Date: Mon, 6 May 2002 11:42:02 -0700
To: "Rick Sherlund" <rick.sherlund@gs.com>
From: "[David Collum]" dbc6@cornell.edu

Subject: Re:

In response to your questions, I worry most about debt, how it has been spread throughout the system, the mechanism by which it will get unwound, and whether the whole notion that one can insure against interest rate risk through derivatives is even a theoretically sound construct (let alone practically sound). Let me summarize what bugs me in general and then try to get at what's got me jumpier than usual at the end. (In the mean time, I enjoy consolidating my ideas, the non-scientific writing, and pretending to know what I'm talking about...which isn't new.)

General Concerns

- (1) Mortgages and Refi's. I see a lot of potential defaults in the housing market. Fannie and Freddie are growing an enormous portfolio and are moving toward the sub-prime loan market during a time of decaying economic fundamentals. Everybody rants about the refi's being good for the economy (including the Fed) when, to me, Fannie and Freddie look like very dangerous institutions. I'm beginning to spot more main-stream thinkers articulating this concern as well. As a segway to the next point...
- (2) "Short-term" Personal Debt. The "average family is looking at a \$50K salary and \$9K on the credit cards (on top of shrinking home equity). The resilient consumer is akin to the avalanche that has not yet fallen; it looks very tranquil. It is mathematically impossible, however, for the consumer to keep accruing debt. The average family the heart of the bell curve must either abruptly stop spending or declare bankruptcy (or both). I don't think either of us can imagine the total sense of futility and denial these guys are feeling right now. I've got a grad student with \$10K on his credit card and he keeps spending. The "resilient consumer" is on a bungee jump in which we have no idea how elastic (or strong) the bungee cord is. It is amazing to me that decades after invention of the credit card, personal debt generation has not yet plumbed some sort of equilibrium; it just keeps growing as a percentage of income.
- (3) Corporate Debt. As some of these big telcos and other conglomerates start drawing down their lines of credit, the potential for a severe banking problem strikes me as quite high. Is JPM a sitting duck? Maybe. If a financial crisis like the one you guys wrote a big check for in 1998 picks up speed, JPM will be up to their butts in problems. As more corporates (WCOM) head to junk status, forcing re-balancing of bond portfolios, it seems to me that a clamp down on liquidity problems should intensify. (This may already be starting if statements by JPM are an indicator.) A number of seemingly stable companies (like GE) are, in principle, stabilizing their short-term interest rate risk (and investor jitters) by moving into the long term debt market. Best case scenario is that they have a drag on their profits for a long, long time. The problem appears to be trickier than that, however. Bill Gross has been pointing out that at least some (including GE) are doing some pretty dicey-looking derivatives trading to undue this shift and re-assume considerable interest-sensitive risk.
- **(4) Balance of trade.** This is the hardest for me to grapple with. But if one follows the seemingly simple premise that a change in sentiment on the dollar and dollar-denominated assets could cause the foreigners to look elsewhere to put their wealth, interest rates will rise. Then we will find out what really is interest rate sensitive. Some (including Roach) suggest that the balance of trade is at levels that have historically proven to be prefaces to currency disasters. The international perspective on the value of the dollar and the possibility of a fairly large decrease naturally leads to the next topic...
- **(5) Inflation.** As I put all this together, it is hard maintain some semblance of an outline since it is so connected. With that said and quite contrary to popular (almost universally held) opinion, I think inflation is here in a big way. The model for inflation that I find to be most credible (almost a truism) is the three-stage model: (1) rising money supply, (2) increased prices, and (3) increasing interest rates. Inflation is really stage 1 money creation decreasing the value of existing currency. Where this money goes is a very different story. The latter two stages rising prices and rising interest rates are consequences. Stage 1 inflation is undeniable; all metrics of money creation point to serious inflation over the 1990's. I'll

go a step further and suggest that stage 2 inflation (rising prices) is not under control at all either. The numbers coming out of the Fed look fictitious to me. Measuring cost per gigahertz and gigabytes, hedonic adjustments for consumption changes, and an emphasis on a basket of goods that are weighted toward imports don't paint an accurate picture. (The motivations for why the distortions are intentional would be long, but keeping inflation-adjusted costs on federal payouts under control would be near the top of the list.) I believe that if you simply do a smell test on the cost of living, you find it's higher than we are being told. I bet you health care costs alone account for >1% per year price increases. Salaries at the university rose 8% last year. Certainly the cost of the most important asset of all, shares of publicly traded corporations, are outrageous using numerical measures. (I stress numerical measures to distinguish them from evaluations based on optimistic projections and just plain old wishful thinking.) I think the bond guys are seeing inflation.

- (6) Derivatives. The model of any insurance is to spread the risk of acute, but localized, events over a broader swath. As long as the event is local and not too bad, the system works well. The problem is that financial crises don't have to be localized and certainly don't have to stay small. LTCM put the system in jeopardy, causing you guys to bail them out "or lose billions of dollars in the bond market" (to quote a famous tech analyst aka you). The system seems more fragile now (especially looking at the absolute numbers on the notional value of derivatives.) Everybody seems to be insuring everybody. It's like a group of neighbors collectively pooling their money to self-insure against floods. The banks raved about how derivatives saved their butt after the Enron fiasco; who's butt got scorched? Any model based on a cataclysmic financial event would have to be centered on derivatives. I should add that I do not subscribe to a model based on an abrupt change (unless you call 1-3 years abrupt). I do, however, believe that this summer might be more interesting than some.
- (7) Hidden costs. Any one of a number of items will put a long term drag on earnings including: options expensing, accountants getting religion, debt servicing, reversals in pension plan returns, and a slow recovery.
- (8) Confidence. I own two stocks. I have fished around preferred shares, small caps, limited partnerships, commodities etc. etc. looking for investments. I see credible looking investments that I don't buy. The harsh reality is I don't trust what I'm seeing. I know what you're thinking; "Of course you don't, you've become a total whack job." This is true. However, I think the average investor is catching on as well. Spitzer is gonna do damage. Buffett, Greenspan, and Gross are all going after options as being a consequence of distortions of earnings resulting corporate greed. Joe six-pack is getting an ear full now. (Joe Sixpack includes a lot of money managers who were not smart enough to get out of the Joe Sixpack classification.) The distorted realities are gonna be hard to hide as companies like WCOM and TYC sporting single digit p/e's on the Yahoo stock board head for the toilet.
- (9) The Dollar. Lord knows I don't understand this one. I can say that dollars and dollar denominated assets look awful to me during a period of enormous money growth.
- (10) Greenspan and rates. To loosely quote Gross: Greenspan is toast. He can't raise rates to fight inflation without triggering liquidity problems. Gross suspects there are some key trigger points at some pretty low Fed rates. If inflation finally shows up on the radar screens to the point where even the paid economists can see it, we have potential for crises that will not be curable by Greenspan's favorite toy loose monetary policy. I'm not sure Greenspan can handle it. If you follow Buffet's reasoning, you can understand bull and bear markets by simply watching interest rates. We are at record lows. The rate cuts have not done anything. (Worse yet, they may have done wonders and what we have now may be the result.) Historians will write a very different chapter about Greenspan than is currently being written (unless I'm wrong, of course!).
- (11) Avoiding recessions. To the extent that recessions purge excesses, you can't avoid them. Greenspan's monetary policy is akin to a drunk with a whopping hangover taking a few drinks. It's akin to providing stimulus to revitalize a 24-hour long Roman orgy. It's akin to...enough similes. The recession of late purged nothing of consequence thanks to AG. I think we will discover that the bone rattling economic events of last year were not "the big one" because the pressures were not released. That is not the good

news. I believe that we will begin to come to this conclusion within a few months. My concern is that we will finally test the stability of all the debt instruments described above simultaneously. Either Greenspan is flunking Econ 101 by trying to avoid the unavoidable or he sees big problems (of his own creation) and can't fess up without exacerbating them. His efforts to achieve a soft landing, while explicitly designed to be non-Japan-like at the outset, may be quite Japan-like in the best-case (soft-landing) scenario. The Austrian economists would argue that there are a lot of ways to purge booms (sharply or slowly), but if you integrate under curve they all inflict the necessary pain.

(12) Event risk. This is a straw-man risk. I fully concede the long term consequences of non-financial events on the financial markets appear to be irrelevant. (They can act as catalysts, however, accelerating certain inevitable outcomes.)

What's different right now? Why do I feel jumpy? This was a tough question that may have illustrated my official transcendence from bear to whack job. Here's my best answer.

- (1) Gold is rising. Gold is an irrelevant commodity as long as the price stays low. I am not a gold bug, but do believe that a rising gold price has practical and psychological consequences. It also may be a canary in the coal mine.
- (2) The corporate problems in companies like WCOM supposedly real, big-cap companies seem unabated. I suspect that disruptions in the debt market must be glaring at this point. JPM is tightening its lending best I can tell. Greenspan has no tricks left. (Of course, he can start buying equities as one of the other Fed governors suggested. Then I'm gonna join a militia.)
- (3) Issues number (1)-(11) noted above would be highly manageable problems and easily placed in a "balanced perspective" if they occur in relative isolation. However, it seems ("feels") like they are coming to a head simultaneously. The risks are highly correlated. This is why economic models based on Gaussian curves fall apart right when you need them the most and you get your butt whipped by fat tails.

In conclusion, you may stop talking to me when I tell you this, but key events that turned me bearish include:

(1) In 1997, you said during reunion weekend that companies not yet starting their y2k fixes may be too late. (Now there was a chapter I'd like to forget.) That was the moment that I began looking at the market through a different lens. (2) In 1998 (or 99), we discussed the LTCM crisis and you explained to me why you guys bailed them out. I saw an analogy with the Cuban Missile crisis that I couldn't shake; another ratchet clicked. As an aside, in that same conversation, I suggested that going off the gold standard may have sent us on a long slow descent into a monetary mess. I believe the garbled grunt you made was an agreement at least with the principle.

Since then, I have been trying to understand the market as a series of interconnected parts constituting either (1) a complex web with great stability, or (2) a house of cards with great fragility. I guess it depends on how you look at it.