The Capital Markets Disarray

When fear conquers greed,

unpleasant things can happen.

WHAT IS OCCURRING today in global capital markets is the combination of two fundamental problems. The first is that most assets are long-term in nature, while most available capital is short-term. As a result, there is a fundamental bias toward asset-liability mismatches. As long as people believe in the rising values and liquidity of long-term assets, this is not a problem. However, when people lose faith, this mismatch is exposed, causing short-term illiquidity, and asset prices to tumble. The second problem is that in the eternal struggle between fear and greed, pessimism

PETER LINNEMAN

and optimism, trust and skepticism, fear occasionally wins. Through March 2007, greed was winning hands-down. It was one of the greatest victories of greed over fear, not just in real estate, but in almost every investment category. Credit spreads were very thin, the stock market was booming, and pricey buy-outs were everywhere. Although an undercurrent of fear grew as each new height was achieved, optimism abounded and capital providers focused on the good things that could happen. Six months later, fear is routing greed, as capital providers are obsessed with the bad things that might happen. This swing from greed to fear has triggered a flight from risk, leaving mismatched investors drowning in a sea of losses.

It all started with sub-prime residential loans, where egregiously poor underwriting has existed for two years, fueled by capital sources with mismatched portfolios. The poor underwriting of sub-

prime debt in 2005-06 was extraordinary versus historical norms, as households that would have never qualified for a mortgage got one, with little money down, and with minimal credit spreads. This generated a great wealth transfer from sub-prime lenders to the borrowers. The good news is that roughly 70 percent of sub-prime borrowers locked in their transfers via fixed-rate mortgages. But 30 percent did not.

For a short time, most sub-prime lenders passed the hot potato before the poor underwriting came to light. They were aided and abetted by ratings agencies that did not understand what they were underwriting, and whose ignorance was salved by rating fees. And, as always, the rating agencies dropped ratings only well after the disaster. Not much of an "early warning" system for investors! Today's capital market crisis was triggered as it became clear that the losses on sub-prime

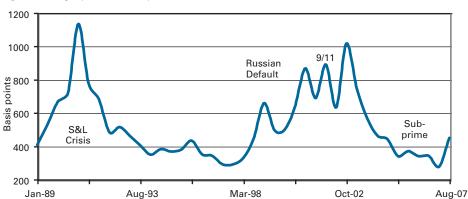
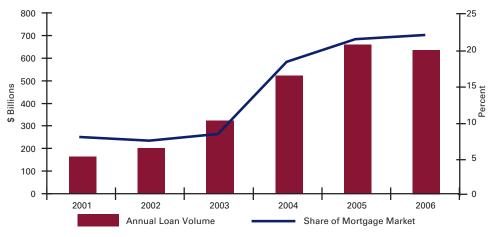


Figure 1: High yield credit spreads

Figure 2: Sub-prime mortgage volume



Sources: Bloomberg, Mortgage Bankers Association

were going to be much larger than anticipated. This not only increased spreads on sub-prime debt, but also caused investors to wonder what other credits had been poorly underwritten and overrated, which started the ball rolling for widespread widening of credit spreads and falling asset prices.

Asset prices fell as investors worried that they would lose money due to poor underwriting, and anyone who mismatched long-term assets with short-term liabilities was forced to meet margin calls. So, to cover what will ultimately be about \$90 billion of losses on sub-prime loans, mismatched owners had to sell assets. The more leveraged they were, the quicker and more dramatic were the margin calls. As assets were sold (including other credit instruments and stocks) to cover margin

calls, credit spreads widened further, and stock prices fell. This triggered margin calls on more mismatched asset owners, causing another round of sales. And as fear widened, the knock-on effect broadened. This is what happens when fear wins out over greed.

This process can be expected to continue until assets are held by investors with strong enough balance sheets to take price hits without margin calls, and when asset prices fall to the point that they comfortably compensate for underwriting losses. We are nearing this turning point after four months of snowballing fear. As smart, liquid investors step up saying "at these prices these assets are a steal," greed begins its counterattack. From that point, it is just a matter of time until greed once again prevails.

IT ISN'T THE FIRST TIME

In the past twenty years, fear has defeated greed four times. The first was in October 1987, when the stock market crashed in the middle of a strong economy. At that time everyone worried—when stocks fell by more than 20 percent in two days—that the capital market turmoil would create a recession. But it did not hurt the economy, with the exception of New York City. And within about eighteen months, things had returned to normal, with greed wining and capital markets again moving forward.

In 1990-1991, we were in a recession, when capital markets experienced turmoil due to the savings and loan crisis. Ground zero was commercial real estate. Credit spreads widened, and capital rationing occurred. This episode worked itself out in the capital markets within about eighteen months, although it took about five years for real estate to work through its excess supply.

The next credit crisis was the 1998 Russian ruble crisis, which occurred in a strong economy. Russian debt was a fairly esoteric credit instrument that had been very poorly underwritten (again with the aid of the rating agencies). Margin calls hit the owners of these highly-leveraged instruments, and rippled through credit markets as all types of assets were sold to satisfy margin calls. Observers again wondered if this capital

market crisis would spill over to the economy. But it did not, except (again) in New York City. And once again it took about eighteen months for credit spreads and pricing to normalize.

The fourth episode where fear defeated greed was after September 11, 2001. At that time, we were in the midst of a recession that had begun in March. Not surprisingly, in an environment where fear defeated greed credit spreads widened, and asset prices fell. Yet after about eighteen months, credit spreads and pricing had rebounded, and a new round of greed was under way.

We are now experiencing the fifth credit crisis in the past twenty years, with subprime debt as the trigger. As was the case in 1987 and 1998, this credit crisis is occurring in a strong economy and will not harm the general economy, except perhaps New York City. As in the past, it will take roughly eighteen months for pricing to return to normal. In the meantime, it is a horrible time to have to borrow or sell.

Fortunately most people, and most firms, do not have to access capital markets during this window. But firms in the capital business such as banks and investment banks have no choice, and their suffering will harm New York (and London). However, over the long-term, capital providers are optimists. Otherwise they'd never take a shower for fear of slipping; never drive a car for fear

of dying in a wreck; and never eat for fear of food poisoning. Given time, optimism always wins. In fact, over the last twenty years, greed's record is fifteen wins and five losses.

The economic activity of firms and households with no need to access capital markets during the next eighteen months will be largely unaffected. But in financial cities, job growth and space demand will suffer in the near-term, as capital market activity declines. For example, what hedge funds-even winning hedge funds-will decide to expand their office space now? And condos in New York will struggle, since what bankers believe they're going to get a huge year-end bonus? And, as people avoid capital markets, layoffs will occur at banks and investment banks. New York and London will be impacted, as always happens during these financial crises, just as Des Moines and Iowa City suffer during corn and wheat crises. But the rest of the economy will not be harmed. The good news is that both London and New York have very little construction under way and have low vacancy rates. But they will experience near-term weakness.

THE FED DID IT

The Fed bears considerable responsibility for the current capital market crisis. During the period 2002-04, it kept the

Fed Funds rate at a ridiculously low level. This low rate guaranteed a negative real return for anyone who invested short and safe, artificially encouraging investors to invest long and risky in an attempt to avoid guaranteed real losses. At the same time, the Fed's excessively low rate encouraged borrowers to borrow short-term using floating rates, taking advantage of the excessively steep yield curve. The Fed's 1.00 to 1.25 percent interest rate essentially for a shortterm loan to the U.S. government, when inflation was about 2 percent, guaranteed pre-tax negative real return of at least 1.00 percent. This is hardly an attractive, or even a natural, proposition.

Long-term asset values rose across the board as capital providers went long because of this strange incentive created and prolonged-by the Fed. Better to potentially lose later on an overpriced long asset, than to lose for sure immediately on a short investment. Eventually, the Fed realized they had kept the rate too low for too long, and rapidly raised it, changing the real short-term rate from roughly minus 1 percent to about 2.75 percent in just eighteen months. The Fed raised the Fed Funds rate to 5.25% in an attempt to soak up some liquidity, but even as the inflation rate fell, the Fed kept interest rates at that absurdly high level. And if you don't believe it was too high, ask why someone deserves a 2.75 percent real





return to effectively lend the U.S. government money for six months. The answer is: "They don't."

Now, three to four months too late has the Fed admitted their error with a grudging drop of 50 basis points on September 18. However, we believe it is still too high by 75 basis points. A year ago, when the Fed increased the rate to 5.25 percent, it took credit markets some time to figure out the attractiveness of investing short and safe, as they had previously unleashed their hounds in search of long assets. But now capital markets are once again reacting in dramatic fashion, abandoning long assets and moving into short-term safe investments. And as they have switched, asset prices have been whipsawed. So in the same way the Fed artificially encouraged capital sources to go long, it is now

encouraging them to go short.

The Fed's errors have created a serious problem for anyone who borrowed short-term floating rate money to fund long investments, including many sub-prime borrowers and debt holders. The Fed has kept the short rate at least 125 basis points higher than borrowers should have reasonably expected. By keeping the short rate high, the Fed is punishing these borrowers (and their lenders), creating more delinquencies and defaults than necessary.

The Fed should have cut rates to 4.25 percent to 4.50 percent months ago, and certainly on August 10. It is not a matter of "bailing them out," but rather creating a neutral capital market environment. Even at 4.75 percent, anyone who says that the Fed Funds rate is now correct must explain why, when inflation is only

about 2 percent, investors deserve a 2.75 percent return for effectively holding short-term government paper. It makes no sense, and seriously distorts capital markets. While the Fed has cut the discount rate and injected some funds, they need to further cut the Fed Funds rate.

Unfortunately, the Fed doesn't seem to "get it." They seem more worried about "moral hazard" bailout risk rather than creating a neutral capital market environment and continue to talk as if there is a tradeoff between low unemployment and rising inflation. But Nobel Prize winners Milton. Friedman and Edmund Phelps proved some forty years ago that inflation does not rise as the unemployment rate falls. Yet the Fed seems to cling to this debunked idea. If the Fed keeps the rate high much longer, it will adversely impact long-term investment activity. This will not hurt the economy during the next quarter or two, but will hurt two years from now, as we will not have put sufficient productive capital in place. That is, we will not have planted enough seeds for future growth. In short, the Fed is fueling a recession in 2009-2010.

IT COULD HAVE BEEN ANOTHER TRIGGER

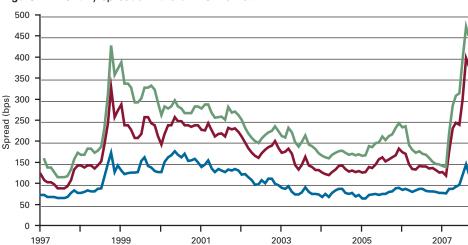
The trigger for the current disarray was sub-prime debt. But if it hadn't been sub-

prime, it would have been something else. As long asset prices rose and spreads fell, poor underwriting was causing too-narrow credit spreads in a number of areas. And (hidden) fear was rising as asset prices rose, just waiting for "something" to trigger panic. But given the extent of mismatched assets and liabilities, it was only a question of where and when.

Collateralized debt obligations (CDOs) get bad rap, but they have been an enormous stabilizer during this crisis, as they allowed better asset-liability matching. Thanks to CDO, commercial mortgage- backed securities (CMBS) holders have not seen runs, as investors did a decent job matching their long-term CMBS and mortgage positions with nonmark-to-market long-term CDO debt. Hence, CDOs have prevented a CRIMIE Mae meltdown, such as transpired in 1998 when spreads widened.

Due to extraordinary spread volatility, no one believes they can profitably issue a CDO today. As a result, fixed-rate CMBS issuance is currently dead. This will resolve only as the CDO market recovers over the twelve to eighteen months as markets stabilize.

The current credit crisis has had a lesser impact on floating rate CMBS issues. For floating CMBS, AAA spreads went from 7 bps over LIBOR in June to 50 bps in August. Since LIBOR rose by about 50 basis points in early September, this has



BBB CMBS

Figure 4: Monthly spreads in the CMBS market

resulted in increased yield of about 93bps. In mid-September, spreads on five-year AAA floating-rate CMBS issuances stood at 52 basis points over LIBOR, versus a 52-week average spread of 14 basis points. Similarly, five-year AA floating tranches priced at 75 basis points over LIBOR, versus a 52-week average of 28 basis points, while BBB tranches were priced at 210 basis points over LIBOR, versus a 2007 low of 65 basis points and a 52-week average of 97 bps. These enormous swings reflect the fact that matched financing is near impossible in times of great volatility.

AAA CMBS

IMPACT

Although it's a terrible time to have to borrow or sell, few commercial real estate

players have to sell or borrow. Instead, like most companies (and households), they will simply avoid the capital markets until things stabilize. And if they must borrow, they will borrow short and refinance when credit markets calm.

BBB- CMBS

What about troubled sub-prime borrowers? Most took fixed-rate mortgages, locking in cheap money. But floating rate borrowers, who purchased some 300,000 homes as speculative investments, will suffer as these investments sit empty for the next two years (or decades in the case of Miami condos!). Society's real sub-prime loss is that the capital that built these properties could have been used for something more productive. As to the idiots who lent (often without down-payments or documents) to the idiots who bought speculative homes: they deserve to lose. We owe

many thanks to German taxpayers for bailing out our idiots by German bail-outs of the German institutions holding U.S. subprime paper.

Many hedge funds with high water marks will shut down, because their assets (not just sub-prime paper) have fallen to the point where their high water marks are unreachable in the near-term. They will shut down and reopen under a new name. This could create some additional selling pressure in the near-term.

In terms of commercial real estate pricing, through most of 2006, pricing was about right in both public and private markets. But by late 2006, real estate pricing was beyond anything explainable by using CAPM or compared to BBB credit spreads. And by March 2007, the overpricing reached 15 percent to 20 percent. That changed very rapidly in April and

early May in the REIT market, as REIT pricing reacted very quickly to widening credit spreads and reduced LTVs. REITs repriced, going from 15 percent to 20 percent overpriced in June, back to fairly priced after the stock market run-up in the third week of September.

In April, May and early June, the private real estate market continued as if nothing had changed, even though credit spreads were widening, and LTVs were falling. Hence, deals made in April, May, and June, which had ninety to 180 days to close, are now struggling. Many buyers are discovering they cannot achieve the low spread 85 percent LTVs they projected. They can obtain 70 percent to 75 percent LTVs, with 1.10 to 1.25 coverage ratios, at much higher spreads. As a result, super leveraged deals are dead, a victim of fear. In today's environment, if you have to bor-

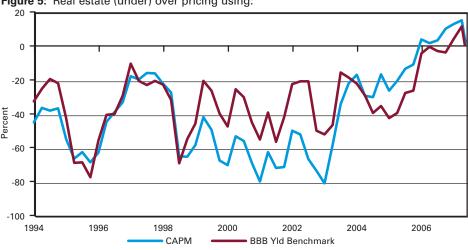


Figure 5: Real estate (under) over pricing using:



Figure 6: CMBS loan to value

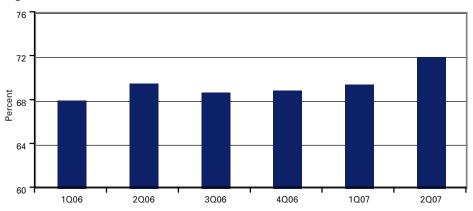
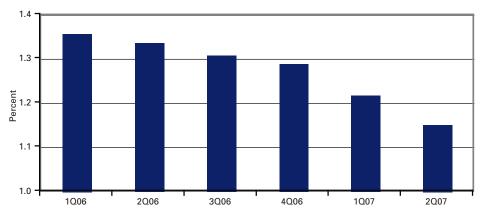


Figure 7: CMBS debt service coverage ratio



row, you probably should float, hoping to refinance when markets stabilize. But that's risky. These buyers are something new: "distressed buyers." To close they need more equity, and many are purchasing at prices 15 percent to 20 percent above values today. But if they walk, they lose their deposits. Those trying to re-trade find sellers who say "The only reason I was selling the property was because of the out-

rageous price you agreed to pay." Most sellers have no incentive to re-trade, especially in view of capital gains taxes. So do not expect a tremendous amount of retrading.

Most funds in this situation have sufficient capital to infuse the required equity, and will close rather than walk from deposits. If they walk, they will have to explain to their investors why they walked

Figure 8: Conduit CMBS subordination to BBB- (excl. I/G loans)

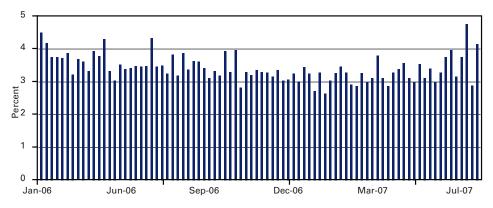
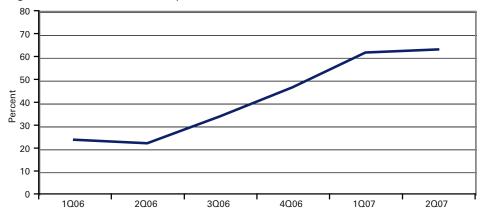


Figure 9: CMBS full interest only loans



away from money, guaranteeing the complete loss of this money. If instead they close by putting more equity in the (possibly overpriced) deal, it generates a much lower pro forma rate of return, meaning six years from now, they may have to report worse returns than projected. But better to do it six years from now than to report a complete loss at their upcoming investors meeting (especially as they pitch raising the

next fund).

It is smart to pursue this strategy. Remember that it is only six years since 9/11. If you think of all the things that have happened since then, it is wise to say, "Who knows what six years from now will be like in terms of this investment?" Even if it's not a spectacular deal today on paper, they have the option of hanging on until greed makes its triumphant return. And

greed can turn marginal investments into stellar performers. So it makes sense to stay alive to 2013.

Deals in the pipeline that were bridged by investment banks will be interesting to watch. Three times in my career I have watched Wall Street get aggressive and guarantee bridges. All three times, the bridges were enormously profitable—right up until they almost bankrupted the firm. We are witnessing the same thing as in 1987 and 1992 with bridges. Specifically, bridge makers who thought they would place the paper at a quick profit are stuck holding bridge commitments that challenge their balance sheets. Some banks have bridges that I do not know how they can bridge, as they do not have enough capital. And no one is going to take the bridge out in the near-term, except at a huge discount. This is more prevalent with big buyout deals than in real estate.

IT'S GOING TO BE

The economy is strong, job growth is solid, and most people rarely tap capital markets. While some of us are in the capital market regularly, if you go to the people running companies around the country, they're not terribly sensitive to capital market events. They rarely tap capital mar-

kets, and do not really focus on this "Wall Street stuff." They do not have Bloombergs, and they do not read the *Wall Street Journal* or the *Financial Times*. They read their local paper, *USA Today*, and trade magazines. If credit spreads stay wide and the Fed keeps the rate high for more than eighteen months, it will hurt them, as eventually they will use the capital markets—but not in the short-term.

Housing is obviously a weak sector. But it should be a weak sector. The industry built 400,000 to 500,000 homes (about 0.3 percent of the existing housing stock) that they should not have built. And now they have to burn-off this excess inventory, which will take until late 2008.

Such adjustments are healthy in that they re-introduce underwriting discipline. Like jogging, it's painful, but healthy. Now is a great time to buy credit spread. But buy it with long-term money, as it could get worse before it stabilizes.

I anticipate few new transactions through the end of the year. But by the latter half of 2008, and certainly in '09, transaction velocity will resume at cap rates that are 40 to 60 basis points higher than prevailed in early 2007. In the meantime, don't panic. Just avoid capital markets. Corporate America has a very strong balance sheet and large cash balances. We are just living through another case of fear conquering greed. But count on greed returning sooner than you think.