GRANT'S
INTEREST RATE OBSERVER®
Vol. 27, Winter Break | Two Wall Street, New York, New York 10005 • www.grantspub.com | DECEMBER 23, 2009

Introducing the *Grant's* Supermodel Credit Portfolio

(December 12, 2008) Credit is what we are bullish on—cast-off residential mortgage-backed securities, senior bank loans, convertible bonds and corporate debentures, high-rated and middling. And it's credit that fills the new *Grant's* model portfolio. Expectantly, we call it our Supermodel Portfolio. May it deliver superior returns for 2009 and beyond. No guarantees, of course. However, at the least, we expect it will outearn the corresponding portfolio control group, an assortment of long-dated, "super-safe" (as a certain newspaper habitually calls them) U.S. Treasurys. Whoever coined the phrase "return-free risk" to apply to government securities at these ground-hugging yields was a sage as well as an aphorist. Barring a deflationary collapse, the Treasury market will surely have its comeuppance.

The investments that stock the Supermodel Portfolio have had their comeuppance already. They deserved it. Credit had a heart attack last year on account of its scandalously loose living during the bubble years. Still remorseful and weak as a kitten, the institution of lending and borrowing is gathering strength for the next cycle. A not-bad time to invest, we think.

The portfolio, in the hypothetical sum of $10 million, is apportioned among RMBS, secured bank loans, investment-grade corporates, convertibles and junk (or should we say "high-yield"?) bonds. We set aside no cash reserve. This is not to say, however, that we refuse to entertain the possibility that even better credit opportunities will present themselves in 2009. They well might. If they do, we'll just have to raise some more imaginary millions to scoop them up.

No need to say much on high-yield (see the prior issue of *Grant's*), except to explain its presence in what is intended to be a safe and cheap portfolio. Rarely, if ever, has junk been junkier, to judge by the ratings mix of the bond crop or the likely sky-high prospective default rates. Then, again, we believe, never have yields to maturity been so high—22% on the Merrill Lynch Master II Index. Come the cyclical turn, junk bonds will shine. The question is, from what level will they begin to glimmer? There can be no assurance, to steal a phrase from the junk-bond prospectuses, that it won't be from prices much below even these. The fact is that, at this point in the cycle, junk is hugely speculative. The iShares iBoxx $ High Yield Corporate Bond Fund (HYG on the Big Board), our junk-bond trading vehicle, holds a position in 51 liquid issues. At a price of $64.81, the fund pays monthly dividends to produce a current yield of 13.5%; indicated yield to maturity is 18.7%. Its market cap is $1.02 billion. Given the risks, we assign to high yield an allocation of just 5%. We view it as a portfolio seasoning, an herb.

A little less speculative is the investment-grade component of our Supermodel Portfolio, though investment-grade yields in relation to government yields imply a looming deflationary disaster even for better-rated debt. At 616 basis points, the spread between

Treasury portfolio

security	price	investment
4 1/2s of May 2038	128-06	$2.0 million
4 3/8s of February 2038	125-03	2.0
5s of May 2037	135-15	2.0
4 3/4s of February 2037	130-08	2.0
4 1/2s of May 2036	123-27	2.0
Cash*		0.0
Total		$10.0

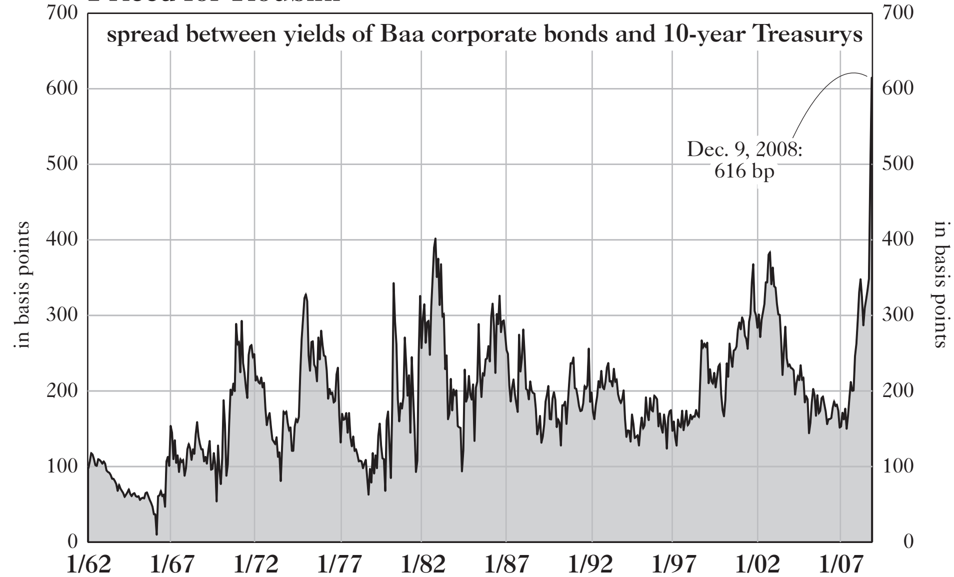
Grant's Supermodel Credit Portfolio

iShares iBoxx $ High Yield (HYG)	63.75	$ 0.5
iShares iBoxx $ Investment Grade (LQD)	92.14	2.0
Nuveen Floating Rate Income Fund (JFR)	5.03	2.5
Calamos Convertible Fund, Class B (CALBX)	15.69	2.5
GSAA 2005-12, Class AF-3	50	1.25
Popular 2007-A, Class A-3	32	1.25
Cash *		0.0
Total		$10.0 million

*cash earns 1%.

the Moody's Baa-rated corporate index and the 10-year Treasury is the highest since at least 1962. Indeed, according to Deutsche Bank data recently quoted in these pages, the gap is probably wider than at any point since the Great Depression (when—let us not forget—the nominal GDP was sawed in half). Moody's relates that the investment-grade default rate never topped 1.6% in any Depression year, while the average annual default rate for investment-grade bonds from 1920 to 2006 was just 0.146%; the high was 1.55%, recorded in the recession year 1938. For what it's worth, the Moody's Baa index has actually been rallying these past few weeks, trading to 8.75% from 9.5%, yet such high-quality issuers as Caterpillar and Hewlett-Packard had to dangle 100 basis-point concessions (in relation to the yields assigned to their own outstanding issues) in order to place new securities last week.

Priced for Roubini



source: The Bloomberg

Senior loans, in the shape of a $2.5 million allocation to the Nuveen Floating Rate Income Fund (JFR on the Big Board), are the third item in the portfolio. "Leveraged loans" is what the adepts call these instruments. They are secured claims—tradable bank loans—on leveraged companies. True, such leverage was typically excessive, but the senior secured lenders stand to come out of the experience in a relatively strong position. The trouble is that leveraged loans attracted leveraged buyers; they yielded a pittance over Libor. To enhance the return, loan investors—e.g., hedge funds and collateralized loan obligations—borrowed liberally against the leveraged collateral. Come the great margin call, they sold (and continue to sell) just as liberally. "All told," according to the definitive chronicler of the loan market, Standard & Poor's LCD, "the [loan] index is down 25.5% over the past three months, leaving returns for the first 11 months of the year at a soul-destroying negative 27%, all but ensuring that 2008 will produce the first annual loss for the index, which dates to 1997."

"Soul-destroying"? An editing error, probably; LCD must have meant "wealth-destroying" and, therefore, "opportunity-creating," though the opportunity thereby created seems not yet to be widely perceived. Supply keeps coming out of the woodwork, and the public continues to yank its money from loan mutual funds. Motivated sellers put out calls for bids, i.e., "bids wanted in competition," and they are the bane of the market. BWICs in the sum of $3.3 billion set a monthly record in October. Another $1.3 billion of BWICs rattled the market in November. (These days, OWICs, i.e., "offerings wanted in competition," are only a dim, gauzy memory.) "While these figures are tiny in relationship to the institutional loan universe of $595 billion," LCD observes, "they are daunting in the absence of any new funding sources." Loan funds have suffered net outflows in 16 of the past 17 weeks, for a year-to-date total of $4.5 billion. Assets under management have dropped to $7.5 billion from $15.9 billion.

There are, according to the *Barron's* Weekly Closed-End Funds roundup, 19 loan-participation funds. As you know, closed-end funds issue a fixed number of shares, and with the proceeds from the sale of those shares, they acquire assets. The funds are exchange-listed and the prices at which they trade may or may not mirror the value of the underlying assets. The universe of listed loan-participation funds trades at a large discount to NAV—at last report, an average of 17.2%.

"Investors are getting a double discount," colleague Dan Gertner points out. "The price of the loans held in the portfolios has fallen below par value. And the funds are selling at a discount to the underlying NAV because so many investors are selling. Elliot Herskowitz, president of ReGen Capital, has studied the discounts at which the closed-end funds are trading. He finds that the funds are trading between 30 and 60 cents on the dollar of the underlying par value of the loans. Herskowitz told me, 'It really points out that, based on the way these things are trading, you can buy into loans at 50 cents on the dollar—I mean the senior loans. And I think it's just an unbelievable opportunity out there.' Herskowitz cautions that the market is thin and prices can move erratically. 'But if you're careful about getting in or out, it's just an unbelievable opportunity. It is very rare for the retail investor to actually get a better deal than that which exists for the institutional clients,' he says. 'But in this particular area, at this particular time, given the way these things are trading, it's just a glaring example.'"

We chose the Nuveen Floating Rate Income Fund to carry the leveraged-loan flag for a number of reasons. For one thing, JFR has redeemed 59% of its auction-rate preferred securities ($235 million out of $400 million), and Nuveen says it intends to redeem the balance. For another, 93.6% of the fund's portfolio is allocated to variable-rate loans and short-term investments (many funds have heavy junk-bond exposures). Finally, the fund is quoted at a discount to a discount. Thus, as of July

31, the portfolio encompassed $954 million of loans and bonds. Assuming no change since the reporting date, the underlying assets are trading at 47 cents on the dollar, based on the decline in the disclosed NAV. Then, too, at the current price of $5.03 a share, the fund is trading at an 18.7% discount to its $6.19 NAV. Multiply one discount by the other, and a new JFR investor winds up owning the assets at 38 cents on the dollar. The fund shows these characteristics of diversification by industry: media, 18%; hotels, restaurants and leisure, 7.3%; health care, 6.4%; and chemicals, 4.8%. Typically for the group, JFR is leveraged 42%, with preferred stock and borrowings. The current yield is 14%. In order for JFR to pay a common dividend, the value of its assets must be 200% greater than the value of the leverage-providing preferred stock and borrowings. As of November 28, the ratio stood at 239%, compared—for reference—to 243% in January. (Consult www.etfconnect.com for current information on closed-end funds.) Open-end funds provide unleveraged access to the bank loan market. Among three of the largest are Fidelity Floating Rate High Income, Eaton Vance Floating-Rate Fund and Franklin Floating Rate Daily Access Fund.

As to convertibles, we laid out the story line in the previous issue of *Grant's*; suffice it to say that they are still not the fixed-income market's favorite flavor. We choose the Class B shares of the open-end Calamos Convertible Bond Fund (CALBX) for the Supermodel Portfolio. The B stock has a deferred sales charge that shrinks by a percentage point in every year that an investor chooses not to redeem—from 5% in year one to zero percent in year six. The fund's annual operating expenses are 1.88%, and the average credit quality is triple-B. Assets total $462 million. Information technology is the top sector weighting (24.4%), followed by health care (20.3%) and consumer discretionary (13.2%). The Calamos fund, founded in 1985, had been closed to new investors since April 2003. It reopened on October 7, with John P. Calamos Sr., co-chief investment officer, recalling the persistent knocking on its door by some would-be investors. "[O]ur response has always been 'not until we identify a significant opportunity that may be advantageous for both new and existing investors,'" he said. "Well, we think we have found one." Nick P. Calamos, co-CIO, added, "According to our research, we believe the global convertible market is significantly undervalued today." So do we.

Last but not least come residential mortgage-backed securities, the hardest of the credit markets' hard cases. In particular, we tap for inclusion in the Supermodel Portfolio a pair of structures we first reviewed in our September 19 issue. They are the GSAA Home Equity Trust 2005-12 and the Popular ABS Mortgage Pass-Through Trust 2007-A. At the time, the slices on which we particularly focused—Class AF-3 of GSAA and Class A-3 of Popular—traded at 69 and 59, respectively. Today's prices are 50 and 32.

At inception, the GSAA Home Equity Trust was stocked with Alt-A residential mortgages, 2,919 of them. All were fixed-rate and first-lien and all had maturities of 30 years or less. The average FICO score, LTV and loan size were 690, 79.1% and $194,740, respectively. Thirty-nine percent of the dollar value of the mortgages was secured by houses in California, Florida and New York.

Oddly enough, the deal hasn't performed badly. The principal balance has been reduced by 43% and the number of loans by 39%. Troubled loans (60 days or more delinquent) stand at 13.8% of the outstanding balance, and cumulative losses amount to just 0.85% of the original balance. We thought that the Class AF-3 was cheap at 69. We like it more—exactly 28% more—at 50. AF-3 pays a fixed coupon of 5.07%, and its credit enhancement has grown to 12.3% from 7.4% as the top of the structure has melted away. It is the third-pay bond, i.e., third in line to receive principal payments. But it might as well be second, because the first bond in the structure has paid down 95.8% of its original balance.

In our post-Labor Day review of the RMBS field, Gertner spoke to Bryan Whalen, managing director of Metropolitan West Asset Management. Whalen obligingly came to the phone again last week. He told Gertner that, in a base case, the AF-3 bond would yield 29% to a five-year maturity. Even a modified Nouriel Roubini disaster scenario would permit a 14% yield, he said. In such a setting, the conditional (i.e., steady-state) prepayment rate would slow to 3% from the current 8.2%, 84% of the remaining pool would default (compared to 13.8% of the deal that is currently troubled) and loss severities would reach 70% (up from 50% at present, which is ghastly enough).

And if interest rates should happen to rise, what then? Not much, probably. At 50 cents on the dollar, the AF-3 is trading on credit quality and liquidity, not on interest rates. "I have a hard time believing that this bond

Buyers, please call your office

source: The Bloomberg

would sell off even with a few hundred-basis-point Treasury sell-off," Whalen told Gertner. "In fact, prices may go up in that scenario if the market is indicating that credit is improving and the economy may be improving and reinflating."

Our final investment, the Popular ABS Mortgage Pass-Through Trust, will absorb our last imaginary $1.25 million. Your hand may quaver when you write the check (if you are following along at home), as the Popular bond—triple-A-rated Class A-3—houses subprime mortgages. The wrinkle is that the mortgages are overachieving ones, though priced as if they were slugs. For one thing, adjustable-rate loans constitute just 49% of the 2,779 mortgages in the pool, the rest being fixed-rate. Usually, ARMs occupy a much bigger share of a subprime RMBS. For another thing, the collateral is widely distributed, with just one bubble market—Florida—in the top five.

On the face of it, our Popular investment will win no quality-assurance awards. Its troubled loans stand at 21.6% of the outstanding balance, while cumulative losses total 1.5% of the original balance. But it shines in comparison to an especially rotten field. In the 07-2 portion of the tradable ABX subprime mortgage index, for instance, troubled loans amount to 35.7% of the outstanding balance, while cumulative losses foot to 4.9%. That ABX subindex last traded at 33.6, a slight premium to the plainly superior Popular bond.

Though the Popular deal references slightly more fixed-rate mortgages than it does ARMs, the Class A-3 bond pays a floating-rate coupon: Libor plus 31 basis points. That fact, of course, makes it more sensitive to interest-rate movements than the preceding AF-3 model, but only to a degree. At 32 cents on the dollar, the market is plainly more worried about solvency than about Libor. Whalen's base case would produce a yield to maturity of 21% and an average life of eight years. The stress case—a 3% prepayment vs. an observed 14.7% rate, and 93% of the remaining loans defaulting with a loss severity of 70%—still results in a 14% yield to maturity.

"The mark to market over the past couple of months has been brutal," Whalen tells Gertner, "but if you can put the emotions aside and keep your eyes on the horizon, and not on short-term volatility, investors should be drooling over today's prices."

Pass the napkins and reach for the "buy" tickets. May the *Grant's* Supermodel Credit Portfolio be worthy of its name.

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Horrible? Certainly. Bearish? Not necessarily.

(June 12, 2009) Not even rising joblessness, plunging Treasury prices and the widening prevalence of negative equity entirely exhaust the list of reasons to despair for American residential real estate. A third wave of losses, set to soak the heretofore high-and-dry prime borrower, is supposedly crashing over the market. "We're right in the middle of this third wave," Mark Zandi, chief economist at Moody's Economy.com, told *The New York Times* last month, "and it's intensifying. That loss of jobs and loss of overtime hours and being forced from a full-time to part-time job is resulting in defaults. They're coast to coast."

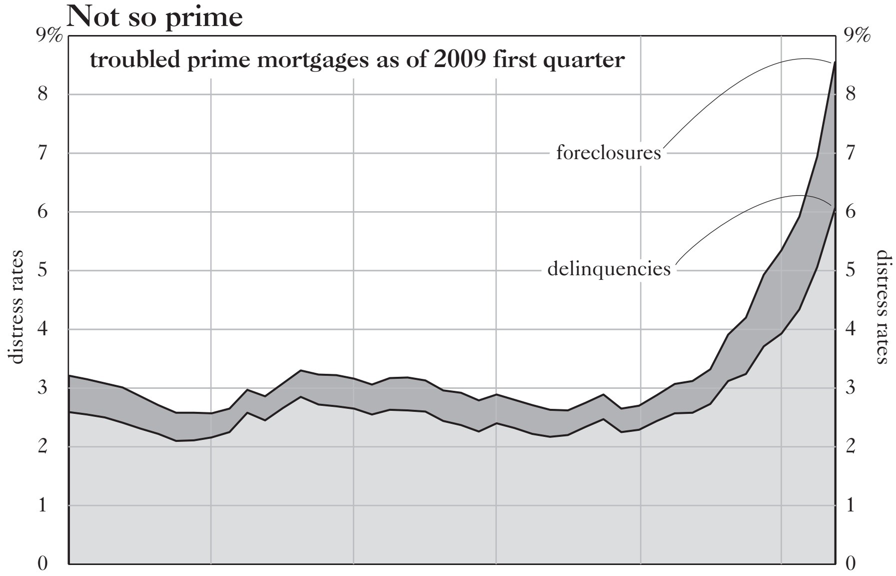
Residential mortgages and house prices are the subjects at hand. In preview, we are selectively bullish on the first and expectant toward the second. Regrettably, the easily accessible public plays on recovery in "toxic" mortgage-backed securities have moved out of bargain-hunting range. Mr. Market, reliably fickle, may just decide to move them back again, though we would not spin out the following essay on that hope alone. Rather, we reappraise the state of American residential mortgage finance because so much seems to depend on it.

"Bullish," admittedly, isn't the first word that springs to the minds of readers of the everyday mortgage news. For instance, first-quarter delinquency rates climbed across the board, even for prime borrowers. Sequentially, they were up by 19.8% (to 6.06% from 5.06%) and by 63.3% from the year-ago level (to 6.06% from 3.71%). The inventory of foreclosed houses financed by prime mortgages climbed by 32.5% sequentially (to 2.49% of prime mortgages surveyed from 1.88%) and by 104.1% from the year-ago level (to 2.49% of that mortgage universe from 1.22%).

The all-in cost of foreclosure proceedings to creditors has also taken a leap. According to new data compiled by Fitch Ratings, loss severities across the credit gamut accelerated between June 2007 and April 2009—for subprime mortgages, to 73% from 40%; for Alt-A mortgages, to 55% from 19%; and for prime mortgages, to 43% from 14%.

In Street parlance, houses are the "underlying" in the residential mortgage market, and they are lying lower all the time. As of March, the S&P/Case-Shiller 20-city composite index was down by 18.7% in a year and by 32.2% since July 2006. Phoenix, with a

Not so prime



source: Mortgage Bankers Association

peak-to-present decline of 53%, lost the most; Dallas, off by only 11.1%, the least. Not surprisingly, transaction volumes have plunged with house prices, while inventories have traced a course in the opposite direction. In April, according to the U.S. Census Bureau, new homes sold at a seasonally adjusted annual rate of 352,000, 0.3% higher than in March but 34% below the year-ago reading and 74.7% below the July 2005 peak of 1.4 million. The inventory of unsold, unlived-in houses stood, at last report, at 10.1 months (i.e., it would take 10.1 months to get rid of a house at the current sales pace), down from 12.4 months in January.

If you detected a small shaft of sunlight in the previous sentence, it wasn't your imagination. Falling prices are parting the clouds. Distressed property sales accounted for fully 45% of all used-house transactions in April, according to the National Association of Realtors. "After mostly retreating from the housing market after the bubble burst," *The Wall Street Journal* reported on May 20, "investors are returning in droves, hoping to take advantage of the distress. In many cases, realtors say, investors also are outbidding first-time home buyers and other would-be occupants because they often come to the table with all-cash offerings."

Colleague Dan Gertner, our first vice president for the mortgage mess, relates that house prices, having famously overshot to the upside, now seem to be overdoing it in the opposite direction. The basis for his conclusion is, in the first place, the analytical test developed by reader R. King Burch: Multiply the average house price (new and used) by the number of sales and divide by GDP to arrive at an intuitively attractive bubble-o-meter for residential real estate. Since 1970, the Burch Index, as it will henceforth be known, has averaged 9.8%, with a standard deviation of 2.9. It peaked at 18.3% in 2005, just shy of a three standard deviation from trend. The latest reading, 7.5% at the end of the first quarter, is a 0.8 standard deviation below the post-1970 mean. "The Burch Index," Gertner observes, "indicates that the housing correction has overshot to the downside."

Gertner invokes a second test of house-price value, the rent-to-price ratio monitored by Morris A. Davis of the University of Wisconsin-Madison School of Business. For donkeys' years, houses returned an average of 5%. The yield declined from 5.5% in 1960 to slightly less than 5% in 1999. Then it plunged to 3.1% in the first quarter of 2006. But now look: Owing to rising rents and falling house prices, the ratio is back to 5.1%. "Let us say," muses Gertner, "that 5% is the correct yield for a house and that the price-to-rent ratio overshoots by one standard deviation to 5.7%. Assume, too, that rents stay the same. In that case, the Case-Shiller index would have to register an additional decline of 9.9%, for a total drop, peak-to-trough, of 38.9%.

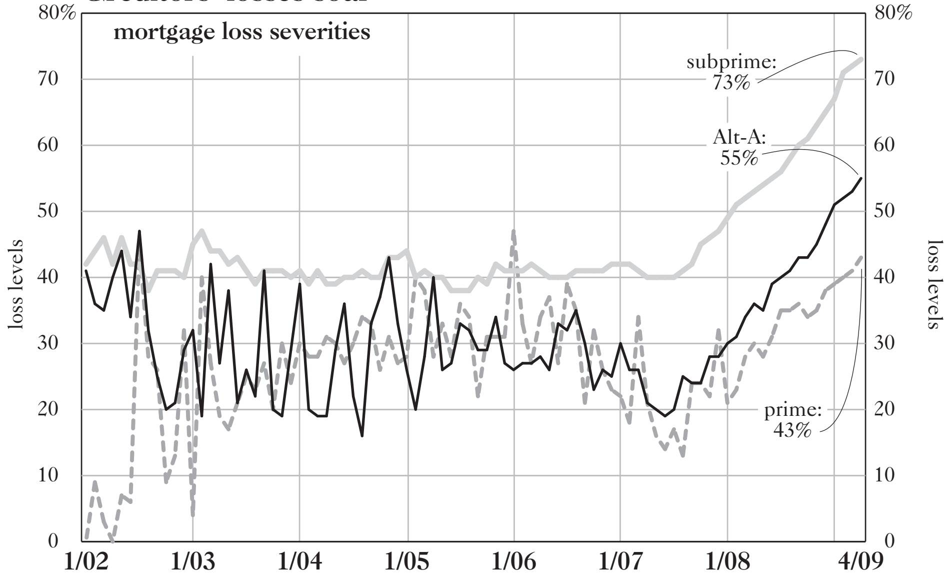
"A third test of house prices," Gertner proceeds, "is the National Association of Realtors' index of affordability. The index is set so that a reading of 100 means a family earning the median income would be able to afford a house offered at the median price. An index of 150 would mean that the family's income is 150% of the minimum amount required to afford a median-priced house (assuming a 20% down payment and principal and interest payment no greater than 25% of income). As of March, the index stood at a record 172.5, more than three standard deviations above its long-term average of 125."

Of course, things are never so bad that they can't get worse, and the bear market that follows a truly bubbly bull market often surprises the pure rationalist by how low it goes. So let us posit, suggests Gertner, that house prices overshoot to the downside by the same three standard deviations as they overshot to the upside (as measured by the rent-to-price ratio). In that case, they would register a further drop of 26.9% for an overall decline of 50.4%.

Nobody knows the future, but all can observe how markets discount it. In the case of the residential mortgage-backed securities market, collective expectations are as dire as the known facts. "A mortgage investor I know (he prefers to remain anonymous)," Gertner relates, "has built a data base of liquidated loans. In the past month, the average liquidated prime loan had an original loan-to-value ratio of 75% on a house priced at $750,000. So the loan was in the amount of $562,500. Notably, the price of the house at the time of liquidation had fallen not just by the Case-Shiller 20-city average (32.2% from the bull-market peak to date), but by 45%, to $412,500. It's notable but not surprising, inasmuch as foreclosures tend to cluster in weaker neighborhoods. Anyway, subtract the written-down value from the par amount of the loan, and you see that the creditors are in the hole by $150,000, or 26.7% of face. But the all-in loss severity is another 12 percentage points higher than that, such are the burdensome costs of foreclosure."

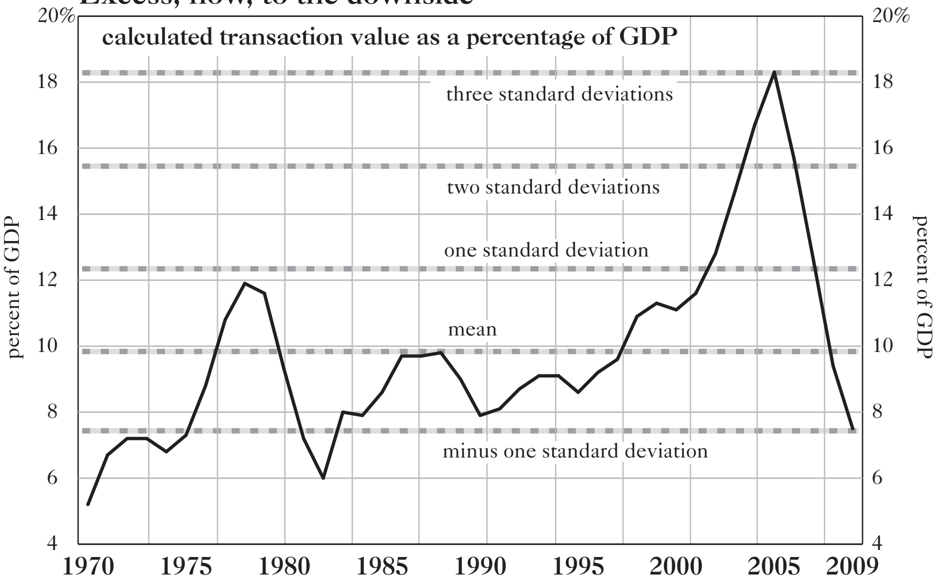
Daunting as these numbers are, they are nobody's secret. How is the RMBS market discounting them? In the case of a particular senior-most tranche of a certain prime RMBS, the market is fig-

Creditors' losses soar



source: Fitch Ratings

Excess, now, to the downside



sources: Bureau of Economic Analysis, Census Bureau, National Assn. of Realtors

uratively laying in candles and canned goods. Beneath the tranche in question are five layers of credit protection amounting to 7.8% of the principal sum of the structure. This, the penthouse tranche, is quoted at 74 cents on the dollar to return an expected 10.3% over the life of the deal.

Our anonymous investor—it is he who expects the 10.3%—has modeled three sets of total-return outcomes corresponding to three different sets of assumptions. The most important of these assumptions are prepayment speeds, default rates and loss severities. Our investor's base case features prepayments decelerating to 4% from the 14% actually registered over the past three months, default rates accelerating to 3% annually from the current 1%, and loss severities immediately rising to 50%.

Even under a future as bleak as this one, our tranche, to repeat, is expected to deliver an annual return of 10.3%. Under a less severe set of assumptions (e.g., prepayment speeds doubling to 8%, default rates at 2% and loss severities of 40%), an investor would earn 12.2% a year. Of some comfort to us is the finding that even under a truly gruesome set of assumptions (e.g., prepayment speeds falling to 2% a year, defaults rising to 8% and loss severities climbing to 75%), an investor would earn a projected 2.8% per annum. Incidentally, at a 75% loss severity, a $750,000 house would be hammered down to $195,000.

We know of only two avenues by which a retail investor can participate in the residential mortgage-salvage movement. The first is Redwood Trust (RWT on the Big Board), featured in these pages on February 6. Redwood's management was lately out buying 2004 and earlier vintages of senior Alt-A RMBS and 2005 vintages of senior prime RMBS and junk-rated Alt-A RMBS. Studying the most recent 10-Q reports, we venture that management is paying 65 cents on the dollar for assets it regards as money-good. Impressive enough, but Redwood common is quoted at 1.6 times book and yields 6.6%. Perhaps Mr. Market would be so obliging as to mark it back down to book, or, say, to 1.2 times book at a minimum, in order to afford the value-minded investor a margin of safety?

Then there is Chimera Investment Corp. (CIM on the Big Board), a specialty finance company managed by a wholly owned subsidiary of Annaly Capital (to disclose an interest, Gertner and your editor are both Annaly investors). Chimera invests in RMBS, residential mortgage loans and other real estate-related securities. Its management is partial to Alt-A securities of 2006 and 2007 vintage, a part of the market that Redwood has avoided. A characteristic Chimera strategy is to pay 50 to 55 cents on the dollar for senior Alt-A bonds that, down the road, it expects to sell for 70 to 80 cents on the dollar, allowing for write-downs of 20 to 25 cents. Gertner asked Wellington Denahan-Norris, chief investment officer of Chimera, if the latest mortgage data on delinquencies had her spooked. "We expected it to be bad, and it continues to be bad. . . ," she replied. "We run some pretty draconian scenarios, and none of this is unexpected, and the bonds that we buy can withstand increases of much greater magnitude than we've experienced so far."

At 1.4 times book value and with a yield of 9.1%, Chimera, like Redwood, trades as if the market were confident of a happy outcome. We, too, expect good things, but we would be more comfortable investing if the market expected bad things. It will, too, sooner or later. Just wait.

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Early bird specials

(June 12, 2009) The trouble with long-anticipated disasters is not that they never happen. The trouble, rather, is that they rarely unfold according to a well-thumbed script. Bearing this truism in mind, we return to commercial real estate, a disaster in fact as well as in the making. Or is it?

Not precisely, according to J. Bruce Flatt, senior managing partner and CEO of Brookfield Asset Management (BAM on the New York Stock Exchange), manager of $80 billion of property, power and infrastructure assets and the 51% owner of a separately traded commercial real estate subsidiary, about which you soon will hear more. It's helpful to make distinctions, Flatt reasonably cautions. "Real estate is the largest business in the world," he says, "and saying 'real estate is bad' is a dangerous thing, or 'real estate is good' is a dangerous thing."

Skirting generalizations, therefore, we get down to cases. The first is CB Richard Ellis Group (CBG on the NYSE), the world's No. 1 commercial real estate broker. Brookfield Properties (BPO on the NYSE), owner of 75 million square feet of office space in 108 buildings in the United States and Canada, is No. 2.

Constant readers will remember the names. *Grant's* was bullish on Brookfield Asset Management, owner of 51% of BPO, in the issue of Jan. 13, 2006, and bearish on Ellis in the issue of June 29, 2007. Today, we are bullish on BPO and CBG alike, though we append a single, four-letter caveat.

"In past cycles," Flatt reflects, "real estate caused issues for banking. The banks got in trouble because they had big portfolios of real estate. . . . This time around—and I'm talking about commercial real estate, not residential—banking issues caused problems for real estate."

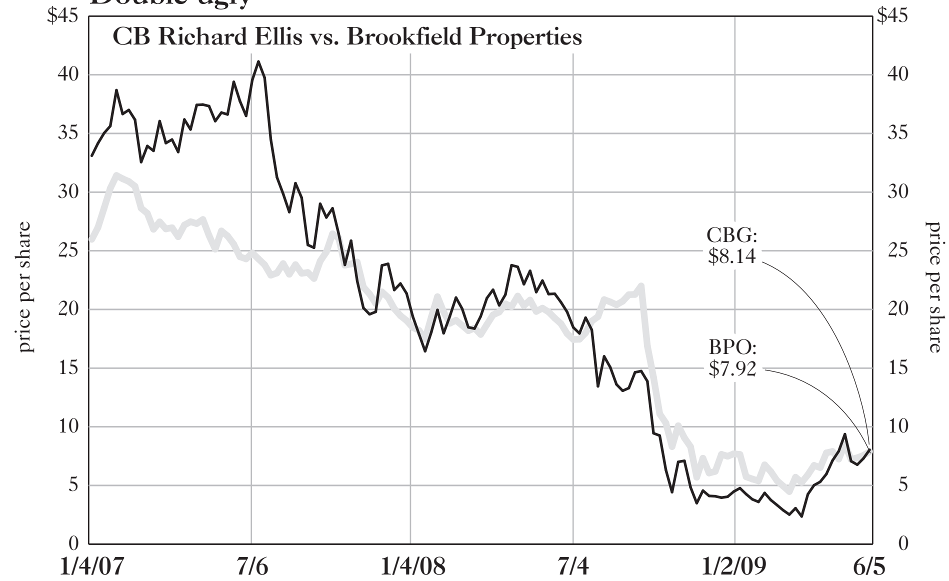
So debt is our caveat. Research from Ellis itself shows that $200 billion of secured debt, and perhaps $200 billion more of the unsecured kind, falls due this year, mainly in the second half. "Although loan extensions have often been negotiated," the firm adds, "there is a growing likelihood that more forced property sales will occur later in the year." Even before this particular rug gets pulled out from under the commercial real estate market, the Moody's/REAL Commercial Property Price Index has fallen by 22.8% from its October 2007 peak.

Ellis has not only kept track of the debt drama, but it has also participated in it, borrowing heavily to buy Trammell Crow in 2006. Though it reckons the acquisition a success, the acquirer almost died in financing it. The wherewithal for debt service dwindled alarmingly with the collapse in real estate activity. In the first quarter, leasing revenue was down by 32%, sales revenue by 66%. It could have brought only so much joy to Ellis headquarters that the Crow building-services business was the companywide best performer, down a mere 4% in revenue and now accounting for 44% of overall revenue. As the CBG share price plunged almost to nothingness, management sat down with its lenders to seek covenant relief on its $2.4 billion in mostly acquisition-related debt. And it has won at least some temporary breathing room.

As Ellis knows about debt at first hand, so does it understand distress, and management has declared itself bullish on the opportunities in salvage. "Of course," colleague Ian McCulley notes, "such a surge in distressed opportunities would benefit not only the investment division, which has $2 billion in fallow capital, but also the sales brokers. Sales might benefit from a slew of impending distressed sales as overleveraged owners are forced to dispose of real estate, and leasing activity might improve as companies begin to regain more confidence about the future. It's also a business that is relatively capital un-intensive—a good thing during our imagined future inflation—and should generate substantial cash flow that, come the turn, could be used to pay down debt. Even in the March quarter, one of the worst in living memory for real estate dealing, Ellis managed to generate positive operating income, and management has completed three-quarters of a major cost-cutting drive. All in all, as an option on recovery in real estate sales and leasing activity, if not on real estate prices, CB Richard Ellis offers fantastic leverage—with all the associated thrills and chills."

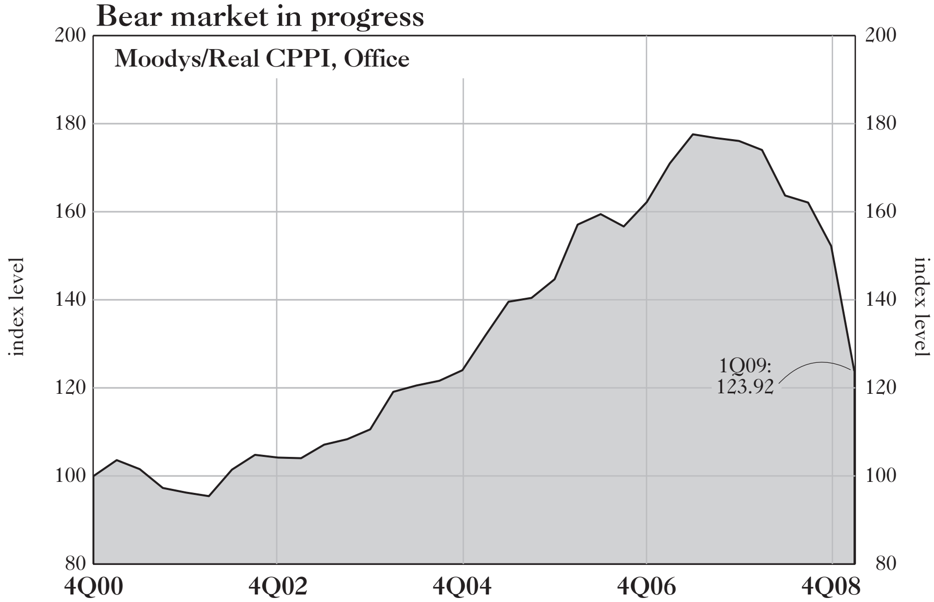
Brookfield Properties, our next candidate, is a company with a set of vital signs you'd swear were typographical errors. Take the average rent on its office buildings, which include the World Financial Center, 245 Park Ave. and 300 Madison Ave., all in New York, as well as properties in Boston, Washington, D.C., Houston, Los Angeles, Denver, Minneapolis, Toronto, Calgary and Vancouver. Its average "in-place" rent is just $22.69 a square foot, well below the $29 per-square-foot av-

Double ugly



source: The Bloomberg

Bear market in progress



source: The Bloomberg

erage market rent in those cities. New Yorkers, who during the bubble kept hearing about triple-digit leases being inked in the very "A"-quality kind of space in which Brookfield specializes, will wonder what pulls down the companywide average. They should be a little less provincial, in our opinion. In Houston, in-place rents are $12.72 a square foot, in Los Angeles, $19.95.

Another thing: Though the U.S. office vacancy rate climbed to 14.7% in the first quarter, just 5.7% of Brookfield's space was empty. So, in the first quarter, BPO managed the feat that has eluded so many other public real estate companies: It earned no less in funds from operations in 2009 than it had in the corresponding 2008 period.

"All real estate is not the same," Flatt reminds McCulley. "When I talk about real estate, what we buy and what we own today, [it] largely is high-quality, long-leased office buildings in great markets which have a chance of long-term growth in rents over the next 50 years, because they are good places to be and people want to occupy space in them. You look at the portfolio and the cities that we are in and they are all money-center places."

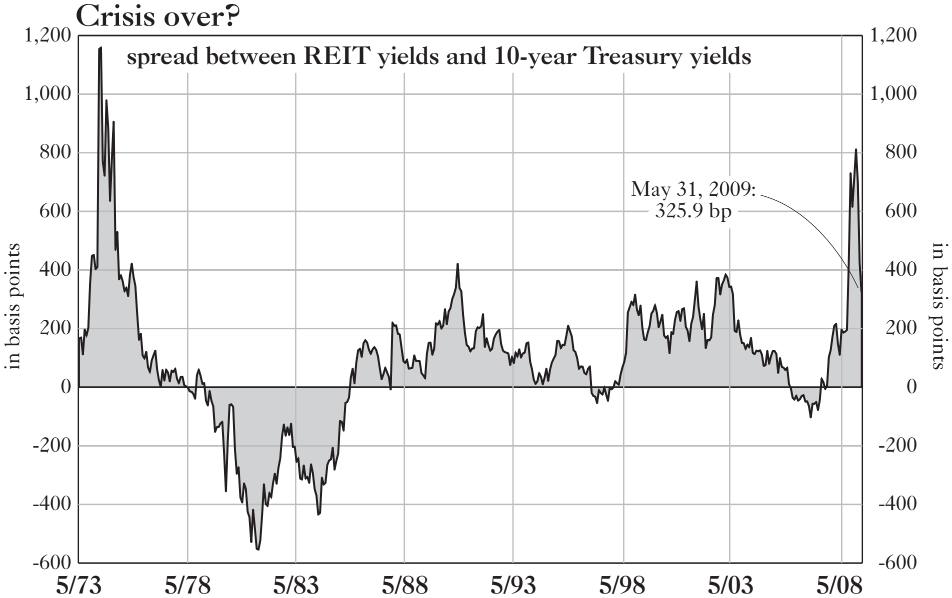
All to the good, but Brookfield Properties does business on the same troubled planet as everybody else. The company's biggest tenant is Merrill Lynch, lessee of 4.9 million square feet in the World Financial Center in lower Manhattan. The lease expires in 2013, some years following the recent expiration (as an independent company) of the tenant. "The current ward of Ken Lewis and Tim Geithner represents 7.7% of BPO's total square footage," McCulley notes, "and about 10% of revenues. As Merrill has been moving people to the new Bank of America building on Sixth Avenue and 42nd Street, Brookfield confronts the disagreeable necessity of marketing a big space in a down market. And Merrill is currently paying about $35 a square foot in net rent, above the $30 market rent. However—and with Brookfield Property there is usually a redeeming 'however'—the debt on the two Merrill-occupied buildings is self-amortizing and will be gone by 2013, and in the next four years, Brookfield ought to be able to find replacement tenants. Continued delays on the World Trade Center site, pushing the completion (if they even get started) of the planned additional office towers well past 2013, will also make it easier to lease space across the street."

A look at the balance sheet of Brookfield Properties shows $19.4 billion in assets, of which $14.8 billion is bricks and mortar, $1.2 billion is property in development, $1.2 billion is home-building lots and inventory and $221 million is cash. The assets are financed by $11.6 billion in debt (of which 93% is nonrecourse), $1.5 billion in subordinated capital securities, $348 million in preferred equity and $3.33 billion in common equity. The totals are overstated because the U.S. Office Fund, of which BPO owns just 45%, is consolidated on the BPO balance sheet.

As we do the numbers, the market is valuing BPO at a discount to book value, stated and hypothetical alike. Cash net operating income from directly owned property in the first quarter was roughly $170 million; times four equals $680 million. (The home-building segment, which broke even, is a non-factor in the calculation.) Assume a 7.5% cap rate. At the projected level of cash net operating income and at the assumed cap rate, BPO's directly owned property would be worth nearly $2 billion more than its current book value of $7.1 billion. After taking into account property-level minority interests, the mark-to-market value could be $4 or $5 higher than stated book value of $8.65 a share. For evidence in support of the notion that book is understated, consider the refinancing of Petro-Canada Centre, announced Tuesday afternoon, which allowed BPO to pull $70 million in equity out of the property. "Given that the shares are trading at below $8," McCulley observes, "the market is discounting the property at an even higher cap rate. Maybe the market is worried about Merrill Lynch—or about the U.S. Office Fund."

The Office Fund, a portfolio of 58 buildings with 28 million square feet of leasable space (including, in New York, the Grace Building and One New York Plaza) is, as noted, 45%-owned by BPO. In real estate circles, the fund is better known as "the Trizec portfolio," Trizec Properties Inc. being the seller, in 2006, to BPO, Blackstone and other third-party investors. Though the fund is leveraged, the debt is recourse only to the fund's properties, not to BPO. Performing the same kind of calculation as described above (with cash net operating income and an assumed cap rate), one finds that the value of the Office Fund portfolio is perilously close to the amount of debt it carries. "So while on the books it is held at a loan-to-value ratio of 78%," McCulley relates, "in real life, it might be closer to 100%. Then, again, according to Brookfield, there are contractual increases in net cash operating income coming down the pike, which would serve to enhance value even at higher assumed cap rates. As for the debt, it doesn't fall due until October 2011, and Flatt, in an e-mail to me, writes

Crisis over?



source: The Bloomberg

that if 'some equity will be required to effect this [refinancing]. . . , Brookfield and its partners will contribute should it be necessary.' But what if worse did come to worse and the value of the fund's assets were written down to zero? BPO's book value would drop to $6.51 a share from $8.65 a share. And that book would be understated by perhaps $4 or $5 a share, if you consider the previously mentioned gain on the rest of the Brookfield Properties' assets."

For perspective—and for the record—BPO traded at close to five times book in the not-so-long-ago boom.

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Goodnight, sweet Supermodel

"Credit is what we are bullish on—cast-off residential mortgage-backed securities, senior bank loans, convertible bonds and corporate debentures, high-rated and middling," led off the page-one story in the December 12 issue of *Grant's*. "And it's credit that fills the new *Grant's* model portfolio. Expectantly, we call it our Supermodel Portfolio. May it deliver superior returns for 2009 and beyond."

Pretty fair returns the Supermodel Portfolio has, in fact, delivered: Up 21.7% through June 23, compared to a loss of 17.4% on the corresponding control group of long-dated, "super-safe" Treasurys. But as fast as the profits have come, so has the opportunity receded. In early December, credit was friendless while commerce stopped cold. No yield was too low or duration too long for the Treasury bulls. Now it's the obligations of the U.S. government that people are running away from. So we'll pay the theoretical taxes on our conceptual winnings. Secretary Geithner can do what he likes with our imaginary check.

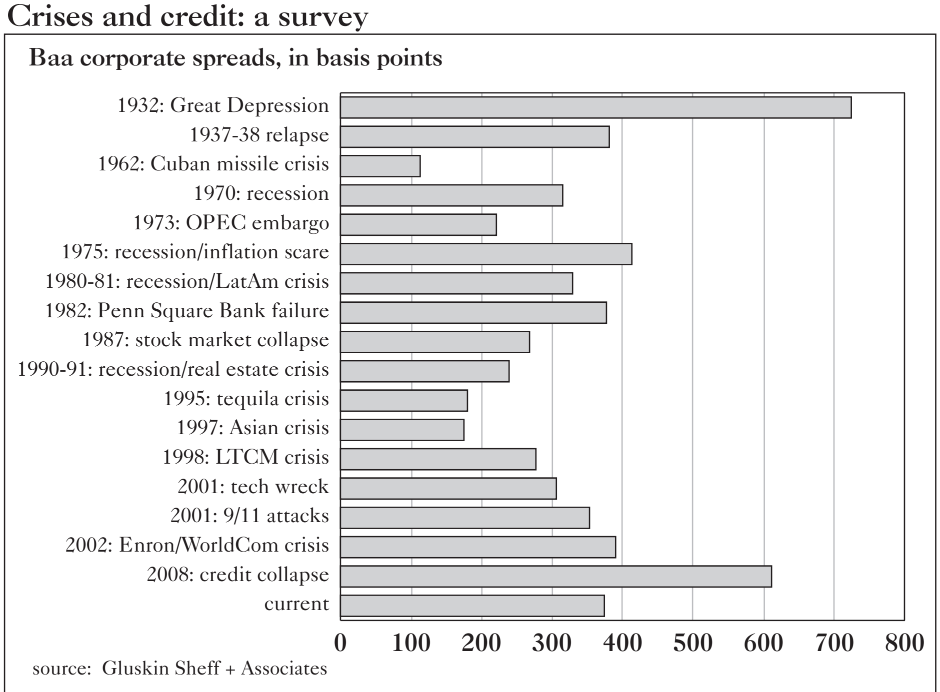
What turned an investment into a trade was, in good part, the snap reversal of investment sentiment. When our Supermodel first emerged from her dressing room, the 30-year Treasury passed for the ultimate in safety, soundness and certainty. Its yield was 3%, on the way to 2.52% (at which point it arrived on December 18, just six days after the cover date on the issue of *Grant's* that roundly disparaged "return-free risk"). What could be better than a default-proof long bond appreciating by 50 basis points a week?

Certainly not the credit instruments to which we had taken a shine. Investment-grade corporates were in bad enough odor—the spread between the Moody's Baa index and 10-year Treasurys was 616 basis points, the widest in decades. Speculative-grade claims were candidates for burial at some Superfund site. "Rarely, if ever, has junk been junkier," we noted about the high-yield market, "to judge by the ratings mix of the bond crop or the likely sky-high prospective default rates. Then, again, we believe, never have yields to maturity been so high—22% on the Merrill Lynch Master II Index." Senior loans to leveraged businesses ("leveraged loans," they're called), supposedly armored against the kind of default risk and volatility that come with the territory in junk bonds and preferred, had delivered a total return of minus 27% for the first 11 months of the year, while the average closed-end leveraged loan fund traded at a 17.2% discount to net asset value. Convertible bonds were priced for a triple disaster in equities, credit and optionality. As for residential mortgage-backed securities, a representative index—the ABX 07-2 penultimate AAA—changed hands at 33.6 cents on the dollar. Professional investors (they know who they are) had loved it at par.

As we go to press, the story line is inverted. Long bonds yield 4.36%, junk bonds 13.6%. That 616 basis-point spread between Baa corporates and 10-year governments has tightened to 361 basis points. "Convertible bonds are back in style with investors. . . ," to quote from *The Wall Street Journal* of June 3, while leveraged loans have left their previously desolated fans bedazzled. Through June 22, according to Standard & Poor's LCD, the market has returned 31.4% this year. Not quite every department of credit has participated in the run-up. Commercial real estate mortgages are still stamped "toxic," while the aforementioned ABX 07-2 index has sunk to 25.6. We continue to troll for opportunities in RMBS. The CMBS market, too, will eventually serve up bargains, though we believe it is early, yet, to go looking for them.

For the record, the Supermodel Portfolio's standout performer was the leveraged-loan entry, the Nuveen Floating Rate Income Fund (JFR), up 31.8% in 10 weeks (we sold it on February 20 after a deep discount to NAV turned into a small premium). Close behind, at 30%, is one of our two RMBS allocations, the GSAA Class AF-3. Our junk-bond fund was up by 21.2%, our convertible fund by 15.4% (a five percentage-point back-end load would, however, take a bite out of that gain; therefore, let that gain be 10%). Bringing up the rear was our second

Crises and credit: a survey



RMBS pick, the Popular 2007-A, Class A-3, up by 3.1%. It should have done better, and probably will.

"Popular," colleague Dan Gertner relates, "is a subprime deal consummated in one of the worst years for subprime deals, 2007. Despite that lineage, the structure continues to perform admirably compared to its peers. Overcollateralization on the triple-A stack continues to build. It was 32.1% at last count, up from 25.9% originally. Subordinate tranches remain intact down to the Baa3/BBB-minus-rated M-8 tranche, while delinquencies of 60 days or more constitute 'only' 30.4% of the total. The comparable ABX 07-2 index has not been so lucky, with credit enhancement amounting to just 25.4%, while losses have eaten away at a number of subordinated tranches. Delinquencies have reached 45%."

A little further on in this issue, we speculate on how America's newfound reluctance to lend and borrow may, or may not, stunt the long-awaited recovery. It's a worthy speculation, though we wonder if the problem is quite what it seems. To start with, as you will read, overall debt isn't shrinking but growing. For another, credit is knitting. Junk-bond issuance in the United States last month reached $23.2 billion, the highest since October 2007, reports Thomson Financial. On the other side of the Atlantic, according to a June 19 dispatch from *The Wall Street Journal Europe*, "Inflows of new money into credit funds have exceeded outflows by the 'greatest ever margin' in the past three months, according to new research, demonstrating investors' eagerness for exposure to new corporate and bank bonds." Some time ago, George Soros popularized the three-dollar word "reflexivity" to evoke the power of market action to change economic reality. Surely, there is something to the idea. In 1991-92, it was the lift-off in stock and bond prices (the starting pistol popped as allied troops poured over the berms and into Kuwait to begin the first Gulf war) that helped to close the books on the junk-bond and commercial real-estate troubles of 1989-90. Maybe this year's rally in speculative-grade credit will make its own contribution to economic convalescence.

Credit the government's over-the-top reflation campaign for helping to close the panic-induced gulf between Treasury obligations and everything else. One of these days, however, the government will bear the blame for lifting the yields on all fixed-income securities as a benign reflation gives way to a malignant inflation. When that red-letter day will come, we don't know, but neither does anyone else.

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Low yield or high?
(data as of June 23, 2009)

Treasury portfolio

security	current price	original value	current value	change from cost
4 1/2s of May 2038	$102.20	$2,000,000	$1,594,588	-20.27%
4 3/8s of February 2038	99.91	2,000,000	1,597,302	-20.13
5s of May 2037	110.11	2,000,000	1,625,606	-18.72
4 3/4s of February 2037	106.13	2,000,000	1,629,559	-18.52
4 1/2s of February 2036	102.03	2,000,000	1,634,543	-18.27
Cash*		0	179,501	
Total		$10,000,000	$8,261,098	-17.39%

***Grant's* Supermodel Credit Portfolio**

iShares iBoxx $ High Yield [HYG]	$77.25	$ 500,000	$ 605,882	21.18%
Calamos Convert. Fund, Cl. B [CALBX]	18.71	2,500,000	2,885,564	15.42
GSAA 2005-12, Class AF-3	65.00	1,250,000	1,625,000	30.00
Popular 2007-A, Class A-3	33.00	1,250,000	1,289,063	3.13
MetWest Low Duration [MWLDX]	7.26	2,000,000	2,050,847	2.54
Cash*	___	0	3,716,654	
Total		$10,000,000	$12,173,011	21.73%

*cash earns 1%
**includes original investments in LQD and JFR
sources: The Bloomberg, *Grant's* staff calculations

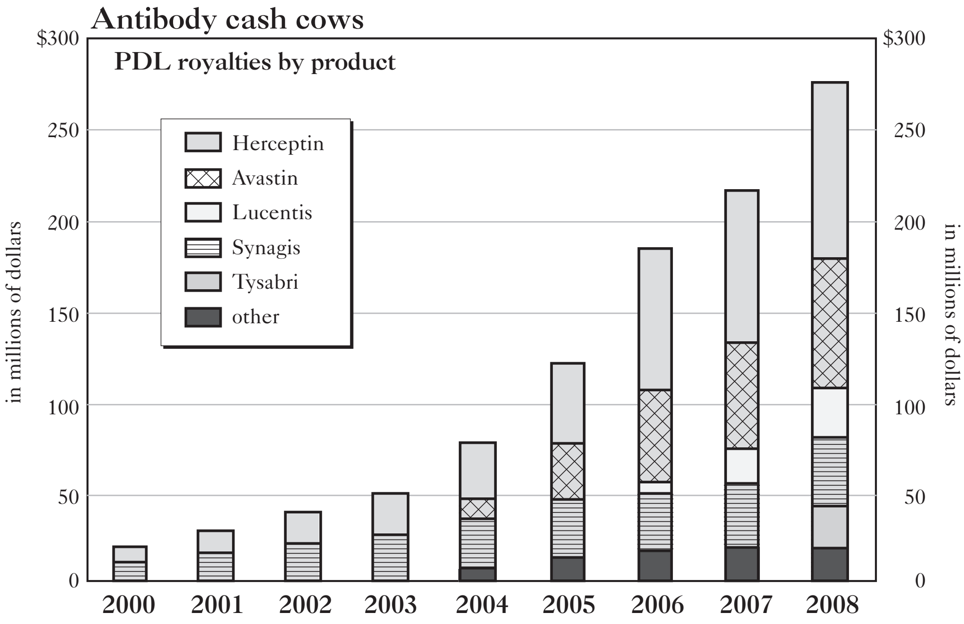
High-yield equity

(July 24, 2009) In the long-ago era preceding the great credit cascade, a hedge fund went courting a biotech company. Said the fund to the management: "Do something for the shareholders, or else." Management resisted, then succumbed. In August 2007, when the front office said "uncle," the target's market cap was $2.8 billion. Not quite two years later, the remnants of the company have a combined market cap of $1.15 billion. Dividends paid along the way raise that value to $1.7 billion, for an overall loss of $1.1 billion from the moment the drive for shareholder value got properly under way. Long live shareholder value.

Now unfolding is a bullish analysis on PDL BioPharma (PDLI on the Nasdaq), one of the two successors of the company that came under the fierce gaze of Daniel Loeb and Third Point LLC. PDLI, as we will henceforth call it, collects royalty checks for a living. The royalties spring from seven patents (collectively known as Queen et al.) that expire in 2013 and 2014. By the time the patents go away, we contend, the value of the payments earned from royalties will far exceed today's share price.

Advocates of the efficient market hypothesis will be rolling their eyes by now. What can explain the presence of such unharvested value? The very technique of the corporate spin-off can, to start with. Whereas, pre-Third Point, there was one company, now there are two: Facet Biotech Corp. (FACT, also on the Nasdaq) and PDLI. Transactions like these create selling pressure, dislocations and change of analytical focus. From confusion comes opportunity.

Third Point is long gone—it announced liquidation of its stake in November 2007—but to listen to PDLI management, PDLI is, in fact, all for



source: PDL BioPharma

the stockholders. "Our main focus," CEO John McLaughlin said on the fourth-quarter conference call, "is to enhance shareholder return. To that end, we have been working with our financial advisors and our board of directors to determine the best means of maximizing value for our shareholders. Our board has approved the payment of a semiannual dividend of $0.50. . . . Second, we are exploring means of monetizing our royalties so that we can bring future cash flow forward in time and pay to our stockholders sooner. As you'll recall, this effort was terminated in November 2008, due to the deteriorating conditions in the financial markets. We are ascertaining whether conditions warrant restarting those efforts, and we look forward to discussing our progress with you in future calls."

PDLI is not your everyday operating company. For one thing, its lifespan is no longer than the remaining life of its patents; like a gold mine, it's a wasting asset. Also atypically, the company has a full-time head count of just six, and just to save the shareholders a few dollars, management last year moved the office to Nevada from California. And—and—in the past four months, the not-so-numerous insiders have bought 13,000 shares in the open market without selling one.

PDLI first saw the light of day in 1986 as Protein Design Labs, "a biopharmaceutical company focused on discovering, developing and commercializing innovative therapies for severe or life-threatening illnesses." The seven aforementioned patents, which were issued between 1996 and 2006, cover the humanization of antibodies (of which more in a moment). PDLI licenses the patents to biotech and pharmaceutical companies in exchange for royalties.

About antibodies: "They are proteins," relates colleague Dan Gertner, "found in the blood and bodily fluids that protect us from foreign invaders (i.e., bacteria and viruses). When a bacterium invades our body, antibodies are produced by plasma cells to kill the intruder. Specific antibodies can be made to target antigens on specific cells, including cancer cells. To create antibodies that target antigens on cancer cells in humans, tumor cells are injected into mice. The mice produce anti-tumor antibodies, which are extracted. PDLI's technology is the process whereby the mouse-produced antibodies are 'humanized'—to be acceptable by humans."

Nine humanized antibody products are paying royalties to PDLI today. Eight are approved by the FDA and by regulatory agencies outside the United States. One of these products is Avastin, which treats metastatic cancer of the colon, rectum, lungs and breasts. Avastin, which is sold by Genentech, accounted for 22% of PDLI's first-quarter revenues. Its sales are budgeted to grow by 29% this year.

Synagis, which prevents infectious diseases, is another big revenue generator for PDLI, although the payer of the royalties on that product has unilaterally decided it has paid enough. MedImmune, which makes Synagis and has been paying royalties for the privilege for 10 years, sued PDLI in December. "They've been paying, as you observe, for over 10 years, about $250 million," McLaughlin remarked on the conference call. "It's a little interesting when a licensee wakes up 10 years later and goes, 'Gee, I don't think I infringe anymore,' or, 'I don't think your patents are good anymore.'" Such appears to be the biggest risk on the horizon for PDLI.

Gertner, let the record show, is an owner of the stock. He built a valuation model, as follows:

"The major inputs are royalties/license agreement revenues, general and administrative expenses, interest expense, taxes and dividends.

"Royalties and license-agreement revenues have been growing rapidly and consistently in recent years (30.8% in 2008 and 36.6% annually between 2004 and 2008). This growth rate is the main variable that drives PDLI's worth.

"General and administrative expenses, excluding depreciation, were $3.8 million in the first quarter. On the first-quarter call, the company expected G&A expenses of $12 million to $15 million. To be conservative, I annualized the first-quarter numbers and inflated them by 5% a year. In reality, I would expect this expense to decline as patent expiration approaches.

"Interest expense is incurred from a pair of $250 million convertible bond issues, the 2s of 2012 and the 2.75s of 2023. The 2.75s have a put right at par on Aug. 16, 2010. Annual interest expense for the two issues is $11.9 million. In each case, the conversion price is higher than today's share price (i.e., $8.08 for the 2.75s and $11.22 for the 2s). I ran expected returns based on the 2.75s being redeemed in 2010 and converting at the current conversion ratio. To be conservative, I assumed no earned interest on PDLI's cash balance, which footed to $193 million on March 31.

"The federal tax rate is 35%. Nevada has no income tax. At the end of 2008, PDLI had $219 million in net operating losses and expected to use $173 million of them in 2009, reducing taxes by $61 million. I taxed the company at 35% after 2009, because there is some doubt whether or not it will be able to use the remaining NOLs in future years.

"I paid dividends with two goals in mind: to build up enough cash to pay down the two convertibles as they come due and to return cash to the shareholders in a timely manner. Actually, the timing of the dividends has a minimal effect on the annualized return.

"Of the five inputs—revenues, G&A expenses, interest expense/convertible conversion, taxes and dividends—revenue growth and convertible conversion (or repayment) drive the returns for investors. On the call, management forecast approximately 10% revenue growth for 2009. This is much less than the annual growth rate of 30% to 37% registered in the past few years. The reason it's so low is that management is not counting on anything from MedImmune's Synagis. 'While MedImmune continues to pay us royalties . . . [w]e remain confident in our legal position that Synagis infringes on our Queen et al. patents and we are owed royalties on those sales,' CFO Cris Larson told dialers-in on the call, and 'we have chosen to be conservative with regard to our financial guidance.'"

Gertner has come up with a number of different return scenarios, depending, for example, on when the convertible bonds are converted. If immediately—and if revenues grow by only 10% until the patents expire in 2014—an investor today could expect to earn 6% a year. If, however, revenues grow by 30% a year, an investor could earn 23% a year.

"Then, again," Gertner goes on, "there are potential catalysts for growth rates to accelerate beyond the historically observed 30%. Avastin, for instance, is in more than 10 Phase III trials. Other therapies on which PDLI would earn royalty income are also in advanced trials. The source of another possible hidden asset is that humanized antibodies are made in batches, stored for up to two years and then sold as needed. Larson told me that drug companies produce an antibody over about a six-month period and then shut down production, clean the facilities and restart to begin making another antibody. The good news for PDLI is that any antibodies made prior to patent expiration require payments to PDLI no matter when they are sold. It follows that PDLI's revenues may continue into 2016 and not, after all, come to an abrupt end in 2014.

"From my simple analysis," Gertner concludes, "the downside on PDLI is a pretty attractive high single-digit return over the next five years (that is, if MedImmune's lawsuit is successful). If growth continues in the next five years as it has in the past five, investors can expect close to 30% annual returns."

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Green light for recovery

(September 4, 2009) According to every known publicly disseminated forecast but one, no near-boom will follow this near-depression. The exception to the predictive consensus points to the strongest snapback since the slump of 1981-82, a recovery with more than twice the zip of those stuttering rebounds that followed the half-hearted downturns of 1990-91 and 2001 (each, coincidentally, just eight months long, hardly worth the bother). Following is an investigation into the merits and implications of this most contrary opinion.

Value investors know that the economic future is unfathomable; not least are its mysteries withheld from economists. One might as well chart the S&P 500 or present the SEC with irrefutable evidence of the Madoff fraud as to hazard a guess on the starting point or strength of the next cyclical upturn. So contends the tribe of Graham and Dodd.

And there is wisdom in that line of thinking. However, there is also wisdom in identifying the precious value of a well-founded idea set in opposition to a hardened consensus of belief. Which is, we think, what we have in the prediction that the recovery will shock by its strength and that government bond bulls and the Federal Reserve are on the wrong macroeconomic scent.

The authors of the forecast, Anirvan Banerji and Lakshman Achuthan, are the principals of the Economic Cycle Research Institute in New York. Accomplished though they are, they would be eaten alive on Wall Street. Pick up the current edition of *U.S. Cyclical Outlook* and look for their names. You won't find them until you get to page 22, and in a type size so diffidently tiny as to lead you to conclude that the only reason they identify themselves on page 22 is because there is no page 23. The name broadcast at the top of page one is that of a dead man, the institute's founder, Geoffrey H. Moore, on whom the great Wesley C. Mitchell (1874-1948), author of "A History of the Greenbacks" and "Business Cycles: The Problem and Its Setting," among other seminal works, laid hands. Moore, who died in 2000 at the age of 86, developed the leading indices that form the intellectual underpinning of ECRI's forecasts.

"Leading Indexes Soar: No Double Dip In Sight," the headline over the August installment of the *Outlook* asserts with characteristic certitude. "Undaunted by widespread misgivings among analysts," Banerji and Achuthan continue, "ECRI's objective leading indexes have continued to shoot up in anticipation of a relatively robust revival in U.S. economic activity. Specifically, the U.S. Long Leading Index skyrocketed to an all-time high in July, while its growth rate ramped up to just under a 26-year high. By early August, growth in the Weekly Leading Index had also hit a 26-year high."

Following a report on the institute's various up-trending subindices—for financial and nonfinancial services, construction and manufacturing, each at a two- or three-year high—the text continues: "Faced with the undeniable reality that the economy's output has already begun to increase in the current quarter, more pessimistic forecasters who, until recently, were predicting an 'L-shaped recovery' whenever it arrived, have been forced to scrunch their 'L' into a 'W' and predict a 'double dip' back to negative growth in the fourth quarter. This is wishful thinking: the message from every one of our leading indexes is unambiguous—there is no double dip anywhere on the horizon."

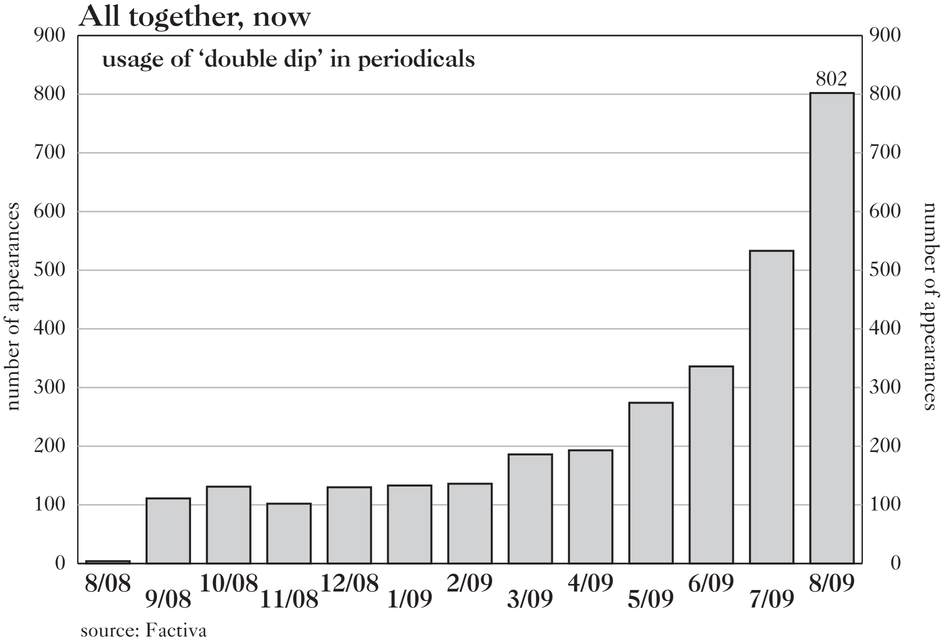
"Unambiguous" is one of those words that reveal a professional personality. For our part, almost everything about markets is ambiguous. There are few fixed and certain causal relationships, only tendencies. God intended it so, lest the rich become even richer and more overbearing. ECRI, in contrast, takes the view that cycles in market economies proceed in much the same fashion at all times and in all places. You can, in fact, bank on certain sequences of cyclical events, sequences anticipated in the leading indicators that Moore devised under the guiding influence of Mitchell and Arthur Burns (Richard Nixon's Fed chairman, the scholar-who-went-wrong). ECRI's Long Leading Index, which points to a Reagan-strength GDP lift-off, was developed by Moore in the 1980s, based on work performed by himself and his mentors 50 years previously.

"In the 1930s," Banerji relates, "when Mitchell had already put in more than a quarter century of research in his career, the then-Treasury Secretary, [Henry] Morgenthau, asked Mitchell to come up with early indicators of economic recovery. And you can imagine why he would want that. . . . Mitchell, joined by Burns at that time, came up with the very first what they called the 'leading indicators of cyclical recovery.' And just around the time they finished their work is when Moore started his career and joined them, in the late 1930s."

In 1950, Moore constructed his leading indicators of recession and recovery. No more for him than for Mitchell did U.S. cyclical history begin in 1946; in putting his theories to the empirical test, Moore began in the administration of U.S. Grant. "Having done that," Banerji goes on, "he moved on and created the original Index of Leading Economic Indicators, the Leading Inflation Index, the Future Inflation Gauge, leading inflation gauge for many countries, the first international application of the leading index, all of that. But then in the early 1990s, he went back and asked a very important question. He said, 'OK, we know that the first-ever index of leading indicators that I put together in 1950 worked in the 19th century, early 20th century. What have they done for us lately?' And that was the most interesting part. What he found was that the same indicators had worked just as well in the second half of the 20th century." Which brings us to the 21st.

Details of the composition of ECRI's indices are proprietary. There are about a dozen inputs, Banerji admits under close questioning. Stock prices are surely one of them—no secret there—as ECRI has been harping since January on the "strong link between cyclical upturns in the growth [rate] of the U.S. Long Leading Index . . . and stock price recoveries during business cycle recessions." In March, the month the market scraped bottom, ECRI went forth with the ta-

All together, now



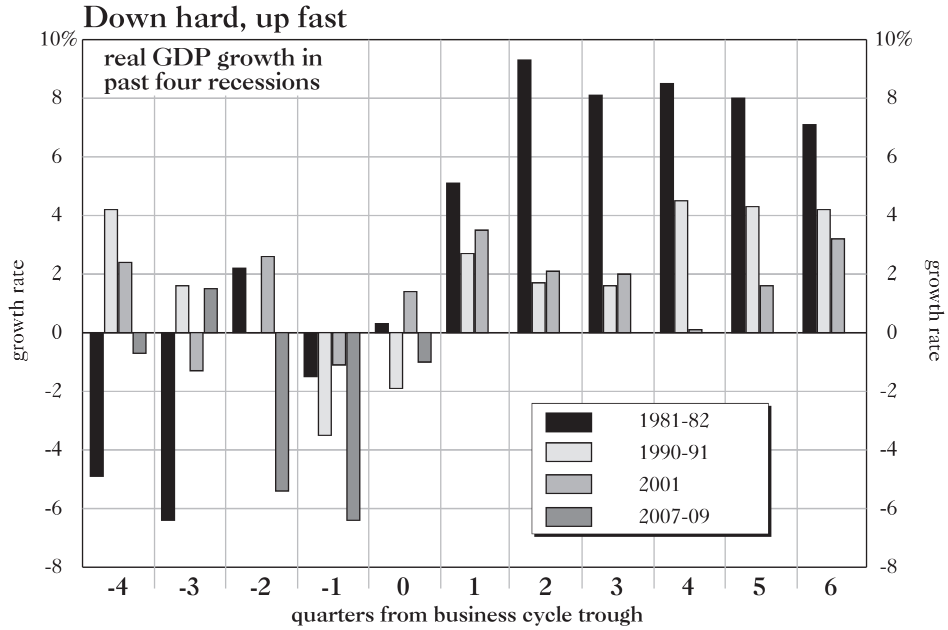
source: Factiva

ble-pounding historical observation that "once a growth rate cycle upturn has started, a business cycle upturn began in zero to four months." The implication could not have been clearer that a market rally, when it started, would be no sucker's affair but the real McCoy.

Banerji has a cautionary word on what the ECRI indicators don't predict. They make no representation, he says, that a strong recovery will deliver a strong and sustained expansion. On this score, he has his doubts, as do we. Then, again, why have an opinion? The expansion, as distinct from the recovery, might be a year down the road. If ECRI is right about the soon-to-bloom recovery, Wall Street and the Fed will be agog, and share prices, commodity prices and interest rates will be making furious adjustments for the unscripted strength.

"For a thought experiment about what a recovery much stronger than the previous two might look like," colleague Ian McCulley proposes, "let's consider the early 1980s. The 1981-82 recession, pre-Great Moderation and pre-Greenspan, was notable for its sheer violence. It began in July 1981, two months before long-dated Treasury yields put in their 20th-century top of nearly 15%. In the worst quarter of the slump, the first quarter of 1982, real GDP contracted at an annual rate of 6.4%, neatly matching the worst print in the current recession, which was registered in the first quarter of 2009. Likewise, the recovery was notable for its volatility to the upside. Starting in the first quarter of 1983, quarterly real GDP growth tripped along as follows: 5.1%, 9.3%, 8.1%, 8.5%, 8.0% and 7.1%. Not until the third quarter of 1984 did real GDP growth drop below 5%. In annual terms, inflation-adjusted GDP grew by 4.5% in 1983, 7.2% in 1984 and 4.1% in 1985."

This was a quarter-century ago, history as ancient to most professional investors as the Panic of 1873. Volatility seemed to go out of the GDP in the mid-1980s. And as the expansions became more muted, so did the downturns. "When economic growth is slow and calm," adjured the French economist Clement Juglar in 1889, "crises are less noticeable and very short; when it is rapid or feverish, violent and deep depressions upset all business for a time." Experience—very pleasant and profitable experience, at that—had taught a generation of investors and policy makers to prepare for the "slow and calm" outcome.



source: Bureau of Economic Analysis

Following the undernourished recession of 1990-91, quarterly GDP advanced at the annual rates of just 2.7%, 1.7% and 1.6%. Only in calendar 1992 did quarterly growth begin to top 4%. Recovery from the 2001 downturn was even slower-paced, measuring—by the quarter, at annual rates—just 1.4%, 3.5%, 2.1%, 2.0%, 0.1% and 1.6%. Worried about everyday low prices, which it was pleased to style "deflation," the Fed pushed the funds rate to 1%, a 40-year low, and held it there for a full 12 months, until June 2004.

As a rule, ECRI holds, the deeper the slump, the snappier the recovery, though Banerji observes that the service-intensive, government-managed contemporary economy is less prone than earlier models to drastic movements in either direction. "It's as if," he says, "you drop a ball and it has a very big drop, then it also shows a big bounce, but it's the bounciness of the ball that has been going down over the decades since World War II. In other words, sure—it's less bouncy, but a big drop in economic activity still is followed by a relatively large rebound. What these leading indexes are saying is *not* that following the worst recession since the Great Depression you will get the biggest rebound since the Great Depression, merely that, at least based on the evidence so far, it's going to be stronger than the last two recoveries. In that context," he says of the house forecast, "it is not that audacious."

Let us then call it highly unconventional. The Congressional Budget Office, fretting about a long-lingering gap between output and potential output on the order of 7%, forecasts real GDP growth of 2.8% in 2010 and 3.8% in 2011 (and—some out-year guesswork—4.5% in 2012 and 2013). At that, the CBO is a far sight more bullish than Wall Street. Economists polled by Bloomberg News predict 2.3% growth in 2010, with a low and high range of 0.5% and 4%. The Fed's forecast is implicit in its zero-percent funds rate and in its chairman's oft-repeated pledge not to tighten "for an extended period." Taking him at his word, speculators in the futures markets are assigning just a 4.1% chance of a rate increase at the December meeting of the Federal Open Market Committee, down from 28% a month ago. "If," as McCulley notes, "GDP growth does surprise significantly to the upside in the next several quarters, those Eurodollar futures will look very mispriced."

They look perfectly priced to a market preoccupied with its own regrets. The 21st-century investor is out of practice at dealing with adversity, the lucky dog. He or she listens with knocking knees to comparisons of our present troubles with those of distant days, though, as often as not, the comparisons are overdrawn.

Deflation is the Fed's bogeyman. It is, in fact, the Brad Pitt of bogeymen. Year-over-year, the CPI has fallen by 2.1%. Yet—for historical perspective—in the first year of the depression of 1920-21, it dropped by 10.8%. In the Great Depression of 1929-33, it fell by a cumulative 26%. Maybe it's a measure of the advance of civilization that a minor decline in prices calls forth an enormous gust of credit creation. Then, again, maybe it's a measure of financial hypochondria.

Having come to understand how hollow was the debt boom, the bear market's victims reproach themselves for missing the danger signals (all too obvious in retrospect) and for ever having listened to the establishment's paid bulls. Resolving not to be duped again, they have compiled a long list of reasons why the recovery will be subpar.

Thus, for instance, Americans have saved too little. Ergo, they will now save much more, a new secular drag on growth. China has stuffed itself with bank credit. When its banking system goes the way of all overleveraged banking systems, the bid will go out of the commodity markets (*Grant's*, July 10). The growing number of U.S. problem banks is another item on the worry list. Also, swine flu, the end of "cash-for-clunkers" (or, alternatively, the fact that the subsidy was ever conceived), the risk presented to 20th-century business models by the Internet, the destruction of wealth in the residential real estate bear market, the incomplete commercial real estate bear market, etc. Besides, the argument goes, the great work of de-leveraging has hardly begun. "It may well be," Bill O'Donnell, strategist at RBS Securities, was quoted as saying in the *Financial Times* last week, "that more [bond] investors are signing on [to] the 'sugar high' from [the] stimulus thesis and [are] worried about what crash lies beyond the boost from homeowner tax credits, cash-for-clunkers and other temporary/transitory props for the U.S. economy." In July, former Fed governor Laurence Meyer told a Bloomberg radio audience that the United States will not return to full employment for six years.

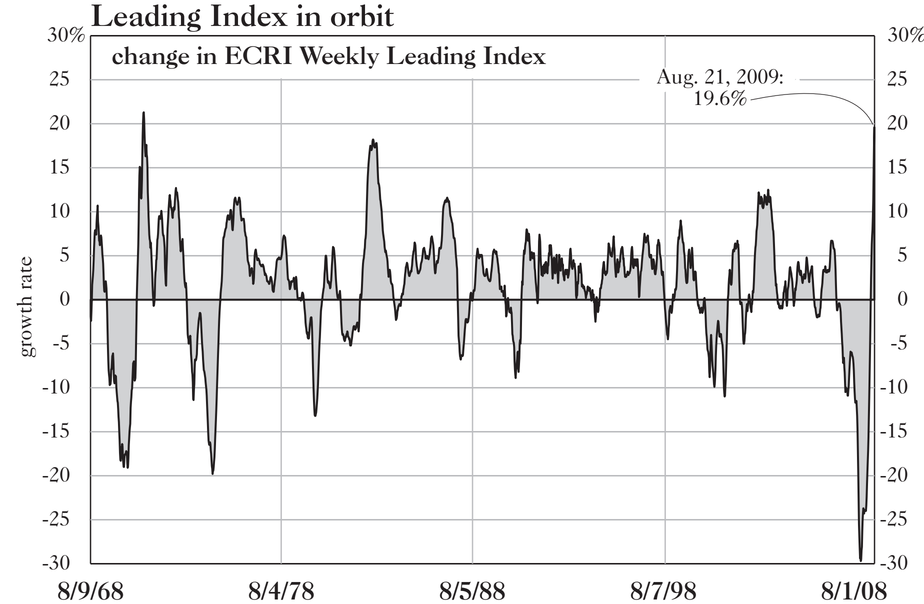
Maybe, too, in the back of the market's mind is the fear that this great recession is no mere cyclical disturbance but rather a ringing-down of the curtain on an era of relatively free enterprise and relatively light taxation. The immense federal money-printing project begs the question of what our central bankers and politicians will dream up the next time growth sputters. The combined federal fiscal and monetary response to the 1981-82 recession measured 3.8% of GDP. That is, the increase in the federal deficit combined with the growth in the Fed's balance sheet amounted to 3.8% of GDP at the cyclical peak. Readings for 1990-91 and 2001 were 2.8% and 7.2% of GDP, respectively; that for 2007-08 was on the order of 30% of GDP. Is 30% the new baseline? In a paper delivered at the central bankers' picnic at Jackson Hole, Wyo., last month, C.A.E. Goodhart of the London School of Economics pointed out that monetary authorities the world over have crossed a kind of Rubicon of intervention: "During this crisis," said Goodhart, "most central banks have been steadily driven from their comfort zone of only providing liquidity to a limited set of (core) banks by lending against top-quality assets for short periods, towards lending to a widening range of financial institutions against almost any grade collateral at ever longer maturities. The genie cannot be put back in the bottle."

Whether the genie, thereby sprung, is bullish or bearish for the GDP in the short run is a matter for guesswork. Possibly, it makes no difference. So, too, with the perils just enumerated; most may not bear at all on the timing and power of the next recovery. As to the future of capitalism, to name one such distant imponderable, it looks no darker today than it did in 1933, when the U.S. economy was blasting out of the Great Depression. "The error of optimism dies in the crisis, but in dying it gives birth to an error of pessimism," Banerji is fond of quoting the French economist A.C. Pigou. "This new error is born, not an infant, but a giant."

Only Banerji and Achuthan are privy to the ingredients of the secret sauce of the various indicators from which they derive their unhedged confidence. The rest of us, revering though we might the intellectual provenance of the Long Leading Index and its offshoots, are likely to require other sources of support before we go buying puts on money-market interest-rate futures and speculating in moderately valued steel stocks (see below). Geoffrey H. Moore's original 1950 leading indicator list comprises business failures, industrial stock prices, new durable goods orders, residential housing starts, commercial real estate starts, the average manufacturing workweek, new business incorporations and the wholesale price index for commodities. There was not so much as a nod to money supply or bank credit. Of that original list, as applied to 2009, five components have likely bottomed and are rising, two are still falling (business failures as proxied by bankruptcies and default rates, and commercial construction starts), while data for new-business formations are not available in real time.

Moore pioneered in leading indices, but he didn't patent them. The Conference Board compiles its own Leading Economic Index by which many swear, including such highly regarded forecasters as Paul Kasriel at the Northern Trust Co. The LEI's components include average weekly manufacturing hours, initial unemployment claims, manufacturers' new orders for consumer goods and materials, vendor performance, manufacturers' new orders for non-defense capital goods, new private-housing building permits, stock prices, M-2 money supply,

Leading Index in orbit



source: The Bloomberg

the shape of the yield curve and an index of consumer expectations. Though the LEI rose by 0.6% sequentially in July, its fourth straight monthly increase, the rate of climb has set off no such bullish sirens at the Conference Board as the Long Leading Index has done at ECRI.

So one must choose, though to listen to Banerji or Achuthan, there is no choice. Thus, Acuthan: "Our statistical methodology is different (new and improved), and more importantly the entire structure of the approach has evolved to where we have a large array of leading indexes for inflation, employment and growth, and—within growth—leading indexes for major sectors, like services, manufacturing and construction. Furthermore, for overall cycles in growth we use a sequence of Long Leading, Weekly Leading and Short Leading indexes to home in on upcoming turning points. All of this is to say that the forces driving the economic cycle are too complex to be forecast reliably by any one leading index. In a way, this makes sense, no?"

For ourselves, in this cycle, we'll line up with ECRI. A forecast so seemingly impossible, yet so eminently logical, must have some claim on the truth. We draw confidence from the wise Pigou. Fear colors decisions in the bust just as surely as faith did in the boom. It wasn't pure reason that led American manufacturers to cut inventories and their customers to slash purchases in June at the fastest rates since World War II (down, year-over-year, by 9.8% and 18%, respectively). The manufacturers were as shell-shocked as their customers—and as the central bankers. In one way or another, all fell victim to the boom-time error of optimism. Now, in atonement, they're committing the symmetrical error of pessimism. The money that our distinguished policy makers are printing and spending in such profusion will almost certainly fail to boost American enterprise in the long run. But it may stoke current-dollar GDP in the short run.

In the meantime, Mr. Market is doing his part. Going up, stocks are said to discount a recovery, but their rising constitutes its own healing balm. "Companies have taken advantage of a lately buoyant stock market to sell equity in order to delever," McCulley notes. "Through July, U.S. companies had sold $130 billion of common equity, up 38% year-over-year. Secondary offerings were up 50% year-over-year. Even IPOs, which remain moribund with only $4.3 billion so far in 2009, compared to $11 billion in the full 12 months of 2008 (and $91 billion in 2007), have lately shown signs of life. REITs have led the equitization parade, selling more than $15 billion of shares to investors this year."

The rallies in tradable bank debt and junk bonds have likewise advanced the cause of a strong recovery. Cemex, for instance, the Mexican-domiciled global cement maker, was a member of that nonexclusive corporate club that overborrowed in order to overexpand. A credit crisis overlaid on a slowdown in construction put it at the mercy of its creditors, and a failed bond auction in March pitched it into crisis. But Cemex was able last month to refinance $15 billion of bank debt and to extend its repayment obligations as far forward as 2014. Since the March lows, the stock has rallied to $12 from $4.

To reiterate, ECRI is forecasting and we are guessing. The future is unfathomable. Still, we are bullish on the GDP.

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Under the cloak of respectability

(September 18, 2009) Wall Street was away from its desk when the Securities and Exchange Commission and General Electric Co. came to terms on August 4. To settle charges of book-cooking and earnings manipulation, Thomas A. Edison's corporate brainchild neither admitted nor denied guilt, but paid a $50 million fine and vowed never again to commit the sins to which it had not confessed. A sell-side analyst obliged a reporter at *The Wall Street Journal* with the comment that, really, the revelations didn't matter. While the accounting practices at issue might have been "frustrating," he claimed, "they were never material."

They were and are material—and entertaining, too, in a shabby kind of way—we are about to contend on this, the first anniversary of the great troubles of 2008. The crimes to which GE allegedly stooped reveal a management besotted with its own share price. More broadly, the SEC complaint invites reconsideration of an era in which powerful people did their all to smooth out the bumps. At GE, it was the untidy ebb and flow of revenue that management sought to pretty up, even to the point of employing, as the SEC puts it, "devices, schemes or artifices to defraud." At the macro level, it was the ups and downs of the economy itself that the Federal Open Market Committee worked to flatten. The "Great Moderation" is what economists call the 20 or so years in which these efforts seemed to bear fruit. It was a golden time of shallow recessions, measured expansions and high "visibility." As to the visibility, the case of the "*Securities and Exchange Commission* v. *General Electric Company*" is a reminder of how little we ever really know.

The eye that the stock market turns to history is dim enough. The one it uses to see, but yet not to see, the transgressions of the great and good is—actually—legally blind, at least during the bull portion of the cycle. So it was that, "[b]eginning in 1995 and continuing through the filing of form 10-K for the period ended December 31, 2004, GE met or exceeded final consensus analyst earnings per share expectations every quarter," as the SEC describes it. In a better world, investors would collectively face federal charges for being so gullible as to fall for such a thing.

It's a fine irony that GE, the bluest-blooded of American blue chips, triple-A-rated from 1956 until 2009, the last of the original Dow stocks still in the Dow, wound up funding itself through such public assistance programs as the Commercial Paper Funding Facility (CPFF) and the Temporary Liquidity Guarantee Program (TLGP). It's an even finer irony that the government was succoring GE even as it was investigating it. "[W]e believe," comment the equity analysts at J.P. Morgan in a September 8 research report, "GE will go down as the least publicized 'too big to fail' story in the crisis."

The Morgan report, incidentally, takes a guardedly bullish line toward the stock, calling it "one of the last stocks for which a little good news can still go a long way." And the analysts, with C. Stephen Tusa Jr. in the lead, add that, "[i]n the look for non-consensus, catch-up stories, GE stands out as the last, in our view." Not disagreeing with this judgment, we hereby lift our own fatwa on GE (e.g., *Grant's*, Sept. 5, 2008), now quoted at 10.3 times trailing net income, half of the post-1990 average of 22 times, a fifth of the 51 times peak multiple at year-end 1999 and at a 40% discount to the valuations of its global peers. However, our interest in this investigation is not so much the share price as the remarkable story of the company that couldn't seem to stop watching it.

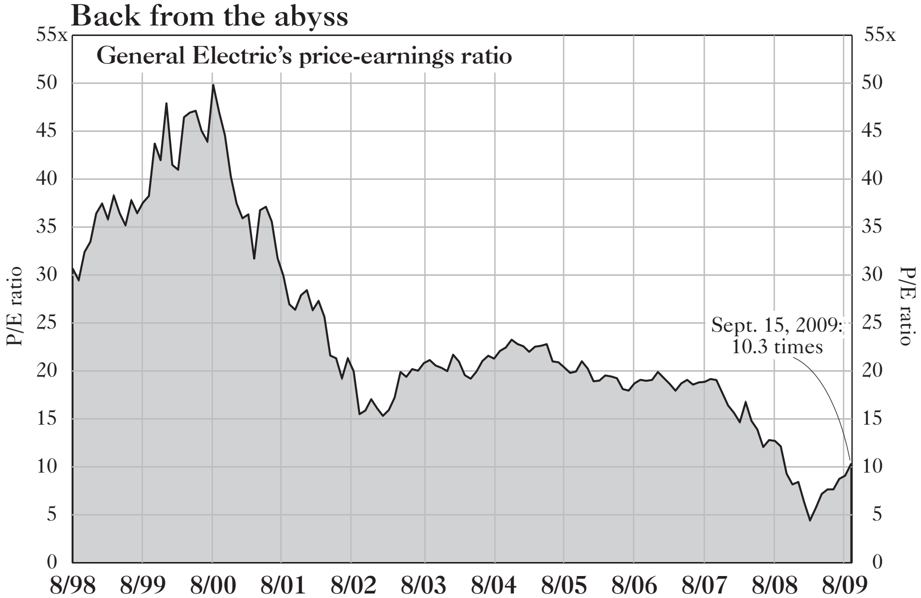
The infractions that the SEC complaint identifies allegedly occurred on the watch of CEO Jeff Immelt in 2002 and 2003. But Immelt's predecessor, Jack Welch, had run the company for the preceding 20 years until Sept. 6, 2001, and it might just be that Welch had something to do with the corporate culture that valued the price of GE common above the kingdom of heaven. In his unintentionally revealing memoir, "Jack: Straight from the Gut," published in 2001, Welch describes the rallying round of his lieutenants to the news that a $350 million hole had opened up in the balance sheet of GE's brokerage-house subsidiary, Kidder, Peabody. The news had hit on April 14, 1994, as the Street awaited the release of GE's first-quarter earnings. They would be a little light, though not for want of loyalty in the GE hierarchy.

"The response of our business leaders was typical of the GE culture," Welch relates. "Even though the books had closed on the quarter, many immediately offered to pitch in to cover the Kidder gap. Some said they could find an extra $10 million, $20 million and even $30 million from their businesses to offset the surprise. Though it was too late, their willingness to help was a dramatic contrast to the excuses I was hearing from the Kidder people." This was, to repeat, in 1994, after which the Six Sigma GE accounting department somehow was able to match or beat each quarterly earnings estimate through Dec. 31, 2004.

Be that as it may, Immelt was in command when the SEC's investigation turned up four kinds of accounting irregularities. One had to do with interest-rate hedges on commercial-paper borrowings, a second with another kind of interest-rate hedge and a third with the accounting for spare parts for commercial aircraft. The fourth seems closest to the everyday ruse of pressing one's thumb on the scale. It concerns the mistimed recognition of revenue from the sales of GE's locomotives. As the complaint says:

"In the fourth quarters of 2002 and 2003, GE improperly recorded revenue of $223 million and $158 million, respectively, for locomotives purportedly sold to financial institutions with the understanding that the financial institutions would resell the locomotives to GE's railroad customers in the first quarters of the subsequent fiscal years. The six transactions were not true sales and did not qualify for revenue recognition under GAAP. GE personnel at the business level orchestrated these transactions in order to improperly accelerate revenue recognition. A member of GE's corporate accounting group approved the accounting for these transactions despite learning that GE maintained significant obligations that (1) suggested that the risks of ownership for the locomotives had not passed and (2) should have precluded revenue recognition under GAAP."

Back from the abyss



source: The Bloomberg

To convey some size of the scope of this apparent fiction, the locomotive "bridge financing" transactions in the fourth quarter of 2002 accounted for 131 of the 191 engines ostensibly sold in that period. "Inclusion of these transactions significantly overstated the performance of the GE Transportation Systems," according to the complaint, "significantly overstated the performance of the GETS business in the fourth quarter of 2002, with GETS revenues and profits being overstated by 45.1% and 39.6%, respectively." And again in the waning months of 2003: "bridge-financed" locomotive sales represented 42.8% of the quarter's locomotive unit sales, overstating fourth-quarter revenues and earnings, according to the commission, by 22.6% and 16.7%, respectively.

Enron was crashing and burning in 2001, but not until 2003 did the import of that fraud seem to register either on GE or its Wall Street enablers. Thus, the complaint relates, "In December 2003, the [GE] business team informed the senior accountant that the financial intermediaries had requested GE represent that the rail transactions had been disclosed to GE's outside auditor and accounted for in accordance with GAAP. When he asked why the financial intermediaries were seeking the representation, the senior accountant was told they were concerned about their risk of liability for helping influence another company's financial statements in the wake of a recently reported financial scandal. As in 2002, notwithstanding the above, GE's corporate accounting group permitted GE to recognize the revenue and income on year-end rail deals in the fourth quarter of 2003."

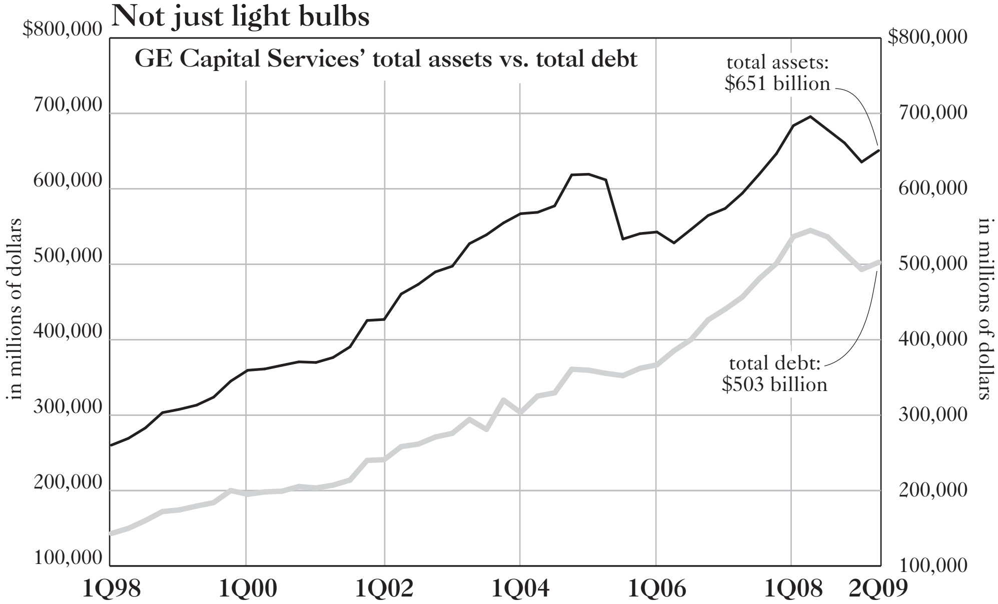
Nobody can say that GE was paralyzed by contrition. It disclosed the early-August settlement with the SEC in a press release asserting the corporate commitment "to the highest standards of accounting." A little awkwardly for a communiqué meant to affirm the company's fidelity to the letter of GAAP, there was, at the top of the release, the familiar GE logo set alongside the corporate motto, "Imagination at work." Just when GE decided to walk the accounting straight and narrow, the statement didn't say, though the zeal-of-a-new-convert tone of a letter to the editor of *The New York Times* that came shooting out of the Fairfield, Conn., headquarters a few days later suggests a relatively recent adaptation. Contrary to the insinuation of *Times* columnist Floyd Norris, management protested, there was nothing Enronesque about the locomotive transactions. ". . .GE locomotives were purchased and retained by our railroad customers," management pointed out. "GE prematurely recorded these sales based on intermediate sales to financial institutions—an error that has led to improved controls. But there were no returns and no fictitious revenues."

As for Welch, he, too, turned over a new leaf without acknowledging that there ever had been an old one. In a March interview with the *Financial Times*, the most famous disciple of shareholder value asserted that, "On the face of it, shareholder value is the dumbest idea in the world. Shareholder value is a result, not a strategy. . . . Your main constituencies are your employees, your customers and your products."

Welch's auditors were possibly too astonished by this remarkable volte-face to tax the corporate icon on the glaring omission from his short list of vital GE constituencies. This was in March—the panic was on—and GE owed its liquidity, if not its solvency, to the U.S. government. In his memoir, Welch berates himself for taking on faith the retrospectively implausible proposition that Joseph Jett's bond trades could legitimately generate almost a quarter of the earnings of the Kidder, Peabody fixed-income department—and that that department could legitimately account for more than 100% of Kidder's earnings. "When they [the bond people] spoke, the firm listened, and few questioned their success," recounted Welch.

By the same token, perhaps, neither Welch nor Immelt delved deeply enough into the sources of the monumentally unlikely success of the in-house leveraged financial institution. "So profitable and so fast-growing

Not just light bulbs



source: The Bloomberg

was GE Capital Services," observes colleague Ian McCulley, "that it eventually accounted for nearly half of consolidated GE profits and more than four-fifths of companywide assets. It was GECS' heavy reliance on short-term funding sources that nearly brought down the company last fall. Absent GECS, GE would be basking in praise for preserving profit margins, generating lots of cash and generally weathering the storm. Instead, management has Japanese real estate, Hungarian mortgages and U.S. restaurant financings to worry about."

Then, again, without GECS, GE would hardly be recognizable today. It might have been said in 1990 that Jack Welch's company was an industrial business with a finance subsidiary bolted on. By 2006, one could almost say that GE was a bank that happened to manufacture appliances, jet engines, locomotives and the rest. Certainly, the solvency of the industrial side was hostage to the funding of the financial side, although that was not the kind of observation that seemed germane during the Great Moderation.

To allay lingering fears about solvency and funding, GE in late July handed out a 63-page slide deck brimful with reassurances about its financial problem child. No capital raise was in the works, credit losses were in line with the numbers set out in the Fed's stress test and GECS would be well-positioned coming out of the recession, was the gist of the message. Kathryn Cassidy, vice president and treasurer of GECS, told listeners-in to a conference call that GE had won approval from the FDIC to issue long-dated commercial paper on its own hook—a hook now rated only slightly lower than triple-A. "Our remaining guaranteed commercial paper will roll off quickly over the next couple of months," Cassidy went on. "We have also made a lot of progress in our long-term funding, completing our total year 2009 plan and funding about $18 billion of long-term debt towards our plan for 2010. We've issued over $12 billion in non-guaranteed, long-term debt so far this year in a variety of currencies—dollars, euros and sterling. Last week, we raised almost $3 billion worth of euros in a five-year transaction at an equivalent spread of mid-swaps plus 190 basis points. We were pleased to see strong demand and a diversified investor base."

GECS is on a post-crisis, balance-sheet weight-loss plan, but the shrinkage will be gradual. Borrowings at June 30 footed to $503 billion, down not much from $515 billion at year-end 2008. There was $173 billion of short-term debt and $329 billion of long-term debt. Short-term loans featured $82 billion in bank deposits and only $50 billion in commercial paper. In that year of innocence, 2006, GECS had issued as much as $100 billion in CP, and $72 billion was outstanding as recently as December 31. The company would like you to know that it has stopped issuing into the Fed's CPFF, a step on the road back to capitalism.

This purportedly blue-chip paragon of financial strength, however, remains very much beholden to the taxpayers. At last report, GE had borrowed $69 billion through the TLGP, consisting of $21 billion of commercial paper and $48 billion in longer-term debt. "To compare," observes McCulley, "TLGP consists, in toto, of $320 billion, so GE has something like one-fifth to one-quarter of total issuance. And even though GE can access capital markets on its own at a price, it reopened one of its TLGP issues, the 2s of 2012, at the beginning of September to raise an additional $1 billion on top of the $650 million it borrowed in late July. And so far in 2009, it has sold far more guaranteed debt than not."

The Treasury doesn't rent out its gold-plated credit rating for nothing. Since the inception of the TLGP and CPFF programs last year, GE has paid $1.9 billion for the privilege of borrowing under the name of the United States of America. At that, GE must consider the trade a bargain, saving itself, as it did, interest expense on the order of $750 million to $1 billion, while foreclosing the possibility of a bankruptcy filing, a not remote risk during the credit upheaval.

Now that the crisis has passed, GE is extricating itself from the arms of its savior, as the latest 10-Q report disclosed with evident pride: "At the request of GE Capital, on July 21, 2009, the FDIC approved an application filed by GE Capital which positions it to exit the TLGP. As a result, GE Capital will no longer issue FDIC-guaranteed commercial paper with maturities of 31 to 270 days and will be able to issue non-guaranteed long-term debt with maturities of 18 months to three years. The FDIC and GE have also agreed to reduce GE's aggregate limit under the program, resulting in approximately $14 billion of remaining long-term debt capacity under the TLGP at July 21, 2009." The last of the TLGP borrowings won't roll off until 2012.

Some day, financial historians will try to make sense of it all: the mere existence of a $100 billion GE commercial paper program (the number today seems incredible); the ideal of "shareholder value" carried to the point of alleged institutionalized fraud; an industrial company recreating itself as a highly and precariously leveraged financial institution with nary a peep of protest from the stockholders; the close brush with insolvency of a company still bearing the imprimatur, triple-A. Finally, the historians of the future will scratch their heads to understand why Jack Welch and Alan Greenspan, icons of the late 20th century, put so much stock in an idealized "stability" that can only appear to exist in a dynamic world but that can never be present in fact. To these historians, we say, Good luck!

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Options on crude

(September 18, 2009) Oil is becoming harder to lift even as money is becoming easier to print (or, rather, to materialize while seated at a computer keyboard). Overlaying the first trend on the second, a speculative thinker can imagine a much higher oil price. Other speculative thinkers, focused, for example, on the collapse of the natural gas market, might imagine a much lower oil price. Let us say, however, that the bulls are right and the bears are wrong. How to prepare for that contingency?

We are about to suggest a smallish, development-stage Canadian energy company involved in the exploration, production and upgrading of bitumen from the Athabasca oil sands deposits in Alberta. Preceding even the identification of this speculation, however, is an overview of global oil production. Widows and orphans have no business dabbling in the likes of the company to be named, and they should cover their eyes before they encounter its ticker symbol.

As for the state of the oil business, demand is up and supply is stagnant. It is a notable set of circumstances in a time of (still) historically high prices. The other day, the International Energy Agency raised its forecast for worldwide demand in 2009 and 2010 by 0.5 million barrels a day (henceforth, mb/d), to 84.4 mb/d and 85.7 mb/d, respectively. Almost in the same breath, the agency disclosed that "August global oil supply was down 400 thousand barrels a day, to 84.9 mb/d, on lower non-OPEC output."

It's a cinch that some of that non-OPEC decline is attributable to the fast-fading Cantarell field, an immense complex of wells named for the Mexican fisherman who alerted Petroleos Mexicanos (Pemex) to an oil spot on the surface of the Bay of Campeche in 1971. The field that leaked the spot was discovered in 1976 and production began in 1979. In the argot of the IEA, Cantarell is a "super-giant" field, one of 58 in the world, of which 54 are currently producing. It is the third-largest offshore field by initial reserves, which totaled about 35 billion barrels, half of which are recoverable. As for yield, Cantarell recorded the second-highest annual production of all time at 2.1 mb/d in 2003, second only to the largest field by every measure, Saudi Arabia's Ghawar.

Created by a landslide resulting from a meteor strike, Cantarell is geologically unique. It is distinct, as well, in how relatively recent was its discovery (most super-giant fields began their productive lives a decade or two or three earlier). And because of its relatively late start, Cantarell has had the benefit of modern recovery and life-extension technologies. The story of Cantarell's life cycle directly bears on the prospects for the speculation we are about to analyze—and, indeed, for all out-of-the-money options on crude.

Cantarell had a gushing childhood, adolescence and early adulthood, producing a million barrels a day from 40 wells for 18 years. Sensing the onset of middle age, Pemex launched Proyecto Cantarell in 1996 to optimize production in the later stages of life. With the installation of artificial gas lifts on new wells, production began to increase. In 1999, it reached 1.4 mb/d.

"During my career at Schlumberger in the late 1990s," recalls colleague Dan Gertner, "I worked on a reservoir simulation for a field in Venezuela. Another group in my office was working on a reservoir simulation for Cantarell. Using a supercomputer, one of a handful in the country at the time, the Cantarell team modeled the effect of injecting nitrogen underground to increase pressure and production. The computer needed a week to think it over.

"The simulation." Gertner goes on, "was for the purpose of determining the best location for the projected nitrogen-injection wells. The drilling platform for the nitrogen wells was installed in 1999 and seven injection wells were drilled in 2000. The first nitrogen was injected in May 2000. The average production that month was 1.4 mb/d. Production increased steadily, reaching 2.2 mb/d in December 2003 and holding at 2.0 mb/d or more until September 2005. It seemed that Cantarell had a new lease on life.

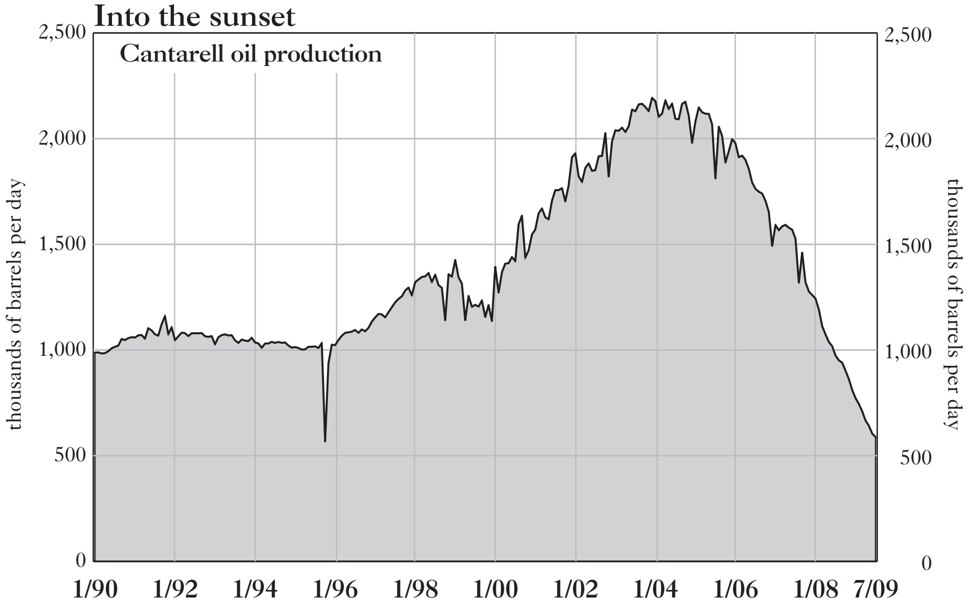
"But it was a mighty short lease, as production has declined at an alarming rate ever since. In July 2008, the field produced nearly 1.0 mb/d. One year later, it was down to 0.6 mb/d. The annual decline rate has been accelerating, from the teens in 2007 to the mid-20s in 2008 and now to the high 30s. Whether or not Cantarell will stabilize at 400,000 barrels a day, as Pemex hopes, remains to be seen. The fact is that companies and technologies are being pushed further and further to replace the world's dowager giants."

Whether or not the world is running out of oil, it is assuredly running out of Cantarells. BP's September 2 announcement of a "giant oil discovery in the Gulf of Mexico" seemed, on its face, to underscore the comforting notion that there will always be enough petroleum. "We believe it's the deepest well ever drilled by the oil and gas industry," a BP spokesman told *The Wall Street Journal*. It was, indeed, a startling feat, a well drilled to a total of 35,055 feet (4,132 feet of water and 30,923 feet of rock), over six miles down. And what might be the payoff? Three billion barrels. Of which, however, only 500 million barrels, or 16.7%, are recoverable with today's technology. "To put 500 million barrels in perspective," Gertner notes, "they would quench the world's thirst for oil for all of 5.9 days. It will cost an estimated $200 million to drill each of the multiple wells needed (no estimate as to how many), plus millions of dollars for pipelines and floating facilities. BP's stock gained 4% on the news, and $6.4 billion was added to the company's market cap. The price of crude was unchanged."

What, then, about the Santos Basin, the immense undersea find that could partially fill the 64 mb/d gap between current production and the IEA's projected demand of 106 mb/d in 2030? The basin is situated off the coast of Brazil in an area slightly larger than Italy. Since 2006, there have been eight major finds in the basin, of which the Tupi field, with an estimated five billion barrels of recoverable reserves, is the largest. Estimates of reserves in place throughout the basin range from 50 billion to 100 billion barrels, of which eight to 12 billion are thought to be recoverable.

Planners can think all they want about recovery. Actually getting the oil to the surface will be a Herculean job. The fields lie under 6,500 feet of water and 16,000 feet of rock, sand and salt. The oil reservoirs are capped by a layer of salt so old that geologists call it "pre-salt." (For perspective, Cantarell's oil lies under 150 feet of water and 3,500 feet of rock.) The depth of the water and the hardness and shifting nature of the salt layer will require "cutting-edge robots and other technology to recover," as the press customarily understates the matter. Exploratory wells cost $60 million to $70 million apiece (the first one went for $200 million).

Into the sunset



source: Energy Information System, Federal Government of Mexico

Salt, pre-salt and rock are obstacles usually surmountable at a cost. Politics is not always so easily tractable. Lula—Brazilian President Luiz Inacio Lula da Silva—on August 31 announced the government's intention to help itself to a bigger share of the Santos riches. With the new oil discoveries, the *WSJ* has quoted him as saying, "God has given us another chance." Assuming that the Brazilian congress concurs with the Almighty, production-sharing agreements will displace concession-style contracts as the template for international oil companies operating in the Santos Basin. The government will retain possession of the oil and control the rate at which it's lifted (assuming that it can be found and lifted). The companies, sharecropper fashion, will be allowed to keep a portion of what they lift. As it is, they keep what they produce, having paid exploration, production and royalty costs.

So the federal government of Brazil is on the verge of appointing itself a dividend-earning shareholder of every new well. Petroleo Brasileiro (Petrobras), the state-run oil company, will become the 30% owner and sole operator of each production-sharing-agreement field. That's not all: Petrosal, a new state-owned oil company, will have veto power over oil-field operational decisions. The oil companies have got their backs up over the new regime, though Dilma Rousseff, Brazil's chief of staff and likely next president, finds it eminently fair. "This model is right for the amount of oil we have," she was quoted as saying in the *Financial Times*, "for the low level of exploratory risk and because of the high levels of returns. We want to keep a bigger part of the oil revenues."

The minister's airy optimism is not necessarily shared by the geologists, reservoir simulators and roughnecks who work on the Santos Basin. For them, lately, it's been a struggle. No hydrocarbons were detected, for example, in preliminary test results for a field called Corcovado-2, as BG Group acknowledged on August 24. Corcovado's failure follows ExxonMobil's news in July that it had drilled a dry hole at another Santos site. Before these disappointments, Petrobras had claimed that its success rate on 11 exploratory wells was 100%. It had, it declared, drilled 30 wells in the Santos and Campos basins (Campos is a pre-salt basin north of Santos), with 87% testing positive for oil and gas. Not so, an unnamed international oil executive told the *FT*: Of the 30, said this skeptic, three were dry and eight failed to show commercially viable deposits. If true, this intelligence would nudge the failure rate up to 36.7%, not quite meeting Rousseff's characterization of exploratory risk as "low level." To prove to the oil industry just how lucky it is, Jose Sergio Gabrielli, CEO of Petrobras, is on the road this week to talk up the felicities of production sharing. The same Brazilian government, incidentally, left Asian shipyards crestfallen with its September 11 announcement that, while a new $9.8 billion contract for 28 deepwater drill rigs will be up for grabs, the winner must agree to build the vessels in Brazil and nowhere else. Globalization would seem to be turning provincial.

Which brings us at last to UTS Energy Corp. (UTS in Toronto), our speculation on the chance that not even the wit of man can stop a new oil bull market. We use the word "speculative" advisedly. UTS has no production and no revenue. One year ago, the share price dropped by 35% in response to an upward revision in the estimated cost of completing one of the company's oil-sands projects. Mitigating, slightly, the essential speculative nature of UTS are two considerations: No. 1, as of the second quarter there was C$256 million of cash on the balance sheet and a C$700 million "earn-in" (of which more in a moment) off-balance sheet. At C$1.70 per UTS share, the company has a market capitalization of C$807 million, a discount to the sum of the cash and earn-in. Consideration No. 2 is that the shareholders recently rejected a bid for the company in the amount of C$1.75 a share. They did so in April, when the oil price was almost $20 per barrel cheaper than it is today.

UTS has assets in various stages of development. In three such cases, drilling has revealed estimates of "contingent" bitumen resources. The Canadian Oil and Gas Evaluation Handbook defines "contingent resources" as "those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations using established technology or technology under development, but which are not currently considered to be commercially recoverable due to one or more contingencies." Nearby is a consultant's best guess of the contingent resources available in the three UTS assets just alluded to: Fort Hills, Frontier and Equinox. "Low," "best" and "high" are defined by the ratio of total volume mined (sand, dirt, bitumen) to bitumen. At $71 a barrel, today's crude price is perhaps $6 per barrel higher than the price required to justify an investment in an oil-from-sands mining operation.

What if?
net to UTS, mln bbls

project	low	best	high
Fort Hills	421	776	870
Frontier	490	774	1,275
Equinox	114	166	189
Total	1,025	1,716	2,334

source: UTS Energy

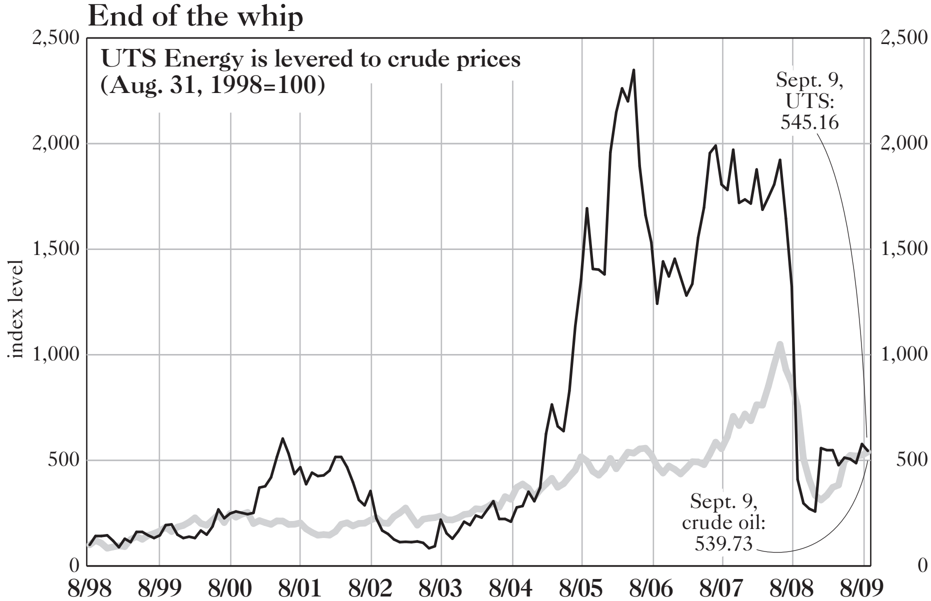
That the Dominion of Canada is no small place can be inferred from the size of the UTS development parcels. Fort Hills, the most advanced oil-sands project in the UTS portfolio—regulators have given their blessing and C$2.8 billion has already been sunk into it—covers 46,711 acres in northeastern Alberta province, 310 miles northeast of Edmonton. The leases are good through July 2019.

UTS acquired a 100% working interest in Fort Hills in 2004, when it bought out TrueNorth's 78% interest for C$125 million and seven million warrants. Then UTS turned right around and surrendered most of its new prize in exchange for C$7.5 billion in capital contributions from Petro-Canada (now Suncor Energy) and Teck Resources. As it stands today, Suncor owns 60% of Fort Hills; Teck and UTS each own 20%. Of the C$5 billion or so in remaining capital outlays, C$1 billion would be UTS' responsibility by dint of the size of its ownership interest. The aforementioned C$700 earn-in, however, whittles that obligation down to C$300 million. UTS expects that its earn-in reserve will be depleted by the first quarter of 2012.

Let it not be said that Great Recessions are good for nothing. Just a year ago, Suncor's predecessor, Petro-Canada, boosted its estimate of the cost to develop Fort Hills by more than half, to C$23.8 billion. But the formerly spiraling costs of labor and materials have unspiraled and the scope of the project has been scaled back. UTS says it expects that a plant capable of producing 160,000 barrels per day of crude can be completed for between C$8 billion to C$10 billion, or at a cash cost of C$750 million to UTS plus the previously cited C$700 million. Such numbers float on the sea of assumptions.

"The Frontier project is UTS' largest contingent bitumen resource with a high estimate of 1.3 billion barrels," Gertner notes. "UTS and Teck are equal partners in the project. Frontier consists of six leases covering 65,280 acres. UTS

End of the whip



source: The Bloomberg

and Teck are also equal partners in the Equinox project, which comprises 7,146 acres. UTS' share of contingent bitumen resources is 189 million barrels (high case). Lease 421 has had 59 cores drilled with 47 encountering rich oil sands with bitumen grade of 11 to 15 weight percent. Seasoned oil men call these numbers choice. UTS holds a 50% interest in another 209,280 acres of exploratory lands besides."

It was Total E&P Canada that launched that unsolicited bid for UTS earlier in the year. Spurning it, the UTS board presented six comparable transactions that had occurred between 2005 and 2008 at prices ranging between C$0.47 and C$1.62 of enterprise value per barrel of recoverable resource. Total's bid, said the board, represented C$0.18 of enterprise value per barrel excluding UTS' remaining earn-in. Including that earn-in, the value of the Total bid was minus C$0.25 per barrel. On September 1, PetroChina invested C$1.9 billion in Athabasca Oil Sands Corp. for a 60% stake in Athabasca's Dover and MacKay river projects. The price was equivalent to 63 Canadian cents per barrel. On September 10, the *FT* reported that China National Petroleum, the parent of PetroChina, had increased its acquisitions war chest with a $30 billion loan from a state-owned bank.

"Using PetroChina's price per barrel of 63 cents would value UTS' best reserves at C$1.47 billion (0.63*2,334 million barrels)," Gertner points out. "Add C$255 million in cash and C$700 million remaining on the aforementioned earn-in and subtract total liabilities of C$111 million. By this method, UTS would have a value of C$2.3 billion, or C$4.88 a share."

Needless to say, there are no perfect investments, let alone perfect speculations. You pays your money and takes your chance. For institutional shareholders, UTS is the figurative eye of a needle. For them, Canadian Oil Sands Trust (COS-U in Toronto), owner of 36.7% of Canada's Syncrude Project, is the oil-sands investment of necessity. COS, with a market cap of C$13.7 billion, trades at 14.5 times trailing earnings and 34.4 times forecast ones, at 3.5 times book and at a very fancy ratio of enterprise value to EBITDA of 12.1 times (ExxonMobil and Chevron command multiples of 6.2 and 4.6, respectively). Optionality comes in all forms; with the Canadian Oil Sands Trust it comes, in part, in C$1.3 billion of long-term debt. In 2008, with its record-high crude prices, EBITDA minus capital expenditures covered interest expense by 24 times. In the first quarter of 2009, the margin had fallen to 1.1 times. By the second quarter, it had plunged to minus 3.5 times. Oil and debt mix like oil and water.

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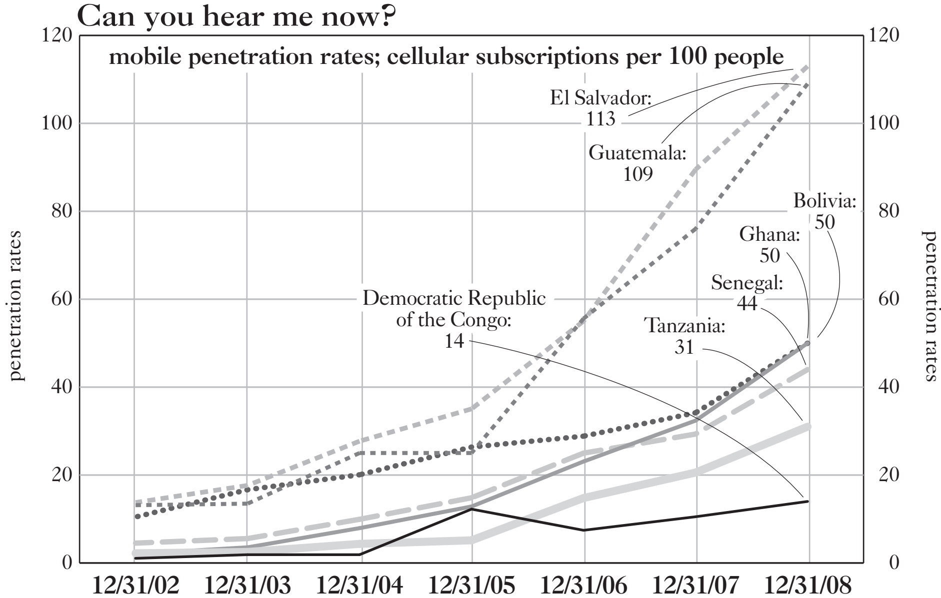
Talk is cheaper

(October 16, 2009) Millicom International Cellular S.A. (MICC on the Nasdaq), global decoupling and Mr. Market's funny ideas about valuation are the subjects at hand. Could a company like Millicom, which serves 31 million customers in 12 countries, not one of which is the United States, prosper even in the absence of the *Grant's*-scripted, shockingly strong U.S. economic recovery? To anticipate the next 1,500 words, the answer is "yes."

We leave it to the anthropologists to explain why cell phones have such a hold on even the poorest regions of the world. Are there not more urgent priorities for the people of the Democratic Republic of the Congo, for instance, than talking into a handset? Nutritionists, physicians and teachers might say yes, but Millicom has 1.3 million customers in the Congo, a nation that holds the anchor position, No. 210, on the World Bank's league table of national per-capita income. The company's Congolese subscriber base grew by 77% in the past year and generated $23 million of corporate revenue in the second quarter alone. "The same thing is happening all over Africa," relates colleague Ian McCulley, "which represents one of the last great virgin growth opportunities for mobile telecommunications companies."

Millicom happens to be the No. 3 carrier in the Congo, but it holds the No. 2 position in other African markets. It does business in Chad, Ghana, Mauritius, Senegal and Tanzania, and next month it opens in Rwanda. In all, Africa contributed $183 million in revenue in the second quarter, up 3% in dollars but 23% in local currency terms—an encouraging reminder, incidentally, that the world's top reserve currency still holds its own against such competition as the Tanzanian shilling, the Central African franc and the Ghanaian cedi. African operations accounted for 22.5% of the Millicom top line in the second quarter and will almost certainly make a bigger contribution in years to come, so fast are they rising. In the second quarter, African markets produced earnings before interest, taxes, depreciation and amortization of $62 million, for an EBITDA margin of 34%, up from last year's 32%. If these margins sound lush, you are new to emerging markets. They are 20 percentage points below the ones the company has been able to achieve in its dominant Central American operations.

Can you hear me now?



sources: The Bloomberg, International Telecommunication Union

Domiciled in Luxembourg, Millicom also does business in South America, but you get a sense of how fast the cell phone industry is growing when you hear analysts describe the company's properties in Honduras, El Salvador and Guatemala as "mature." Central America accounts for 41% of the company's top line but 50% of its EBITDA. Not in every "mature" market is the No. 1 entrant (in this case, Millicom, operating under the Tigo brand) able to expand its subscriber population by 18%, year-over-recessionary-year. Pulling up stakes in Asia, the company recently sold its properties in Laos and Cambodia and put its Sri Lankan operations on the block. The grand design is to seize the growth opportunities in Africa, where the mobile penetration rate in Millicom's territory averages just 21%, as well as to fortify operations in Central America with cable broadband and television.

Companywide, subscribers grew by 25% from the second quarter of 2008 to the second quarter of 2009, reaching the aforementioned 31 million. Revenues were up by 5%, to $814 million, and EBITDA by 14%, to $371 million, while operating free cash flow flipped to a positive $120 million from a negative $88 million. But in Millicom's world, too, there was a Great Recession. Average revenue per user weakened along with other vital signs of emerging-market economies, including commodity prices and cross-border cash payments, or "remittances." In the second quarter of 2008, year-over-year subscriber growth was running at 58%, more than double the latest reading.

"Emerging-market economies continue to be affected by strong headwinds," Millicom's new CEO, Mikael Grahne, understatedly told listeners-in on the second-quarter earnings call. "Remittances into Central America continued to fall sharply in the second quarter, down 13% year-on-year, and this has led to a slowing of these economies. Our own revenue trend in the region, however, has shown some signs of stabilization. So while the phenomenon is definitely a drag on growth, our own actions in the market are mitigating the impact to some extent."

Millicom International Cellular S.A.
(in $ millions, except per-share data)

	12 mos. to 6/31/2009	12/08	12/07	12/06	12/05
Revenue	$3,436	$3,412	$2,624	$1,576	$ 923
Cost of revenue	899	1,255	974	617	373
Gross profit	2,537	2,157	1,650	959	549
Selling, general & admin expense	1,660	1,290	979	518	274
Operating income	877	867	672	441	275
Interest expense	152	149	190	124	116
Net non-operating losses (gains)	55	14	(71)	(37)	(12)
Income tax expense	265	277	87	118	69
Extraordinary loss net of tax	25	22	(246)	76	98
Minority interests	(102)	(113)	14	0	0
Net income	481	518	697	160	4
Diluted earnings per share	4.44	4.77	6.61	1.67	0.1
EBITDA	1,449	1,383	1,023	671	494
Subscribers (millions)	31.8	32.1	23.3	14.9	7.5
Cash	$ 833	$ 674	$1,174	$ 657	$ 597
Current assets	1,432	1,364	1,752	1,127	1,241
Property, plant and equipment; net	2,597	2,787	2,066	1,267	672
Total assets	5,524	5,221	4,414	3,321	2,560
Current liabilities	1,540	1,749	2,002	902	909
Long-term debt	1,743	1,661	945	1,359	821
Total liabilities	3,684	3,569	3,045	2,739	2,226
Total shareholders' equity	1,841	1,652	1,368	582	334
Price per share	72.70				
Shares outstanding (millions)	108.52				
Market capitalization	$7,889				
Price/earnings	13.9x				
Price/book	4.2				

Enumerating the risks, Grahne could have gone on and on. Technological obsolescence is one concern. New competitors, licensed by fickle governments, are another. Outright governmental theft is a third. We wonder if, in the case of the cell phone vendors, the political risks might not be overdrawn. The Congo, for example, though embroiled in a decade-long conflict, last year delivered the afore-cited 77% growth to Millicom's subscriber rolls. People love to talk.

That they also love to watch television is the premise on which Millicom based its 2008 purchase of Amnet, a provider of cable broadband and TV services. Amnet will put Millicom in a position to offer the vaunted telecommunications quadruple play—cable *and* Internet *and* landline *and* cell phone service. Besides Amnet, which currently produces 39% EBITDA margins, Millicom has a fiber-optic network business called Navega that produces even better margins. Combined, the two units generated $50 million of revenue in the second quarter. Though only 6% of the corporate top line, those dollars serve the important strategic function of helping Millicom to stay on top in Central America.

Guatemala, Honduras and El Salvador were poor enough before the curtain fell on the great American mortgage experiment, and they are no richer now. The International Monetary Fund projects that Central American GDP will fall by 0.7% this year and will grow by just 1.8% next year, vs. growth of 4.2% in 2008 and 6.9% in 2007. When Guatemalan, Honduran and Salvadoran workers can find jobs in the United States, their paychecks, remitted home, boost Central America's economies. To that extent, then, Millicom is not entirely decoupled from the world's one and only superpower.

The Millicom balance sheet shows $833 million in cash against $2.28 billion of debt, good for a debt-to-EBITDA ratio of 1.6 times and a net debt-to-EBITDA ratio of 1.0 times. Most of the debt is held at the subsidiary level

Telecom comparisons
(in U.S. $ millions)

	mkt. cap	no. of subscribers	operating margin	EV/trailing 12-mo. EBITDA	EV/ sub	price/ earns.
Millicom (MICC)	$7,889	30,757,558	25.8%	6.4x	$301	13.9x
Zain (ZAIN KK)	20,333	69,518,000	28.9	9.0	406	15.7
MTN Group (MTN SJ)	31,243	103,200,000	30.1	5.0	327	13.6
America Movil (AMXL MM)	78,079	182,000,000	29.4	7.7	469	15.6
Vodacom (VOD SJ)	10,764	35,689,000	19.5	5.7	349	13.0

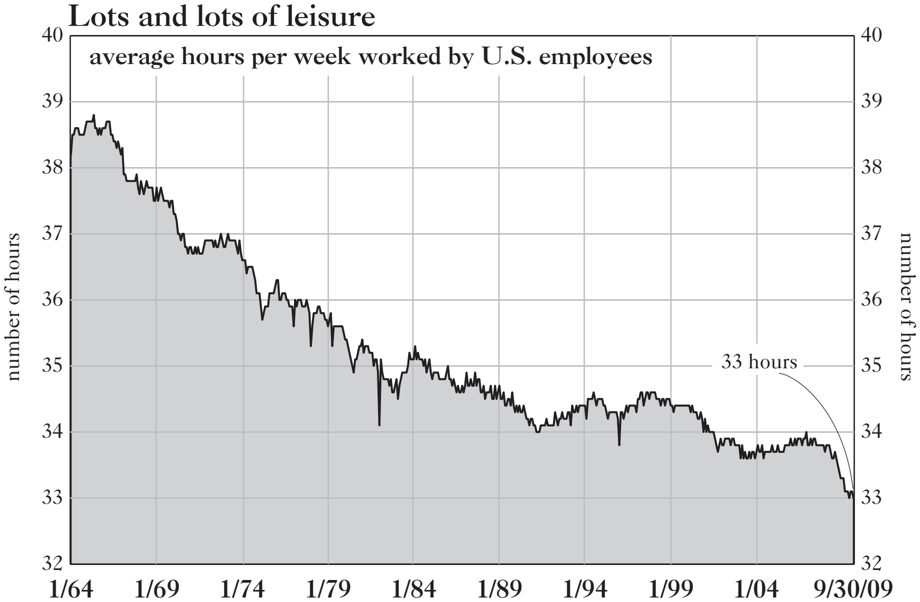
sources: company filings, the Bloomberg

and is denominated in local currencies, but $454 million of 10% senior notes, incurred by the holding company, fall due in December 2013. Millicom pays an effective interest rate of 8%. Pending sales of the Asian operations will reduce debt and bolster cash by perhaps $650 million. "As for our plans for the use of the cash proceeds of the sale," CFO Francois-Xavier Roger said on the call, "we are looking at opportunities to expand either through acquisition or new licenses, as we believe in our proven business model. Any external growth opportunity will have to offer both attractive returns and potential leading position over time. There is no rush to make [an] acquisition. Getting [the] right opportunity is more important than making a quick deal. If there is no immediate opportunity, we will either redeem the high-yield bond, which is not tax-efficient in Luxembourg, or return funds to shareholders."

The shares change hands at 13.9 times trailing net income, four times book value and 6.4 times the trailing ratio of enterprise value to EBITDA. They are valued at 12.4 times and 5.7 times the 2010 forecast for net income and the EV-to-EBITDA ratio, respectively. Zain, MTN Group and American Movil, much bigger companies in the same basic business, are valued in the same general vicinity. Then, again—curiously—so are such slower-moving, established carriers as AT&T, Verizon and Telefonica. In the recent days of pleasant mass delusion, Millicom and its comps fetched P/E ratios of 30 and up, but the once-yawning valuation gap between developed and emerging telecommunications properties has snapped shut.

What current valuation ratios don't capture, McCulley points out, is that Millicom is beginning to build a significant amount of free cash flow. "After several years of heavy capital expenditures to build out operations in Africa, especially," he relates, "such spending is expected to fall this year. Management expects cap-ex for 2009 to be in the $750 million range, excluding Asian operations held for sale, which compares to nearly $1.3 billion in 2008 and $965 million in 2007, both ex-Asia. As a result of slowing cap-ex spending, free cash flow has improved dramatically. If Millicom generates the $1.45 billion in EBITDA

Lots and lots of leisure



source: The Bloomberg

that analysts expect this year, it would imply free cash flow—ignoring changes in working capital—on the order of $700 million next year, which would deliver a 10% free cash-flow yield.

"A fact to note," McCulley winds up, "is that Millicom is 34% owned by Investment AB Kinnevik, a Swedish holding company publicly listed in Stockholm that helped to found Millicom in 1979. The presence of such a large, profit-oriented shareholder implies that Millicom might be for sale at the right price. In the spring of 2006, China Mobile was rumored to be contemplating a $48 per-share bid, or the equivalent of 12 times EBITDA, and $550 (more or less) per subscriber, double today's valuations. One could also imagine Millicom filling the acquisition bill for a company like Bharti Airtel, especially in the wake of Bharti's failed merger with South Africa's MTN. 'At Bharti,' CEO Sunil Mittal was quoted as saying in *The Economic Times* of India on October 8, 'we have been working to expand globally, especially in the African market.' Mital went on to say that he had nothing on the front burner." At current valuations, we believe, the holders of Millicom can afford to wait.

Valuation isn't so straightforward in the case of Hutchison Telecom International (HTX), the subject of a bullish profile in these pages on May 29. As we suspected, the company entered into a sale of Partner, its Israeli subsidiary, for a pretax gain of $1 billion. When the deal closes, Hutchison will be left with operations in Indonesia, Sri Lanka, Vietnam and Thailand, none of which, however, happens to be profitable. How to value the post-Partner Hutchison? There are 6.4 million subscribers in Indonesia, the new Hutchison crown jewel. At $200 per subscriber, the Indonesia subsidiary would be worth $1.3 billion, compared to Hutchison's market cap of $950 million. As for that $1 billion of anticipated cash (management says that the prospective tax liability is small), $320 million will likely be absorbed in second-half capex and $125 million will fi nance operating losses. There is $310 million of net debt, excluding Partner.

With these numbers in hand, actual and—especially—guesstimated, one could assign a number to anticipated enterprise value, i.e., equity market cap plus debt minus cash: We call it $705 million. It happens to be less than our $1.3 billion guesstimated value of the Indonesian operations, but that evident gap should never be confused with what the ancients called "value." It is, rather, what we moderns call "a story." Speculators may investigate at their own risk. Widows and orphans, stand clear.

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On the coming shortage of labor

(October 30, 2009) If everyone knows anything, it's that the job market is bad and will so remain, either indefinitely or forever, whichever comes first. Next week's report from the Bureau of Labor Statistics is likely to deepen this near-universal conviction. If the average forecast compiled by Bloomberg hits the mark, the headline unemployment rate for October will reach 9.9%, the highest since the 10.1% reading set in June 1983. If the average workweek remains at 33 hours, it will tie the record low set in June. And if, in October, there is no change in the percentage of unemployed not on temporary layoff (having rather been given their permanent walking papers), that number will match the all-time high of 54.3% set in September. The stock market isn't the only American institution to have made no net progress in 10 years: "Private-sector payrolls today are lower than they were at the end of 1999," as *The Wall Street Journal* reports.

Following is the case for an unanticipated and unauthorized rebound in hiring. We proceed with only two strong convictions, namely, (*a*) the future is unpredictable, and (*b*) the world is cyclical. The hardened consensus of belief about the supposed intractability of unemployment flies in the face of both these fundamental precepts.

Harder than the pay czar's heart is the bearish consensus on labor. A pair of authorities canvassed by the *Journal* early this month made bold to forecast jobless rates out to the years 2017 and 2019; neither clairvoyant anticipated a jobless rate below 5% in those distant years. Said a third prognosticator, the oft-quoted Mark Zandi, chief economist at Moody's Economy.com, "This Great Recession is an inflection point for the economy in many respects. I think the unemployment rate will be permanently higher or at least higher for the foreseeable future." Just how much of the future is foreseeable, Zandi, who was quoted in *The Times* of Trenton, N.J., didn't say, but the reader was left to imagine that it was not an insignificant portion of eternity. There was a glimmer of optimism from Jim Glassman, senior economist at J.P. Morgan, who went on record predicting that the nation might return to full employment within one short decade. Christina Romer, chair of the White House Council of Economic Advisers, ventured no bearish forecast for the remote future in testimony before the Joint Economic Committee of Congress last week, but she did painstakingly quash any hopes for the present. "Though Ms. Romer said that economic conditions had improved drastically in the last six months," *The*

New York Times reported, "and that the $787 billion stimulus program had contributed to that improvement, she said the rebound in jobs could actually be even slower than what White House officials currently expected. 'There is a substantial range of uncertainty around any forecast,' she cautioned."

Not to mention persistent error. Just ask the BLS, which, in 1999, undertook a review of its half-century record in forecasting total employment (it ventures no projections on unemployment). Five intervals—1960-70, 1960-75, 1968-80, 1980-90 and 1984-95—were the focus of the investigation. The agency found that it was dead on with respect to one period (1960-70), that it erred on the high side with another (1960-75) and that it missed on the low side with the other three. A fair-minded reader will wonder which computer-assisted mortal wouldn't have miscalculated. To nail the growth in the labor force, it's only necessary to make accurate forecasts in the working-age population and in that share of the population that wants to work. To forecast population growth, merely predict fertility rates, mortality rates and net immigration. Needless to say, one can't, and the BLS mostly didn't. Sometimes it underestimated net immigration, while at other times it missed the number of women who wanted a job outside the home. "The accuracy of projections has not changed over time," the study summed up. "The projections prepared in the mid-1980s are no more accurate than those prepared in the late 1960s, despite the availability of more data and improved modeling."

Still curious how the BLS reads the future? "Over the 2006-16 projection period," concludes the latest long-range forecast, published in the agency's November 2007 Monthly Labor Review, "growth in the labor force is projected to slow significantly. . . ." If you are wondering what the labor-force participation rate will be in 2016, it will be 65.5%, more than a few dozen basis points below the all-time recorded high of 67.1%, which was set in 1997. Reading the collective future mind of the women of the United States, the agency forecasts that the female labor-market participation rate in 2016 will be 59.2%. If we were the BLS, we think we would have omitted the number to the right of the decimal point.

And it isn't only the working population and the labor-market participation rate that changes. So does the economy. As Sudeep Reddy of *The Wall Street Journal* puts it so well, "Many of tomorrow's jobs don't exist today." Reddy here refers to a 2003 study by the then-Princeton economist, Ala n Krueger, which found that 25% of American workers were employed in jobs that "the Census Bureau didn't even list as occupations in 1967." No doubt, the year of the study being 2003, "subprime mortgage origination specialist" and "triple-A rubber-stamp subprime mortgage ratings analyst" were among these new occupations. And now they, too, are gone, which is, in part, what accounts for the embedded bearishness about present-day employment prospects. "Many jobs in real estate and finance, for instance," Reddy also writes, "are likely gone forever."

Agreed—if instead of "forever," one could substitute the phrase, "for as far as the clouded eye of ignorant man can see." Though we humans do our best, we usually underestimate the capacity of market economies to reinvent the nature of work. Before there was a BLS, with its 2,400 workers producing 1,900 monthly employment statistics series and its 2,600 monthly earnings-and-hours statistics series, there was a Commissioner of Labor. And this commissioner, in his report for 1886, discussed the alarming speed with which new machinery was displacing human labor in American factories. In the previous 15 or 20 years, he reported, in the case of one industry alone—agricultural-implement manufacturing—machinery had pushed aside "fully 50% of the muscular labor formerly employed; as, for instance, hammers and dies have done away with the most particular labor on a plow." The table reproduced nearby accompanied this worrying information. Mechanization was no bad thing, the commissioner readily acknowledged. On the contrary, the trouble was rather that the new machines were coming into service at a rate faster than that at which consumption was growing. The upshot was "over-production."

We may smile at this analysis today, but how will the labor-market analyses of 2009 read to our descendants? No doubt, just as quaintly. Of course, it is necessary to distinguish near-term forecasts from secular stargazing, and cyclical evergreens from the rare, indispensable observation of what is genuinely new. It is, for example, cyclically predetermined that at every business-cycle low

Machinery displaces muscle
1886 report on farm implement manufacture

	number of employees			
department	required with machinery	required w/o machinery	displaced by machinery	proportion
Engine	60	540	480	1 to 9
Boiler	70	210	140	1 to 3
Foundry	110	165	55	1 to 1.5
Woodworking	60	300	240	1 to 5
Setting up	50	50	-	1 to 1
Blacksmiths	45	90	45	1 to 2
Machinists	45	405	360	1 to 9
Erecting room	35	70	35	1 to 2
Paint shop	30	30	-	1 to 1
Teamsters	10	20	10	1 to 2
Pattern making	5	40	35	1 to 8
Draft room	15	150	135	1 to 10
Tool room	10	10	-	1 to 1
Shipping and stock	30	30	-	1 to 1
Lumber	10	10	-	1 to 1
Bolt and nut	5	5	-	1 to 1
Belt	7	14	7	1 to 2
Watch	3	6	3	1 to 2
	600	2,145	1,545	1 to 3.57

source: U.S. Commissioner of Labor

in employment, a national newspaper will play up a report about the impossibly high number of applicants seeking an impossibly low number of jobs.

Thus, the front page of the Oct. 22 *New York Times* reported on the nearly 500 men and women who had failed to edge out Tiffany Block, 28, of Portage, Ind., in the competition for a single job at the C.R. England trucking company in Burns Harbor, Ind. The story line didn't just seem familiar, it was familiar. Cycle by cycle, the names are changed but the plot remains the same. "In today's job market," the director of personnel at the new Long Island Marriott Hotel, then sifting through 4,508 job applications, told a *Times* reporter in October 1982, "we don't worry about someone being overqualified. You find people with college degrees waiting tables, making money and perfectly happy." This was a month before the cycle bottom and eight months before the aforementioned June 1983 national unemployment rate of 10.1%. Nineteen years later, as the sun was setting on the March-November 2001 recession, the manager of a 24-hour Waffle House in Anderson, S.C., was marveling to another *Times* reporter about the quantity and quality of applications he was seeing for menial work, even for the graveyard shift. Ominously, according to the National Restaurant Association, employment in restaurants and bars had fallen in August 2001 for the first time in 34 years.

Each cycle is the same, yet each is different. Recoveries from the recession of March-November 2001 and, before it, the recession of July 1990-March 1991 were notoriously "jobless." Not until February 2005 and February 1995 did total employment return to the respective pre-recession highs. You have to have a gray hair or two to have been on Wall Street for the recession of the early 1980s, the recovery from which featured stronger employment growth. Most of today's practitioners have never seen a jobful recovery; jobless is all they know.

As noted, our strong convictions stop at two. Mindful that the future is a mystery, we do not pretend to know what nobody can know. On the other hand, the world is cyclical, and we advance the hypothesis that the now-advancing recovery may resemble more closely that of 1983 than those of either 1991 or 2001.

Colleague Dan Gertner, sifting through the unemployment data, has hit on a new way at looking at how labor markets evolve. "The BLS," he notes, "segregates the numbers on unemployment according to the duration of unemployment—fewer than five weeks, five to 14 weeks, 15 to 26 weeks and more than 27 weeks. It has published these data since 1948, and they cover 11 recessions, including this one. Initial jobless claims, first published in 1967, make a fifth category. Lay these groupings out on a spreadsheet, and you can plot the dynamics of the labor market's ebb and flow."

As constant readers know, Gertner is (among other things) the *Grant's* first vice president in charge of mortgage-backed securities. He's spent many a happy hour analyzing "roll rates" in MBS structures—watching loans tumble from one category of delinquency to another (30 days, 60 days, 90 days, foreclosure) until finally, if all went badly, into a terminal state of loss. For an analyst trying to intuit the overhead supply of foreclosed properties, it helps to know the rate of flow from the front end of the bad-debt pipeline through the back end. Maybe an economist searching for clues about the pace of recovery in the labor market can proceed along similar lines.

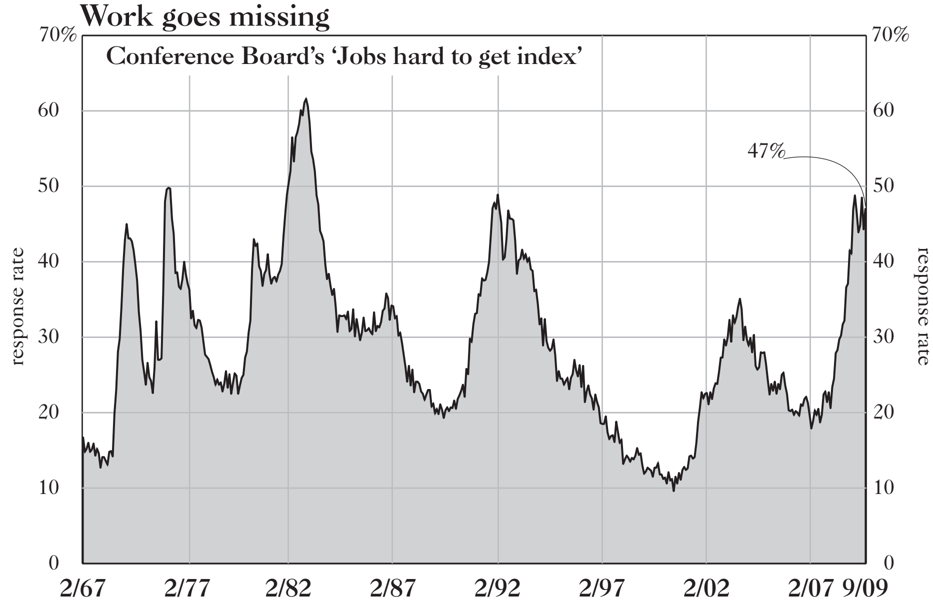
"I thought it would be an interesting way to look at unemployment," Gertner relates—"or perhaps I have been looking at RMBS for too long. Anyway, there is a clear pattern in the behavior of the various segments of the unemployment data. In particular, there is an interesting pattern in the way the numbers peak on the eve of recovery or in the months after recovery begins."

Note, for example, the top line in the nearby table, which plots the labor market recovery from the second of Harry Truman's recessions, that of November 1948 to October 1949. You will see no entry for initial jobless claims for that episode, no such series being available at the time. Note, however, that the statistical grouping for workers unemployed for fewer than five weeks peaked in the very month the recession ended. It is, therefore, marked "zero." Also tagged zero is the segment out of work for between 15 and 26 weeks, as that cohort, too, peaked in the very month of the trough. The greater-than-27-weeks category made its high in April 1950, so it is marked six.

What Gertner found is what one might expect to find (if one had thought to look for it): Initial jobless claims, where available, are the first to top out. Then, in approximate order of duration, come the other jobless segments, from fewer than five weeks to 27 weeks or more. "This makes perfect sense," Gertner remarks. "As the economy improves, layoffs stop first. Hiring and rehiring begin second. The first thing that jumped out at me is how different are the 1990 and 2001 recessions from the others. Excluding the past three downturns, including this one, the composite record is as follows:

"Claims peaked 1.5 months before

Work goes missing



source: The Bloomberg

When joblessness peaked relative to recession trough
(in months)

recession	claims	less than 5 weeks	5-14 weeks	15-26 weeks	27 weeks and over
11/48 to 10/49	NA	0	-1	0	6
7/53 to 5/54	NA	-2	4	2	5
8/57 to 4/58	NA	-1	0	2	5
4/60 to 2/61	NA	-2	-1	5	5
12/69 to 11/70	0	-1	0	1	17
11/73 to 3/75	-2	-2	1	2	8
1/80 to 7/80	-2	-2	-1	2	6
7/81 to 11/82	-2	-2	0	0	7
7/90 to 3/91	-1	2	11	15	19
3/01 to 11/01	-2	-1	5	20	22
12/07 to 5/09*	-2	-4	0	1	?
Avg. (excl. 1990, 2001, 2007)	-1.5	-1.5	0.3	1.8	7.4

*estimated end of recession
source: The Bloomberg

the recession ended, as did the fewer-than-five-weeks segment. Five-to-14 -weeks peaked 0.3 months after the business-cycle trough, followed by 15-to-26-weeks at 1.8 months and more-than-27-weeks at 7.4 months. What makes the 1990 and 2001 recessions stick out like cyclical sore thumbs is how many months dragged by before the longer-term jobless categories crested. The five-month-to-14-month segment did not start to shrink until 11 months after the 1990 recession ran its course. The 15-to-26-week category peaked 20 months after the 2001 recession ended. And the greater-than-27-week grouping topped out fully 22 months after the trough of the 2001 recession."

Which brings us to our late Great Recession. The peak reading in the number of people jobless for five weeks or less occurred in January, while claims topped out in March. Maybe, then, the recession ended in May—it would be true to form, as Gertner's statistical table so helpfully defines form. Of course, we could be jumping the gun. The bottom could fall out of the economy all over again and both the five-weeks-and-less statistical series and initial claims could proceed to new highs. We doubt it, for whatever that doubt is worth. Let us assume that May marked the low.

If so, November would be the sixth month of the recovery. Seen in that hypothetical light, this recovery would bear a much closer comparison to the recoveries from earlier recessions than it would from the 1991 and 2001 affairs. Notice, for instance, the 15-weeks-to-26-weeks segment: This time around, it peaked (or seems to have peaked) only one month after our hypothetical trough, as opposed to 15 months and 20 months, respectively, for the 1991 and 2001 cycles.

There is, of course, no guarantee that the jobless rate will immediately start to decline. On the contrary, it appears that it will keep moving up. What the data do suggest, however, is that today's recovery is shaping up to resemble the jobful recoveries of yesteryear more than it does the jobless kind of 1991 and 2001.

Of course, it does not look that way yet. When the Conference Board disclosed last week that its Leading Economic Index rose 1% in September, its sixth consecutive monthly increase, the accompanying press release added that "all the leading indicators contributed positively" to the September reading. The exceptions were building permits—and the average workweek. The prospect of tax increases, the fact of credit withdrawal and the threat of an immense new federal health-care initiative are only a few of the worries that press on American entrepreneurs and their human resource departments these days. A September survey by the National Federation of Independent Business finds that 16% of small-business owners plan to reduce staff or not fill vacancies, up 3% from August. And if all that weren't enough, productivity growth proceeded apace even during the worst of the 2007-09 recession. Does the modern American economy really need all the employees it once did? As in 1886, and at innumerable other cyclical junctures, many answer "no." And yet, new cycles of innovation inevitably seem to call forth new cycles of hiring.

Proverbially, recoveries climb walls of worry. Not long before the bottom of the 1975 recession, the CPI was registering year-over-year growth of 12.3%. Capitalism was then under a kind of siege, just as it is today, the Nixon administration (he was a Republican) having instituted wage-price controls, a peacetime American first. In November 1982, the federal funds rate was quoted at 9.5%, the 30-year Treasury at 10.5%. Interest rates were down from their 1981 highs, but nobody—and we mean nobody—looked confidently to the future, to a time of zero-percent T-bill yields.

So we listen with more than passing interest to the CEO of Paychex, who mentioned in a Sept. 23 press release that business had stopped getting worse: "While we have not seen improvement in any of our key indicators, we have not seen any significant deterioration, either. On a positive note, this is the first quarter in the last four sequential quarters that we have not had a noticeable decline in checks per client. The largest sequential decline in fiscal 2009 peaked in the third quarter [ended February 28] at 2.2%."

And we mark, as well, the response of Patrick Pichette, CFO of Google, to a question about the company's hiring plans on the Oct. 15 earnings call: "We've ramped our hiring practices in our pipelines. . . . We won't give you specific numbers, but what I can tell you is, we are ramping up our pipelines to make sure that we have access. And we also think that, in this kind of economic environment, there's a great opportunity to get great talent as well, so we should capitalize on that as much as possible."

And, finally, we note what Jim Owens, CEO of Caterpillar, had to say about the possibility of an unscripted pickup during Cat's third-quarter earnings call last week: "The volume dropped so quickly after the fourth-quarter collapse of the credit markets a year ago that companies have been scrambling to take employment down and take inventories out. . . . We've got a road show starting now with our vice president for purchasing, one of our group presidents, to help our suppliers understand the magnitude of that impact on them, just as business stabilizes next year and once we've got the inventory correction behind us. We think [that], with a very modest increase in sales, the likely requirement on our supply chain is 70% to 80%. It's a staggering number, I know, but do the math on some of this inventory swing and you'll get there. That's the kind of increase we're looking for from them."

That labor, now so commandingly in surplus, might one day—even at some distant point—return to scarcity is an admittedly implausible notion. But we assign greater odds to that outcome than we do to a period of stagnation half as lengthy as that required to validate the long-range forecasts of the growing army of bearish macroeconomists.

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Bullish on turmoil

(October 30, 2009) We can agree, we sons and daughters of Adam Smith, that the economy of the People's Republic of China ought not to exist in its current \$4.4 trillion, world-beating, dollar-accumulating, commodity-inhaling form. It ought not to be growing by 8.9% year-over-year, as it reportedly did, in the third quarter. Yet, here we are.

The reason the Chinese economy ought not to be flying so high is because the ruling cadres give the price mechanism such short shrift. They believe in money all right, i.e., getting it. But they do not believe in the invisible hand. This lapse of judgment, of course, they share with not a few other governments. But Beijing seems to surpass even Washington, D.C., in substituting political muscle for the verdict of the marketplace. So erring, China produces clusters of avoidable errors: office buildings without workers, apartments without tenants, ports without ships and expressways without automobiles. Properly functioning markets reprice human error more or less promptly. On the other hand, even the best-functioning collectivist economies allow errors to pile high and higher, like the trillions of dollar bills in the Chinese foreign-exchange hoard.

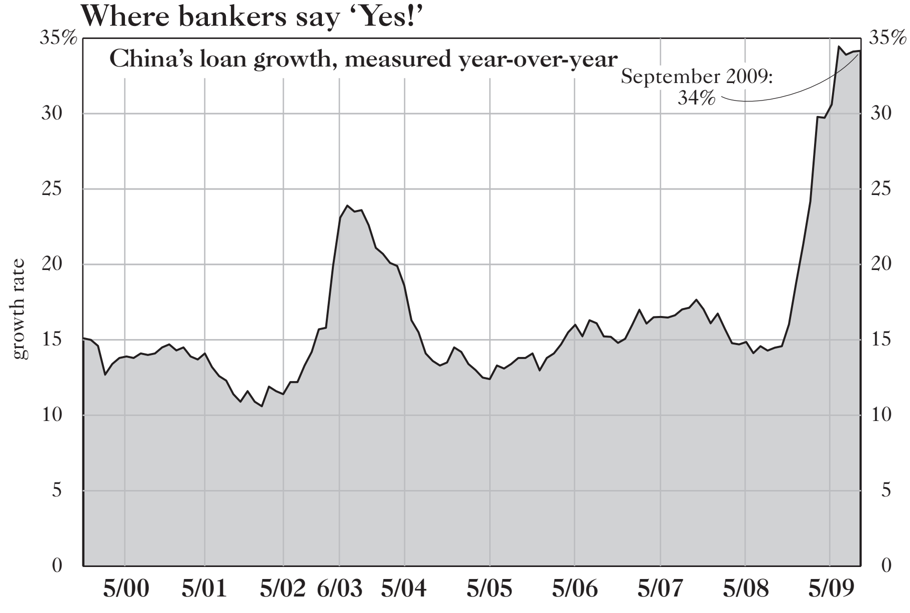
Early or late, we say, the economy of the People's Republic will hit something bigger than a speed bump. It will suffer inflation or deflation or a hybrid disorder suitable to an economy that manages to combine the worst features of capitalism and socialism. Cheap puts and calls are the things, if you can find them, to use to lay down a safe bet on outcomes that might be classified as inevitable but unpredictable. A crisis in China is just that inevitable-but-unpredictable event. We herein offer two such options, each designed to pay off if China's currency, now closely pegged to the dollar, breaks out either to the upside or the downside.

To start with, let your editor acknowledge a shortcoming of his own. The centerfold pages of the prior issue of *Grant's* foretold a slowdown in Chinese bank lending. On the contrary, loan growth in September accelerated to more than 517 billion renminbi (\$75.7 billion), well above the expected Rmb300 billion-Rmb400 billion. Lending at the nation's top four banks has, indeed, decelerated, but the smaller fry didn't take the giants' cue. Through the first nine months, total renminbi-denominated loans rose by 8.67 trillion, or the equivalent of roughly 30% of GDP. Meanwhile year-over-year M-2 growth stands at 29.3%, 11 percentage points higher than the rate of growth registered 12 months earlier. For these monetary pyrotechnics, the People's Bank of China serves up an explanation that makes no pretense about central-bank "independence." In this, at least, it comes as a breath of fresh air to the world. "In an effort to implement the decisions of the Communist Party of China Central Committee," the statement says, the central bank "adopted moderately loose monetary policy and strengthened financial support for economic growth. As a result, money and credit maintained rapid growth and the performance of the financial system was stable."

"Stable" the Chinese financial system may now appear, but it is instability that comes of money printing. World monetary arrangements are inherently unstable, and China's arrangements are at the rotten heart of the world's. What are these arrangements? As you know, China sends merchandise east; America sends dollar bills west. The dollars are presented for purchase to the People's Bank of China, which buys them with renminbi it prints up for the very purpose. Some of these renminbi it erases, or "sterilizes," as a counter-inflationary measure, but most go to work in the Chinese economy, lifting share prices and mobilizing real estate developers.

Having "monetized" those dollars—i.e., turned them into renminbi—the PBOC or its agent invests them in U.S. government Treasurys or agency securities. A very different business is this from the arrangements formerly prevailing. Way back when, the United States would discharge its debts to China not in paper or electronic impulses, but in gold. Ships on the backhaul from Long Beach to Shanghai would be carrying gold bricks, literally the building blocks of the U.S. monetary base. Here was de-leveraging you could see. Debtor nations lost money; creditor nations

Where bankers say 'Yes!'



source: The Bloomberg

Riding the wrong horse?

source: The Bloomberg

gained it. Debtor nations deflated; creditor nations inflated. Such reciprocal monetary adjustments kept the nations in approximate balance. At least, under the classical gold standard, the world's reserve assets didn't keep rolling in one direction as they do today, that direction being west, across the Pacific.

Governments prefer today's arrangements, of course. In China, factory chimneys smoke and markets rally as newly printed renminbi course through Chinese banking channels. As for the great debtor, America, its loss is (or seems to be) purely hypothetical. The dollars it sends to its offshore creditors come bounding right back home again in the form of investments in U.S. debt obligations. The rising pile of America's external debt is dischargeable in dollars, but what of it? You can create dollars—if you have the right log-in name and password—on a PC.

So creditor nations collect dollars, and debtor nations accumulate debts. A harmless enough exercise in money manipulation, you may suppose. Yet manipulated exchange rates and interest rates are the errant signals that direct and misdirect real investments. In September, China's foreign exchange hoard climbed to \$2.28 trillion, up by \$141 billion in the quarter and \$327 billion in the first nine months. What these stupendous sums stand for is projects launched or discontinued; people employed gainfully or wastefully (or not at all). "Malinvestments" are what the Austrian theorists called commitments that were undertaken because the price mechanism didn't work. "White elephants" is the corresponding indigenous American phrase.

Hot money was the bane of the finance ministers and central bankers who created the first Bretton Woods system in 1944. Seeking stability after the turmoil of the 1930s, they instituted fixed exchange rates and a dollar defined as 1/35th of an ounce of gold. Economists have fastened the name "Bretton Woods II" to the arrangements in place today. The monetary descendant, however, is no chip off the old block, but, rather, a structure that all but institutionalizes speculative flows. In the main, exchange rates float (more on China's in a moment), and all currencies are faith-based; none is defined by a weight of anything—gold, tin or tungsten.

So hot money prowls the world in search of extra basis points or an imminent foreign-exchange crisis. And a good deal of this money is winding up in China, the mainland's capital controls notwithstanding. How much money unlawfully hops the Great Wall goes undisclosed, but one can make inferences. Thus, when foreign-exchange reserves are growing faster than China's trade surplus plus foreign direct investment, hot money is evidently entering the country. When foreign-exchange reserves are growing more slowly than the trade surplus and FDI, hot money is evidently leaving the country. Just how much money is somewhat murky. Such back-of-the-envelope calculations fail to capture, among other things, valuation changes in the non-dollar portion of China's foreign-exchange assets.

We are going to observe that, through the nine months, reserve accumulation totaled the aforementioned \$327 billion, whereas the trade surplus amounted to \$137 billion and FDI reached \$64 billion. Which implies a hot-money torrent on the order of \$126 billion. Nothing like this sum of money would be moving into China if the world's speculators shared even one iota of our concern about the nature, financing and structure of the economy of the People's Republic. By the looks of things, the fast money is sanguine.

That it shouldn't be forms the basis of the currency trade we are about to lay out. Strangles on the renminbi and—yes—on the Hong Kong dollar are the low-cost ways to hedge against the coming turmoil in China. "That third-quarter GDP number, up a mere 8.9%," colleague Ian McCulley relates, "was achieved, primarily, thanks to a very large stimulus from the government and the banks. As the stock analysts would say, earnings quality was low. A new report from Pivot Capital, a Monaco-based hedge fund with around \$500 million under management, takes a bearish view of the Chinese investment boom. Its argument—the long-time argument of the China bears, *Grant's* included—is that overinvestment and poor capital allocation caused by easy money will eventually come to no good. Bulls, such as BHP Billiton, counter with arguments about the rising Chinese middle class and the potential for a consumption boom to rival anything seen in the United States. Each side has a point." That each side does have a point is what leads us to bet on volatility, rather than on a direction.

The Pivot Capital argument proceeds in this fashion: "China has emulated the path of other countries that have rapidly developed in the second half of the 20th century driven by high investment-to-GDP ratios. . . . However, both in its duration and intensity, China's capital spending boom is now outstripping previous great transformation periods (e.g., postwar Germany and Japan or South Korea in the 1980s-90s). The gradual increase in China's investment ratio that started in 1998 has now reached unprecedented levels. As a result, capital spending has become the dominant growth driver. We estimate that [fixed capital formation] accounted for 70% of China's growth in 2008 and close to 90% of China's first half 2009 growth."

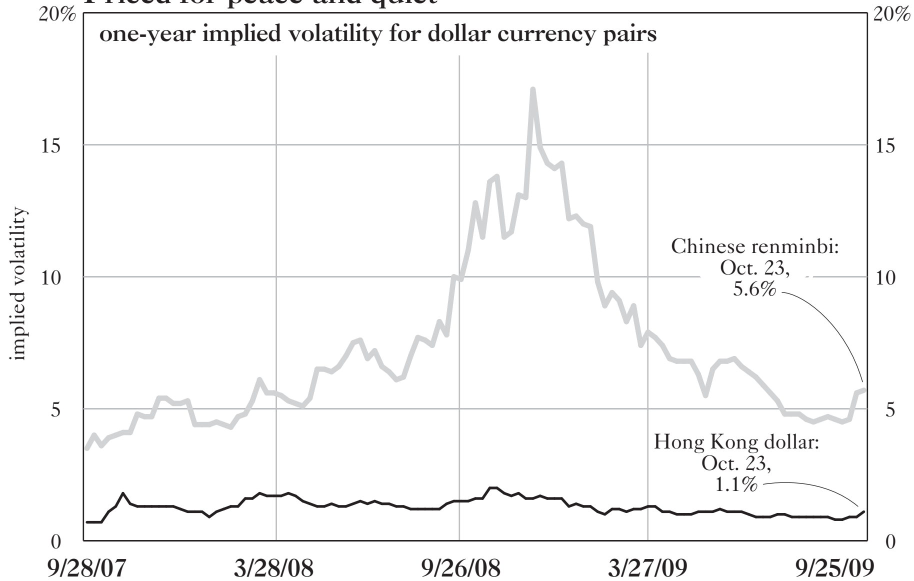
The law of diminishing returns is another scriptural truth that the cadres seem to have overlooked. Every successive dollar of fixed investment does not contribute identically to economic growth. Invest too much, in fact, and the final sunk dollar generates a return with a minus sign in front of it. "The falling marginal returns on investment are symptomatic of the increasingly speculative nature of China's capital spending boom, where a self-feeding process of credit growth in manufacturing, infrastructure and real estate is underway," Pivot contends. The incremental dollar of debt, too, is losing its potency, according to the data quoted from the International Monetary Fund's time series on domestic credit. Thus: "In the period from 2000 to 2008, it took an average of $1.50 of credit to generate $1 of GDP growth in China. This compares very favorably with the peak $4 of credit for $1 of GDP in the USA in 2008. However, in the first half of 2009 in China, this ratio was already around $7 to $1. Credit might be going into the luxury property and stock markets, but the trickle-down is very poor."

If the Pivot analysis is correct, as we suspect it is, there is a deflationary jolt in China's future. Then, again, if BHP Billiton is on the mark, the People's Republic might just motor ahead, inflating but nonetheless growing. *Grant's* observes these distant proceedings from the sixth floor of an office building at 2 Wall Street. We are not going to be dogmatic.

Steel production is an analytical bone of contention between the warring camps of fire and ice. Pivot argues that China is heavily overdoing it. BHP, which, of course, mines iron ore and metallurgical coal used to feed the Chinese steel industry, sees the matter differently. Production could increase by 40% by 2015 and double by 2025 and still not be excessive, the company projects. Vicky Binns, BHP's head of commodity analysis and economics, elaborated at a September analysts' meeting in Sydney:

"One example of the detailed analysis of end markets we undertake is the recent study we did on Chinese steel demand, where we analyzed the five major drivers of steel demand. Just to focus on one of those, construction, which accounts for about 50% of Chinese steel consumption, we looked at forecast changes in the average residential floor space per capita as well as how the average steel intensity in buildings would change over time with building height in order to capture the higher steel intensity as buildings become taller. In a country where urban land trades at a premium, we believe the shift to taller buildings in the urban landscape as more of the population is urbanized is inevitable. We estimate demand from just these two drivers could add a further 150 million [metric] tons per annum to steel demand and that is assuming that China, by 2025, only reaches the urban residential floor space per capita of Japan and Taiwan today."

Priced for peace and quiet



source: The Bloomberg

What do these differing views imply for the Chinese currency? Suppose that the deflationary crack-up was postponed—just by a cycle or two—and that the boom conditions returned. The PBOC would react as it reacted in 2006 and 2007, with intervention that leads to even more money growth, an even bigger bull stock market and more than a whiff of inflation. Enough would be enough: At some point, the government would let the renminbi shoot higher.

"The other scenario," explains McCulley, "is that once the loan boom and stimulus end, growth begins to falter. The white elephants of the 2009 investment bulge produce the bad debts of 2010. The economy slumps and hot money exits. Now the renminbi, too, falters, and the central bank intervenes to prop it up. To some degree, this occurred in late 2008, but what we are suggesting is something on a much larger scale, even to the point where the PBOC considers abandoning the peg."

Properly agnostic on just how trouble will manifest itself in the People's Republic, a seasoned speculator may nonetheless discount one possibility. In our opinion, the lowest-probability event on the Sino-American monetary front is tranquility. To profit from disruption, the professional investor might buy a renminbi strangle. "You can buy a strangle that expires in one year with strikes set at 10% out of the money on either side, at 6.00 and 7.34, respectively, for a total cost of 1.2% of notional," McCulley reports. "Or, you can go out two years and extend the strikes out to 20% out of the money on either side, and pay closer to 2.7%. One reason I like this option strategy is that the implied volatility of the renminbi has come down significantly in the past year or so. Current one-year implied volatility on the Rmb is 5.57%, compared to highs near 18% last fall. Still, the current level of implied volatility is above levels of 2007. If the currency is going to stay pegged, 5.57% is, of course, too high. But if China is overdue for some form of monetary or economic upheaval, 5.57% looks reasonable."

The renminbi option is, in our judgment, a serviceable idea. Perhaps a better one is a strangle on the Hong Kong dollar. As this is McCulley's brainstorm, he should do the explaining: "The Hong Kong dollar is, under existing currency-board arrangements, backed by the U.S. dollar," he points out. "It is pegged at a rate of 7.8 to one. Not surprisingly, therefore, quoted vols on the Hong Kong currency are dirt cheap. The currency isn't going anywhere—so the market assumes. But Hong Kong increasingly finds itself drawn into the orbit of China, and it makes less and less sense to peg the former crown colony's currency to that of a superpower across the Pacific, when it can peg to the superpower right in its own backyard. You can go out five years and buy options 20% out of the money (either way) for around 3.9% of notional value on the HKD. Because it runs a currency board, Hong Kong is currently importing rock-bottom U.S. interest rates and massive liquidity. Its economy is like a tiny toy boat riding the crest of an enormous wave of money.

"So Hong Kong apartment prices are up 28% this year, nearly to where they were before the 1997 Asian financial crisis. The other day, someone rang the bell, paying HK$439 million ($56.6 million) for a flat, the highest price per square foot ever for Hong Kong. The Hang Seng Index is up by 54% this year, and measures of money supply and inflation are both surging."

In a speech delivered last month, Joseph Yam, head of the Hong Kong Monetary Authority, declared that, "surely, the key for the future is in developing Hong Kong as *the* [his emphasis] offshore renminbi market. There should be no doubt that the renminbi will become an international currency one day. For Hong Kong to be unprepared for this, for us to fail to see the opportunities or build the infrastructure to make the best of it, would be to risk marginalization. There is no shortage of awareness of this point, whether at the policy or the technical level within the government. At the practical and business level, the banks also have a role in making use of the channels that are opened up; it is gratifying to note that banks are playing their role effectively and with enthusiasm."

As we were going to press, the Monetary Authority was on the tape injecting HK$4,263 million ($550 million) into the local money market to tamp down the appreciation of the Hong Kong dollar against its transpacific Siamese twin. "The Hong Kong dollar hit the top of its trading band at 7.7500 on Tuesday as money continued to flow into Hong Kong assets. . . ," Reuters reported. "Expectations that China's [renminbi] will appreciate is further encouraging investors to put money into Hong Kong. . . ."

Whether the renminbi will appreciate or depreciate is an arguable point. For ourselves, we are highly confident that it won't remain the same.

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GRANT'S

JAMES GRANT
EDITOR

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