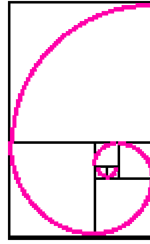


Sand Spring Advisors LLC

Long-Term Pension Asset & Liability Blues

by,

Barclay T. Leib

March 31, 2002

When I hear people argue that stocks always go up in the long-term and how this country's Baby Boomer demographics will be so positive for the market into 2013, I can do nothing short of cringe.

Yes, stocks have gone up a great deal in the 20th century. But do people have any true perspective on how they have done so?

Since Warren Buffet is certainly a smarter man than I, let me share with you a few of his recent thoughts on this subject, as espoused within *Fortune* magazine last December:

> "Over the past century, we have had three huge secular markets that covered about 44 years, during which the Dow gained more than 11,000 points. And we had three periods of stagnation, covering some 56 years. During those 56 years the country made major economic progress and yet the Dow actually lost 292 points.
>
> "How could this have happened? In a flourishing country in which people are focused on making money, how could you have had three extended and anguishing periods of stagnation that in aggregate – leaving aside dividends – would have lost you money? The answer lies in the mistake that investors repeatedly make…that psychological force: People are habitually guided by the rear-view mirror, and for the most part, by the vistas immediately behind them."

In other words, institutional and small investors alike have made the mistake of shunning stocks just when stocks represented exceptional value, and chasing after them just when they do not. The unwinding of these mistakes then takes much time to transpire. But for Buffet, value investing is so simple. "If the market value of all publicly traded securities as a percentage of the country's business (GDP) falls into the 70-80% area, buying stocks in likely to work well for you," says Buffet. "If this ratio approaches 200% -- as it did in 1999 and a part of 2000 – you are playing with fire." At a current ratio between 130-140% of GDP, Buffet is non-plussed with equities, but not exactly a bear. "I would now expect to see long-term equity returns…in the neighborhood of 7% after costs. Not bad at all – that is, unless you're still deriving your expectations from the 1990's."

But even as Mr. Buffet tries to sound upbeat amidst a heavy dose of realistic skepticism, we face at least one major historical problem. You see, we have also simply never had a recession that ended with corporate valuations at as high a level as they stand today. In lieu of corporate valuations bottoming at

130-140% of GDP, most solid market bottoms have seen corporate valuations reach just 30% of GDP. In addition, we've never ended a recession without the housing market experiencing a stiff fall in value, or without consumer spending declining. We've never had a recession that did not correct trade imbalances and an overvalued U.S. dollar.

I could go on, but I won't. The simple fact is that while most people think the recent recession is over, we question whether the real pull-back that lingers out there has even begun. We continue to point to 2002 as a likely "holding pattern year" with true ugliness still residing behind it. And within this holding pattern, we technically see a significant "zig" lower into June (May 26, 2002 specifically representing a long-weekend/full moon combo and June 30, 2002 being the next PEI 4.3 month cycle turn date – two possible "turn dates" to keep in the back of one's mind), followed by a likely "zag" rally period into November. This latter rally will likely find its impetus when the Fed is far slower during May and June to raise interest rates than some currently forecast.

But thereafter, we see longer-term demographics almost as a negative for the equity market -- not the positive most people point towards. Not only will the average consumer, already over-indebted, likely face a potential crisis in the declining value of overly mortgaged property, and potentially be forced to sell stocks to reduce debt burdens, but the very existence of all these Baby Boomers -- taken together with a broken-equity environment -- will mean that large corporations are going to face stiff costs to fund Defined Benefit retirement plans. This is potentially very detrimental to corporate earnings – *particularly over the long term.*

A Revenue Source Now Diminished

Previously, throughout the late 1990's, U.S. corporations were able to book excess pension fund earnings (above ERISA-imposed benchmark returns) to their corporate bottom line. But many of these same pension plans failed to "book out" their paper gains, and took huge losses in 2000-2001. In 1999, out of 350 S&P 500 companies that provide pension plan data, only 34 companies experienced a decline in the value of its pension plan. But by 2000, pension assets declined for 175 of these 350 companies, and the 2001 results, still being tabulated, were likely even worse. These companies now face the prospect of amortizing these losses over the next multiple years. Previous war chests of unrealized pension gains are already quickly getting depleted. In the end, if pension plan asset performance does not come roaring back very quickly, various financially undesirable accounting measurements will occur. This includes some combination of reduced earnings, higher required pension fund contributions, higher pension insurance premiums, and lower credit rating valuations.

GM, for example, earned $5.5 billion in revenue in 2000, but for that same calendar year, its $70 billion pension fund declined in value by 30%. This latter $21 billion loss did not fall immediately to earnings. Instead -- and if not quickly recovered -- it will now need to be amortized over the average life of GM's pension plan of approximately 15 years. This translates into a $1.4 billion future drag to reported earnings before GM even opens its showroom doors.

Most recently, GM issued $3 billion in convertible securities, with much of this money earmarked to go into their pension plan. The idea from this latter move may be to augment its pension plan investments at a propitious moment so as to recoup recent losses at as fast a rate as possible when markets rebound. But by taking such an approach, GM has also now turned one liability on its balance sheet into two via the added borrowing. This is obviously not without a certain amount of danger.

Complicated Rules

But before we proceed too far down the road of discussing individual corporate pension plan liability issues, it is important to first explain just how this system works.

Regulated by ERISA Act of 1995, as well as FAS Accounting Standards 87 & 106, major corporations that offer any sort of Defined Benefit retirement plan, must first estimate these liabilities (# of employees x # of years that they are expected to be alive in retirement x total benefit each will be due), and

then discount these liabilities back to a present value over the average life of the plan. The discount rate to be used is arbitrarily set to be that of high-grade U.S. debt of a similar tenor as the plan liabilities.

If calculating a pension liability number already sounds complicated, it gets even more complicated on the asset side of the equation where FAS 87 allows corporations to determine a pension plan's value in an endless variety of ways. Although a few corporations use simple "fair market" current valuations of pension plan assets, a far larger number of companies apply an "expected rate of return" type process over a 5-year time horizon and then amortize excess gains and losses around this return. FAS 87 allows corporations to do so in order to smooth the immediate impact to earnings of short-term pension fund gains or losses. If a company assumes a high rate of return, but in actuality experiences short-term returns below that assumption or absolute losses in the value of its pension assets, then for a while at least, the company can defer those losses. They exist but are not recognized. Conversely, if an "expected rate of return" is beaten on any given year, excess gains get amortized off into the future.

Now, If current plan assets – typically calculated using this smoothing technique -- are above the discounted liability calculation, a plan is considered to be "overfunded," and some of this gain can also be booked to a corporation's bottom line – often straight into operating earnings or as a reduction to Sales & General Administration expense. Some of this excess will also get carried forward to future years in an amortization. On the other hand, if a corporation's current smoothed plan assets fall under the ERISA mandated liability calculation, then a corporation must pay stiff non-refundable penalties to the Pension Benefit Guaranty Corporation until its plan is once again properly funded. Most corporations avoid this latter path of extra expense at all costs. It is only as a last resort that corporations turn to The Pension Benefit Guaranty Corporation as the ultimate backstop to any pension plan. The PBGC becomes the receiver for contributing entities that may hit financial difficulties or ultimately go out of business.

Overall, pension fund accounting is very complicated and tricky. Perhaps some reading these paragraphs already have eyes glazed over. The key point is simply that a plan can be properly funded, without penalties being incurred, but a corporation can still face violent behind-the-scene and evenntually public swings from its pension fund accounting.

Huge Behind-the Scene Swings

Consider Procter & Gamble. For the years 1992-1999, annual excess gains from its pension fund investments trickled to its bottom line, and its plan grew to be $1.3 billion overfunded by the end of 1999. But that <u>entire</u> overfunded amount was wiped out by the 2000 equity decline, eliminating future amortizations of prior gains that would have nicely padded future P&G earnings.

You see, P&G, like other corporations, has long since done away with trying to match its pension liabilities -- that are basically dominated by a fixed-income math calculation -- with matched fixed income assets. Instead, most corporations have accepted as "a given" that held long enough, stocks will always outperform fixed income assets. So given such, why not put a large preponderance of equities into their bucket of pension assets, and reap some added benefit from this pool of assets?

But when stocks go down and interest rates go down, such a program can run seriously amuck. All of a sudden, pension plans – which for so many years contributed to corporate profitability -- are now actually going to start costing corporations money again. This is particularly the case since interest rates have also fallen so precipitously in the last 18-months. A future liability discounted at a lower interest rate results of course in a higher present value of that liability. So as plan assets have imploded from aggressive equity investing gone awry, plan liabilities have marched higher. It's been a double whammy effect.

Much of this pension liability issue will take a number of years to play out and to openly manifest itself in corporate earnings. In 2000, for example, there were still 162 companies within the S&P 500 with a war chest of past pension plan equity gain amortizations sufficient to report current pension income to their bottom line. Indeed, according to a recent Bear Stearns report, pension income accounted for 10% or more of the operating income in 25 S&P 500 companies during 2000. These included:

Pension Income as a percentage of
2000 Operating Income

Company	%
U..S. Steel	440%
McDermott Intl.	267%
Allegheny Technologies	49%
NCR Corp.	46%
Northrop Grumman	42%
NICOR Inc.	29%
PACTIV Corp	28%
Unisys Corp.	25%
Lucent Technologies	24%
Peoples Energy Corp	24%
Westvaco Corp.	20%
Lockheed Martin Corp.	19%
Consolidated Edison	16%
Verizon Communications	16%
Unumprovident Corp.	. 16%
Potlatch Corp.	15%
Tektronix Inc.	15%
Ryder Systems	14%
Raytheon Co.	.11%
Weyerhaeuser Co.	11%
IBM	11%
SBC Communications	11%
Honeywell Intl.	10%
K-Mart Corp.	10%
DuPont	10%

Now, having pension fund "income" is obviously not a bad thing. But we also know that the top name on the above list, U.S. Steel, has recently been crying on the shoulder of the U.S. Government that the magnitude of its pension fund liabilities and aging workforce is such that USX risks eventually being put into bankruptcy from its pension plan. It's funny how that works: The biggest contributor to USX's 2000 income can suddenly disappear and come back to bite the corporation.

Pension fund positive amortizations are obviously a nice thing to have when they exist, but when these amortizations become more than 10% of current income, and the amortizations then start to dissolve while pension fund liabilities simultaneously increase, it is a potential bad dream – a dream from which there can often be little escape. In the end, one could tweak core operations of many large companies until the cows come home, and there could be little impact vis a vis a behemoth pension plan starting to suck wind.

For this reason, one must view the earnings of all of the above companies with a great deal of future suspicion. It's great that they have those excess pension returns, but how fast have those amortizations already slipped away? How soon will it be until America wakes up and realizes that much of IBM's earnings growth over the past 10 years has had nothing to do with its core operating returns, and everything to do with a well-performing pension plan that has now started to decline in value? How long will it be that pension plans start to actually cost corporations real money again rather than spewing out deceiving gains?

No Net Historic Gain & Overly Optimistic Current Assumptions

All of the above is even more upsetting when one realizes two things.

First, according to Ryan Labs of New York, even with the preponderance of pension plans having taken an aggressive stance by investing heavily in equities through the 1990's, after the horrific years of 2000-2001, net estimated excess pension returns since December 1988 are actually back to near flat

compared to the benchmark liability calculation. While we have had a huge equity bull market, people often forget that interest rates have also fallen throughout the period, pushing the liability side of the pension equation higher. This shows up in the table below, where if one adds up all the annual returns of the "Assets – Liabilities" row, the cumulative total return difference stands at 5.12% (or even slightly worse on a compound return basis) -- hardly any value added.

Asset / Liability Watch

(December 31, 2001)

Index	Weight	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
RL CASH	5%	9.34	8.73	7.42	4.12	3.51	3.94	7.11	5.59	5.72	5.48	4.24	6.49	4.97
LB AGGREGATE	30%	14.53	8.96	16.00	7.40	9.75	-2.92	18.47	3.63	9.65	8.69	-0.82	11.63	8.44
S&P 500	60%	31.68	-3.15	30.45	7.64	10.07	1.29	37.57	22.93	33.34	28.55	21.03	-9.09	-11.86
MS EAFE	5%	10.80	-23.32	12.48	-11.85	32.95	8.06	11.56	6.37	2.08	20.24	27.32	-13.87	-21.11
ASSET PORTFOLIO	100%	24.31	0.16	24.13	6.44	10.79	0.55	28.67	15.21	22.98	21.37	13.69	-2.50	-5.40
RL LIABILITIES	100%	25.40	3.23	19.26	7.87	22.46	-12.60	41.16	-3.70	19.63	16.23	-12.70	25.96	3.08
ASSETS - LIABILITIES		-1.09	-3.07	4.87	-1.43	-11.67	13.15	-12.49	18.91	3.35	5.14	26.39	-28.46	-8.48

This leads Ron Ryan of Ryan Labs to conclude: "It is hard to believe that an asset allocation heavily skewed to equities (which enjoyed the greatest bull market in American history) could not significantly outperform a low yielding, high quality liability portfolio over 13 years. Perhaps traditional asset allocation and asset management strategies need rethinking."

The second point of added concern is that the average corporation in the U.S. is currently putting out current earnings reports and future earnings estimates based upon an assumed 9% return for pension assets. This goes back to the smoothing technique on the pension asset valuation side that we described earlier.

But if actual pension returns average 2-3% below that level – per Mr. Buffet – then multiplied by the aggregate assets for the largest 1000 public and private plans of $4.8 trillion, this difference would cost America $100-$150 billion *per year* in future "revenue." With Corporate defined pension plans currently representing approximately a third of total pension fund assets, corporate America would face $33-$50 billion in lower revenues per year over time. Smoothing of past gains into current losses would not have this all show up at one time, but incrementally, slice by slice, it would add up to such a drag over time.

And how does $50 billion in earnings impact compare to corporate earnings? To quote from another savvy analyst, Rob Arnett of First Quadrant Securities, who has studied this matter:

> "In 2000 and 2001, earnings from the S&P 1500 (the S&P "Supercomposite") totaled $524 billion and $252 billion, respectively, with P/E ratios of 25 and 46 times earnings. If return assumptions had been dropped by 3%, then reported earnings would have been $474 billion and $202 billion respectively, and the yearend P/E ratios would have been 28 and 58 times earnings. Today's P/E ratio would rise from 60 to 80 times current depressed earnings. Yes, $50 billion per year is significant."

Harking back to Mr. Buffet once more, he warned in his December *Fortune* article that companies with return on asset assumptions above 6.5% are not facing reality, and "that anyone choosing not to lower assumptions – CEOs, auditors, actuaries all – is risking litigation for misleading investors. And directors who don't question the optimism thus displayed simply won't be doing their job."

But we all know that corporate America has little proclivity yet to face grim realities. Instead the emphasis remains at present to make Wall Street earnings expectations at any cost. As recently pointed out in the *Economist,* the companies in the NASDAQ 100 for the first three quarters of 2001 reported combined losses to the SEC of nearly $82 billion, while at the same time promoting profits of $20 billion to their stockholders. The difference between the two figures falls out of course from using generally accepted accounting standards in SEC reporting and the distinctly more favorable New Age "pro forma" accounting for the public. Writing on this topic in his March commentary, Bill Gross of PIMCO states without hesitation: "Charles Ponzi would undoubtedly have approved."

Thus while in 1982, corporations were using a 6.5% future return assumption on their pension fund assets (a number that represented just half of the then-current bond yield and barely higher than then current equity dividend yields), in 2000-2002, we now see corporations using a 9% future return assumption. Unfortunately, this now represents twice the current yield on T-bonds and 8 times the dividend yield on stocks. This is a hugely inappropriate and unlikely assumption to be actually achieved, and a disaster waiting to happen. Ryan refers to it as a "Trillion Dollar Time Bomb" since an annual public and private pension plan shortfall of $100 billion in returns per year will, over the average 15-year life of most plans, add up to well over a trillion dollars in the end.

It is not dissimilar in some ways to pension fund problems in Japan where 4% minimum statutory returns on pension assets have conflicted for many years with interest rates near 0 and a declining equity markets. At the end of the day, the pension plans have become insolvent by having to promise year after year to deliver more in returns than they have been able to capture from the market.

More Commentary to Follow

Within the next 10 days I will be attending a Ryan Labs conference specifically devoted to this topic, and I will most assuredly come back to Sandspring.com readers with further thoughts on this important long-term issue thereafter.

For now, too much discussion of pension-fund assets and liabilities isn't that time sensitive. This problem is not one that will be here today and gone tomorrow. Except perhaps in the instance of IBM, it is not an issue that I would advise clients to immediately trade off of.

It is instead a problem that will build with time, and will surprise people on corporate earnings reports from time to time. As a front-page news "issue" unto itself, it will likely not hit the NBC Nightly News until the year 2004 or thereabouts. Few care about or understand this issue now. Instead, they blithely assume that long-term demographics of Baby Boomers are bullish. We think not.

Chip Tech-Land Still a Mess

More immediately, let us share a few other shorter-term perspectives with you. We recently had occasion to sit down with a pre-eminent tech-investing expert with $6 billion under management. From him we heard the following:

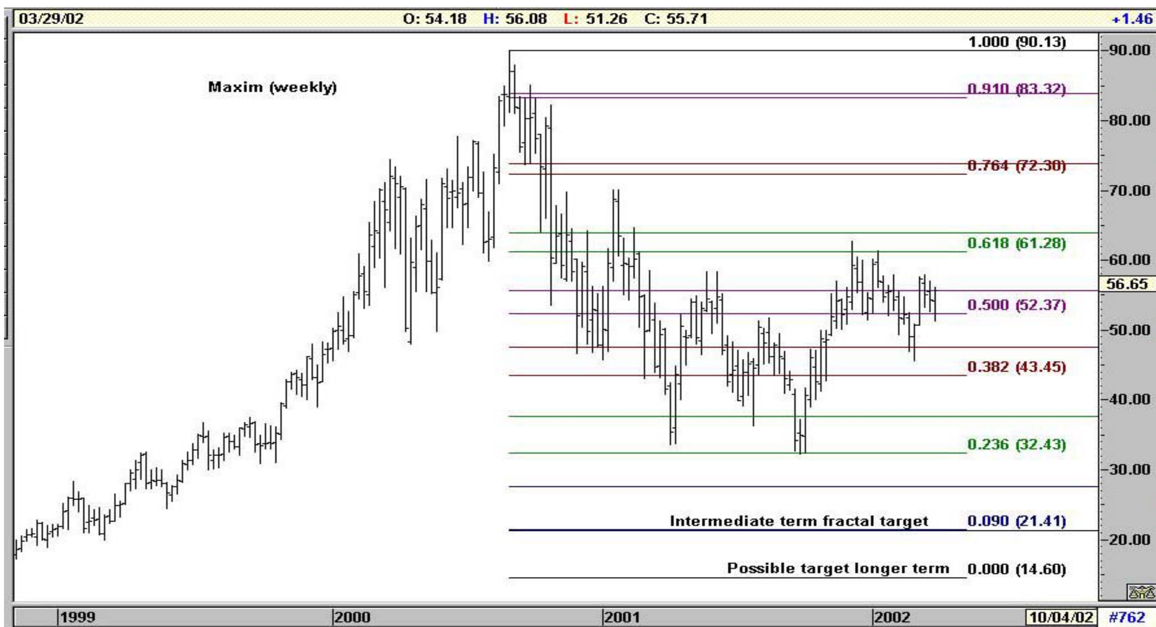
> "Recent strength in the semiconductor sector post September has largely been based on a 'pattern recognition' premise. In the past when the economy has recovered, the semiconductor sector has usually been in the lead as excess supplies get worked off and demand rebounds.
>
> "In the current instance however, we are facing a somewhat unprecedented situation where some two-thirds of the demand for chips comes from industries such as PCs, cell phones, servers, data storage, telecom equipment, and network information -- and all these industries appear to have matured simultaneously. There is still some growth in chip demand from flat panel technology,

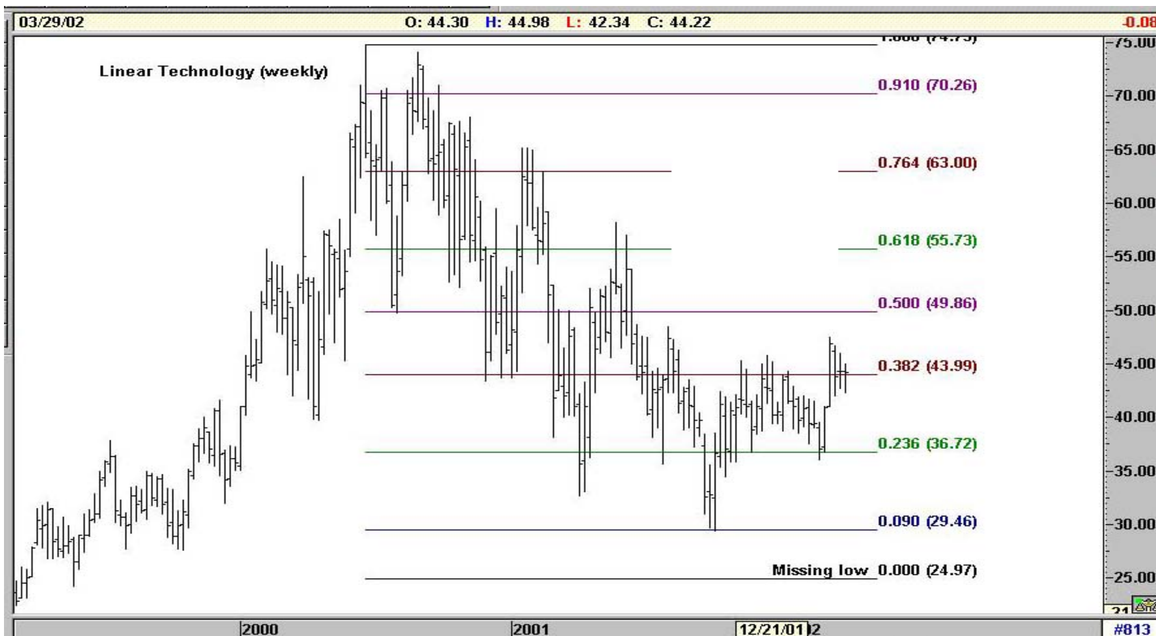
PDAs, DVD, DSL, medical devices, and auto-based electronic technology, but a full two-thirds of traditional chip demand just isn't there.

"Meanwhile, we still have companies such as Maxim and Linear that are tremendously expensive -- trading at 20 x trailing revenues."

Now all this is coming from a fellow who makes his living primarily as a long-only mutual fund manager.

So with these fundamental thoughts in mind, we thought we'd take a quick renewed technical look at these two stocks as possible short sale candidates. Combining cogent fundamentals with our own chart reading usually brings us nice success.





Lastly, many subscribers periodically ask for us to post updates on previously suggested positions. To this end, below is a table with some updated thoughts on past fundamental and technical perspectives.

Previously espoused long positions

(Stocks that are **bolded in green** we remain actively involved with or excited about. Stocks in blue, we are still involved with but cautious at current price levels, or simply less excited about.)

Cadbury Schweppps…Long at $27.50. Looking for $31.70 target.
Stillwater Mining…We are long from $ 14.75 with eventual target of $54.70. Short-term resistance at $20.
Trizec Hahn ABX convertible notes….up 14% since first commentary at $56. Continued nice yield-to-maturity with gold kicker.
JLM Industries…Long at $2.6. No satisfaction to date as stock has slid to $1.60. A dormant value proposition.
ERGO Scientific…Still a value proposition trading just over cash value, but awfully sleepy price action.
BriteSmile…Still a nice little growth company, but very disappointing price action since we profiled it.
Apache Oil…Recommended September 10th at $48, this stock has since clawed its way to $56.90. Longer-term a great hold, but is oil starting to be overdone to the upside right now?
Anadarco Petroleum…Also slightly higher than Sept 10th recommendation. Chart pattern by itself still looks constructive, but we have the same concern as with Apache that the short-term recent oil rally may be getting overdone.
Del Monte…Long at $8.53, and moving nicely toward $13.29 target at present.
Delta Pine & Land…Cotton has been moving higher of late. We particularly like this position at present, with an eventual minimum target of $38.
Cooper Industries…Already 20% higher than our February long at $34. Hold.

Previously espoused potential shorts

(When names are bolded **in red**, we remain involved with or excited about on the short side)

IBM…bearish from around 112 for some time, $74.60 Fib target still beckons.
Bank of America…Short at $60.80 with small loss to date. Slowly giving up on previously espoused $31.60 Fib target. Will likely cover on next significant downdraft.
Capital One…Short from $65 and then $55 and underwater on the latter sale at the moment. Stubbornly bearish for at least the low $30's at some point.
GE…Short from $39.65. $25.70 Fib target still beckons.
JP Morgan…Stumbling lower since our short above $39, but only grudgingly. Recent bounce just the result of successful Barron's PR. $23.60 is one Fib target to the downside we have.
Morgan Stanley…Previously espoused long-term target at $12.5 may be asking too much, but should this stock still touch $28 at some point? You betcha.
Bear Stearns…Broadening pattern here with little satisfaction for bears. If $65 can contain the upside, long-term Fib target of $38.25 remains in the offing.
Sotheby's…Just above where we went short. Still far from a happy antiquarian's world.
Applebee's…starting to show signs of being tired, but no satisfaction yet.
Darden's…Went through our first Fibonnaci upside resistance, but then promptly suffered a large reversal. We remain distasteful of fast-food stocks at current levels.
Brinker Intl…Continues topping action.
Panera…Slightly above our short, this stock likely remains a long-term joke at current valuation levels.
Wabash…Short at $7.90, we are not believers in the recent pop in this stock to $9.90. If not our previously espoused target of $3.92, then a target toward $4.20 still remains in the offing. (See chart below.)

Wendy's…Stopped out at the moment and not happy. May try to reload on short side if $38.25 is reached.

Coca-Cola…Short originally from above $60, recent bounce to $53 likely another opportunity to sell. $38.50 is the first real downside target.

Bed, Bath & Beyond…We nicely caught what now appears to have been 4th wave downdraft. But now this stock is back to marginal new highs. Is recent strength the final 5th? Perhaps. Worth watching, but a pain to fight all the long-term bulls here.

Micron Technologies…Targets toward $8 still seem reasonable to us here – with time.

Dell…"Beautiful Mind" fractals still suggest $12.50 with time.

GAP…Downside $15.55 target reached. Uninvolved any longer.

KLA-Tencor…Has run against us, but this is another semiconductor with current valuation silliness.

Altera…$14.63 still beckons.

We also still dislike **Nokia, Mattel,** and **Caterpillar** – all of which we have posted recent Chart du Jours outlining potentially negative technical patterns and specific downside targets.

Please note that we mention no gold stocks in the list above. That is because we are for the moment completely flat on our previous long exposure to gold stocks excepting the Trizec-Hahn convertible position. This may be a mistake, but given the amount that individual gold equities rallied in January and February vis a vis the less impressive advance in gold itself, we have been prudent and taken money off the table. We are watching for an opportunity to become re-involved, and will let subscribers know when we do so. Seasonally we have a general proclivity to do so only from June onward. This is the period when physical jewelry demand for the Christmas season starts supporting the gold price. Between now and then, we are trying to show some patience and a bit of savvy not to let recent profits suddenly evaporate.

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