver problems
- Blood problems, such as sickle cell anemia or leukemia
- A deformed penis, Peyronie's disease, or an erection that lasted more than 4 hours
- Stomach ulcers or any kind of bleeding problems

Tell your doctor about all your medicines. Include over-the-counter medicines, vitamins, and herbal products. Tell your doctor if you take or use:

- Medicines called alpha-blockers to treat high blood pressure or prostate problems. Your blood pressure could suddenly get too low. You could get dizzy or faint. Your doctor may start you on a lower dose of VIAGRA.
- Medicines called protease inhibitors for HIV. Your doctor may prescribe a 25 mg dose. Your doctor may limit VIAGRA to 25 mg in a 48-hour period.
- Other methods to cause erections. These include pills, injections, implants, or pumps.

POSSIBLE SIDE EFFECTS OF VIAGRA

Side effects are mostly mild to moderate. They usually go away after a few hours. Some of these are more likely to happen with higher doses.

The most common side effects are:

- Headache
- Feeling flushed
- Upset stomach

Less common side effects are:

- Trouble telling blue and green apart or seeing a blue tinge on things
- Eyes being more sensitive to light
- Blurred vision

Rarely, a small number of men taking VIAGRA have reported these serious events:

- Having an erection that lasts more than 4 hours. If the erection is not treated right away, long-term loss of potency could occur.
- Sudden decrease or loss of sight in one or both eyes. We do not know if these events are caused by VIAGRA and medicines like it or caused by other factors. They may be caused by conditions like high blood pressure or diabetes. If you have sudden vision changes, stop using VIAGRA and all medicines like it. Call your doctor right away.
- Sudden decrease or loss of hearing. We do not know if these events are caused by VIAGRA and medicines like it or caused by other factors. If you have sudden hearing changes, stop using VIAGRA and all medicines like it. Call your doctor right away.
- Heart attack, stroke, irregular heartbeats, and death. We do not know whether these events are caused by VIAGRA or caused by other factors. Most of these happened in men who already had heart problems.

If you have any of these problems, stop VIAGRA. Call your doctor right away.

HOW TO TAKE VIAGRA

Do:

- Take VIAGRA only the way your doctor tells you. VIAGRA comes in 25 mg, 50 mg, and 100 mg tablets. Your doctor will tell you how much to take.
- If you are over 65 or have serious liver or kidney problems, your doctor may start you at the lowest dose (25 mg).
- Take VIAGRA about 1 hour before you want to have sex. VIAGRA starts to work in about 30 minutes when you are sexually excited. VIAGRA lasts up to 4 hours.

Don't:

- Do not take VIAGRA more than once a day.
- Do not take more VIAGRA than your doctor tells you. If you think you need more VIAGRA, talk with your doctor.
- Do not start or stop any other medicines before checking with your doctor.

NEED MORE INFORMATION?

- This is only a summary of important information. Ask your doctor or pharmacist for complete product information OR
- Go to **www.viagra.com or call (888) 4-VIAGRA (484-2472).**

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FACETIME | MARIA BARTIROMO

(TOP) BRAD TRENT; (BOTTOM) GAMMA/ZUMA PRESS

MEDVEDEV OF RUSSIA TOUGH TALK ON NORTH KOREA

On the eve of the St. Petersburg Economic Forum on June 4 and as North Korea reportedly moved closer to testing an intercontinental ballistic missile, I had an extensive interview with Dmitry Medvedev. The Russian President spoke forcefully about Pyongyang's recent nuclear and short-range missile tests; plainly addressed Russia's economic woes and the need for structural reform; and said it is a top priority to reassure foreign investors that they will be treated fairly by the legal system. Clearly Medvedev, a protégé of former President (and now Prime Minister) Vladimir Putin, is coming into his own as a world leader.

MARIA BARTIROMO
What is your reaction to North Korea's recent actions?

PRESIDENT DMITRY MEDVEDEV
This is by no means an economic topic, is it? But it is, unfortunately, by no means less topical. What has happened is very tragic and pitiful indeed. We were working through a consolidated international effort to help North Korea get out of its very difficult economic situation so that the nuclear program that it is implementing would be peaceful in its essence and would not create any harm to adjacent countries. But we have to admit that North Korea is not only close to South Korea and

Japan, it is close to us also. We have always had good relations with the North Korean leadership. But what has happened raises great alarm and concern. I have had quite a number of telephone talks with the Prime Minister of Japan and the President of South Korea. We need to think about some measures to deter those programs that are being conducted. We hope the North Korean leadership will get back to the negotiating table, because there is no other solution to this problem. The world is so tiny—as we see from the economic problems common to all of us. But indeed, WMD development or [nuclear] proliferation is a danger that is even higher than that. I'm prepared to discuss this matter in more detail during our meeting with President Obama in Moscow in early July. And we're going to discuss this in other forums also.


A North Korean missile launch in January

We just saw a sharp contraction in Russia's GDP. What is the state of your economy?
Our economy has indeed suffered from the international financial crisis. The slowdown in GDP will be six or even six-plus percentage points. At the same time, we cannot [help] but mention some other alarming points such as the growing number of unemployed persons. There are about 2.2 million registered unemployed. But in fact this [number] is higher because some people simply did not get registered. It is no secret that the Russian economy has always been export-oriented, and this has caused difficulty because the prices of oil and natural gas have changed. To a certain extent, we are now hostages of the structure of the economy.

North Korea is not only close to South Korea and Japan, it is close to us also. ... What has happened raises great alarm

What is your reaction to the uptick in the price of oil? Is it sustainable?
I closely follow oil prices, and we now are between \$60 and \$70 per barrel. These are the prices of 2006. And at that time we thought the prices were very high. Today I believe these prices are fair, bearing in mind that when the crisis peaked last year, oil hit almost \$150 a barrel. What are the reasons for the current price growth? The optimists think it reflects fundamental changes in the world economy. The support programs launched by the U.S., Europe, China, and Russia are finally showing results, and the [global] economy is recovering. But the pessimists believe the current growth in prices is just a random event. To a certain degree, it is a result of the support programs, but a new wave of depression will hit us soon, the prices of oil and gas will go down, and the [global] economy will continue spiraling down as well. I would like to believe that the positive changes in oil and gas prices [show] our efforts are at last bearing fruit. And what is happening in our country gives me reason to believe and to be moderately optimistic.

After this economic slowdown, will you deploy Russia's oil riches differently?
I have to say that this crisis is not only a dramatic event in our lives but it also is a chance destiny gave us to change the outdated and obsolete structure of our economy. It's [too] dependent on raw materials. It neglects innovation to a large extent. Extra revenues from the export of raw materials should be used to support social programs and to radically change the structure of our economy. They should be invested not only in the expansion of our oil-producing sector but into related areas such as petrochemistry, and most important, into new technologies, biotechnologies, and energy efficiencies.

The Yukos story, the TNK-BP story, and Shell being forced to sell a 51% stake in its Russian operations to Gazprom have all caught the world's attention. Will foreign capital be protected? Is it welcome?
I have quite a different point of view [of] what happened. I don't think that the companies you mentioned sold 51% of their shares under pressure or under threats. Nothing like that happened. But if we speak about the investment climate in general, then of course our legislation governing such investments should be further improved. We have walked quite a path already modernizing it. But there's a lot of room for improvement. We now have legislation that treats foreign investments as if they were domestic investments, so investors have equal rights in our markets. But I'm not happy about the protection of investments by the courts. Legal reform in Russia is a must. And I keep track of it daily. BW

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

KCNA/EPA/CORBIS

WARY CONSUMERS MAY HOLD BACK RECOVERY

Americans spent less again in April. Now, with gas prices and mortgage rates on the rise, households won't be offering the economy much help in the second half

One of the green shoots of recovery is starting to look a bit brown—and it's a big one. Consumer spending in April fell for the second month in a row, dropping below its first-quarter average and pointing to a tough road ahead for both households and the economy. At best, outlays adjusted for inflation have only stabilized following their dizzying plunge in the second half of last year, brought on by $4 gas and a near financial meltdown. At worst, consumer frugality is a growing risk to the broadly expected shift toward renewed economic growth in the second half.

The depressing effects of shrinking payrolls, lost wealth, and tight credit remain intense. Real, or inflation-adjusted, consumer spending posted a modest 1.5% annual rate of increase in the first quarter, but all that growth occurred in January. Monthly data since then show no momentum. In fact, spending in May and June will have to post at least moderate gains to prevent a dip back into negative territory. But weekly chain store reports through May look soft, and the pickup in the month's car sales largely reflected temporary discounting to clear out inventories.

-0.7%

Change in spending on necessities, such as food, housing, and medical care, since June, adjusted for inflation

Now, two new headwinds are blowing against prospects for third-quarter spending. First, sharply higher yields on Treasury notes are lifting mortgage rates. The average 30-year fixed rate rose to more than 5.25% at the end of May, after holding at about 4.8% earlier this year. The rise threatens to dampen home demand and kill off the refinancing boom that is bolstering the health of some households. Plus, the price of oil is pushing toward $70 per barrel. Gas prices are already up more than 60¢ per gallon since Mar. 16, to $2.52 on June 1. That rise will cut into buying power and negate some of Washington's stimulus.

So far, none of that stimulus has helped spending, although the Making Work Pay tax credit was fully implemented into withholding schedules in April. A $64 billion drop in taxes paid helped fuel a $122 billion surge in aftertax income in April, but households saved all of the gain. The savings rate jumped to 5.7%, a 14-year high, and the pressure to save is increasing. Since the last recession, consumers' liabilities have grown almost twice as fast as aftertax income. Huge wealth gains had helped consumers live with that imbalance, but since the middle of 2007, household net worth has plunged by more than $13 trillion.

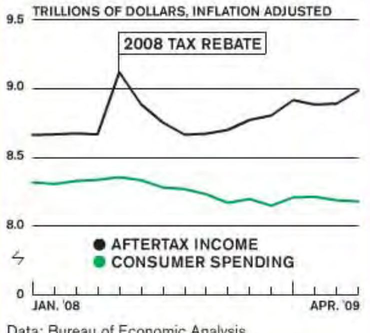
Despite massive job losses, aftertax income has grown at a solid 8.3% annual rate so far this year. That pace reflects lower taxes and help from other income-support programs, including a big 5.8% cost-of-living boost in January for Social Security recipients, who also will get a $250 one-time payout in May. Wages and salaries, which make up three-fifths of aftertax income, have declined 3.6% annually this year, but all other income has grown 29%. Still, spending has barely grown, as households have either salted away their gains or used them to pay down debt (chart).

The problem for the second half is that the size of government income support is set to diminish. That will put more pressure on wages and salaries to fill the gap, even as job losses remain large and as higher gas prices further erode buying power. If pump prices rise much further, real aftertax income in the third quarter will fall sharply, which would weigh heavily on spending, especially given consumers' desire to save more of what they make.

The jump in consumer confidence in April and May offers hope that increased faith in the future will lead to a pickup in spending. For now, though, the record two-month gain in the Conference Board's index from an all-time low most likely reflects relief that the economy has avoided a depression. The gauge remains historically low, and unemployment is expected to approach 10% in coming months.

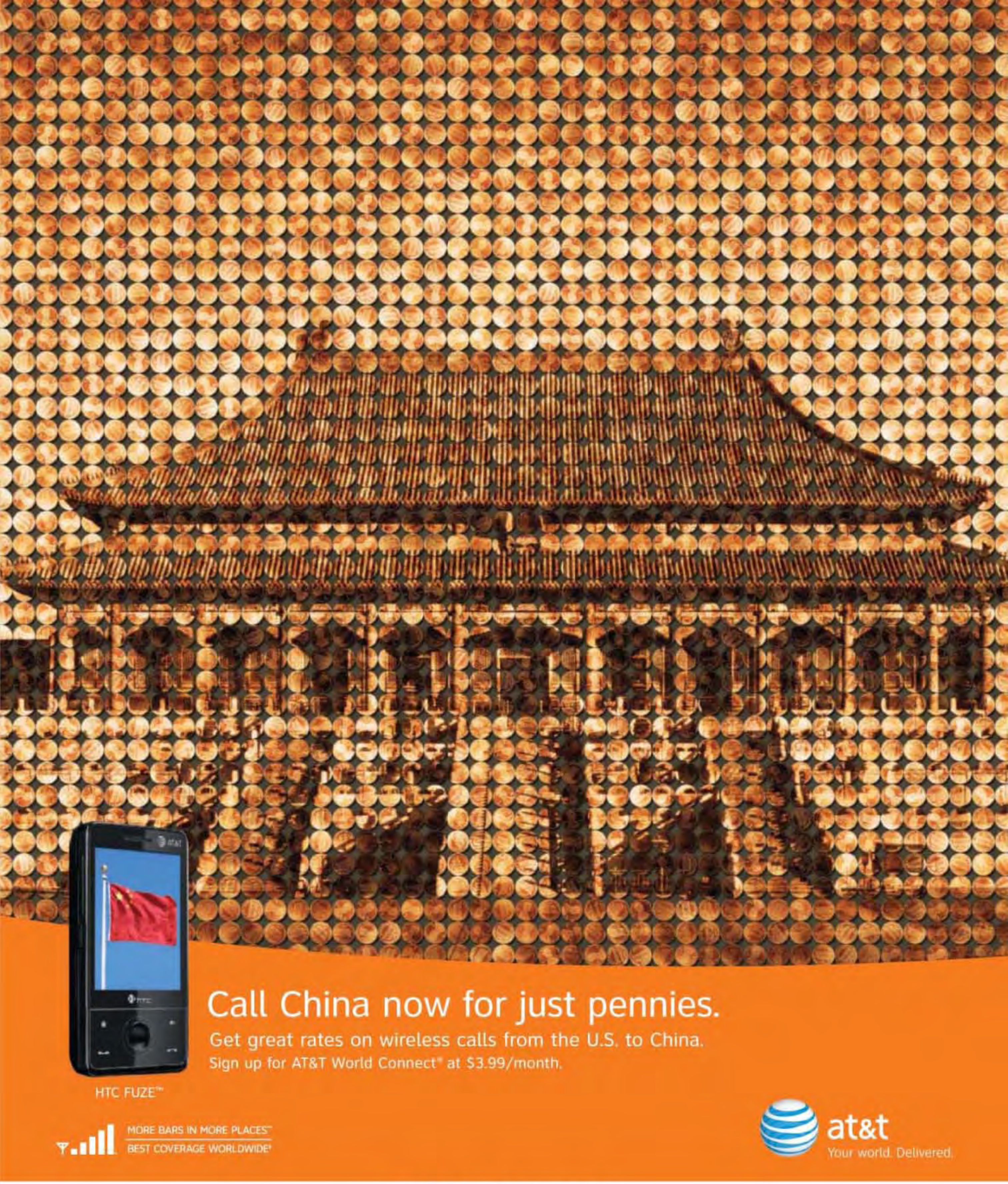
All this is not to imply more recession lies ahead. Recent positive signs from the stock market, manufacturers, and emerging-market economies suggest a turnaround is near. However, consumers don't appear ready to contribute to a recovery anytime soon. | BW |

CONSUMERS SPUTTER, EVEN AS INCOME REVS UP



Data: Bureau of Economic Analysis, IHS Global Insight

BRAD TRENT; CHART BY DAVID FOSTER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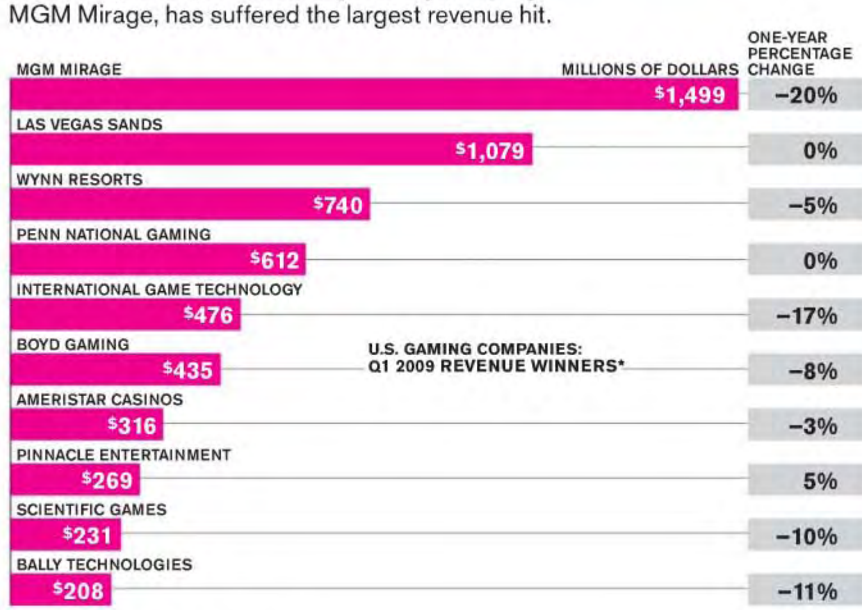
NUMBERS

U.S. CASINOS: EVEN THE HOUSE IS LOSING

By Tara Kalwarski/Charts by Ray Vella

The gambling industry, once seen as recession-proof, is hurting. Real expenditures at casinos dropped last year for the first time this decade, and gambling stocks have fallen by two-thirds since the start of 2008, vs. a one-third drop in the Standard & Poor's 500-stock index.

Receding Mirage: The No.1 gambling company, MGM Mirage, has suffered the largest revenue hit.



*With at least $100 million in market cap
Data: Capital IQ

Hot Spots: The top 10 casino markets brought in more than 60% of gross gaming revenue.

TOP 10 U.S. CASINO MARKETS BY 2008 REVENUE, IN MILLIONS

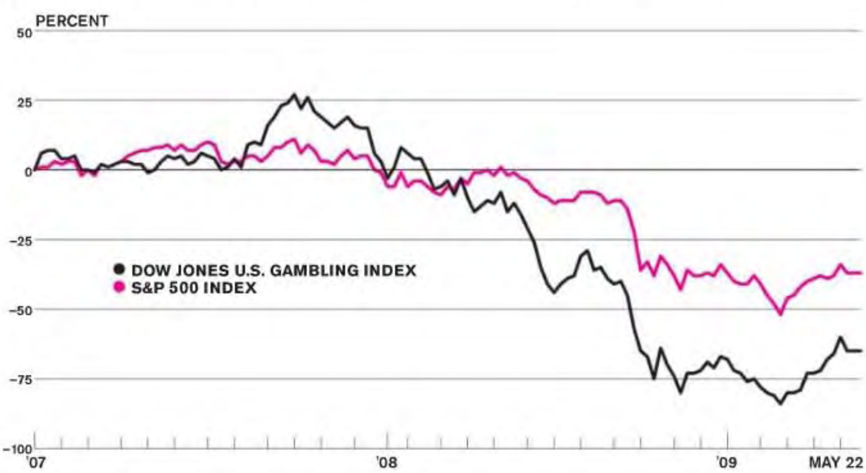
Las Vegas Strip	$6,121
Atlantic City	4,545
Chicagoland, Ill./Ind.	2,251
Foxwoods/Mohegan Sun, Conn.	1,571
Detroit	1,360
Tunica/Lula, Miss.	1,105
St. Louis, Mo./Ill.	1,031
Biloxi, Miss.	951
Shreveport, La.	848
Boulder Strip, Nev.	837

Data: Innovation Group

Holding Back: In 2008, inflation-adjusted spending on casino gambling dropped by 5%.

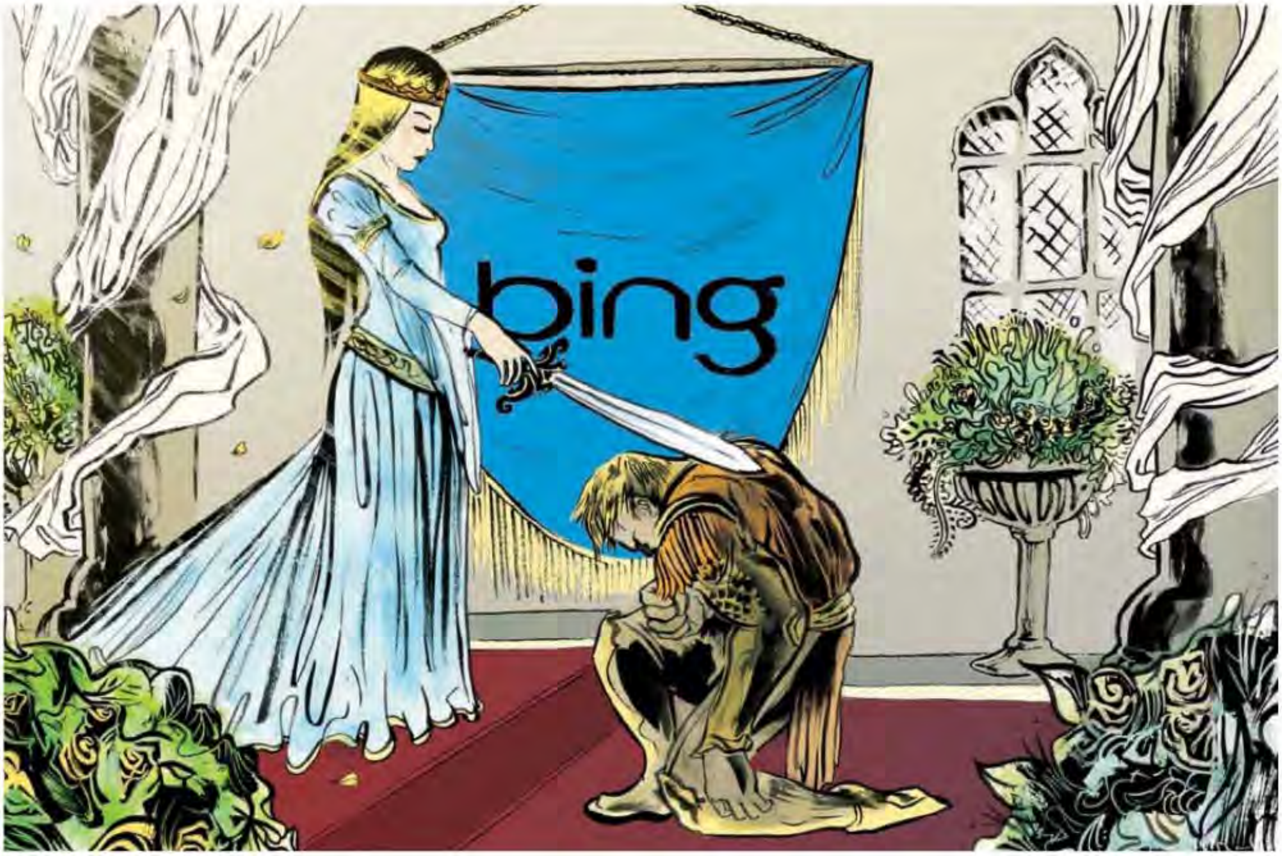
*Commercial includes private-sector land-based, riverboat, and dockside casinos; net of winnings
Data: Christiansen Capital Advisors, state gaming regulatory agencies, American Gaming Assn.

Snake Eyes: Stocks of 10 big gambling companies tumbled from October 2007 through this February, before bouncing back a bit.



Data: Bloomberg

EDITED BY DEBORAH STEAD



MATT HUYNH

THE DUBBING OF 'BING'

The new name for Microsoft's search engine is meant to capture the sound effect of a lightbulb moment. But coming up with "Bing" was hardly spontaneous for the software giant. It took six months and dozens of experts to settle on the name.

Brand naming is serious business in an age when goods must have global appeal and when an unfortunate choice can turn a promising product into a punch line. Web surfers looking for Fling, a low-calorie Mars candy bar launched in California in January, found that www.fling.com is a site specializing not in chocolate but in sex. Mattel's latest American Girl Doll, which just hit the stores, turns out to share her name, Rebecca Rubin, with an alleged arsonist wanted by the FBI.

Microsoft was determined to get it right when, in early 2007, it decided to rename its "Live Search" service. Interbrand, the firm that won the job of developing a list, assigned eight people to brainstorm names around such themes as "speed" and "relevance." Over roughly six weeks they came up with more than 2,000 choices, winnowing as they went along, says Paola Norambuena, who ran the project. First to go were names that weren't catchy or were hard to type. As two trademark lawyers and 20 linguists pored over the 600 remaining choices, the team also eliminated any used by other companies—or profane in any language.

That left 50 to 60 to show to Microsoft, which picked eight, submitting those to focus groups and more trademark screening. On that short list: Kumo (Japanese for "spider," and also the project's code name) and Hook. Bing won out, says Microsoft's Danielle Tiedt, who manages the search engine's marketing, partly because it was close to the "aha!" sound in many languages. "It's short, appealing, memorable, active," says Jeremy Faro, a senior director at branding agency Landor Associates. Still, despite all the hard work, bloggers are taking potshots. One popular quip: Bing is an acronym for "But It's Not Google." *—Burt Helm*

EUROPE'S FASHION VICTIMS

The fashion house of French designer Christian Lacroix confirmed on May 28 that it had filed for bankruptcy. But while Lacroix may be the luxury goods industry's best-known recession victim, he's not alone. Hundreds of small European businesses are staggering from a steep drop in orders from big luxury groups, whose sales may fall as much as 20% in 2009's first half, Bain & Co. estimates. Société Internationale de Lingerie (SIL), a longtime Paris supplier of lacy underthings to labels such as Christian Dior, Kenzo, and Sonia Rykiel, closed its doors in January, throwing 130 people out of work. Another recent casualty: Poitiers-based Sopim, which produced leather goods for handbag-maker Lancel, a unit of Switzerland's Richemont. Luxury groups like Richemont, LVMH Moët Hennessy Louis Vuitton, and Gucci are offloading excess inventory to discount Web sites. Paris-based EspaceMax.com, which says business is up 50% this year, is currently selling 400,000 pieces of lingerie made by the now defunct SIL. *-Carol Matlack in Paris*

WARMING UP TO GREENLAND

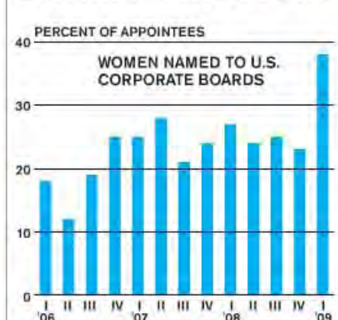
Will Greenland be the next emerging economy? On June 21, Denmark, which has ruled the island for three centuries, will grant the right of self-government to Greenland's 56,000 people, and policymakers in the tiny capital of Nuuk are making big plans. Since Greenland (Kalaallit Nunaat to its mostly Inuit population) has an abundance of swift rivers, the potential for cheap hydroelectric power is huge. Alcoa is now looking into locating an aluminum smelter on the island. Computer storage companies may follow. "They can keep their server farms cool with cheap hydropower, and we have more broadband than we can use," says self-government director Mininnguac Kleist. Then there are the oil, gold, palladium, platinum, and zinc deposits. An unusual twist in all this: the impact of global warming. Melting ice is causing rivers to run even faster. And one lead and zinc mine is reopening as retreating ice makes it easier to reach. *-Christopher Power*

WOMEN COME ON BOARD

More women than ever joined corporate boards in the first three months of 2009. According to *Directors & Boards* magazine, 38% of new U.S. directors in the first quarter were women, a "chart-busting" figure that is by far the highest since the magazine began tracking appointments in 1994. "This is good news for business, not just for women," says Ilene Lang, CEO of nonprofit advisory group Catalyst, whose research shows that companies with more female directors and senior officers outperform others.

What's driving the influx? Some experts say there are more female senior executives eligible to serve on boards, though Catalyst says the percentage of females in those ranks held steady in the past four years. Whether part of a blip or a real trend, the new directors may have a long tenure. Many—such as Juliana Chugg, a General Mills senior VP named to the board of apparel maker VF—are in their early or mid-40s. *-Matthew Boyle*

DISTAFF DIRECTORS



Data: *Directors & Boards*

(CLOCKWISE FROM TOP) PHOTOGRAPH BY BOB STRONG/REUTERS; CHART BY RAY VELLA/BW; ILLUSTRATION BY MATT HUYNH

FORECLOSURE GOES UPSCALE

Rising job losses and falling home prices are dragging down people who never dreamed their mortgages would get them in trouble

By Peter Coy

With the U.S. economy and financial markets showing signs of life, optimistic analysts are looking for a recovery in the all-important housing sector. They got some ammunition on June 2 from the National Association of Realtors, which said that its Pending Home Sales Index jumped in April by the most in more than seven years.

But housing can't revive as long as the market is being flooded with homes that are falling into foreclosure. And far from going away, the problem is broadening. It's not just about subprime anymore. Now, people with excellent credit who never dreamed of getting in financial trouble are being dragged down by a dangerous cycle of rising unemployment and falling home prices. That is going to prolong the foreclosure crisis and, inevitably, inhibit the recovery of the rest of the economy.

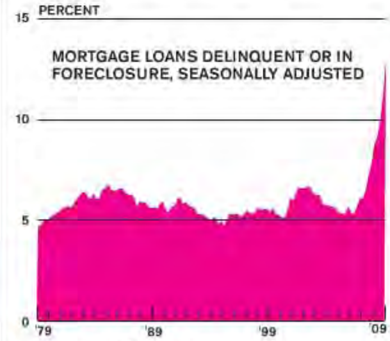
Any illusion that prime loans would emerge unscathed was shattered by a May 28 report from the Mortgage Bankers Assn. "For the first time since the rapid growth of subprime lending, prime fixed-rate loans now represent the largest share of new foreclosures," the bankers said. The grime in prime was responsible for the worst performance on record for the U.S. mortgage sector in the first quarter: Nearly 13% of loans were delinquent or in foreclosure, the most since the bankers started keeping tabs in 1972. The problems were worst in the bubble states of California, Florida, Arizona, and Nevada.

The biggest factor in this second wave of foreclosures is the inability of distressed homeowners to sell in order to pay off their debts. Prices in bubble cities such as Los Angeles, Phoenix, and Miami are down less at the high end of the market than at the bottom, according to data from Standard & Poor's/Case-Shiller home price indexes. But that's cold comfort to people who haven't managed to sell at all. According to research by the National Association of Realtors, there are enough \$750,000-plus homes on the market to cover more than 40 months' worth of demand at the current rate of sales. That's four times the rate of oversupply in the housing market as a whole.

Unemployment is exacerbating the problems at the top of the market. The jobless rate for adults with a bachelor's degree or more may not sound too high at 4.4% in April given the overall April jobless rate of 8.9%. But it's more than double the rate of 2% a year earlier. And many families in that segment of the population built their finances on the assumption of continuous full employment, so they can't cover the mortgage when even one spouse is out of work.

Consider the plight of Stephanie and

DELINQUENCIES SOAR



Data: Mortgage Bankers Assn.

GARY NEIL

Bob Walker, who bought a $799,000, three-bedroom home in Los Angeles with a view of the Hollywood sign in 2006 but are losing it because last year Bob stopped getting computer consulting work that used to pull in about $240,000 a year. Bob eventually landed a job paying $60,000, and Stephanie found work as a $13-an-hour temp, but it wasn't enough to cover their mortgage and credit-card debt, which was swelled by about $130,000 worth of home renovations. They listed the house last year for an "optimistic" $875,000 but didn't get any takers. After months of price cuts and threats of foreclosure from the bank, they're days from closing on a sale at $700,000 that will assuage their primary mortgage lender—but leave them under pressure from other creditors. "We had no expectation things would come crashing down as fast as they did," says Stephanie. "We had no one to blame but ourselves. We didn't have a backup plan if he lost his job."

The economics at the top of the market aren't as advantageous as they are at the bottom, where first-time home buyers are flocking to lower-priced homes, spurred by low interest rates, temporary tax credits, and a drop in prices that has made owning cheaper than renting in many cities. At the high end, homes are too expensive for most first-time buyers, and move-up buyers can't purchase a home without selling property they already own. What's more, financing is far costlier, if it's available at all, because private investors have lost their appetite for big mortgages. Rates on "jumbo" loans—that is, those too big to be purchased by Fannie Mae or Freddie Mac—are roughly a percentage point higher than those for loans that conform to Fannie and Freddie's purchase limits. (Those limits range from $417,000 to $730,000, depending on local housing costs.)

An inflation panic in the fixed-income market is the latest blow to homeowners who are trying to sell to avoid foreclosure, because it's pushing up mortgage rates and pushing potential buyers out of the market. Rates on 30-year fixed, conforming mortgage loans jumped nearly half a percentage point, to 5.25%, in the week ended May 29 from a week earlier, according to the Mortgage Bankers Assn. Meanwhile, the market is unlikely to get much help from the Obama Administration's foreclosure-prevention program. Although it's somewhat more ambitious than the Bush Administration's program, it is voluntary for lenders and is off to a slow start since its March inception.

When will this second wave of foreclosures crest? David Crowe, chief economist of the National Association of Home Builders, doesn't see the peak coming until 2011, later than most other experts predict. Foreclosures typically top out after unemployment does, and Crowe doesn't expect that to occur until late this year. After that, Crowe says, more people will lose their homes because of upward resets on adjustable-rate mortgages. Credit Suisse says mid-2010 is the peak for scheduled resets, and resets will stay high well into 2012. While most of the subprime loans issued during the boom years have been washed out by now, there are still about half a trillion dollars' worth of option ARMs, which allow borrowers to add unpaid interest to the principal they owe. There's an even more alarming $2.5 trillion in "alt-A" loans, which are between prime and subprime and include a big chunk of the mortgages that required little or no proof of income or assets. Most of these loans were issued to people with relatively good credit who were buying more expensive homes.

A key unknown is how many middle- and upper-income homeowners will simply walk away from homes that are worth less than the mortgages on them. So far few have. Whitney R. Tilson, managing partner of New York investment firm T2 Partners and co-author of the book *More Mortgage Meltdown*, expects the ranks of walk-aways to increase, exacerbating foreclosures. But Rick Sharga, senior vice-president of RealtyTrac, a foreclosure data specialist, disagrees. "To sign a contract for a house and then walk away from it runs counter to everything we were taught," says Sharga, who predicts foreclosures will dip slightly in 2010.

Even if foreclosures don't rise, the rate is already so high that it will put considerable pressure on the national housing market for at least two more years, says Mark Hanson, managing director of Field Check Group, a Menlo Park (Calif.) research firm.

While forecasts differ in detail, the clear message is that foreclosure is going upscale. And that means the housing bust won't end anytime soon. BW

–With Brian Burnsed

NO SOLIDARITY FOR LABOR

Bitter squabbles among union bosses could complicate efforts to pass Democratic legislation

By Michael Orey and Jane Sasseen

Months after helping put Barack Obama in the White House, organized labor's most important unions are sliding into vicious internecine warfare.

The strife has become so intense that the senior Democratic leadership is intervening. The Democrats, under pressure from labor to pass legislation that would make it much easier to unionize workplaces, fear the disputes will further erode support for the controversial issue; they also need union support to help secure popular backing for health-care reform. While the business lobby has so far been surprisingly successful at stalling the unionization bill, known as the Employee Free Choice Act (EFCA), it will have a tougher time getting its way on labor issues and on health care if the unions bring their quarreling to an end.

At the heart of the dispute is a three-way fight between the Service Employees International (SEIU), the country's second-biggest union, and two factions of Unite Here, until recently one of the fastest-growing unions. The two leaders of Unite Here, Bruce Raynor and John Wilhelm, have fought bitterly over strategy and finances. On May 28, Raynor quit the union and joined 100,000 of his followers who had affiliated in March with the SEIU, which is commanded by Andrew L. Stern.

The much larger SEIU might now organize the same workers as Unite Here, and could claim a large share of the troubled union's $400 million in assets. Wilhelm is fighting back. "The unified approach that the labor movement hoped for has been derailed by Andy Stern and SEIU," says Wilhelm. Stern vehemently disputes that notion. "I don't think the labor movement has ever worked more closely on an issue than it has on EFCA," he says.

Epic struggles inside Big Labor are nothing new. But this fight—plus another clash involving a breakaway chapter of the SEIU in California—comes at a bad time for the Democratic leadership as it prepares for critical legislative efforts. Democratic senators met on June 3 to discuss possible compromises needed to pass EFCA, also known as card check. The U.S. Chamber of Commerce has done a highly effective job of stalling the legislation by pressuring moderate Democrats to withhold their support for the bill in its current form, since it would do away with secret ballots at union-organizing votes.

Most Democratic senators want to see a compromise that would keep the secret ballot but otherwise make it easier for unions to organize. Stern says he is open to approaches that would garner the 60 votes needed to overcome a potential filibuster, but Wilhelm accuses him of not consulting adequately with other unions.

GRASSROOTS SKILLS

The spectacle of union leaders quarreling openly about a bill they consider a top priority doesn't help the Democrats. Says one party official close to top SEIU leaders: "They could use their money to organize politically instead of fighting other unions." The Democrats need the grassroots skills of the SEIU and other unions to push back against the Chamber's shrewd recruitment of

SEIU chief Stern dismisses fears that union conflicts will derail progress

business owners to oppose the EFCA.

Prominent Democrats and other labor leaders are now getting involved. Sources say Senate Majority Leader Harry Reid met with top union officials to get them to settle their differences. And on May 28, American Federation of Teachers President Randi Weingarten sent a letter to Raynor and Wilhelm, telling them: "This conflict is causing collateral damage. ... The longer it continues, the less likely we are to enact a strong Employee Free Choice Act."

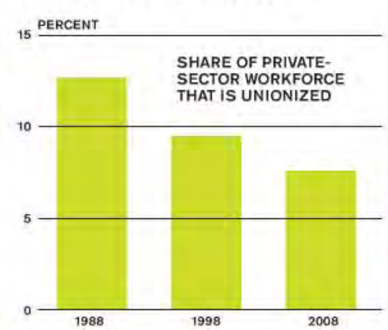
Stern dismisses the idea that the infighting is derailing labor's progress in Washington. It's a sign of union strength, he argues, that discussions on card check continue. "No other bill could have withstood this kind of opposition and still survived," he says.

Still, labor supporters like Jamie Court, president of Consumer Watchdog, an advocacy group, are worried. "Any time you have labor fighting, it gives politicians an excuse to buy big business' argument," he says. Stern ripostes that progress is still being made. Labor Secretary Hilda L. Solis and Health & Human Services head Kathleen Sebelius were both championed by the SEIU; White House political director Patrick Gaspard is an SEIU veteran. Obama's appointments to the National Labor Relations Board are expected to vigilantly oversee efforts to form unions and bargain collectively.

The next challenge is health care. Labor groups have helped keep a government-funded insurance option—a key union goal—on the table. Union lobbyists have also so far fended off the idea of taxing health-care benefits to fund universal coverage. Some 500 full-time organizers from the SEIU are working to build grassroots support for the union version of health-care reform. Democrats hope a reunified labor movement will do even more. | BW |

—With Christopher Palmeri in Los Angeles, Moira Herbst in New York, and David Kiley in Detroit

THINNING RANKS



Data: Unionstats.com

Business Exchange

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Reshaping the NLRB

One way Obama can shift the power balance between labor and business is through regulatory appointments. The National Labor Relations Board oversees workers' efforts to form unions and bargain collectively. In a client bulletin, law firm McKenna Long & Aldridge says two new additions to the NLRB will likely create a majority bloc "distinctly in favor of expanding the rights of unions and workers."

To read the bulletin, go to **http://bx.businessweek.com/labor-unions/reference/**

PHOTOGRAPH BY CHRIS USHER

030

WE'RE SORRY. BUY OUR CARS

To market in a bankruptcy, GM will strive both to concede past mistakes and buff up its image

By David Welch and David Kiley

As General Motors begins its perilous course through bankruptcy, its marketing team is working overtime on the company's other biggest challenge: repairing GM's crumpled image.

Led by many of the people who helped revive Cadillac nearly a decade ago, the team has been frantically developing a pair of campaigns aimed at buffing up GM and the four brands that will survive bankruptcy—Buick, GMC, Chevrolet, and Cadillac. Susan Docherty, vice-president of Buick and GMC, says she is working seven days a week, sometimes scheduling conference calls at 10 p.m. "I tell my staff: 'If you're not comfortable with the pace, get with it or get out,'" she says.

The first priority is convincing Americans the company has changed. Eric Hirshberg, whose Deutsch Los Angeles agency is handling the campaign, says "the public needs to believe that GM acknowledges it's paying for past mistakes." That's why the ads now appearing online, in newspapers, and on TV telegraph repentance. The message, says CEO Frederick A. "Fritz" Henderson, is that "the GM that let too many of you down is history."

In mid-June, GM will pivot to plugging Buick. The primary focus is on hooking younger buyers who have zero loyalty to GM vehicles. Buick, while popular in China, has come to be considered a fogy brand at home (average buyer age: 66). Americans love a makeover, so that is the theme Buick has latched on to. One ad has a plastic surgery spin with the catch line: "Nip. Tuck. Weld." To reel in younger buyers, ads for Buick's curvy new LaCrosse sedan will feature its array of Lexus-caliber gadgetry, including a hard drive for music, a system that alerts drivers if someone is in their blind spot, and a retractable rear sunshade. And where Buick used to advertise alongside televised golf games—watched mostly by middle-aged people—it will buy time during National Football League games, which skew younger. "We need to be relevant, and we aren't today," says Docherty.

RICHARD MIA

25% Portion of its $2 billion annual advertising budget that GM plans to spend online in the coming years

Data: General Motors

TWITTER CAMPAIGN

GM plans to double down online, dedicating 25% of its ad budget to Web marketing. In one initiative, the company is asking customers who ditched their imported wheels for a GM vehicle to recount their stories on Twitter and Facebook. "Someone who bought a car is worth a lot more than a 30-second [TV] ad," says Jay Spenchian, GM's North American marketing chief.

Can GM repair its reputation? Much depends on how long it lingers in bankruptcy. If the proceedings drag on longer than the expected three months, says James N. Hall of industry consultant 2953 Analytics, then people will be reminded of the company's troubles. But if GM can get through bankruptcy quickly, as the feds predict, then the strategy of splitting the automaker in two—with the to-be-liquidated brands in one company and the four survivors in the other—could conceivably convince people GM is worth another chance.

The automaker is not stinting on marketing dollars to make its case. In three years or so, GM's ad budgets will match those of Toyota Motor. The company is also praying that its humiliating comedown will kindle empathy among consumers. Mark LaNeve, GM's North American sales and marketing chief, says he hopes that "Americans will root for us as an underdog." |BW|

JOHN VANBEEKUM FOR THE MIAMI HERALD

Kanas, part of a group that bought BankUnited, is now the CEO

PRIVATE EQUITY'S RUN AT THE BANKS

Desperate regulators are relaxing ownership rules, but critics fear taxpayers could pay for investors' mistakes

By Peter Carbonara

Many U.S. banks need cash. Private equity players are eager to give it to them. Will such deals save banks or set the stage for trouble later?

In recent weeks big buyout firms have been scooping up banks—and more likely will follow. A team of investors, including Carlyle Group and Lightyear Capital, is close to making a deal for Silverton Bank, a failed \$4.1 billion institution in Georgia. In a different deal, Lightyear and two other firms will invest \$450 million in First Southern Bancorp.

The new deals are changing the face of bank ownership. For decades only bank holding companies—highly regulated entities devoted exclusively to banking—could own banks. Now regulators are letting private equity firms, which invest in all kinds of companies, control banks. The worry: Private equity will pillage the banks' resources to fund their other operations or investments. "We think that this is the worst idea," says John Adler, a director at Service Employees International Union, which invests in private equity funds.

Following the wave of bank failures in the Great Depression, regulators decided that bank ownership should be limited to bank holding companies. Why? Back then several banks failed when owners diverted resources to prop up other holdings like retailers and manufacturers. With 305 banks on the verge of collapse today, regulators have begun to relax the rules. Now the Federal Reserve will let a single private equity firm own as much as 33% of a bank. Firms can team up to buy an entire bank.

But different regulators are applying different standards. In January the U.S. Office of Thrift Supervision gave one firm, New York's Matlin Patterson, the green light to purchase Flagstar Bancorp in Michigan. Some lawmakers aren't happy. Last month, Senator Jack Reed (D-R.I.) sent a letter to top regulators calling the Flagstar purchase a case of investors "shopping around a potentially risky activity until they can find a regulator who will allow it." Matlin Patterson declined to comment.

Critics fear private equity firms—which collectively own hundreds of companies—will succumb to the same temptation as bank owners in the '30s. "If I've got a bank, and I have a business that's going down, where do you think the bank funding is going?" says Rochdale Securities bank analyst Dick Bove.

If private equity stumbles, taxpayers could end up footing the bill. When Carlyle, Blackstone Group, WL Ross, and investor John Kanas made a deal to buy Florida's BankUnited Financial for \$900 million, for example, the FDIC agreed to eat the bulk of losses on the bank's \$10 billion loan portfolio. Carlyle Managing Director Randal Quarles says critics' fears are misplaced, in part because under the terms of the deal, BankUnited's owners won't make any transactions between the bank and their other holdings.

In the end, regulators don't have a choice. They don't have the funds to bail out every troubled bank, and few investors have the financial muscle of private equity firms. Says Hal S. Scott, a Harvard University finance law professor: Banks "need capital, and private equity has capital." |BW|

SHOPPING LIST

Private equity firms have been picking through the troubled banking sector for deals

BANK	BUYER(S)	DATE
Flagstar Bancorp	Matlin Patterson	February
BankUnited Financial	Blackstone Group, Carlyle Group, and WL Ross	May
First Southern Bancorp	Lightyear Capital, Crestview Partners, and Fortress Investment Group	May

CHINA RETHINKS THE AMERICAN WAY

Mainlanders still relish U.S. products, but their view of U.S. management is increasingly negative

COMMENTARY

Geithner (right) is trying to reassure the Chinese their U.S. investments will be safe

ANDY WONG-POOL/GETTY IMAGES

By Dexter Roberts

BEIJING

As a journalist in China for nearly 15 years, I've had to play a second role as something of a guide to American culture. In the small talk that inevitably follows interviews with government or industry bigwigs, I'm sometimes asked: "How is this done in the States?" That's because China has often sought to emulate the American economic system. A planned stock exchange was pitched as a "Chinese Nasdaq." A central bank reform was modeled on the U.S. Federal Reserve system. And officials and executives alike boast that their staffers have spent time in the U.S., a badge of honor in China.

As Treasury Secretary Timothy Geithner motorcaded his way through Beijing this week, though, it became clear that mainlanders have far less respect for the American Way these days. While there's scant evidence that Chinese youth are avoiding McDonald's, KFC, or the myriad other beacons of U.S. culture that dot the landscape, American management has fallen out of favor. "I used to think the U.S. was a very good country," says Li Mo, a 26-year-old wearing a red LeBron James T-shirt and sipping an iced mocha in a Beijing Starbucks. "But after the financial crisis, I began to think China is the best place in the world."

That's not to say people here are happy about Beijing's management of the economy. In fact, plenty of Chinese feel their country has too closely followed the lead of Washington—or Wall Street. China's sovereign wealth fund, the China Investment Corp., has been roundly criticized for losses (on paper, at least) of $4 billion on investments in New York financial houses Blackstone Group and Morgan Stanley. And many fear Beijing may ultimately take a far bigger bath on the $1.4 trillion-plus in U.S. securities it holds.

Much of the discontent is showing up on China's freewheeling Internet forums. On these Web sites, countless postings attack U.S. banks and politicians for reckless behavior. The U.S. economy "is like a dump truck just starting to tip," reads one comment on the Web site of broadcaster CCTV. On a hyper-patriotic online forum called Revival, another post declares that "anyone who sends money to the U.S. is betraying the Chinese people!"

STOP TRYING TO PLEASE

Wang Xiaodong may be one of the most vociferous proponents of this view. I first met him more than a decade ago, when he was running *Strategy & Management*, a Chinese journal that advocated a turn away from Western values. He recently co-authored *China Is Not Happy*, a book that has sold more than half a million legal copies, with an untold number of pirated versions in circulation. In it, Wang criticizes the U.S., saying it has damaged itself by focusing too much on its financial sector while sending manufacturing offshore. China, he says, needs to adopt a more assertive economic, diplomatic, and military stance. "China's policies are always based on trying to please the West. We don't think this is necessary," Wang tells me as he sips a Coke, a beverage he allows is "pretty good."

The anger has found its way into official rhetoric. Premier Wen Jiabao on Mar. 13 urged Washington to "maintain its good credit, to honor its promises, and to guarantee the safety of China's assets." During his visit to Beijing, Geithner heard plenty of concern about such matters, with students at Peking University questioning him on the financial crisis and how Washington might put things right. And those worries about China's U.S. investment holdings? They're "very safe," he told the students. "We have the deepest, most liquid financial markets in the world." Good luck convincing the Chinese of that. |BW|

Critic Wang Xiaodong says the U.S. has focused too much on its financial sector while sending manufacturing offshore

DELL IS ON THE PROWL

With $10 billion in hand, it's shopping for acquisitions beyond the PC business

CEO Dell must contend with slowing growth in the PC industry

STEPHEN HILGER/BLOOMBERG NEWS

By Aaron Ricadela and Cliff Edwards

In a strategic shift, Dell plans to get more aggressive about acquisitions. The Round Rock (Tex.) PC maker, led by CEO Michael Dell, has bought just 10 companies in the past three years, far fewer than rivals such as Hewlett-Packard, IBM, and Cisco Systems. But with PC sales slowing, Dell executives say that is going to change—and the company has amassed a $10 billion war chest.

In a sign of how serious Dell is about acquisitions, it is trying to recruit David Johnson, a 27-year IBM veteran who has cut Big Blue's key deals in recent years and left the company in May. IBM is suing to stop the move. Last month it filed suit against Johnson in a New York court, arguing that his joining Dell would violate a noncompete agreement.

Dell says its move to "inorganic growth" will go forward whatever the suit's outcome. Brian T. Gladden, chief financial officer, told *BusinessWeek* that Dell is eyeing tech companies that help businesses manage computer networks and equipment. He declined to discuss specifics, but here are six companies that analysts, bankers, and former Dell executives say merit a close look:

THE TOP TARGETS?

PALM

Market Value: $1.7 billion

Dell needs a mobile play. Palm's Pre, which goes on sale on June 6, is generating buzz as the next big competitor to Apple's iPhone and Research In Motion's BlackBerry. Palm also has hired away some Apple software vets, who may keep the Pre from being a one-hit wonder.

MOTOROLA PHONE UNIT

Market Value: $3 billion (est.)

Motorola's mobile phone operation is struggling. But it has spent the last year streamlining in preparation for a spate of product launches later this year. Banking sources say Dell is not interested now, but it may give Motorola another look if the phone unit delivers a hit product.

AFFILIATED COMPUTER SERVICES

Market Value: $4.3 billion

Dell has been beefing up its services business through acquisitions. Accenture, worth $22 billion, may be too rich a target for Dell. But Dallas-based ACS would be more manageable. And it's seeing solid demand for business process outsourcing and technology services.

BMC SOFTWARE

Market Value: $6.6 billion

BMC makes software that companies use to update and manage groups of PCs and server computers. With an acquisition, Dell may be able to help BMC tap a broader range of corporate customers and boost BMC's sluggish growth rate.

SYMANTEC

Market Value: $12.9 billion

Symantec would give Dell the leading provider of security software for PCs, a business that has held up well in the recession. The company could also help Dell grow in other areas, such as online storage and services.

EMC

Market Value: $25.1 billion

A Dell-EMC deal would probably have to be a merger rather than an outright acquisition. The data storage king has an enviable customer base. And EMC owns another prize: VMware, a company that helps businesses manage resources in their data centers with virtualization technology.

INNOVATION INTERRUPTED

By Michael Mandel
Illustrations by Andy Potts

During the last decade, U.S. innovation has failed to realize its promise—and that may help explain America's economic woes

"We live in an era of rapid innovation." I'm sure you've heard that phrase, or some variant, over and over again. The evidence appears to be all around us: Google, Facebook, Twitter, smart-phones, flat-screen televisions, the Internet itself.

But what if the conventional wisdom is wrong? What if outside of a few high-profile areas, the past decade has seen far too few commercial innovations that can transform lives and move the economy forward? What if, rather than being an era of rapid innovation, this has been an era of innovation interrupted? And if that's true, is there any reason to expect the next decade to be any better?

These are not comfortable questions in the U.S. Pride in America's innovative spirit is one of the few things that both Democrats and Republicans—from Bill Clinton to George W. Bush to Barack Obama—share.

But there's growing evidence that the innovation shortfall of the past decade is not only real but may also have contributed to today's financial crisis. Think back to 1998, the early days of the dot-com bubble. At the time, the news was filled with reports of startling breakthroughs in science and medicine, from new cancer treatments and gene therapies that promised to cure intractable diseases to high-speed satellite Internet, cars powered by fuel cells, micromachines on chips, and even cloning. These technologies seemed to be commercializing at "Internet speed," creating companies and drawing in enormous investments from profit-seeking venture capitalists—and or-

dinarily cautious corporate giants. Federal Reserve Chairman Alan Greenspan summed it up in a 2000 speech: "We appear to be in the midst of a period of rapid innovation that is bringing with it substantial and lasting benefits to our economy."

WHERE ARE THE NEW PRODUCTS?

With the hindsight of a decade, one thing is abundantly clear: The commercial impact of most of those breakthroughs fell far short of expectations—not just in the U.S. but around the world. No gene therapy has yet been approved. Rural dwellers can get satellite Internet, but it's far slower, with longer lag times, than the ambitious satellite services that were being developed a decade ago. The economics of alternative energy haven't changed much. And while the biotech industry has continued to grow and produce important drugs—such as Avastin and Gleevec, which are used to fight cancer—the gains in health as a whole have been disappointing, given the enormous sums invested in research. As Gary P. Pisano, a Harvard Business School expert on the biotech business, observes: "It was a much harder road commercially than anyone believed."

If the reality of innovation was less than the perception, that helps explain why America's apparent boom was built on borrowing. The information technology revolution is worth cheering about, but it isn't sufficient by itself to sustain strong growth—especially since much of the actual production of tech gear shifted to Asia. With far fewer breakthrough products than expected, Americans had little new to sell to the rest of the world. Exports stagnated, stuck at around 11% of gross domestic product until 2006, while imports soared. That forced the U.S. to borrow trillions of dollars from overseas. The same surges of imports and borrowing also distorted economic statistics so that growth from 1998 to 2007, rather than averaging 2.7% per year, may have been closer to 2.3% per year (page 39). While Wall Street's mistakes may have triggered the financial crisis, the innovation shortfall helps explain why the collapse has been so broad.

But here's some optimism to temper the gloom: Many of the technological high hopes of 1998, it turns out, were simply delayed. Scientific progress continued, the technologies have matured, and more innovations are coming to market—everything from the first gout treatment in 40 years to cloud computing, the long-ballyhooed "information at your fingertips" (page 42). The path has been long and winding, but if the rate of commercialization picks up, the current downturn may not be as protracted as expected.

To see both the reality of the innovation shortfall and its potentially happy ending, look at Organogenesis, a small company in Canton, Mass. Back in 1998, Organogenesis received approval from the Food & Drug Administration to sell the world's first living skin substitute. The product, Apligraf, was a thin, stretchy substance that could be grown in quantity and applied to speed the healing of diabetic leg ulcers and other wounds that had stayed open for years.

From a health perspective, the approval of Apligraf seemed to open up an entire world of "tissue engineering," growing all sorts of replacement body parts from living human cells. From an economic angle, the possibilities were equally ap-

A DECADE OF DISAPPOINTMENTS

In 1998 there were an astounding number of technological breakthroughs across a range of fields. A decade later, the rate of commercialization has been far slower than expected.

CANCER TREATMENTS

1998 Hopes: Scientists reported several big cancer breakthroughs, including attacking tumors by cutting off their blood supply.

What Followed: Tackling cancer was far trickier than expected. There were some successes, such as Avastin, but many more failures.

Today: Many treatments are in clinical trials, including therapeutic cancer vaccines.

CLONING

1998 Hopes: After the cloning of Dolly the sheep was announced in 1997, the cloning of humans for medical-research purposes suddenly seemed plausible.

What Followed: The combination of ethical concerns and technical difficulties slowed human cloning to a crawl.

Today: More than 20 animal species have been cloned, but businesses to clone livestock or pets have not taken off.

FUEL-CELL-POWERED CARS

1998 Hopes: In January of that year, GM Chairman John Smith promised a production-ready fuel-cell car by "2004 or sooner."

What Followed: Automakers demonstrated fuel-cell cars, but were never able to show any that were production-ready.

Today: The Obama Administration has chopped research funding for fuel-cell vehicles.

GENE THERAPY

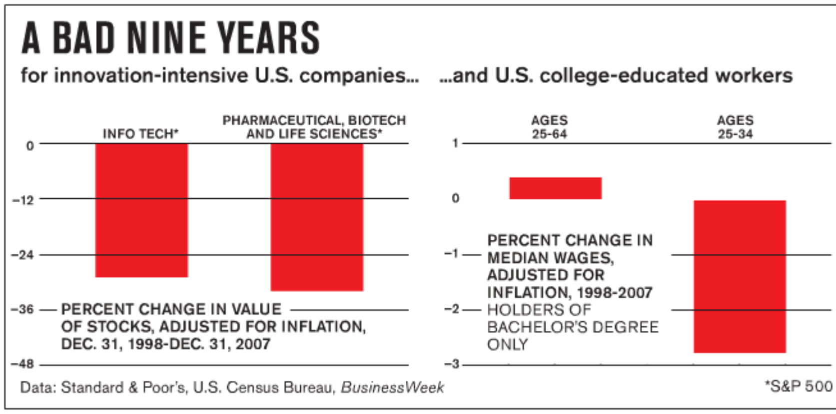
1998 Hopes: Researchers were trying to insert "replacement" genes into patients with illnesses such as cystic fibrosis.

What Followed: When an experimental gene therapy treatment killed a patient in 1999, research slowed down dramatically.

Today: No gene therapy has been approved by the FDA, but recent clinical trials have been encouraging.

pealing: Apligraf, approved in Canada and Switzerland, was being exported, creating skilled jobs in Massachusetts. This was the sort of high-tech product needed to drive the U.S. economy into the 21st century.

But there were several big problems, recalls Geoff MacKay, the company's current CEO, who repeatedly used the word "cautious" during our interview. For one, Apligraf cost more to make than the company could sell it for—never a good way to stay in business. In addition, Organogenesis couldn't figure out how to deliver Apligraf reliably, since it was shipping a product made out of living cells. "This is something no one had done before," says MacKay, who at the time was working for Novartis, then the marketing partner for Apligraf. "The way to commercialize this type of technology was more difficult than initially anticipated."



By 2002 the early enthusiasm for Apligraf had vanished, along with the money. Novartis pulled out, Organogenesis declared bankruptcy, and jobs were slashed. The company was not alone: The entire field of tissue engineering was languishing. Shortly after, MacKay took over at Organogenesis with a clear mandate to straighten out the company's manufacturing, logistics, and sales, and turn this tarnished product into a moneymaker.

And that's what he did. By bringing down costs, "we now have margins that are pharmaceutical-like," says MacKay. Sales of Apligraf are growing at more than 20% per year, the company is taking over two more buildings on the same street in Canton, and it has FDA approval to install high-reliability robots from Japan's Denso, the same supplier Toyota uses, he says. Employment is expected to climb from 350 jobs to about 600, the company is introducing products, and MacKay is talking about "cautious globalization." In other words, Organogenesis is fulfilling the promise of 1998—a decade later.

STUMBLING BLOCKS

Now multiply that story a hundredfold and extend it to other areas. Consider, for example, micromachines—miniaturized gyroscopes, pumps, levers, or sensors on a silicon chip. Also known as MEMS (microelectromechanical systems), micromachines have been around in one form or another for years, most notably as the sensors that trigger airbags in cars.

In 1998, MEMS suddenly became the "next big thing." Engineers started to see how the devices could be useful in all sorts of ways that conventional semiconductors were not. For example, MEMS, in theory, could be used to make miniature sensors to monitor a hospital patient's blood at far less cost than conventional medical equipment. Venture capitalists threw billions into optical MEMS, miniaturized arrays of tiny mirrors

IMPROVED DRUG DEVELOPMENT

1998 Hopes: Many scientists believed that biotechnology would speed discovery of new drugs and improve drug production.

What Followed: Despite the 2003 sequencing of the human genome, drug discovery was much harder than envisioned.

Today: Many new drugs are in the testing pipeline.

MINIATURIZED SILICON-BASED MACHINES (MEMS)

1998 Hopes: That year venture capitalists began pouring billions into MEMS startups, "the next semiconductor revolution."

What Followed: Mass production of micromachines was far more complicated than anticipated.

Today: Consumer applications for MEMS are expanding, including a new add-on for the Wii controller.

SATELLITE-BASED INTERNET

1998 Hopes: Big money backed Teledesic, a space-based Internet service intended to have 800-plus satellites in low orbit for fast response and quick downloads.

What Followed: Teledesic never got off the ground as low-orbit broadband systems turned out to be costly.

Today: Satellite Internet speeds are slower than expected 10 years ago, but the technology is improving.

SPEECH TECHNOLOGY

1998 Hopes: IBM and others pushed improved speech recognition as a "killer app," allowing people to interact naturally with computers.

What Followed: Few people use speech for Web browsing or creating documents, but it's important in areas such as call centers and health care.

Today: Speech-enabled mobile phone applications are proliferating.

TISSUE ENGINEERING

1998 Hopes: Artificial tissues and organs seemed imminent when the FDA approved Apligraf, a skin substitute made of living cells.

What Followed: Creating artificial organs proved challenging. Organogenesis, Apligraf's maker, filed for bankruptcy protection in 2002.

Today: Organogenesis is out of bankruptcy and thriving. Tissue engineering has evolved into the broader field of regenerative medicine, which includes stem cells.

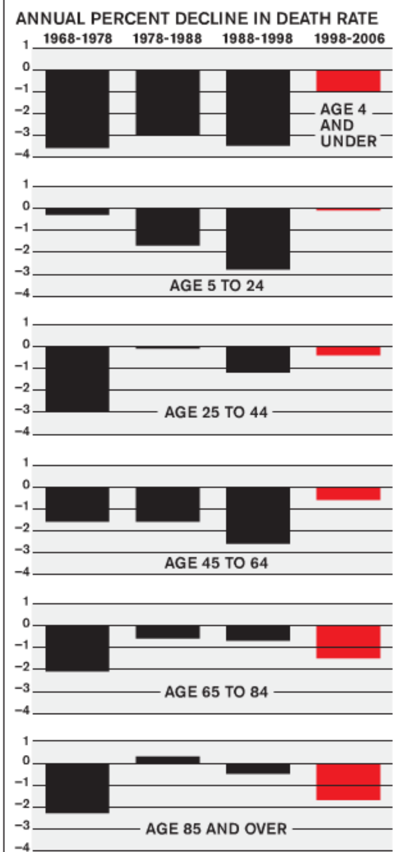
designed to run fiber optic networks.

"In 1998 friends of mine started a MEMS company and asked me if I wanted to live the semiconductor revolution again," says Jeff Hilbert, now president and chief operating officer at MEMS outfit WiSpry in Irvine, Calif. "I naively thought it was a lot closer to being commercialized than it was." A whole array of challenges arose when it came time to move to mass production. "We didn't know what we didn't know," says Hilbert. WiSpry, which just closed a $20 million round of venture funding, is now about to start shipping MEMS chips that will go into cell phones, improving battery life and reducing dropped calls.

And then there is the biotech sector. The story driving the biotech boom was both scientifically sound and economically compelling: By understanding DNA and the human genome, researchers could develop effective drugs more quickly and easily. Pharmaceutical companies would no longer have to rely on serendipity to find a treatment for an illness. Instead, they could focus like lasers on the biological mechanisms that were broken or needed to be shored up. And the benefits of biotech were supposed to stretch into new sources of energy, increased agricultural production, and better ways to clean up environmental problems.

But fixing and improving the human body turned out to be far more complicated than expected. Even the sequencing of the human genome—an acclaimed scientific achievement—has not reduced the cost of developing profitable drugs. One indicator of the problem's scope: 2008 was the first year that the U.S. biotech industry collectively made a profit, according to a recent report by Ernst & Young—and that performance is not expected to be repeated in 2009.

SMALL HEALTH GAINS FOR MIDDLE-AGED AND YOUNG AMERICANS



Data: Centers for Disease Control & Prevention

RED FLAGS

There's no government-constructed "innovation index" that would allow us to conclude unambiguously that we've been experiencing an innovation shortfall. Still, plenty of clues point in that direction. Start with the stock market. If an innovation boom were truly happening, it would likely push up stock prices for companies in such leading-edge sectors as pharmaceuticals and information technology.

Instead, the stock index that tracks the pharmaceutical, biotech, and life sciences companies in the Standard & Poor's 500 dropped 32% from the end of 1998 to the end of 2007, after adjusting for inflation. The information technology index fell 29%. To pick out two major companies: The stock price of Merck declined 35% between the end of 1998 and the end of 2007, after adjusting for inflation, while the stock price of Cisco Systems was down 9%.

Consider another indicator of commercially important innovation: the trade balance in advanced technology products. The Census Bureau tracks imports and exports of goods in 10 high-tech areas, including life sciences, biotech, advanced materials, and aerospace. In 1998 the U.S. had a $30 billion trade surplus in these advanced technology products; by 2007 that had flipped to a $53 billion deficit. Surprisingly, the U.S. was running a trade deficit in life sciences, an area where it is supposed to be a leader.

A more indirect indication of the lack of innovation lies in the wages of college-educated workers. These are the people we would expect to prosper in growing, innovative industries that need smart, creative employees. But the numbers tell a different story. From 1998 to 2007, earnings for a U.S. worker with a bachelor's degree rose only 0.4%, adjusted for inflation. And young college graduates—who should be able to take advantage of opportunities in hot new industries—were hit by a 2.8% real decline in wages.

The final clue: the agonizingly slow improvement in death rates by age, despite all the money thrown into health-care research. Yes, advances in health care can affect the quality of life, but one would expect any big innovation in medical care to result in a faster decline in the death rate as well.

The official death-rate stats offer a mixed but mostly disappointing picture of how medical innovation has progressed since 1998. On the plus side, Americans 65 and over saw a faster decline in their death rate compared with previous decades. The bad news: Most age groups under 65 saw a slower fall in the death rate (chart). For example, for children ages 1 to 4, the death rate fell at a 2.3% annual pace between 1998 and 2006, compared with a 4% decline in the previous decade. And surprisingly, the death rate for people in the 45-to-54 age group was slightly higher in 2006 than in 1998.

Each of these statistics has shortcomings as an innovation indicator. The relatively small decline in the death rate for many age groups could reflect an increase in obesity-related diseases among the American population rather than a shortfall in health-care innovation. The import and export numbers leave out trade in services and innovative products produced by U.S. companies overseas. And drawing conclusions about innovation from movements in stock prices is a dicey business at best. But taken together, these statistics tell a story of weaker-than-expected innovation.

The final piece of evidence is the financial crisis itself. After the 2001 tech bust, trillions of dollars flowed into the U.S.—but most of it went into government bonds and housing rather than into innovative sectors of the economy. While subprime mortgages boomed, venture capital investments have more or less stagnated since 2001, with few tech startups going public. "The U.S. was awash in capital, much of it desperately seeking a good deal," says Robert D. Atkinson, president of the Information Technology & Innovation Foundation, a nonpartisan Washington (D.C.) think tank. "If this had truly been an innovative period, then a vast array of cutting-edge innovations and their commercialization would have demanded hundreds of billions of dollars of capital."

If the description of the last decade as an innovation shortfall turns out to be accurate, that could make a big difference in how we think about the U.S. economy. For one thing, it helps explain why the trade deficit skyrocketed. A high-wage country such as the U.S. either has to develop innovative products and services to compete with low-cost countries such as China or accept a lower standard of living. "The competitive advantage of the U.S. economy has to be leveraging our science capacity for economic growth," says Pisano of Harvard. Fewer innovative products mean a weaker trade performance.

An innovation shortfall might also have weakened the country's underlying productivity growth, which in turn influenced real wages and the ability of consumers to spend without borrowing. Certainly economists on both the left and the right believe innovation is an essential ingredient for growth. A December 2006 paper by the Brookings Institution, co-authored by Peter R. Orszag, now head of the Office of Management & Budget, observed: "Because the U.S. is at the frontier of modern technological and scientific advances, sustaining economic growth depends substantially on our ability to advance that frontier."

The flip side: A shortfall in innovation could undercut growth and incomes, especially over a decade-long period. True, the economic statistics appear to show decent produc-

TOO GOOD TO BE TRUE?

U.S. statistics may have overstated productivity—and innovation

By Michael Mandel

1.7%. That's the annual reported growth in real gross domestic output per full-time worker between 1998 and 2007, according to government figures. "The amount that U.S. workers produce has grown at remarkable rates in recent years," gushed the 2007 Economic Report of the President. These productivity gains are usually held up as proof that the U.S. innovation machine has continued, despite all sorts of obstacles.

But productivity growth may be overstated, for two reasons. First, the economy was lifted by two financial bubbles in a row—stock market and credit—leading to excess growth of finance and real estate. "The financial sector contributed substantially to the surge in productivity growth," says Martin Baily, a Brookings Institution productivity expert. "Some of the financial innovation has turned out not to generate real benefits."

Second, new research by Emi Nakamura and Jon Steinsson of Columbia University suggests pervasive problems with the government's import price statistics. One example: The figures from the Bureau of Labor Statistics seem to show the reported price of imported furniture rose by a total of 9% from 1998 to 2007. But how can the import price have risen over a stretch when the price paid by consumers fell by 7%? Or take computers. The official stats indicate that the price of computers to consumers fell at an average annual rate of 22% per year from 1998 to 2007. The annual import price index for computers, however, fell by just 8%. Similar problems occur for the measured import prices of consumer durables, including motor vehicles.

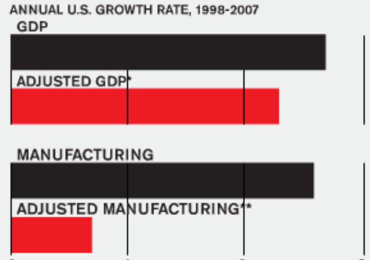
These apparently arcane statistical problems mean that the real growth of imports has been significantly underestimated for goods such as computers that have rapid model changes. And that in turn distorts the productivity and growth stats and make them look a lot better than they really are. (For an explanation of how the import price problems affect the official economic statistics, see businessweek.com/go/09/growth.)

Adjusting for the finance bubble and the import price problems may mean that economywide productivity growth rose by about 1.3% per year from 1998 to 2007, rather than the reported 1.7%. Similarly, real gross domestic product growth falls to roughly 2.3% annually from 2.7%. (The exact size of the downgrade depends on what is assumed about the correct change in import prices.)

And what about manufacturing? The official stats seem to show that U.S. manufacturing output grew at a 2.6% annual pace from 1998 to 2007, a strangely positive picture considering how many factory jobs were lost and how much production was shifted overseas. After the adjustments, however, the growth rate for manufacturing output is only 0.8% per year. The conclusion: You can't depend on productivity and output growth statistics to make a case for innovation's strength.

LESS OF A BOOM

ANNUAL U.S. GROWTH RATE, 1998-2007



*Adjusted for financial bubble and import price problems
**Adjusted for import price problems, assuming manufacturing absorbs the full impact

Data: *BusinessWeek*, Bureau of Economic Analysis tivity growth across this stretch. But since there is compelling evidence that the figures are overstated by the credit bubble and statistical problems, we can construct a plausible narrative for the financial bust that gives a starring role to innovation—or rather, to the lack of it. It goes something like this: In the late 1990s, most economists and CEOs agreed that the U.S. was embarking on a once-in-a-century innovation wave—not just in info tech but also in biotech and many other technologies. Forecasters upped their long-run growth estimates for the U.S. economy. Consumers borrowed against their home equity, assuming their future incomes would rise. And foreign investors lent America money by buying up U.S. securities, assuming the country would come up with enough new products to pay off the accumulated trade deficit.

This underlying optimism about the economy's growth potential became an enabler for Wall Street's financial shenanigans and greed. In this narrative, investors and bankers could convince themselves that rising home prices were reasonable given the bright future, which was based in part on strong innovation. In the end, the credit market collapse in September 2008 reflected a downgrading of expectations about future growth, which put trillions of dollars of debt underwater.

BEYOND INFO TECH

Many economists are skeptical about placing the blame on an innovation shortfall, preferring to focus on problems on Wall Street and in Washington. "I tend to see the direct causes in our regulatory system," says Paul Romer, an economist at Stanford University's Graduate School of Business renowned for his work on innovation. "The big task is to explain why risk was so badly mispriced, particularly the risk of a collapse of the housing bubble."

Whatever the ultimate cause of the downturn, a pickup in innovation would provide a welcome economic boost. In part, that could come from information technology, where the combination of Google, social networks, wireless technology, and the beginnings of cloud computing is substantially altering the way people live their lives.

Of course, no industrial revolution in the past has been based on a single technology. A combination of radio, television, flight, antibiotics, synthetic materials, and automobiles drove the productivity surge of the early and mid-20th century. The Industrial Revolution of the second half of the 19th century combined railroads, electricity, and the telegraph and telephone.

Similarly, for sustainable economic growth, the U.S. needs breakthrough innovations outside of core IT. Some technologies weren't ready for prime time 10 years ago but have matured. MacKay of Organogenesis says that after spending years cutting costs and increasing reliability, he is ready to "reinject innovation" back into the company. He is in the process of submitting new treatments for FDA approval, including a product made from living cells that helps stimulate the growth of gum tissue. "This is the type of manufacturing that won't be lost offshore," says MacKay.

MEMS, too, is maturing. Nintendo is about to release a new add-on for the Wii controller, containing an innovative MEMS gyroscope chip that makes it easier to sense a wider range of user movements. The chip is made by InvenSense, a Sunnyvale (Calif.) startup that was able to build on 10 years of industry false starts to produce something small enough and cheap enough to go into a mass consumer product. "If I had any idea how difficult it would be, I wouldn't have started the company," says CEO Steve Nasiri. He expects a fivefold increase in revenue this year, and he sees a competitive advantage for the U.S. "In MEMS technology, the U.S. is two to three years ahead of Europe and Japan," says Nasiri.

The imponderables are biotech and alternative energy. In biotech, the clinical-test pipelines are full of breakthrough treatments, any of which could turn out to be a blockbuster. But as we've seen far too many times, a drug can be promising up to the moment it is rejected by the FDA. Similarly, the potential for innovation in alternative energy is enormous, but it's hard to know which approach will pay off.

The professor, trader, and author Nassim Nicholas Taleb calls technological breakthroughs "positive Black Swans"—unexpected events with huge positive consequences that in retrospect look inevitable. Some, such as Google, come out of nowhere to dominate within a short time. Others take years to mature and are surprising only because people forgot they were there. We've learned over the last 10 years just how unpredictable technology can be. But right about now, the U.S. could use a few positive Black Swans. | BW |

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Puny Progress

A February 2009 report from the Information Technology & Innovation Foundation ranks 40 countries and regions on a range of innovation-based competitiveness metrics, including R&D investment, IT infrastructure, and science and technology researchers as a share of the workforce. The U.S. is No. 6 on the list, behind South Korea. The biggest gainer by the ITIF's metrics since 1999 was China. The country with the smallest advance? The U.S.

To read the report, go to http://bx.businessweek.com/innovation-economics/reference/

CLOUD COM
BIG BANG FO

By Steve Hamm

Information is no longer captive to individual devices and is now accessible anywhere. The implications are vast

In 1990, in a keynote speech at the Comdex computer conference, Microsoft's then-chief executive, Bill Gates, bolstered his bona fides as a tech visionary when he declared the PC industry would produce advances within a few years that would put information at people's fingertips. To get there, Gates said, the world needed three things: a more "personal" personal computer, more powerful communications networks, and easy access to a broad range of information. Sometimes visionaries are right on the vision but off on the timing.

Only now is Gates' grand vision finally becoming a reality for businesses. While pieces of what he had in mind have been available for years, they typically were expensive and difficult to set up and use. Now that more personal PC is here in the form of smartphones and mini-laptops, and broadband wireless networks make it possible for people to be connected almost anytime and anywhere. At the same time, we're seeing the rise of cloud computing, the vast array of interconnected machines managing the data and software that used to run on PCs. This combination of mobile and cloud technologies is shaping up to be one of most significant advances in the computing universe in decades. "The big vision: We're finally getting there," says Donagh Herlihy, chief information officer of

STUDIO SATO/AMANAIMAGES/CORBIS

Avon Products. "Today, wherever you are, you can connect to all the information you need."

A BIG STEP AT AVON

Avon is embarking on a massive, multiyear overhaul of the way it manages its nearly 6 million sales representatives around the world. In the past, "sales leaders," who help manage reps but are not employees of the company, mainly checked in with the salespeople through face-to-face meetings and phone conversations. But next month, Avon will begin to equip 150,000 sales leaders with a cloud-based computing system accessible via smartphones and PCs. The technology will keep them much more up-to-date on the sales of each rep, and it will alert them when reps haven't placed orders recently or when they have payments overdue to the company. The idea is to increase the sales and efficiency of Avon's distribution system.

Avon's strategy shows how the relationship between individuals and their computers is undergoing a radical change. Up till now, people have used a variety of computing devices in their professional lives, including desktops, laptops, handhelds, and smartphones. Each device was essentially an island of capabilities—applications, communications, and content. Cloud computing means that information is not stranded on individual machines; it is combined into one digital "cloud" available at the touch of a finger from many different devices. "We're shifting to more of a people- and information-centric world," says Paul Maritz, CEO of software maker VMware.

HOW TO PLAY IT
064

For the $3.4 trillion global tech industry, this shift offers a path out of the economic doldrums. In fact, it may be the largest growth opportunity since the Internet boom. While market researcher Gartner expects the global tech market to shrink by

3.8% this year, forecasters have high hopes for portables, wireless networks, and cloud computing over the next few years. Gartner predicts the market for cloud products and services will vault from $46.4 billion last year to $150.1 billion in 2013.

Many businesses are struggling to understand what this shift means for them. They're feeling their way forward, trying to figure out how best to take advantage of it. "In this area, we're a bit behind, so this is a huge step for us," says Dr. Leo Hartz, chief medical officer for Blue Cross of Northeastern Pennsylvania, which has started using a cloud computing system to let its 300,000 members find medical histories and claims information with their mobile phones. "It's new, but I expect to see some big changes."

There are experiments popping up all over that offer lessons for other businesses. Serena Software has switched almost entirely to cloud services, even using Facebook as its main source of internal communications. Genentech has made medical experts available to sales reps in the field with a couple of button clicks. Coca-Cola Enterprises is equipping 40,000 mobile workers, including truck drivers, merchandisers, and sales staff, with portable devices so they're better connected to the home office while on the road. They can alert their bosses instantly about shifts in demand or problems they encounter. Such examples suggest the possibilities ahead for using these technologies to remake sales, distribution, and other parts of business.

It won't be easy for companies to make good on the opportunities. There is still a great deal of work to be done to get all these technologies functioning seamlessly and reliably. Tech companies have shifted a lot of the software applications that businesses typically handle for themselves over to the cloud, but many more have yet to be switched over.

Meanwhile, companies need increased reassurance that their data and communications will be secure and that the new services will be available whenever they need them. On May 14, an outage at Google left many customers unable to use its online applications. And while the tech industry has made it ever easier for information from different cloud services and devices to be fused together (personal profiles and calendars, for instance), a lot of the actual merging has yet to be done.

FOR THE TECH INDUSTRY, THE SHIFT TOWARD CLOUD COMPUTING MAY OFFER THE LARGEST GROWTH OPPORTUNITY SINCE THE INTERNET BOOM

The shortcomings spell opportunity for plenty of companies in tech. Chipmakers such as Qualcomm and Intel are creating products for portables that pack more capability on a single slice of silicon while reducing power consumption, making it easier to access information in the cloud from anywhere. Mobile-phone makers including Nokia and Research in Motion are racing to come out with products aimed at business users that have all the ease-of-use of the iPhone.

Hardware makers Hewlett-Packard and IBM, among others, are packing cloud technologies into their server computers. Software giants such as Microsoft and SAP are developing cloud services. And startups are coming out with technologies that reorganize our digital worlds. Silicon Valley's Xoopit, for instance, has built a specialized search engine capable of finding bits of information scattered among e-mail systems, sales management programs, blogs, and online news sites. An executive could use the technology to pull together information about customer complaints from a variety of sources.

VIRTUAL PERSONAL ASSISTANTS

This is one of those turning points where small companies can explode onto the scene while industry giants miss out. One factor that puts some tech giants at a disadvantage is that the shift to a more personalized approach to computing is being led by companies born and raised in the consumer world. Apple and Google understand in their bones that simplicity and ease of use are essential to broad adoption of products and services. That lesson doesn't come so naturally to Microsoft and IBM.

But they are trying. For IBM, the change begins with encouraging its 400,000 employees to use tools it has created based on consumer social-networking sites. After IBM tests new consumer-like cloud computing capabilities internally, it launches them as services for customers. On Apr. 1, IBM unveiled LotusLive Engage, a cloud service for corporations that combines social networking and collaboration. IBM now is working to make it possible for Engage users to search the LinkedIn professional social networking site right from their Engage pages to find people outside their companies whose expertise they need.

One of the most promising aspects of cloud computing is that it enables the creation of so-called virtual personal assistants. These software confections know people's interests and needs and go off and do useful things for them on the Internet, like suggesting a restaurant for a client meeting or offering reminders of where you have taken the client before. With GPS in smartphones, computing systems know where we are. And with artificial intelligence software, computers can be taught what we expect of them and how to anticipate our needs.

Silicon Valley startup Siri last month introduced a service that puts sophisticated artificial intelligence in an easy-to-use form. The first applications are designed to help people arrange travel and entertainment, but the founders anticipate developing powerful tools specifically for business. Example: A salesperson asks her virtual assistant to help pull together the best pitch she can make to a particular customer. The assistant draws information from a variety of sources that the salesperson can use to create a proposal. "The goal is simple and practical: to help people perform tasks in their lives faster, easier, and in a more personalized way," says Adam Cheyer, Siri's vice-president for engineering.

Simple, yes. But it has taken nearly 20 years and a tremendous amount of innovation to get here. At last, though, the tech industry is beginning to make good on Gates' vision. | BW |

Burton can access Serena's performance data anywhere

MORE IN TOUCH THAN EVER

Jeremy Burton overhauled Serena Software's computing—and transformed the management of the company

When Serena Software Chief Executive Jeremy Burton wants to take the pulse of his company, he taps an icon on the screen of his smartphone. A dashboard pops up that shows him the company's financial performance plus up-to-the-minute reports on each of his executives' performance against goals he has set for them—what he calls their "Victory Plan." His lieutenants can tap into the same information trove wherever they may be. "The fact that everybody can see how we're doing, good or bad, builds trust and forces accountability," he says.

Burton is at the leading edge of a growing trend: management by cloud. Increasingly, CEOs and other executives will be able to lead their organizations from anywhere, and they'll have new tools that will give them more timely and relevant information on their operations. "This can be a great management tool, but it requires a change in attitude," says Amy Wohl, an independent technology strategy consultant to corporations. "It will require a company's IT department to give up some of their control in exchange for flexibility for the executives."

After Burton took over as CEO in early 2007, he decided to overhaul the Redwood City (Calif.) company's computing. Piece by piece, he replaced software running on Serena's own computers with cloud services run by other companies. The shift has had a profound effect, changing everything from how employees share information to how Serena markets its own software—it does so, in part, via employees' personal Facebook pages.

FINGERTIPS' NEW REACH

Most strikingly, the switch has transformed the way Burton manages the company. Thanks to his smartphone, fast wireless networks, and software applications in the cloud, he stays plugged into his company wherever he may be. His iGoogle personal Web page contains graphics showing the latest sales data, relevant news, his e-mail in-box, an instant chat feature, and the latest updates from business associates' Facebook pages. "I feel for the first time in my career that I truly have all the information I need at my fingertips," says Burton.

Burton says the technology lets him do two jobs at once: CEO and head of sales. That way, he can discover firsthand challenges in the field and quickly fix glitches. The move is paying off: He saw the sales force wasn't responding well to the recession, so he launched a retraining program. It's designed to help the staff spot the opportunities most likely to result in sales. He says executives have to get more involved than in the past: "You can't be the CEO in the corner office. You have to be in touch with your people."

OLIVIER LAUDE

Genentech rep Roh can quickly find answers to complex medical inquiries

EXPERTISE TO MAKE THE SALE

Specialized, user-friendly applications put corporate knowledge within reach when a customer has questions

When Michael Roh, a sales representative for Genentech, calls on physicians, he's never really on his own. The cloud is shadowing him.

A doctor may have a question Roh can't answer—say, how Rituxan, one of the company's cancer drugs, will interact with another the physician is prescribing to a patient. Then Roh can use his smartphone to tap into Peeps, a Facebook-like directory of the Genentech staff. The application helps him find staffers with the expertise he needs. And if he can't speak to one of them or reach them by e-mail immediately, he can submit a question to Genentech's computing system for handling such queries. The system routes the query to the appropriate expert, who responds directly to the doctor.

These days, Roh doesn't bother to lug a laptop when he's on the road. He simply pockets his smartphone and he's off. The device provides all the computing power he needs to do his job. He can connect to cloud services, including Salesforce.com's sales management service and Google Apps, from his car or a physician's office to do anything from checking on the latest uses of the drug to strategizing with colleagues. Says Roh: "I can do things more real-time."

THE iTUNES MODEL

For Roh and 4,000 other Genentech employees who carry company-issued iPhones, dealing with their corporate computing systems is just like downloading songs from Apple's iTunes. That's because Genentech's tech staff built a Web site modeled on iTunes, where employees can select the applications they want and download them with one click. So far, the company has created 15 applications for the iPhone, including Peeps. "We're cutting down on the drag of technology so people can focus more of their intellectual energy and creativity on the important stuff," says Todd Pierce, vice-president for information technology.

Employees are supportive of the switch. Surveys show 85% are satisfied with their mobile-computing experience.

A SHARPER EYE ON PATIENT CARE

OptumHealth's eSync gathers medical and drug records in one place and sends out alerts if it detects a potential problem

In January, Linda Mower, a personal-care counselor for OptumHealth, had an experience that reminded her why she got into nursing 30 years ago. She was notified by the company's computing system that a patient might need counseling—based on software that scans patient information and detected he recently had had stents installed. Mower contacted Stephen Hart of St. Johnsville, N.Y., and, during a second phone call, when he reported feeling pressure in his chest, she urged him to see a doctor immediately. He did—and had triple bypass surgery the next day. Hart says the procedure probably saved his life. "You sometimes wonder if you're making a difference, but something like this lets you know you are," says Mower.

MOBILE ACCESS

OptumHealth provides an example of how cloud computing can help companies improve the quality of their services and products. The technology allows employees to pull together pieces of vital information they didn't have before and act on them. The company's system, called eSync, is designed to help health-care organizations improve their quality of service while reducing costs. It identifies gaps in care and helps people respond before minor issues become problems or even emergencies. Golden Valley (Minn.)-based OptumHealth is rolling the system out to health-care organizations serving more than 20 million members across the country.

With eSync, all of the electronic information about a patient is assembled in one place so the patient, doctors, health-plan counselors, and insurers can find what they need easily. Health-care plan members type in their profile information via individual Web portals. That info is matched up with health-care advice, electronic medical records, insurance coverage information, and pharmacy records. Analytics software sizes up the information as it changes and sends out alerts and recommendations.

The system is aimed at putting the patient at the center of health-care management and making it possible to get a holistic view of the patient's health and treatment. In the past, information tracking systems were oriented toward diseases or treatments rather the patients.

The next step will be reaching out to patients via mobile devices. OptumHealth is about to begin testing technology supplied by AllOne Health that lets patients and caregivers access eSync from anywhere and get alerts. Says Robb Webb, chief executive of the OptumHealth technology unit that developed eSync: "We're getting information to people so they can triage themselves."

20 Million

The number of patients served by health-care systems rolling out eSync medical technology

Data: OptumHealth

BRIAN SMALE

Coca-Cola merchandisers have the ability to make adjustments on the fly

SMARTER STOCKING

Coca-Cola Enterprises is an example of a company using a cloud-based system to streamline distribution

Coca-Cola Enterprises' 12,000 store merchandisers used to operate like ants that had strayed from the colony. They picked up instructions at a warehouse in the morning, did their rounds of stores, and checked in again with the boss at the end of the day. Mostly they were on their own. It wasn't ideal. One problem: They couldn't adjust during the day to changing needs.

Those days are over for the merchandisers responsible for restocking Coke products in stores and setting up displays. Using smartphones and a cloud computing setup supplied by Antenna Software, they stay in constant touch with their bosses and the company's information storehouse. At the end of each stop, they complete online surveys that give the company a complete picture of sales trends and relationships with store managers in real time. "It's great for me. I don't have to do any paperwork. I just tap my fingers," says Troy Fitchett, a CCE merchandiser in Atlanta.

EYE IN THE SKY

CCE shows how companies can improve their distribution systems with a combination of mobile devices and cloud computing. Other companies that use Antenna's service for their distribution operations include Xerox, DirecTV, Pitney Bowes, and AT&T.

At CCE, using the survey information and GPS, merchandiser managers can watch their workers' movements on maps and change their schedules on the fly depending on shifting needs. If a merchandiser falls behind, the boss sees a red alert icon next to the employee's profile. They can rejigger schedules to dole out tasks more evenly.

The system has been in use only since December, but CCE is already seeing benefits. Merchandisers now drive to the head office once a month rather than daily, and their total driving time has been reduced by 75%.

A NEW LEVEL OF CUSTOMER SUPPORT

Komatsu uses cloud computing to help staff monitor equipment and arrange travel to clients more efficiently

As the head of customer support for Komatsu America, Mike Hayes travels almost constantly for meetings with owners and sellers of the company's backhoes and bulldozers. Wherever he goes, he can check the status of Komatsu equipment in North America on his smartphone. He sees where the equipment is and whether it's operating or in the shop for repairs. The system even sends alerts when a machine is about to fail. "This is essential to customer service," he says. "[Customers] know you're being proactive and responsive."

FUEL SAVINGS

The information comes through a service called Komtrax, which is provided by Komatsu in Japan to the company's global subsidiaries, distributors, and equipment owners. It's an example of how mobile computers that connect people to a system crunching data in real time can dramatically improve customer service for corporations. Other heavy equipment companies, including Caterpillar, have come out with similar services for use by their employees and customers.

For Don Pleu, heavy equipment manager at Komatsu customer Kinder Morgan Terminals, the service offers the potential for big savings on fuel. He can now monitor how long each piece of equipment spends idling and tell the operators of those machines to turn them off more regularly. Then he can easily see if they've done what he asked. "We have developed a philosophy of 'Thou shalt not idle,'" says Pleu. Last year, sensors in Komatsu equipment found leaky window seals and alerted Komtrax. The seals were replaced before damage was done.

Hayes taps another cloud service that helps him cope with making 8 to 10 flights a month. He has a virtual travel agent from Reardon Commerce that handles his arrangements and is reachable from anywhere at any time. If a flight is canceled, the system instantly notifies him and gives him alternatives it knows will suit his needs. "The system eliminates the frustration and puts you back in control of your life," Hayes says.

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Managing Identity in the Cloud

Last summer, the Aspen Institute hosted a seminar called Identity in the Age of Cloud Computing. Participants floated the idea of a user-controlled identity system that would allow individuals to manage information about themselves in the computing cloud. Such a system would allow people to dole out only as much information to an outsider as they deemed necessary.

To read more on this topic, go to **bx.businessweek.com/cloud-computing-/reference/**

MARK ANDERSON

ILLUSTRATION BY OWEN SMITH; PHOTOGRAPHIC REFERENCE BY MANAN VATSYAYANA/AFP/GETTY IMAGES

MANAGEMENT & LEADERSHIP

Wal-Mart's Magic Moment

As the recession brings in new shoppers, CEO Duke is moving aggressively to hang on to them

By Matthew Boyle

When he stepped into the chief executive job at Wal-Mart Stores in February, Michael T. Duke looked like the luckiest retailer in America. Duke, 59, inherited a rigorously efficient company that rang up $401 billion in sales and $13.4 billion in profits last year. Rivals are struggling to stanch losses while Wal-Mart's U.S. same-store sales grew 5% in April.

Duke, who will make his public debut at the company's annual shareholder meeting on June 5, now must figure out how to keep the momentum going. More than a quarter of Wal-Mart's

BETH HALL/BLOOMBERG NEWS

sales increase has come from new shoppers, more than half of whom have household incomes of at least $50,000. Wal-Mart execs say that higher-income group spends an average of 40% more per visit than the typical shopper. "Wal-Mart is becoming increasingly relevant to a growing proportion of households," says William Blair analyst Mark Miller. As Wal-Mart's U.S. marketing chief Stephen F. Quinn puts it: "We are being reassessed."

SPRUCING UP

The question is whether Duke can hold on to that more affluent demographic once the economy improves. Wal-Mart's reputation for humdrum goods and aggressive labor tactics has made it tough for the chain to gain a following among wealthier customers. To help keep them, Duke is expanding the presence of brands such as Dell and Apple, putting pressure on manufacturers to advertise more in stores, and aggressively ramping up an initiative called Project Impact.

The effort's goal: to remodel most of the chain's 3,600 U.S. stores (it has 7,900 worldwide) and make them more inviting. Duke is spending $1.6 billion to upgrade 600 stores this year, on top of 300 that were recently redone. He is also continuing a push to reduce the number of items in stores, which means less clutter but less variety for customers. And despite Wal-Mart's growth, he has laid off 800 staff at the Bentonville (Ark.) headquarters and slashed other costs to keep the chain lean.

WOOING THE WEALTHY

ANNUAL HOUSEHOLD INCOME	FEB-'08	FEB-'09
Less than $25,000	29.5%	26.9%
$25,000-$49,900	28.1	28.7
$50,000-$84,900	22.8	22.9
More than $85,000	19.7	21.5

Data: Retail Forward ShopperScape

Such moves suggest Duke is taking a bolder role than expected by industry experts, who paint him as a caretaker CEO. They see his main mission as keeping Wal-Mart steady until execs such as 43-year-old international head C. Douglas McMillon get seasoned. Morgan Stanley analyst Gregory Melich calls Duke "the keep-it-going" leader.

But insiders say he's taking a big hand in moving Wal-Mart upscale while continuing to emphasize its low-price mantra. Aisles are being widened, lighting improved, and shelves lowered to give the stores a more sophisticated feel. Even the well-trafficked corridor known as "Action Alley" is no longer packed with pallets of random merchandise.

The spruced-up aisles provide a more inviting home for brands that previously had little exposure in Wal-Mart but are now desperate to find customers. Newer offerings range from Danskin apparel to gadgets from Dell, Palm, and Sony. Dell Vice-President Michael Tatelman says the two-year-old partnership is expanding fast: "Some were skeptical of whether it would benefit us, but it has." The home department now features brands such as KitchenAid and Dyson, and a new line of products endorsed by celebrity chef Paula Deen.

Executives have learned some lessons from the last time Wal-Mart tried to shift its identity upmarket. In 2006 the chain went after Target's "cheap chic" customer by launching Metro7, a line of fancier apparel. Despite a splashy ad campaign, the clothes failed miserably. They simply weren't hip enough to attract a new style of buyer or cheap enough to appeal to the old one.

Duke wants Wal-Mart to go upscale but maintain its low-price image

Last year, Wal-Mart moved its apparel-buying unit from Bentonville to New York City to stay closer to fashion trends. Designer Norma Kamali, who launched an exclusive line of women's clothing with the retailer in September, says she's impressed with the "professionalism" of her Wal-Mart partners. "They know how to service clients and yet are big enough to have the power to sell low prices," says Kamali.

Some suppliers find themselves on the losing end of the chain's attempts to increase its appeal. Analysts estimate Wal-Mart's push to simplify merchandise will reduce the total number of distinct products by up to 15% in remodeled stores. That move has been devastating to vendors such as CCA Industries, which makes health and beauty products in East Rutherford, N.J., and generated 44% of its fiscal 2008 sales from Wal-Mart. CCA learned earlier this year that Wal-Mart was dropping its Plus+White toothpaste, eliminating a chunk of its Wal-Mart business. (CCA won't say exactly how much.) "There's not much you can say," says CCA analyst Maggie Cornell, who works on the Wal-Mart account.

Vendors who remain may well be asked to do more. A recent JPMorgan

Chase report says Wal-Mart wants manufacturers to spend more on promotions and ads that appear on the retailer's in-store TV network. "Failure to participate could have meaningful consequences," the report concluded. Paul Boitman, head of the global Wal-Mart team at Atlanta consumer-products maker Newell Rubbermaid, denies being asked to spend more, but another vendor concedes that it's happening. CMO Quinn insists that "any increase [in spending] is because there is value on both sides."

EASIER TO COMPLAIN

With fewer items to restock, employees can, in theory, devote more time to helping customers. To drive home what Wal-Mart calls its "fast, friendly, clean" message, store managers' bonuses are now based partly on scores of customer surveys. Until this year, only profits mattered. The manager's office is being moved to the front of the store from the back, making it easier for customers to register a gripe.

While Wal-Mart reports higher sales, faster inventory turnover, and happier shoppers in remodeled stores, retail experts are divided on whether it will retain higher-end shoppers. "If the recession ended tomorrow, they would lose a lot of them," says Ryan Mathews of Black Monk Consulting, which works with retail clients. "But the longer the recession goes, the smarter Wal-Mart will be about holding on to those customers."

Newcomers such as Sarah E. Bowman appear to be converts. The 39-year-old legal recruiter, who makes about $130,000 a year and lives in Hagerstown, Md., says she used to have "negative feelings" about the world's biggest retailer. In January, to save money, she began grocery shopping at a local outlet. She discovered a dress for her daughter, bathroom items, and even a tungsten wedding band, for $48, to replace the one lost by her husband. "He gets compliments on it," she says, adding she's "only told a few people" where it's from. Asked where she'll shop when the economy rebounds, Bowman replies: "I think I'm going to stick with Wal-Mart." |BW|

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Wal-Mart's Passage to India

The world's top-selling retailer realized a longtime goal with the opening of its first store in India on May 30, reports *The Times of India*. The 50,000-square-foot outlet in the state of Punjab is one of at least 15 wholesale stores Wal-Mart plans to open in the country over the next three years in a joint venture with India's Bharti Enterprises.

To read the story, go to **http://bx.businessweek.com/wal-mart/reference/**

China's Eroding Advantage

Outsourcers are seeing the costs of manufacturing there climb, making other countries more attractive

ALEX NABAUM

By Pete Engardio

As purchasing manager for the North American arm of Japanese auto supplier Takata, Fred Heegan used to feel pressure to shift manufacturing to China. But when a customer pointed to a lower-priced Chinese part, Heegan would talk about the added challenges of quality, logistics, and engineering changes. "There are significant hidden costs to having supply lines that extend to China," says Heegan, whose company manufactures auto parts in the U.S. and Mexico.

Heegan now looks like a visionary. A growing number of companies are moving beyond the usual considerations of labor and raw material costs in deciding where to produce goods to calculate the "total cost of ownership." That means tallying expenses associated with things such as storage and delays. By this light, the so-called China price, which always seemed to be at least 40% below U.S. costs on everything from bedroom furniture to telecom gear, isn't so low. In fact, China's once-formidable edge in manufacturing has all but disappeared in some industries, according to a new study by Southfield (Mich.) firm AlixPartners, which researches and consults on outsourcing.

AlixPartners studied five categories of machined products, ranging from large engine parts requiring significant labor to small plastic components that need little. The cost shift has been dramatic. In 2005, AlixPartners found that by the time the items had arrived at a U.S. port, Chinese-made parts were 22% cheaper on average than those produced in the U.S. By the end of 2008, however, the average price gap had dropped to 5.5%, which often isn't large enough to merit the hassle of manufacturing halfway around the world.

THE RISING CHINA PRICE

Labor and currency costs have eroded the benefits of producing goods in China. Here, the cost to produce an aluminum auto part:

	2005	2008
CHINA	$17	$25
MEXICO	$18	$20
U.S.	$24	$29

Data: AlixPartners

Even more surprising is the cost comparison with Mexico. While the total cost of making goods in China was about 5% cheaper than in Mexico three years ago, manufacturing in China now is about 20% more expensive. Compared with the U.S., the savings in Mexico have widened to 25%, from 16%. "A couple of years ago outsourcing to China was a no-brainer," says Stephen T. Maurer, AlixPartners' managing director. No longer, he says.

The biggest factors behind the sharp shift are currency fluctuations and labor costs. The yuan has appreciated by around 11% against the dollar since late 2005, and wages have risen 7% to 8% a year. To rein in polluting industries, furthermore, Beijing has stripped away tax breaks for exporters of some heavy industrial products.

That said, China's manufacturing advantages remain formidable. With factory wages averaging $1.26 an hour, the mainland is still hard to beat for labor-intensive products such as toys and apparel. China is also rising fast in industries like solar power modules and cars, thanks to strong domestic

The yuan has appreciated considerably vs. the dollar, and Chinese wages have risen 7% to 8% a year since 2005

demand and generous government incentives.

Even with its eroding price advantages, China has retained its unrivaled supply base of parts and materials in some industries. It remains the king of consumer-electronics and PC manufacturing. "What makes this industry sticky is that the entire supply chain is now in Asia," says Michael Andrade, North America manager for Celestica, an electronics contract manufacturer based in Toronto. Transplanting that ecosystem to North America would take years.

And because of the recession, consultants say, most U.S. manufacturers are holding off on major moves right now. Whatever they can save by moving production may not be worth the cost and effort of relocating a modern, efficient plant with experienced managers and well-trained workers. Besides, says Maurer, "You don't want to shift everything to Mexico—and then see the yuan drop like a stone, making China cheap again."

Still, the reassessment of costs seems to have halted the herd mentality that drove many U.S. companies to China 5 to 10 years ago for what have turned out to be marginal gains. "A lot of work that went from Mexico to China probably shouldn't have," Maurer says. Production of high-end electronics, such as telecom switches and computer servers, is starting to return to the Americas so that supplies can be closer to U.S. customers, says Celestica's Andrade. Another variable is the cost of repairing and replacing defective equipment, which can be surprisingly high for complex electronic items.

The growing need for lean inventories also puts China at a disadvantage. Goods take 45 days on average to reach U.S. shores. With the recession making it more difficult to predict demand, manufacturers are being forced to stash unsold products in warehouses for longer periods. And the cost of meeting emergency supply needs is inevitably higher in China, from air cargo charges to premium trucking rates.

Such factors reinforce the belief of Takata's Heegan that it is better to buy parts closer to where final assembly happens. He cites the example of automotive wire harnesses, insulated bundles of electrical conductors that can cost $1 apiece and are churned out by the millions.

Heegan says he might be able to buy a harness from China for 15% less than in Mexico. But if a design is altered after a batch of Chinese-made harnesses is already on the boat from Shanghai, the company has to foot the bill for up to six weeks of shipping and handling of obsolete parts. And there are the complications of time zones, language barriers, and travel times. An English-speaking Mexican supplier can be at a U.S. plant within hours. |BW|

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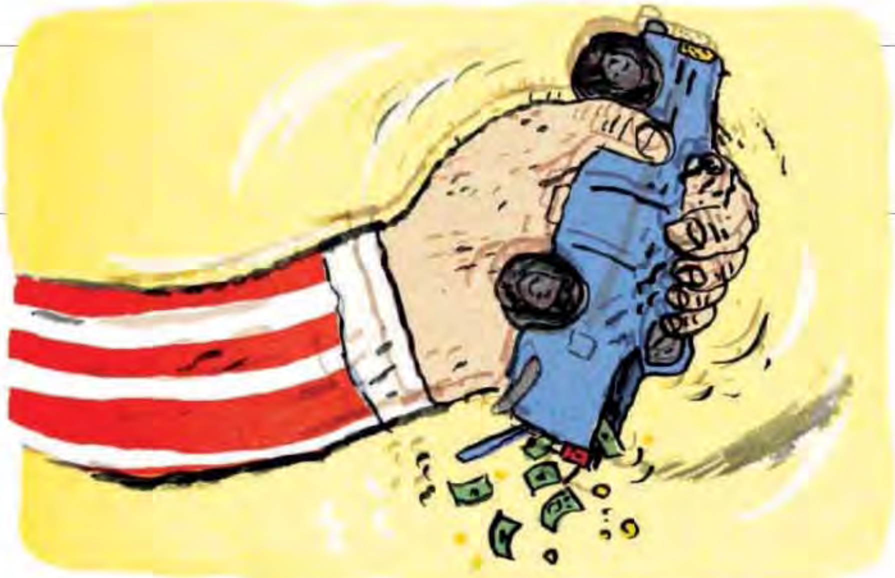
Penny Wise, Pound Foolish

Cost is usually the major driver in a company's decision to purchase parts and products from abroad. Yet in a 2008 Pricewaterhouse-Coopers survey of retail and consumer-goods companies, one-quarter of respondents said they could not quantify actual savings. Many tracked transportation, customs, and warehousing costs. But quality and reliability of vendors often went unmeasured.

To view the survey, go to **http://bx.businessweek.com/supply-chain-management/reference/**

EDITED BY ADRIENNE CARTER



GENERAL MOTORS

Will Taxpayers Ever See a Return?

As the government pledged an additional $30 billion to General Motors, President Barack Obama declared the country "reluctant shareholders" in the carmaker. Reluctant may be an understatement.

The recent move brings Uncle Sam's total outlay in GM to $50 billion. If the company emerges from bankruptcy as planned in 60 to 90 days, the government will own roughly 60% and hold $8.8 billion of its debt. For taxpayers just to break even, the market value of GM will have to hit $69 billion, roughly the same as McDonald's or ConocoPhillips today. "If you want to call it an investment, you'd have to call it highly speculative," says Kurt Brouwer, a financial adviser in Tiburon, Calif.

Taxpayers may not see a return on GM for quite a while. The market valued GM at less than $500 million on May 29, just days before it filed for Chapter 11. The U.S. has bigger concerns than its investment gains, but in a background briefing before GM's filing, one Administration official said: "I don't know how much we're going to recover. We hope to recover as much as we can." *–Theo Francis*

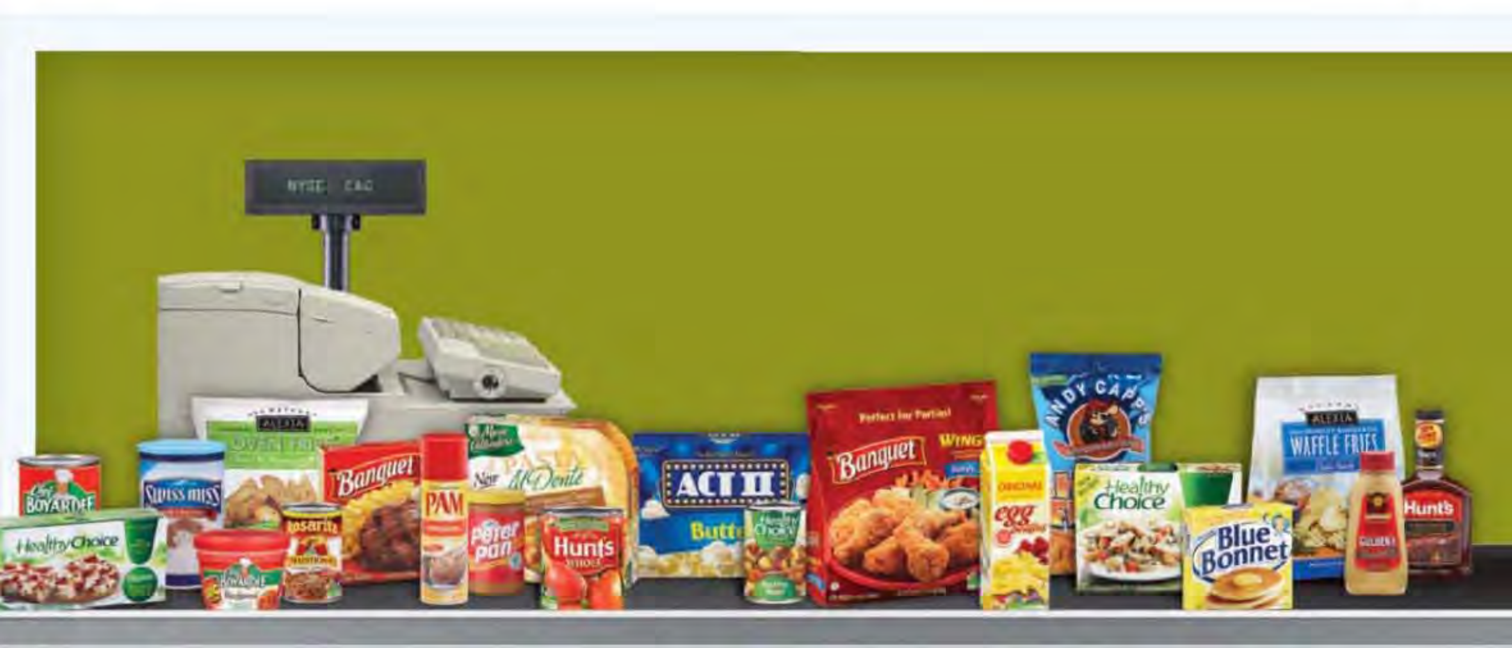
EXOTIC SECURITIES

AIG's Foray Into Death Bonds

American International Group, the insurer that's fighting for its life, may be the first major financial firm to sell a "death bond" to investors.

Wall Street firms have been salivating over so-called life settlements for years. Under such arrangements, people sell their life insurance policies to financial firms that pay the premiums and collect the payouts. The idea was to bundle the policies into exotic securities, reaping huge fees from the death bonds. After the credit crisis, the plans got shelved.

But AIG recently packaged policies into a bond worth $2 billion, the largest investment backed by life settlements. For now, AIG is keeping the bonds on its books, rather than selling them. Says an AIG spokesman in a written statement: "The [securities] are an attractive asset class because their performance is not correlated to credit or real estate markets and the [bonds] pay an attractive coupon." *–Matthew Goldstein*



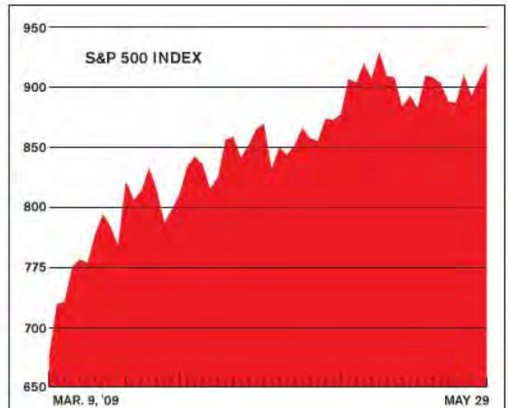
CREDIT-CARD FEES

Home Depot Wants Cheaper Plastic

Borrowers aren't the only ones reeling from high credit-card fees. Retailer Home Depot claims to spend more on interchange fees—the tab paid by retailers to credit-card companies each time a customer pays with plastic—than it does on health care. At a payments conference held by the Chicago Federal Reserve in May, Home Depot executives said such costs have jumped 16% in the past couple of years while total purchases have only increased by 10%.

Home Depot, like other retailers, is pushing U.S. regulators to follow Australia's lead. In 2003 the country's central bank forced credit-card companies to lower the interchange rates to 0.5%, down from more than 1%. The move, says Home Depot, would translate into more jobs: By lowering the fees, the company estimates it could hire an additional 10 employees per store. "Our interchange fees are our third-largest cost, behind rent and salary," Dwaine Kimmet, Home Depot's vice-president for financial services, said at the conference. "If card acceptance costs were lower, Home Depot might pass some of those savings to shoppers."
–Jessica Silver-Greenberg

Home Depot says lower credit-card transaction fees will help create more jobs



Data: Bloomberg

EQUITIES

New Stock Issues: The Great Market Leveler

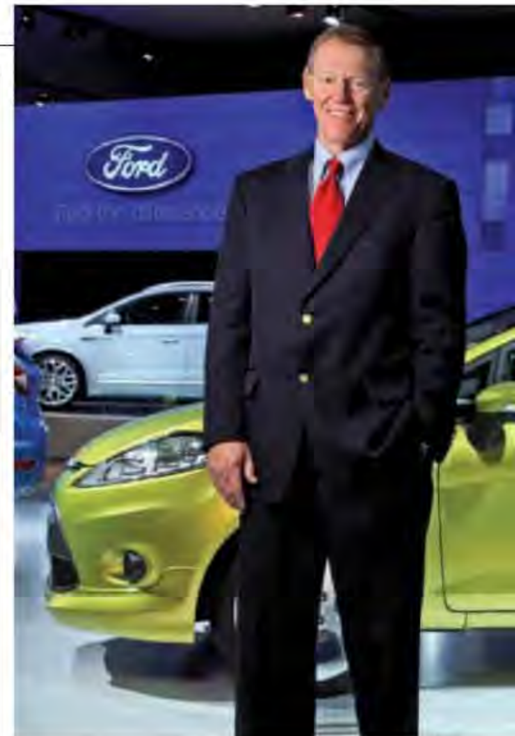
Pensions and hedge funds have plowed about $200 billion into stocks over the past few months to rebalance their portfolios and put cash to work, according to Trim Tabs Investment Research. That's a big reason why the market has jumped 39% from its 13-year low on Mar. 9. But the rally may be on its last legs.

Why? The bulk of new money isn't going to buy existing shares but to purchase newly issued stock. Companies, including a number of big banks, have issued $88 billion of shares since March. Trim Tabs CEO Charles Biderman figures the amount will top $125 billion by the end of the quarter, the highest three-month tally in recent history. Says Biderman: More companies will need to issue new shares "as long as the economy keeps slumping."
–David Henry

(CLOCKWISE FROM TOP LEFT) ILLUSTRATION BY MARK TODD; CHART BY DAVID FOSTER; SCOTT OLSON/GETTY IMAGES

One Ford for The Whole Wide World

America will be the big test for the Fiesta—popular in Asia and Europe—and for Mulally's global game plan



Ford's Mulally took inspiration from BMW's 3 Series in styling the Fiesta

By David Kiley

As CEO Alan Mulally sets about remaking Ford Motor, he has put at the center of his efforts the "world car." It's a simple concept: building one product for multiple markets rather than a bunch of different ones tailored to national or regional tastes. Like many auto executives, Mulally is convinced that the only way to make money on cars, especially the small ones Ford has struggled to sell, is by spreading development and other costs over one huge, global market. The first test of this high-stakes undertaking is the subcompact Ford Fiesta, already selling well in Europe and Asia and set to appear in the U.S. early next year.

The world car makes sense on paper, but it's risky. Ford has tried this before and failed, largely because its regional divisions couldn't agree on what kind of cars to build. But Mulally has reorganized the company around the world car and, after the Fiesta, plans global versions of several other models. "Ford is betting it has figured out what has bedeviled mass-market automakers for decades, which is hitting a home run in every market with the same car," says Jim Hall of 2953 Analytics, which helps automakers with design. "It's awfully difficult, but if Ford pulls it off, it stands to make huge profits."

DUMB-DOWN DANGER

When Mulally arrived at Ford in 2006, Derrick Kuzak, the North American product development chief, was pushing the global car concept. The potential savings were compelling: as much as $700 million in up-front costs per model, and the investment could be paid down more quickly than if Ford built a model for each market. Mulally, who learned a thing or two about building one product for the world while running Boeing's commercial-plane division, put his imprimatur on the strategy and appointed Kuzak Ford's first global-product czar.

The danger of building one car for multiple tastes is that you wind up dumbing it down: Rather than being impressive, the vehicle is merely inoffensive. The trick is to aim higher aesthetically without alienating anyone. Kuzak took heart that European and U.S. tastes seem to be converging. For example, midsize sedans were once much smaller in Europe but now are comparable in size to their American

BENOIT DECOUT/REA/REDUX

siblings. Meanwhile, thanks to all the communities springing up on the Web, taste to a degree has become globalized. "If you look at consumer electronics and cell phones, it's all evening out globally," says Kuzak.

For inspiration, Ford turned to BMW's iconic 3 Series sports sedan. The car is not only virtually the same in each market but is also, to borrow a term from the garment trade, "fashion forward." The trick, says Verena Kloos, president of BMW's DesignworksUSA studio in California, is to "show consumers what the next big thing is, not reflect what they think now." Ford's global marketing chief James D. Farley explains the BMW appeal this way: "The ubiquity of the 3 Series engenders trust in every part of the world, and its design always has a strong point of view, which creates aspiration. It's a perfect combination."

ISABELLA EVERYPERSON

Ford researched buyers of its previous Fiesta in Europe as well as customers who prefer small cars sold by Volkswagen in Europe, Honda Motor in the U.S., and Toyota in China. These were mostly consumers aged 20 to 30 who had limited funds but a big appetite for fashion and design. Ford next created an imaginary customer—a global archetype, if you will. Her name is "Isabella," a recent college graduate living near Milan. Isabella is creative, thinking about pursuing journalism, a modest earner, and likes city living. She is fashionable and plugged into social media. "We found that Isabella's personality traits, aspirations, and sensibilities, and what she wants in a car, [resonated] in each market where we ran consumer clinics, whether it was Sydney or St. Louis," says Moray Callum, a Scot who has spent considerable time working in Japan and who now runs Ford's U.S. design studio.

The Fiesta is no bland commodity car. A hatchback normally telegraphs cheap, especially in the U.S. and China, but Ford contoured the rear of the car to resemble one of the small sport-utility vehicles that have won a following in recent years. The Fiesta's giant headlights seem to belong on a much pricier car. The dashboard instruments were modeled after a cell-phone keypad—a look billions are familiar with. To test acceptance, Ford put the Fiesta in Chinese, European, and U.S. showrooms, without pricing or fuel economy stickers. The company says the car attracted a surprising amount of attention from people ready to ditch Ford for Honda and from loyal customers who typically buy larger models.

It's hard to imagine a better company to benchmark than BMW. All the same, BMW took years to perfect its world-car strategy, time Ford doesn't have. Plus, BMW can afford to build cars that aren't just eye-catching but stuffed with new technology. That's harder to do in the mass market, where price competition is fierce. And just because the Fiesta is doing well in Asia and Europe doesn't mean it will be a hit in the U.S., where small cars are widely deemed a compromise. Much depends on what happens to gas prices and whether all those "Isabellas" think the Fiesta is cooler than the Japanese or European alternatives. |BW|

BUSINESSWEEK.COM | To find out what David Kiley thinks of Ford's Fiesta "world car," please read about his recent test drive at businessweek.com/go/09/fordfiesta

DAVID POHL

INNOVATION & TECHNOLOGY

A Dogfight Over Greener Air Travel

U.S. carriers are balking at tough new EU emission rules, but they may be fighting a battle they can't win

By Adam Aston

GREEN BUSINESS

This August, U.S. airlines face their first big deadline to meet European Union rules on emissions linked to global warming. That's when carriers landing in Europe will have to submit proposals to the EU on how they plan to track such emissions. This is a first step toward tough European "cap-and-trade" laws requiring airlines to either slash greenhouse gases or pay for permits to emit, starting in 2012. U.S. airlines are watching these developments anxiously, in part because they are already struggling with weak travel demand and yo-yo'ing fuel prices.

The Air Transport Assn. (ATA), which represents U.S. carriers, says the plan violates international law, and that the U.S. government is obliged to object. If the EU proceeds on its course, it faces a thicket of lawsuits, predicts Nancy Young, ATA's vice-president for environmental affairs. "We adamantly oppose their scheme," she says—adding that having to purchase credits will stifle funding for the very innovations airlines must develop to cut emissions.

Just how much new carbon costs might increase airfares is unclear. One aviation industry study estimates the annual operating costs of airlines landing planes in Europe will rise by billions of dollars if the EU enacts its plan. But green groups tell a different story. They point to an EU analysis that puts the average price increase for a cross-Atlantic round-trip ticket at just $6 to $56 by 2020, depending on the cost of carbon permits. The effect on prices is "within the range of fluctuations travelers are used to," says Mark Kenber, policy director at the Climate Group in London.

Environmentalists argue that, compared with the auto and electric power sectors, airlines have had it easy when it comes to efficiency targets and carbon policies. Their special status dates back to 1997, when many countries enacted the Kyoto Accord, a global pact to cut greenhouse gas output. Kyoto didn't set specific reduction targets for airlines or marine shippers, though both groups were asked to come up with their own plans. That's because plane flights accounted for just 2% of total industrial emissions at the time, and because of murky jurisdiction issues when planes or ships cross national borders.

U.S. carriers have boosted their fuel efficiency by 31% since 1990 and have promised an equal gain by 2035. Airplane and engine builders, from Boeing and Airbus to General Electric and Rolls-Royce, are researching lightweight materials and plant-based jet fuel. Airlines are seeking streamlined flight paths to avoid wasting fuel. Still, because air traffic is growing so fast globally, the sector's emissions are on track to more than double by 2035.

Outside the U.S., key carriers such as Air France-KLM, British Airways, Cathay Pacific, and Virgin Atlantic are supporting just the sort of carbon caps the ATA opposes. They're making the case in the runup to the Copenhagen Accord, a process to replace Kyoto that will move into high gear in December. On May 24 the International Aviation Transportation Assn.—a global trade group—for the first time agreed to reduce emissions.

U.S. carriers, which consume 35% of the world's jet fuel, may not be able to opt out of carbon limits much longer. The Waxman-Markey climate bill moving through Congress includes aviation in its gas reduction goals. "The writing's on the wall," says Jake Schmidt, international climate policy director at the Natural Resources Defense Council. |BW|

119%

Expected growth of emissions from global air transport between 2005 and 2035, if there are no caps.

Data: Aviation industry groups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PERSONAL BUSINESS

MONEY REPORT

By Aaron Pressman

SIRIUS IMPACT

General Motors filed for bankruptcy June 1, creating the potential for a massive restructuring of the auto giant's relationships with its employees, dealers, and suppliers. Satellite broadcaster Sirius XM Radio is highly dependent on GM and other carmakers for new subscribers, so is it in big trouble now, too? ¶ Maybe not. Tyler Savery, a writer on the SiriusBuzz.com blog, says the bankruptcy could actually give Sirius XM shares a small boost this year. Fears about excessive debt and declining numbers of subscribers prompted an 86% drop in the stock over the past year. Savery expects a pop in the price because, he says, the bankruptcy will likely prompt a wave of heavily discounted auto sales, and many such sales will bring new subscribers. (Savery discloses on all his posts that he owns Sirius XM shares.) Other investors seem to agree—the shares gained 13% on May 29, three days before GM's bankruptcy filing.

13%

Gain in the stock price of Sirius XM Radio on May 29, three days before General Motors made its bankruptcy filing

PETER ARKLE

STRATEGIES

INDEX PLAYS

Conventional wisdom says money can be made buying stocks just added to a major index. On June 1 came news that Cisco Systems and Travelers will replace General Motors and Citigroup in the Dow Jones industrial average. Time to buy?

A study by Messod Daniel Beneish of Indiana University's Kelley School of Business and John Gardner of King's College London found no salutary impact on stocks that entered the Dow—just those added to the Standard & Poor's 500-stock index. (S&P, like *BusinessWeek*, is a unit of The McGraw-Hill Companies.) The difference comes down to the buying power of index funds, which have about 50 times more money in the S&P 500 than in the Dow.

STOCKS

SCOOPING UP SPIN-OFFS

Time Warner announced on May 28 it would finally undo one of the worst-performing mergers of all-time by spinning off its AOL division. AOL was no bargain in 2000 but may be worth a look now. Voluminous academic research has concluded that corporate castoffs often outperform the market over the three years after they're cut loose. But investors must scrutinize the spin-off terms to ensure the freed unit isn't saddled with excessive debt or other liabilities.

It's too soon to analyze the AOL deal, but William Mitchell, editor of newsletter *Spinoff & Reorg Profiles*, likes some other deals. Potlatch spun off Clearwater Paper, its pulp mill operations, in December. The unit has no debt and won an IRS ruling to qualify for a lucrative alternative energy tax credit. If the ruling stands, Clearwater is trading for less than two times what it's likely to earn this year, he says. In May, Hutchison Telecommunications International spun off its Hong Kong and Macau operations as Hutchison Telecommunications Hong Kong Holdings. Shares trade for roughly the company's tangible book value, even though the profitable unit has had rapid earnings growth for several years.

CLOUD COMPUTING'S BIG BANG FOR BUSINESS

(FROM PAGE 042)

By Dean Foust

For many investors, trying to make plays based on demographics or other slow-moving trends requires the patience of Job—or short of that, Warren Buffett. But as Buffett has proved, there are fortunes to be made from patient investing. And such will likely be the case for investors hoping to profit from cloud computing, because the benefits for companies shifting many computer-based processes to the Internet are undeniable.

Although the transition could take a decade or longer to fully play out, this is the time for investors to start laying down markers, because when the turn occurs, the rewards will be huge.

For conservative investors, the safest play is through a stake in an Internet giant that, unlike the Microsofts and Oracles of the technology world, doesn't have an old desktop franchise to preserve. Analysts say the best plays are Google, whose online applications like Gmail and Google Docs are building a strong following, and, better yet, Amazon.com, the \$19 billion e-tailer that has quietly developed a nice sideline providing computing and storage services for other companies.

While CEO Jeff Bezos is loath to divulge details about its Amazon Web Services unit, some analysts believe the Internet retailer now has more than 50,000 corporate customers, ranging from Eli Lilly to ESPN. What's more, a number of small retailers piggyback on Amazon's other capabilities, such as handling sales and fulfillment of e-commerce orders. While some analysts fear that kind of basic hosting could in time become a commodity service, Bezos has shown no concern, noting once that "we're good at commodity businesses."

The bane of many companies with far-flung branches has been managing the computers in all of these locations. That has created opportunity for VMware of Palo Alto, Calif., which provides companies with a virtual network that allows them to run their computers with far fewer resources. "Instead of buying servers for 10 offices, you can run them all with just two," notes Wedbush Morgan Securities analyst Kaushik Roy. VMware's stock swooned in late April after the company warned that coming quarters could be tough, but Roy believes the company's early leadership will make it the virtualization standard-bearer. "They're creating the new architecture, the new paradigm for IT," he says.

Wall Street pros such as Kaufman Brothers analyst Karl Keirstead also see opportunity in niche companies such as Salesforce.com and NetSuite, which provide business-oriented applications over the Internet for a fraction of what companies would spend managing these functions themselves. Grant Bowers, co-manager of the \$281 million Franklin Growth Opportunities Fund, is partial to Redmond (Wash.)-based Concur Technologies, whose travel and expense-report software plugs right in to corporate intranets. Bowers notes that Concur's software helps companies save money by setting personalized spending limits for each employee and by steering corporate travelers to preferred hotels and airlines with which the company has negotiated discounts or rebates. Sales have risen fourfold since 2004, and at that rate, Concur could be riding the cloud computing trend for years to come. |BW|

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STOCKS FOR THE STRATOSPHERE?

Analysts believe these companies are well-positioned to benefit from the shift toward cloud computing

COMPANY/TICKER	PRICE*	COMMENT
Amazon.com/AMZN	83.05	Thriving computer-services business with more than 50,000 clients
Concur Technologies/CNQR	31.25	T&E, travel, and invoice software that plugs in to corporate intranets
Google/GOOG	426.56	Strong corporate demand for its Internet-based e-mail and apps
Salesforce.com/CRM	39.78	Maker of sales software is expanding its suite of applications
VMware/VMW	32.22	Its virtual network lets clients run their computers more efficiently

*Prices as of June 1

TREASURY BONDS

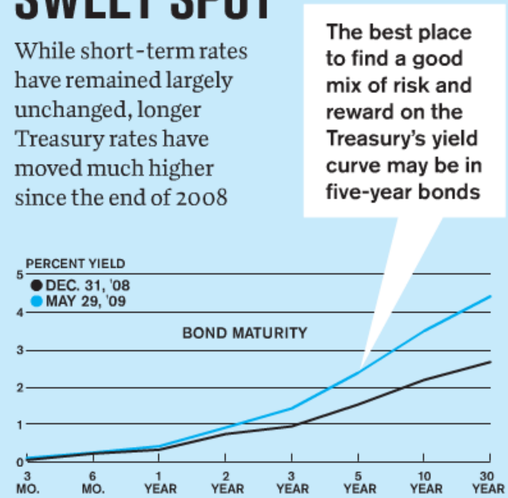
SAFE HAVEN— OR RISKY BET?

By Ben Levisohn

U.S. Treasury bonds are supposed to be the safe choice, but recently they've been acting like just another risky asset. At the height of the financial crisis, investors raced into ultrasafe government bonds—in the last three months of 2008 the price of 10-year notes ran up about 16%, sending yields as low as 2%. Now investors are fleeing Treasuries. Since December prices have fallen about 10%, and yields are at 3.67%. Some investors say Treasuries are still overvalued; others see opportunity in the pullback. | BW |

FINDING THE SWEET SPOT

While short-term rates have remained largely unchanged, longer Treasury rates have moved much higher since the end of 2008



Data: Bloomberg

BULL CASE Treasuries are primed for a rebound. The U.S. economy won't recover soon, bulls say. But stocks and bonds are priced as though it will. Near-term inflation isn't an issue, and bad economic data or political unrest could renew the safe-haven appeal of Treasuries. And to keep mortgage rates low, the Federal Reserve may boost the amount of Treasuries it buys from $300 billion to $1 trillion.

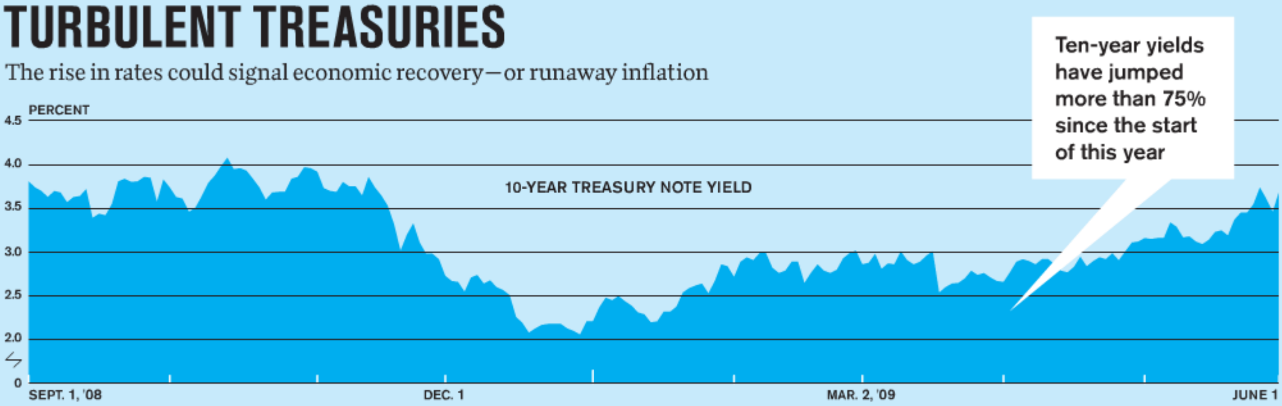
THE STRATEGY The iShares Barclays 3-7 Year Treasury Bond Fund, an exchange-traded fund, makes sense for buy-and-hold investors. Active traders who think Treasury prices have fallen too far can buy the iShares Barclays 20+ Year Treasury Bond ETF and sell on a recovery.

BEAR CASE The U.S. government needs to sell a massive amount of Treasuries—$2 trillion at last count. When the economy turns, that flood of cash will lead to inflation, bears figure. With demand for anything but short-term debt dwindling, the U.S. will have to raise rates to entice buyers into long-term Treasuries. A return to the decade-long 4.3% average on the 10-year is likely—and some even see rates reaching 10%.

THE STRATEGY For buy-and-hold investors, the advice is: Stay away. Those with a trading mentality can short the iShares Barclays 20+ Year Treasury Bond ETF. Two other ETFs can double a short bet: the ProShares UltraShort 7-10 Year Treasury and the UltraShort 20+ Year Treasury funds.

TURBULENT TREASURIES

The rise in rates could signal economic recovery—or runaway inflation



Data: Bloomberg

DEFERRED PAY

WHEN TO TAKE THE MONEY

By Amy Feldman

It used to be that if you were lucky enough to be offered the option of a deferred compensation plan, which lets you stash pretax income in an employer-sponsored investment account where it can grow tax-free, you took it. Now, with more individuals and companies facing an economic squeeze and taxes expected to rise, that decision is a lot tougher.

While deferred comp plans may encompass both salary and bonus for high-paid employees, most deferrals are just for bonuses. June 30 is the deadline for deciding whether to defer 2009 performance-based bonuses. But the economic uncertainties are so great that many people are deciding to take the cash. After all, if you defer, you won't have access to that money if you need it. Ann Costelloe, an executive compensation consultant in the San Francisco office of Watson Wyatt, expects deferrals of incentive pay to be 20% to 50% lower this year than last. "A lot of folks are saying, 'Gee, things are getting tenuous out there for me and my family,'" Costelloe says. "They may not be able to defer money this year, because their bonus will be far less, or maybe they aren't going to get a bonus."

If you've been offered the deferral option, should you take it? First, evaluate your finances and your company's financial stability—if your company goes bankrupt, you could lose the money. While 401(k) participants are protected in bankruptcy, those in deferred comp plans line up with other unsecured creditors. Then consider the quality of investment options offered in the plan and the impact of future tax rates, which are expected to rise in 2011 when the Bush tax cuts expire.

Those looming tax increases are one of the biggest factors to consider. If you defer, you must decide how long to defer; the minimum period is two years. That means if the Bush tax cuts expire, you'd be taking the money out at a higher tax rate—39.6% vs. 35% in the highest bracket. So you'll need to offset that either by earning more in the plan or by investing over a long enough period that compounding will make up the difference.

Robert Barbetti, an executive compensation specialist for J.P. Morgan's private clients, argues that if you can defer for only a few years, it isn't worth it. Consider: If you receive a $100,000 bonus and don't defer, you'd keep $65,000 (at the highest tax rate, excluding state taxes). If you then got 6% on your investment, you'd have $81,144 aftertax in five years. If you deferred that $100,000 and made the same 6%, withdrew the funds in five years, and paid the higher tax rate, you'd have $80,829—so deferring wouldn't pay.

Given the prospect of higher tax rates, Barbetti advises clients to defer for closer to 10 years, if not longer. If you deferred $100,000 for 10 years and earned 6% a year, then paid taxes at the higher rate, you'd net $108,167 vs. $101,410 if you didn't defer. "You need to defer long enough to make it worthwhile if you're going to take money out at a higher tax rate," he says. "But people are concerned about job security, so they don't want to tie it up too long."

State taxes matter, too. Deferring is especially worthwhile if you move from a high income tax state, such as New York or California to a low- or no-tax one, such as Texas or Florida, by the time you get your distribution.

To make the best decision, look at your entire portfolio. Do you have better investment options outside the plan? Might be best to pass on deferring pay. Do you have other assets to tap if you're laid off, making long-term deferral less risky? Then deferring would probably be worthwhile. Says Doug Frederick, head of consulting firm Mercer's national executive benefits group: "The gut check is whether you know that the money you could have taken today you won't need tomorrow." BW

June 30

Deadline for deciding whether to defer this year's performance-based bonuses

ANDRIO ABERO

FRESH QUESTS FOR QUALCOMM

Qualcomm (QCOM), the largest developer of chips based on CDMA wireless phone technology, is mining lucrative new markets. Its 3G modules are now in use in Amazon.com's Kindle, Google's Android system for mobile devices, FLO TV for advanced cell phones, and laptops from Hewlett-Packard, Dell, Panasonic, and Sony.

QUALCOMM'S BRISK RECOVERY

Data: Bloomberg

Qualcomm has also been working with partners in the medical field to help create new solutions, such as mobile electrocardiogram readers, remote patient monitoring, and glucose monitoring cell phones, says Dan Novak, vice-president for global marketing. These new areas have expanded Qualcomm's reach.

"Despite a challenging economy, global demand for Qualcomm's 3G-enabled mobile products and services made for a quarterly performance that exceeded even the company's own guidance," says David Weissman of Zacks Investment Research, who rates the stock a buy. It sank to 28 on Nov. 21 but rebounded to 43.58 on June 3. Weissman sees the stock at 50 in six months.

Tim Luke of Barclays Capital (it has done banking for Qualcomm) tags the stock outperform. He has raised his earnings estimate to \$2.50 a share for calendar 2010, up from an earlier \$2.42, compared with 2009's estimated \$1.65, as orders from China, Nokia, and Motorola ramp up.

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BALLY HAS CLIMBED SMARTLY

Data: Bloomberg

Why Bally May Be A Good Bet

Casinos are expected to replace their gambling systems with more streamlined devices in 2010—a big boon to Las Vegas suppliers. So which manufacturer should investors bet on?

"Bally Technologies [BYI] holds the keys to the kingdom as the leading casino management-systems supplier," says David Bain, managing director at investment firm Sterne Agee. Bally designs and makes gaming machines and computerized monitoring and accounting systems for the gambling industry. Bain expects industry consolidation and sees Bally as a likely target for large hotel-casino companies. Its stock soared to 28.51 on June 3, up from 13 on Mar. 6. Bain predicts it will hit 55 in a year.

David Katz of Oppenheimer says the roll-out of new products will also boost profits. He sees Bally earning \$2.23 a share in 2009 and \$2.64 in 2010, vs. \$1.84 in 2008.

A SPECTACULAR RUN AT SPECTRUM

Data: Bloomberg

Cancer Drugs From Spectrum

Little-known Spectrum Pharmaceuticals (SPPI) has been one of the market's big winners, climbing to 5.47 on May 26, up from 55¢ in mid-October. It has since eased to 4.74. But don't think the party's over. "Despite the run-up, we recommend buying Spectrum, our top pick among small-cap biotechs," says Shiv Kapoor of investment firm Morgan Joseph, whose 12-month target is 7. Goldman Sachs is the biggest shareholder, with 3.6%.

Spectrum has two anticancer drugs on the market: One targets non-Hodgkin's lymphoma, and the other treats bladder cancer, for which it has teamed up with Allergan. In November, Allergan invested \$41.5 million, plus 65% of the compound's R&D expenses. Royalties and milestone payments could total \$400 million, says Raj Shrotriya, Spectrum's CEO. Rodman & Renshaw's Reni Benjamin rates Spectrum outperform. | BW |

BRAD TRENT; CHARTS BY DAVID FOSTER

BUSINESS VIEWS

TECH & YOU | STEPHEN H. WILDSTROM

A Smartphone Not Quite Smart Enough

Despite some nice features, Palm's new Pre is behind iPhone when it comes to software

(TOP) BRAD TRENT

If the Palm Pre had appeared a year ago, it might have turned the smartphone market upside down. It would have beaten out Apple's iPhone 3G and the iTunes App Store, Google's Android, the BlackBerry Bold and Storm as well as BlackBerry App World, and possibly taken the spoils. But the field has grown so crowded with clever entries in the past 12 months that the Pre, ingenious as it is, seems evolutionary rather than revolutionary. Comparisons with the iPhone are inevitable, and in some ways I'm more impressed with the Pre, which costs $200 after a mail-in rebate with a two-year Sprint plan.

The multitouch display supports a richer range of flicks and swipes of the finger than does the iPhone screen. The battery should get you through a day of hard use, and you can pop in a spare if you run short on power—something the iPhone design doesn't allow. In addition, the screen module slides to reveal a full qwerty keyboard.

Thanks to the iPhone, however, smartphones have evolved into versatile handheld computers. And as the competition among them intensifies, hardware features such as those on the Pre are just table stakes. The real game is software. For the Pre to succeed, Palm will have to inspire an army of third-party developers to write the sort of clever applications that define the iPhone.

When the Pre launches on June 6, it will still have a long way to go. Palm and its exclusive carrier, Sprint, have not yet set up a payment system, so only free programs are available. The pages of the App Catalog, Palm's online store, are sparsely furnished and nearly devoid of games. Perhaps most surprising, there are no programs providing fast access to Facebook and Twitter. You have to use the Web browser to reach those services—a giant step backward compared with the social networking experience on competing phones.

For the many fans of old Palm software, there is a program called Classic from MotionApps that lets you run programs written for devices from the original PalmPilot to Treos. It works well, but the version on the Pre is only a seven-day trial. After that, customers must arrange to buy it from MotionApps.

Palm's built-in software is a mixed bag. The WebOS operating system lets multiple programs run at once, something the iPhone doesn't permit. And unlike the Android-based T-Mobile G1, whose battery drains after a couple of hours if you leave Google Maps running in the background, Palm has figured out how to manage power for multiple apps. The Web browser, built on the same basic code used by the iPhone and Android, works well, although it leaves you wishing the screen, which is 3.1 inches to the iPhone's 3.5, were just a bit bigger.

If you start typing on the home screen or many other windows, the Pre will begin a search that looks first in contacts, then on the Web—an idea seemingly inspired by Android. But there is no way to search the calendar or e-mail, a gaping deficiency.

One unique feature of the Pre is its ability to create a unified contact list and calendar from multiple sources, including Microsoft Outlook, the old Palm Desktop, and Web services such as Gmail and Google Calendar.

When it comes to e-mail, I suspect many corporate users will rely on the Microsoft Exchange service, which works fine provided your company uses delivery software called ActiveSync Direct Push. Palm makes it easy for you to set up other e-mail accounts at the same time. But with such a tiny keyboard, it's tedious to enter anything but very short messages, and it's unnecessarily difficult to read some types of messages because you can't use the mail program in horizontal mode.

The Pre does well with both music and video. It's got a good music player, and when you are connected to Wi-Fi you can buy songs from Amazon.com's MP3 store (downloads over the Sprint network are not allowed). When connected to a Mac or PC, the Pre can also sync with your iTunes music library. But the device cannot download podcasts directly—you need to sync with iTunes, at which point the podcasts get mixed in with your songs. There's a built-in YouTube player that runs well, but like other smartphones, the Pre cannot handle the full-power Adobe Flash video used on sites such as Hulu.com.

It is easy to forget that when the iPhone launched, it also had software and hardware issues. The difference is that Apple was effectively pioneering a new market, so it had plenty of time to get the formula right. Palm, a struggling company going up against surprisingly strong competition, faces a vastly more difficult challenge. I am pulling for the Pre, but I wouldn't want to bet my iPhone on its success. | BW |

HOW THE NEW PALM MEASURES UP AGAINST THE iPHONE

MODEL	PALM PRE	APPLE iPHONE 3G
Availability	U.S. only, Sprint exclusive	Most major countries (AT&T exclusive in U.S.)
Battery	Removable	Fixed
Display	3.1 in. multitouch	3.5 in. multitouch
Keyboard	Slide down, usable in vertical mode only	Horizontal and vertical onscreen
Storage	8 GB	8 GB or 16 GB
Apps	Fewer than 20 (as of June 1), all free	Thousands, free and for sale

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


Panasonic recommends Windows Vista® Business.
intel
Centrino 2
vPro™ inside™
Protect.
Manage.
IN YOUR WORLD, YOU NEED THE MOST RELIABLE LAPTOP—THE TOUGHBOOK 30.
7 TIMES MORE RELIABLE THAN THE INDUSTRY AVERAGE.
As a core manufacturer, we build every computer from the ground up, allowing us to maintain exceptional quality control standards. That makes perfect sense when you consider that the Toughbook® 30 has an average annualized in-warranty repair rate of less than 3%,* compared to the in-warranty industry average as noted in available published reports. The Panasonic Toughbook 30 is powered by Intel® Centrino® 2 with vPro™ technology. So if you are looking for the laptop that defines reliability, look no further than the Panasonic Toughbook 30.
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*Results may vary pending on environment product is used in.

Will Sports Fanatics Ante Up Online?

ESPN's mag thinks so. It will start charging for its Web site this summer

ESPN The Magazine, the decade-old print offshoot of Walt Disney's wildly successful cable sports network, is about to begin charging for access to its Web site. In August the company will essentially shutter its espnthemag.com site and merge almost all of the magazine's Web content—which includes articles and ongoing Web video series—into its ESPN Insider service, which costs \$6.95 a month, or \$39.95 a year. (The Insider will continue to be free to magazine subscribers for one year.)

At a time when many media companies are merely jawboning about demanding fees from online users, this magazine is doubling down on it. More broadly, such a move by a well-known name will plumb whether a paying customer equals a more enthralled customer—the term in the trade is "engaged"—and a more valuable target for advertisers as well.

ESPN The Magazine is well placed to test these waters. Rabid sports fans have bottomless appetites for sports info and the universe of data, jargon, and inside jokes surrounding it. (I write this as one sufficiently removed from sports to find much of ESPN's lingua franca to be decipherable only by native speakers.) The Insider has 350,000 paying subscribers, say executives familiar with the figures, and its parent site ESPN.com remains free. "There is an audience that just loves games" and flits on and off sports sites only to grab scores, says ESPN.com Editor-in-Chief Rob King. But others "love the in-between stuff—the predictive stuff that helps them be smarter fans." They're the people the company is banking on. It also helps that many like to wager on sports, though ESPN doesn't say so: When information can be translated into currency, people pay for it. Insider's most popular features include data, tools, and deep-dig analyses geared to fantasy-league players and other stat geeks, and "Rumor Central," which gathers and comments on sports tidbits from other media, such as newspapers and local call-in radio shows.

The magazine's move comes as paper-based media reel from both a brutal print-ad environment and an increasingly disappointing online ad environment, factors that made the first three months of this year the worst quarter since . . . well, pretty much ever. Time Inc., the largest U.S. magazine company, notched a 30% ad revenue decline in the first three months of '08. (Ad pages at *ESPN The Magazine* fell 31.8% in the same time frame.) Key media chieftains, including News Corp. Chairman Rupert Murdoch and Time Warner CEO Jeffrey Bewkes, both publicly discussed in May the need to extract some fees from online users. Newspaper executives quietly met in Chicago in late May to brainstorm such strategies as well.

Still, ESPN Publishing's general manager, Gary Hoenig, is frustrated by what he sees as other executives' tentativeness. "Why is it, in this business, we are apologetic when asking [consumers] to pay for what we give them online?" he asks. "It's not like people in the milk business who think 'we should give it away for free—we can make money on the cartons.'" (Disclosures: I worked for Hoenig, who remains a friend, at my first real job. My brother is an editor at *ESPN The Magazine*, but I have not discussed any aspect of this column with him.)

Many details of the revamped Insider service remain undecided or under wraps. The changes will include testing features to see which work best in compelling visitors to pay. It's also uncertain how the move will affect ad rates on the site. Hoenig does make clear that the key driver of the strategy is a desire to reduce the 2.1 million-circulation magazine's dependence on ads. But he also outlines a case that a subscribing customer is more valuable to marketers than one who hops from one free site to another. "There is too much content" for advertisers to monetize, he says. "But there is an audience that is staying here and going to stay engaged."

How will this play with advertisers? Uncertain. Something like ESPN Insider is "an attractive environment for advertisers," says Michael Hayes, executive vice-president for digital at media-buying agency Initiative, which buys ads for the likes of MillerCoors and Home Depot. But, he warns, it's not a sure thing that an obsessive fan's focus on ESPN Insider also means "there is more engagement with advertising." That's a debate that ESPN will presumably take up later, should it persuade more readers to pay up online. | BW |

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

(FROM TOP) BRAD TRENT; ILLUSTRATION BY SCOTT MENCHIN

The Stop-Managing Guide to Management

Feedback, praise, criticism—all useless. Instead, put human psychology to work for you, this book advises

It's time for those annual performance reviews, but the boss's manner tends to the boorish. He ham-handedly tells one of his office workers that she was "totally satisfactory this year!" Then he advises a middle manager to work on his body odor. O.K., this is lifted straight from the second season of *The Office*, but even if the last evaluation you gave was as lame, take heart. It's of no consequence, according to Charles S. Jacobs. He persuasively argues in *Management Rewired: Why Feedback Doesn't Work and Other Surprising Lessons from the Latest Brain Science*, that criticism, praise, rewards, and punishment are a waste of a manager's time.

Jacobs builds this contrarian position by borrowing from the fields of cognitive science, evolutionary psychology, and even mythology. He starts by citing a major contribution of contemporary neuroscience: the recently exploded myth of the brain as a recording device. It turns out there's no objectivity, and reality is actively constructed in the mind. Every experience is filtered according to the individual's "cognitive framework," consisting of memories, expectations, and emotions. "With all of us unwittingly operating off of our personal versions of reality," notes Jacobs, "conflicts are inevitable."

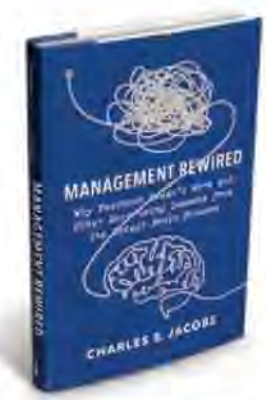
Starting from that premise, Jacobs, who has spent decades consulting for blue-chip companies, proposes a radical rethinking of management techniques. First, we need to relinquish the belief that people are rational. Recent research has shown that emotions hold more sway over our decisions than reason; we turn to logic merely to justify our choices after the fact. Oddly enough, relying on emotion actually produces better, more consistent decisions that draw on experience because emotion and memory are so intertwined in the brain's amygdala.

Much of what we've learned about how the brain works can be traced to the advent of functional magnetic resonance imaging in the early 1990s. Management theory, on the other hand, hasn't changed much since the first half of the 20th century, when the field of psychology was dominated by behaviorists such as Ivan Pavlov and B.F. Skinner. Jacobs points out that giving a top performer a 5% raise should be motivating—unless that employee was expecting 7% and the reward is perceived as a slight. Meanwhile, punishments are useless because people automatically take steps to fend off cognitive dissonance. In other words, we make excuses to preserve our self-image in the face of criticism.

"Whether we're a chimpanzee or a corporate employee, we don't like being controlled by others," says Jacobs. Instead of trying to alter behaviors by fiat, he recommends that managers stop managing. Employees should set their own objectives, critique their own performance, and come up with their own strategies for improvement. People are self-motivating, Jacobs says, especially when they feel they're doing meaningful work. (In case this strikes anyone as a dubious assertion, the author points out that engaging tasks stimulate the brain's dopamine system and deliver the same "high" we get from food and nicotine.)

As contrarian as it sounds, Jacobs says employees should set their own objectives and critique their own performance

So what's a befuddled boss to do? Managers are better served by using subtle tactics to influence employees. Understanding that people are strongly motivated by emotion, he recommends that leaders create evocative "narratives" about an organization's mission. For a small startup, it could be as basic as a David-vs.-Goliath plotline.



Management Rewired: Why Feedback Doesn't Work and Other Surprising Lessons from the Latest Brain Science by Charles S. Jacobs; Portfolio; 216 pp.; $25.95

Here's an example of a rewired manager in action: A team with a specific goal feels it's understaffed. Jacobs suggests the manager defer to the team's point of view rather than react irritably. Acknowledge that the team is shorthanded, he advises, then convince members that adding staff would dilute their accomplishment.

The book draws parallels between the couch and the cubicle. The goal of the talk therapist is to guide the patient away from self-defeating mindsets. But it's hard to imagine the average boss having the patience to apply these techniques, and Jacobs acknowledges that his approach takes more effort than employing carrot and stick. Even so, reading *Management Rewired* might soften the touch—and boost the effectiveness—of many a corporate drill sergeant. | BW |

FEEDBACK

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HEALTH CARE
THE PRICE OF REFORM

In "Someone Must Pay for Health Reform" (News, June 1), I argued that universal health insurance in the U.S. could be funded only by raising taxes, lowering payments to providers, or rationing care. Many readers charged me with ignoring a single-payer solution. My response: That, too, comes at a price—not just higher taxes, most likely, but also the loss of some 2 million insurance industry jobs. There is no free lunch and no free health-care reform. –*Catherine Arnst*

I beg to differ with your assessment that there are only three options. Move to a single-payer system, eliminate insurance company profits and high overhead costs, and we can cover the almost 50 million uninsured Americans. For most people, not paying insurance premiums would more than compensate for slightly increased taxes. And not providing health coverage will be good for American businesses. It's a huge money drain. Under single-payer, companies will be able to withdraw from this cost spiral and focus on what they do best.

Jennifer Dunkle
FORT COLLINS, COLO.

When I'm paying $600 a month for coverage, that's a tax. I have never met a Canadian or European who would trade their health insurance.

Screen name: Joanne

The concentration of health care into giant organizations is a major part of the problem, just as it is in banking. ... We need to start by making Medicare the basic payment system, with private insurance for things like bypass surgery and expensive cancer treatments.

Screen name: Sam

The article misses the elephant in the room: tort reform. Fear of litigation leads to "defensive medicine"—expensive tests and procedures that do not benefit patients but are used simply to shield medical professionals from lawsuits.

Amy Chai
ELLICOTT CITY, MD.

CORPORATE GOVERNANCE
A BALANCE OF POWER AT BANK OF AMERICA

It's disturbing that Bank of America CEO Ken Lewis considers the loss of his board chairmanship a "humbling experience" ("Can Ken Lewis Keep His Job?" News, June 1). Is he paying any attention to shareholder voting trends?

While a vote to separate board and corporate leadership positions may sometimes reflect disappointment in a specific chairman, it is primarily a vote for more balanced corporate governance.

Gisela Moriarty
PACIFIC PALISADES, CALIF.

SOCIAL MEDIA
BRACE YOURSELF FOR MORE ADVERTISING

The distressing outcome of the data-mining efforts described in "What Is a Friend Worth?" (Special Report, June 1) is that we will all have more ads crammed down our throats.

Rick Cunnington
ORO VALLEY, ARIZ.

So we are now "subjects of lab study," and our privacy does not exist anymore, just to feed the growing greed of some few marketers and companies. ... Very interesting world we are building.

Screen name: Jose

BUSINESS PhDs
THE BEST TEACHERS HAVE BEEN THERE, DONE THAT

"The Doctorate Is In" (BTW, June 1) succinctly explains what's wrong with our colleges and universities.

When will academia learn that people's accomplishments can make them more valuable teachers than a piece of paper can?

Robert Cole
BRONXVILLE, N.Y.

CORRECTIONS & CLARIFICATIONS

Credit for the concept of the June 1 cover image ("What's a Friend Worth?") was inadvertently omitted. The illustration was inspired by digital characters created by Habbo.com.

A BusinessExchange link accompanying "Can Ken Lewis Keep His Job?" (News, June 1) misidentified the firm that conducted a study of CEO turnover in 2008. It was Booz & Co., not Booz Allen Hamilton.

"These Angels Go Where Others Fear to Tread" (The Future of Tech, June 1) stated that the board of Knewton, an online education startup, "has already approved two partnerships, including one deal to license its technology to rival Kaplan." While the board did grant its approval for such a venture, Kaplan has no business partnership with Knewton.

"A Royal Headache at Burger King" (Marketing, May 25) incorrectly described Burger King's plans to reallocate marketing funds that had been going to franchisees. Those funds will go to U.S. and local marketing campaigns, not to global marketing.

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.

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Why We Tweet

We're now big fans of Twitter. To those with eyebrows aloft, here's how it happened

You know you're doing something strange and new—or at least new—when every time you're at a social gathering, the activity comes up and the barbs come out. "Why do you waste your time with such nonsense?" people ask. And so it is with Twitter, the social-networking thingamajig that we both recently adopted with a degree of enthusiasm that surprises our friends and family and, well, even us.

But the fact is, over the past few months, we've come to love Twitter. We're not saying it's going to transform humanity—as some of its proponents will tell you—but we certainly get its incipient power. Indeed, if Twitter continues to expand at its current rate, it may well become a high-value way for companies to help brand themselves and microtarget consumer groups, as well as another tool for managers to interact with their people, and vice versa.

But Twitter's business potential doesn't explain why we tap away in 140-character bursts every so often. O.K., like three or four times a day.

We tweet because we can't stop ourselves.

Why? Well, not for the reason we first expected. In fact, one of us (that would be @suzywelch in the lingo) started tweeting for good old-fashioned marketing purposes. She had a book coming out, and everyone-in-the-know kept insisting: "Social media is where it's happening."

It proved to be excellent advice. The accessibility, informality, and reach of Twitter ended up landing several great interviews (mainly with bloggers), generating crowds at book signings, disseminating dozens of reviews, driving traffic to the book's Web site, and best of all, developing a warm and encouraging community of the book's readers. (@suzywelch took to calling this group her "twiffers"—Twitter friends—after many of them replied sympathetically to her Easter tweet: "Just been informed by family I will not make the mashed potatoes this year. What do they mean, 'Too much butter?'")

@suzywelch's interview with @suzeormanshow got an assist from the Twitter world

Eventually, @suzywelch became such a Twitter booster (read: fanatic) that @jack_welch decided to jump into Twitter, too, albeit with the words, "I just don't get this thing."

Within 24 hours, he did. Every time he opined about the Red Sox or Celtics, dozens of sports enthusiasts opined back. Same for politics and business, launching fascinating minidebates about everything from Obama's economic policies to Detroit's woes.

Twitter, in essence, allows you to attend a great big cocktail party filled with diverse and (typically) civilized chatter. Some of what you hear and say will be frivolous. But the chatter will also provoke, inform, and engage you in a way, and at a volume, you can't replicate offline.

It's a bit like joining a conversation at a cocktail party that's engaging, provocative, informative—and just getting started

Best of all, for us, Twitter helps you test—and improve—your ideas. A few weeks ago, for instance, @jack_welch tweeted that two events might be the "green shoots" of a new bipartisan movement. The thoughtful pushback improved the column we went on to write about the topic. Similarly, when @suzywelch was preparing to interview financial guru Suze Orman (@suzeormanshow, by the way) she reached out to the Twitter world for input. One comment—"I love Suze Orman, but I'm not sure she's walked in my shoes"—ended up sparking Suze's much discussed "Are you kidding me?" response.

Not to get carried away with Twitter's worth as a work tool. Any boss alive would have the right to be annoyed by how much time we fritter away with our new toy. To wit: Writing this column took about twice as long as it might have because we had to keep checking for reaction to the "What's so great about Twitter?" query we lobbed out there.

The answers, in true Twitter manner, came fast and furious. We tweet, people told us, "because it's fun," "to feel more connected in a disconnected world," and to "communicate with staff."

All good reasons, for sure. But for our part, another message resonated more. "I have tried to explain to people why I tweet," it read, "but the best I can come up with is: Start tweeting urself & you'll figure it out." That's what happened to us. We stumbled into a conversation that seems to just be getting started. We think we'll stick around. | BW |

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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

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