Composite Performance

2009 MONTHLY RETURNS													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	**YTD**
S&P 500	-8.57%	-10.99%	8.54%										**-11.67%**
Dow	-8.84%	-11.72%	7.73%										**-13.30%**
EEM^	-9.29%	-6.27%	16.86%										**-0.64%**
Bond*	-1.99%	-1.41%	0.77%										**-2.62%**
Cmdty**	-5.38%	-4.45%	3.58%										**-6.36%**

^ MSCI Emerging Markets Index
*Lehman Brothers Aggregate Bond Index (ticker symbol AGG)
**Dow Jones/AIG Commodity Index

Financial markets are now more dependent on government decisions than at any time in recent decades. Although this may not be preferred, it is a fact that we cannot ignore. From our perch, we notice a clear bet that policy makers are taking that involves a substantial amount of risk and will impact financial markets for years to come. This bet hinges on investor confidence, economic precedence and relies on a good deal of luck. In this update, we'll review the policy maker's bet. But first a quick primer on how to value a company's stock, the problems that Japan faced during the 1990's, CDOs and zombie banks.

Stock Prices & the Impact of Confidence

How do you determine the price of a company's stock? The answer, approved in all the best business schools, is the present value of future cash flows. Mathematically, it works like so:

$$PV = C1/(1+r) + C2/(1+r)^2 + \ldots C5/(1+r)^5$$

C = cash flow
r = discount rate, or opportunity cost of capital

Conceptually, a stock's value is the amount you would be willing to pay *today* to receive a future stream of earnings. Here are a few examples:

Example #1: Pre-recession
Let's say, in pre-recession times that a company is projected to earn $1 each year for a period of ten years. If we were to assume that the company has a discount rate of 5%, we would simply plug the numbers into our formula and arrive at a price of $7.72. Meaning that we would pay $7.72 today to receive anticipated cash flows of $1 per year over a ten-year period.

Example #2: Severe recession
The little secret to capitalism is that empirical equations do involve some degree of uncertainty, and thus, risk. Given that we are now in a terrible recession, what if we assumed that financial markets have permanently changed in very profound ways. We could then reduce the projected cash flows generated by our fictitious company by a whopping 75% for each of the next ten years. The present value of these future cash flows would also be reduced by a commensurate 75%. So, we would be willing to pay only $1.93 for the company's stock.

Example #3: Severe recession now followed by improved conditions
If we were now to assume that the recession would reduce cash flows by 75% during the next three years, then a stabilization for a few years, followed by moderate growth in the final years of our ten year period, we would be willing to pay $6.50 today for this company. This is only about 15% less than we would have paid in the pre-recession days.

The moral to this story is that both fundamentals and confidence drive the price of equities. When Warren Buffet wrote his infamous op-ed to buy stocks (*Buy American. I Am*, October 2008), he was lending support to example #3 from above. Buffet was professing confidence that U.S. corporations would eventually return to profits consistent with historical norms. Even in the face of current, end even intermediate, economic

conditions that are horrible, this type of investor confidence in future profits has the potential to lift today's stock prices with sustainable vigor.

Japan in the 1990s

Back in the fall of 1991, I was at the University of Illinois completing my 4-year undergraduate degree in 4.5 years (my parents were thrilled to be helping foot the bill for my extra studies). In that final semester I was enrolled in a business administration class that focused on the fundamentals of business management. The materials covered by the professor had an almost strange obsession with Japan. Books and magazine articles featuring rising suns and samurai warriors were routinely discussed in class. It seems as if the successes of the Japanese industry over the previous few decades inspired both admiration and fear. However, I'm sure that the curriculum was revamped shortly after I graduated.

You see, Japan spent most of the 1990s in an economic slump, alternating between short and inadequate periods of economic growth with ever-deeper recessions. Once the growth champion of the advanced world, in 1998 Japanese industry produced less than it had in 1991. And even worse than the performance itself was the sense of fatalism and helplessness, the loss of faith in the ability of public policy to turn the situation around. In fact, the 1990s became known as Japan's "lost decade".

Here's what happened: prior to the 1990's there was an especially cozy relationship between Japanese government and Japanese business. The extension of easy credit by government-guaranteed banks to closely allied companies was seen as the root of the economic problems. At the beginning of 1990 the market capitalization of Japan was larger than that of the United States, which had twice the population and more than 2x the gross domestic product. Land, never cheap in crowded Japan, became ridiculously expensive.

As Japan's banks lent more, with even less regard for the quality of the borrower, the bubble was inflated to outsized proportions. Sooner or later, bubbles always burst. However, the bursting of the Japanese bubble was not sudden. The Bank of Japan, concerned about this speculative excess, began raising interest rates in 1990 in an effort to let a bit of air out of the balloon. At first, there seemed to be little traction with the policy. But beginning in 1991 land and stock prices began a steep decline, which brought a 60% reduction in value within a few years. Japanese authorities regarded this as healthy as it was a return to more realistic and sensible asset valuations. But it gradually became apparent that the end of the bubble economy brought an unhealthy and steadily deepening malaise.

Year after year after the bubble burst growth fell short of both the economy's previous experience and any reasonable estimate of the growth in its capacity. The fact that the Japanese public didn't appear willing to spend enough created a deflationary environment where prices were driven down.

The similarities between Japan circa 1990 and the United States circa 2008/2009:

- Both are large economies with a well-educated and willing work force, modern capital stock, sophisticated technology, and stable governments with no difficulty collecting taxes;
- Recessions that had their roots in the collapse of an asset price bubble based primarily on real estate and shoddy lending;
- Banks were/are broken in both countries.

The differences:

- The consensus view is that the failure of the Bank of Japan to lower interest rates in the early 1990s ultimately drove the economy into a deflationary death spiral. In the United States, the Fed has aggressively reduced interest rates;
- Stimulus has been provided to the U.S. economy much sooner and more aggressively than what had been provided in Japan;
- Japan has one of the highest savings rates in the world; the U.S. among the lowest. American consumers have no such savings to draw upon — and, in fact, carry heavy debt loads;
- The U.S. financial system is generally more transparent than that in Japan. It was not until the late 1990s that the Japanese government stepped in and began forcing banks to come clean about bad loans. By contrast, U.S. banks have already taken write-offs for losses on toxic assets. While the full extent of the mortgage meltdown remains to be seen (as we later discuss), the U.S. is much closer to achieving what economists call "price discovery"—determining the true value of inflated real estate.

The Size of the CDO Problem

Collateralized Debt Obligations (CDO)—CDOs are basically packaged real estate loans. By now—through our updates and through daily news coverage—you're certainly all familiar with these financial instruments of mass destruction. CDOs were initially built with incredibly faulty reasoning that houses prices were supposed to appreciate indefinitely. The models couldn't "go bad" until unemployment spiked, because the models never showed housing could decline 20%, let alone 50%. So, with a combination of all the bad lending decisions by banks, many greedy home borrowers, increase in unemployment, fraud by many and incompetence from rating agencies and congress, we have a mess that will render many of these instruments as completely worthless.

How worthless? You hear about this stuff all the time from talking heads across the TV dial, by financial types and from those across the political spectrum. But does anyone know what he or she is talking about? Let's try to do some math to lend some quantifiable perspective. We are dealing with a universe of 17 million homes sold between 2005 and the first quarter of 2007—the worst vintages—of which all but 20% were securitized. So the universe is reduced to 13.6 million homes in CDOs (80% of the total).

Half of these CDOs are fixed rate. That's 6.8 million homes. The fixed default or defaulting rate is 10%. That's 680,000 defaults in fixed rate CDOs. Half are variable rate CDOs. The default or defaulting rate is 30% on these, or 2.04 million additional homes. Let's round up and say that we have a total of 3 million homes in default.

In California, the average home price during that period was $330,000. So let's use that because it is a worse case scenario. We have 3 million homes in default or defaulting at $330,000, yielding a total of almost $10 trillion in CDOs. Yes…an enormous figure.

The fact is that these CDOs are a mess. The underlying assets are diversified among all sorts of geographies, including lots of second-lien mortgages within them. The 2007 vintage CDOs are worthless. In some cases, the banks are carrying these CDOs at 70+ cents on the dollar on their books. However, the 2005 vintage definitely has some value because, with the time that has elapsed, there is more equity in those homes. And, if you can get the "defaulting" part, not the default part, halted, you can see the magnitude of the problem diminishing. Our estimate is that these CDOs are worth a conservative 30 cents on the dollar.

This means that we have a $7 trillion potential problem—70% of a $10 trillion market. Remember, there have been lots of write-offs already. There are reasonable estimates that $3 trillion in write-offs have been taken worldwide. So, it seems as if the potential future problem, net of recovery and existing charge-offs is $4 trillion. Bankers are paralyzed by fear of these further loan losses and shrinking capital that might subject them to regulatory penalties at best, bankruptcy or nationalization at worst.

The Banks Problem with CDOs

$4 trillion in potential CDO write-offs is staggering. This amount doesn't even include the increased write-offs from other consumer and commercial loans due to a worsening economy that will inevitably occur. Thus, there's a reasonable chance—not a certainty—that banks such as Citi and Bank of America will lose hundreds of billions of dollars over the next several years. These potential losses could be so great that their capital—the excess of their assets over their liabilities—isn't close enough to cover these potential losses. This makes these banks "zombies." A zombie bank refers to a financial institution with an economic net worth that is less than zero, but which continues to operate because its ability to repay its debts is shored up by implicit or explicit government credit support.

It's for this reason that there is a powerful contingency that promotes the idea of wiping out the existing shareholders of the zombie banks, restructuring and basically having them start afresh. The list of prominent politicians/economists supporting this concept include: Sen. John McCain, Paul Krugman, Alan Greenspan, Dennis Gartman, Greg Mankiw, Sen. Lindsey Graham, Joseph Stiglitz, John Mauldin, Sen. Charles Schumer, Barry Ritholtz, Sen. Richard Shelby and many more.

Strange bedfellows, eh? To be fair there are some fundamental differences in approach. About half the participants on the list—including John McCain and mainly other prominent Republican politicians—desire sending the zombie banks through bankruptcy. The other half—including Paul Krugman and Alan Greenspan—argue for temporary nationalization for the troubled banks whereby the government runs the bank for a limited time period. Regardless of approach, this highly influential and mostly well-informed group advocates a similar end result—wiping out the bank's equity and a complete restructuring of the bank's management and operations.

Over the past couple of weeks, as equity markets have rallied, these voices have been muted. However, the fundamentals that we previously discussed will hardly make this issue go away. Continued volatility will only turn up the volume.

The Bet

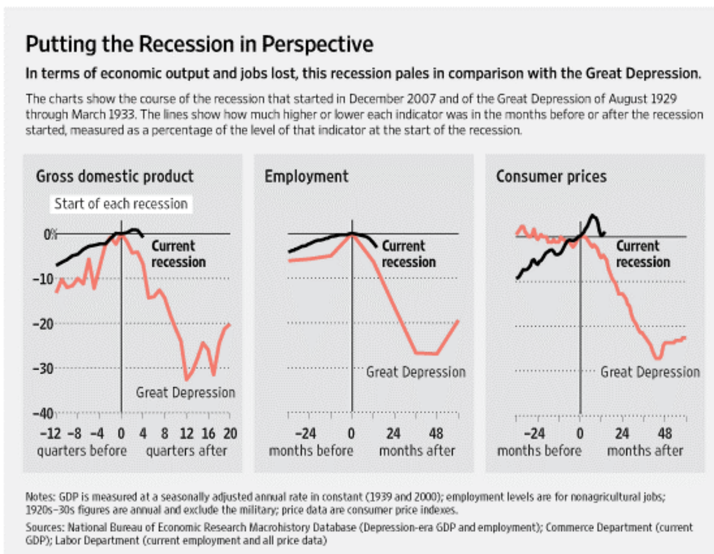
Policy makers are fighting a two-tiered problem. On one side, they are fighting a shortage of demand, as households and businesses reduce their spending. Less spending by some means fewer jobs for others who, in turn, decrease their own spending. This is a deflationary spiral we find ourselves in now that is thought by most to be the worst since the 1930s.

However, we have seen this movie before. This is what is known as a "demand shortage." And U.S. policy makers have learned a lot by going through these cycles many times since the 1930s. The consensus economic opinion is that you fight this phenomenon with a combination of more government spending, tax cuts and lower interest rates. That is why the Fed has lowered interest rates and why congress passed a large stimulus plan in February. The playbook states that this type of action is necessary. And although liberals and conservatives will debate on the amount and type of spending/tax cuts, the consensus view is that you just have to do this kind of stuff.

The second problem, however, is much more complex. All economies run on credit, and our dependency has become extreme over the recent past. Our banking system is currently broken, partly due to the problems of the toxic CDO assets owned by the banks. So, the Obama administration, by not sending the banks into bankruptcy or nationalization, is making a bet that a combination of their actions, investor confidence in their actions, and time will put the economy back on track. It's a risky bet that will make or break the Obama presidency and, more importantly for the rest of the country, the 401k plans of millions of Americans for several years to come.

Here's what we believe to be the rationale:

First, the economic team is clearly betting that the risk of another Great Depression is low. The charts below, pulled from the *Wall Street Journal*, show three important economic indicators—gross domestic product, employment, and consumer prices—that are holding up much better than they were in the 1930's. We already know that these indicators will get worse, but the administration believes that through proactive steps and historical odds that these indicators won't "fall off a cliff."



Second, policy makers seem to be saying that the U.S. is simply not Japan. The slowness with which Japan's economy deteriorated was perplexing. Because the depression crept up on the country, there was never really a moment when the public demanded drastic action be taken by the government. And, the actions taken by the Japanese were equally as perplexing. As we previously mentioned, the Bank of Japan maintained high interest rates for too long after the slowdown became apparent. At one point an overly optimistic government raised taxes prematurely, which certainly prolonged the slump. Economic policies were marked by an odd combination of indifference and fatalism—and by what seemed as a noticeable unwillingness to think hard about how things could have gone so very wrong. There was no trust that the government could get it right.

Part of the difference in action between Japan and the U.S. is due to the experience of each country. In Japan, there was only one direction for asset prices for over the thirty years preceding the 1990s—and that was straight up. When this trend was reversed, the government was not prepared to take aggressive actions. In the U.S., as previously discussed, we've been through enough financial cycles to know that it's necessary to be proactive.

Third, it's a game of confidence. The actions taken and planned—the stimulus package, reduction in interest rates, and all the other alphabet soup of programs (TARP, TALF, PPIP, etc.) are all designed to both attack a

fundamental problem and provide confidence. As we proved in our opening paragraphs of this update, investor confidence can help boost the prices of equities. Furthermore, confidence in government programs could also halt the deflationary spiral. If, for example, homebuyers believe that the government can effectively cease the fall in home prices (through reducing interest rate or halting foreclosures, for example), they will make purchases today instead of waiting.

Fourth, the government is playing "small ball" in hopes of improving the economy with multiple programs designed for singles, rather than a home run. Since the crisis began, there have been a couple of "home run" ideas that were attempted. Remember Lehman Brothers or the plan to have healthy banks buy really sick banks. Well, letting Lehman Brothers go bankrupt and encouraging Wells Fargo and Bank of America to purchase sick banks were complete failures (in retrospect, it's good that these things happened because at least we now know that they didn't work). The programs they are conducting now are providing enough liquidity as necessary to many facets of the non-Treasury market and trying to bring things back to life or at least keep them alive until cures can be found, including higher real estate prices or a better economy.

And really, Geithner and Bernanke might also be thinking that most of their programs can actually be complete failures so long as they buy time. For example, take the recently announced PPIP program, which is basically a way to provide government financing to private entities for the purchase of bank's toxic assets. There has been much debate on the program. But you know what? It might not be necessary to have any successful purchases of these toxic assets. Because the Fed is giving the banks free money in a way that makes it almost impossible for them not to earn profits, maybe all that is necessary is just time. In many cases, maybe banks will simply be able to hold out for as long as they need to as they make money off of the yield curve. Then they can take charges on those toxic assets over time against increased profits. Over the past couple of weeks there have been indications that this has in fact been happening.

Confidence and hope have definitely returned to the market over the past 5 weeks. Equity markets have risen due to some main economic indicators which were getting progressively better (they were still bad, but not as bad), the introduction of the PPIP plan and mark-to-market changes, and the news by some banks that they are earning money. We've become more confident, too. The question is whether this is fleeting or not. And, although we have added equity exposure in all client accounts to ride up the rise in equities, we believe that the bet to avoid drastic measures with the banks combined with overly optimistic earnings forecasts makes it too risky to maintain full equity exposure at this point. We prefer to remain somewhat defensive.

As always, feel free to call, write or e-mail with any comments or questions.

Chris