

# The Sign Posts of Change: Economics ■ Rules ■ Markets



**Muhlenkamp & Company, Inc.**  
*Intelligent Investment Management*



**Ronald H. Muhlenkamp** is founder and president of Muhlenkamp & Company, Inc., established in 1977. He is a nationally recognized, award-winning investment manager, frequent guest of the media and featured speaker at investment conferences nationwide. He has developed a proprietary method of evaluating both equity and fixed-income securities, which continues to be employed by Muhlenkamp & Company. In addition to publishing a quarterly newsletter, Muhlenkamp Memorandum, Mr. Muhlenkamp is the author of *Ron's Road to Wealth: Insights for the Curious Investor*.

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The following essay, *The Sign Posts of Change: Economics, Rules, Markets*, is adapted from a presentation Ron Muhlenkamp delivered at the Muhlenkamp & Company Seminar in May 2009.

Supporting figures are updated through March 2009.

We hope you find this material useful.

Let us know what you think.

For additional reading, visit the Muhlenkamp & Company website at [www.muhlenkamp.com](http://www.muhlenkamp.com) or a retail bookstore to purchase a copy of *Ron's Road to Wealth: Insights for the Curious Investor* published by John Wiley & Sons; copyright 2007.

# The Sign Posts of Change: Economics, Rules, Markets

We have three topics for today: what's happening with the economy, the rules (informal and formal) that affect ongoing changes, and how it all gets reflected in the markets. Each subject builds on material covered during our last two seminars:

*Recessions: What Do They Look Like?* (May 2008); and  
*Bailouts, Your Dollars & the Whole Credit Mess* (November 2008).

Copies of these presentations are available on our website at [www.muhenkamp.com](http://www.muhenkamp.com).

Let's go back a year and review what we said about recessions:

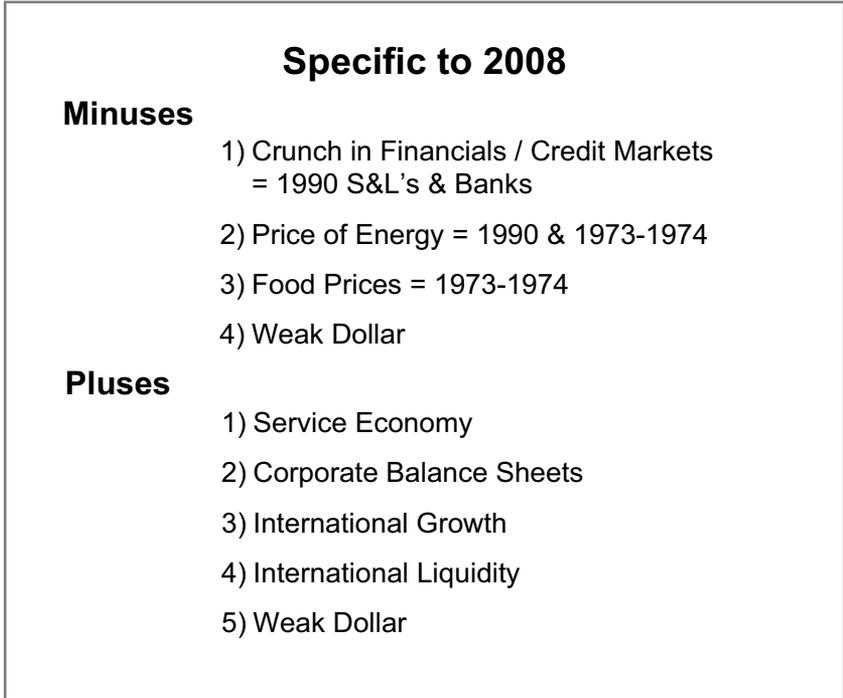
**Figure 1 2008 vs. Prior Slowdown / Recession**

## **2008 vs. Prior Slowdown / Recession**

Aggregate #'s Look Familiar

- 1)GDP
- 2)Employment
- 3)Fed Squeeze → Inverted Yield Curve
- 4)Consumer Confidence

In the aggregate, the numbers and the patterns look familiar, whether it's Gross Domestic Product (GDP), employment, the Federal Reserve, or consumer confidence.

**Figure 2 Specific to 2008**

There are, however, some “minuses and pluses” specific to 2008:

### **Minuses**

During this recession, the crunch was in financials and the credit markets, but that had also occurred back in 1990. So far, we've had about 35 banks go out of business during this recession. Some of you may remember that in '89 and '90 a third of our savings-and-loans (S&L's) went out of business, along with approximately 1,200 banks. So pieces of this we have seen before.

A year ago, we were worried about the cost of energy and, mostly, our focus was on the price of gasoline. But do you remember when energy prices tripled back in 1990? Some may recall the same in 1973-74. So, this, too, looks familiar.

Coming into this recession, food prices tripled as they had in '73-'74.

And as a consumer, the weak dollar was a negative.

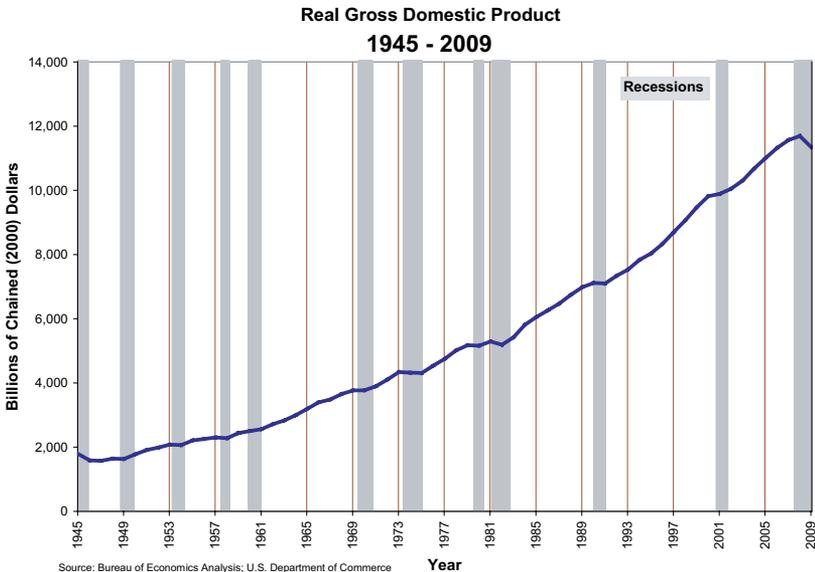
## Pluses

The pluses we saw were the service economy; corporate balance sheets; international growth; international liquidity; and, if you're a producer, the weak dollar is actually a plus. Most of these pluses remain. International growth, however, has slowed. In fact, it looks like China may lead us out of this recession. In the last several recessions, it has always been the U.S. that led coming out.

Now, let's turn to specific recession indicators:

Economists define a recession as two consecutive quarters of down GDP. If you check back, you will find they usually can't "call" a recession until one or two years after it is over. So let's examine Real Gross Domestic Product. ("Real" means adjusted for inflation; this plot is not adjusted for per capita.)

**Figure 3 Real Gross Domestic Product, 1945-2008**

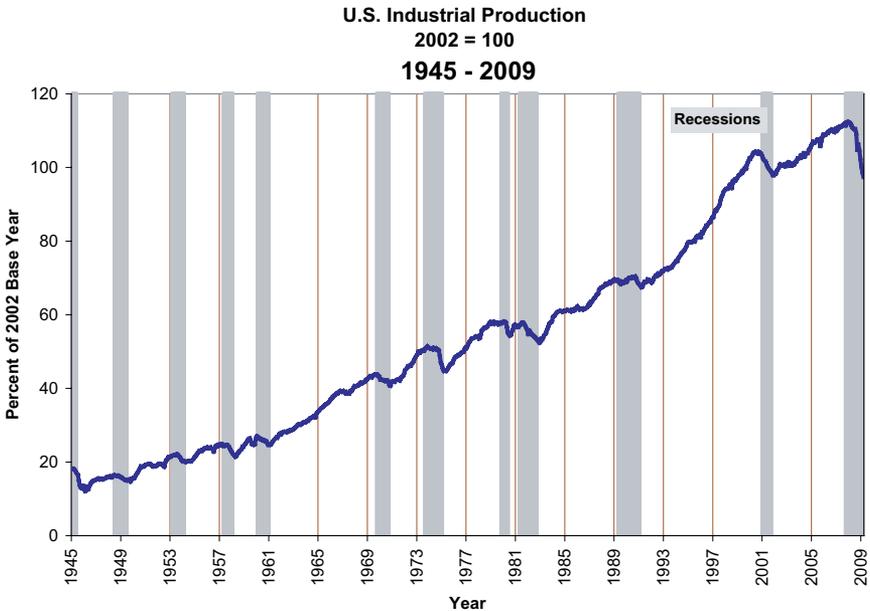


NOTE: In 1996, the U.S. Department of Commerce introduced the chained-dollar measure. The new measure is based on the average weights of goods and services in successive pairs of years. It is "chained" because the second year in each pair, with its weights, becomes the first year of the next pair. The advantage of using the chained-dollar measure is that it is more closely related to any given period covered and is therefore subject to less distortion over time.

While Real GDP has gone from \$2 trillion to \$12 trillion in a 60-year period, recessions are often difficult to find. You can spot a bit of a decline back in 1973-74, along with another in 1980-82. This recession, however, is one that we will be able to find with no problem. We're in the midst of a serious recession, but the pattern is familiar. The degree of decline is more than the past few recessions, and may be a bit greater than '73-'74 and '80-'82, but the pattern is largely familiar. Bottom line: We don't see depression as a headline.

Figure 4 shows that each time we have a recession there is a decline in Industrial Production. Once again, you'll note this is a serious recession:

**Figure 4 U.S. Industrial Production, 1945-2009**



Source: U.S. Federal Reserve

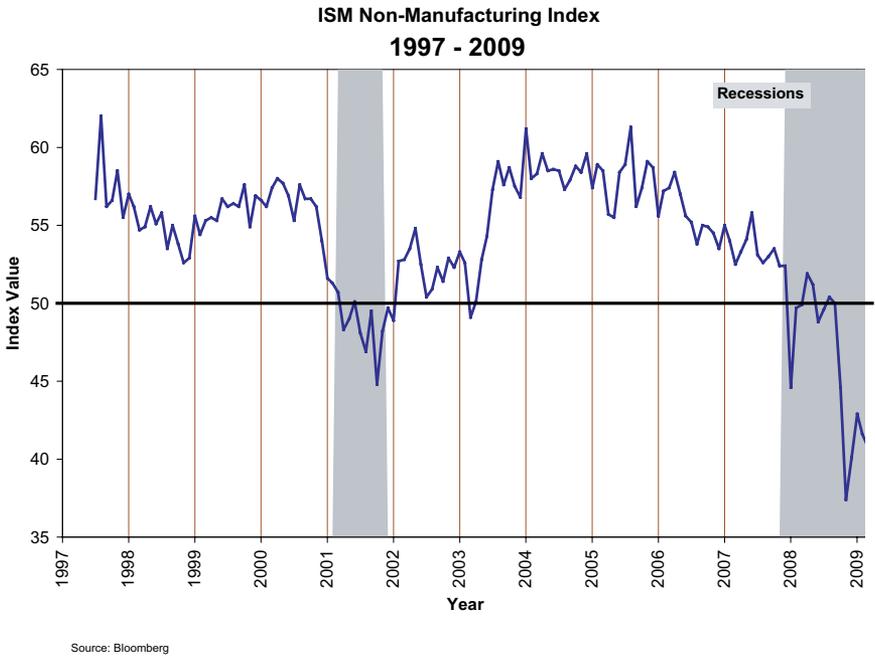
NOTE: The U.S. production index measures real output and is expressed as a percentage of real output in a base year, currently 2002. The production indexes are computed as Fisher indexes since 1972; the weights are based on annual estimates of value added.

Historically, recessions have been primarily corrections in inventory and capital spending. That remains true. If you're on the industrial side of the economy, for anything from autos to capital goods, a recession is easy to identify. This is especially true today.

**Note:** As we become more of a service economy, (as opposed to a production or industrial economy), the percentage weight of this particular metric decreases as a part of overall GDP.

So, let's turn our attention to the service side of the economy:

**Figure 5 ISM Non-Manufacturing Index, 1997-2009**

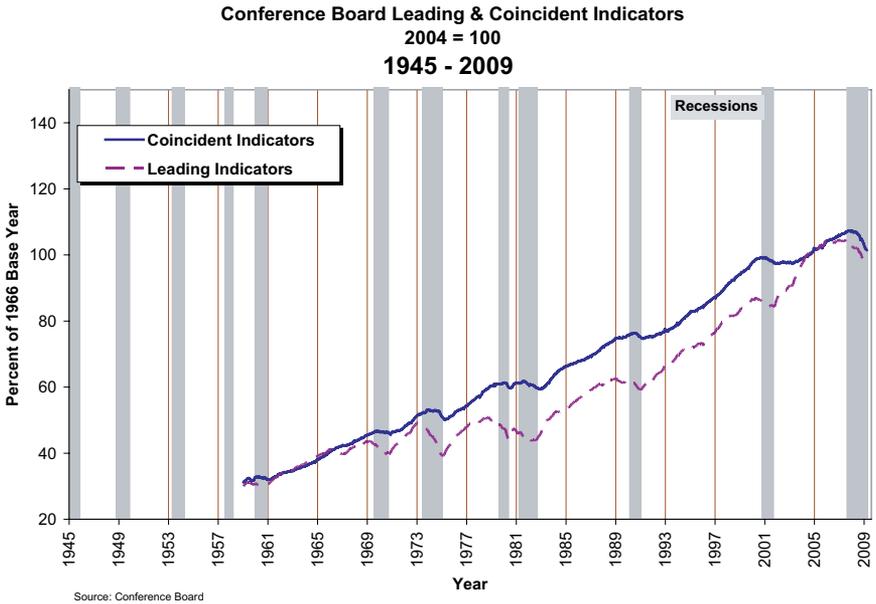


In Figure 5, when the index value is above 50, more companies are expanding than contracting. If below 50, more companies are contracting than expanding.

While this plot dates back only to 1997, you will notice in 2001 that non-manufacturing fell below the 50th percentile. (I think the drop was probably when the “dot-com’s” laid some people off.) It dipped briefly in 2008 and came back up – and then fell off a cliff last September, October, and November, meaning the recession we worried about a year ago became serious during these months. The most recent drop, I suspect, can be attributed to a lot of Wall Street people losing their jobs – all non-manufacturing.

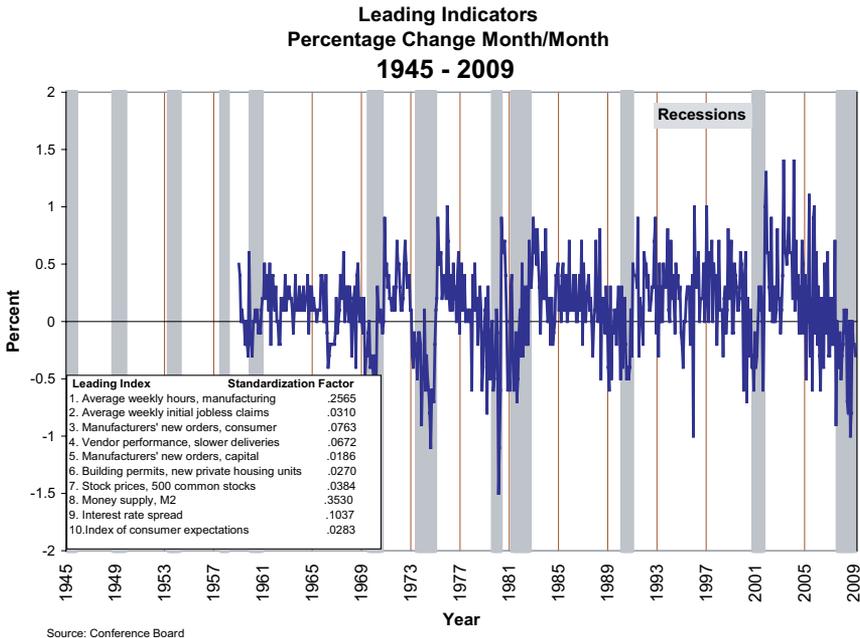
As you can see from Figure 6, when we look at both leading and coincident indicators, the patterns are pretty much familiar. What we're saying is in the economic sphere, (there are also political and financial spheres to consider), the pattern of this recession looks largely familiar:

**Figure 6 Conference Board Leading & Coincident Indicators, 1945-2009 (2004=100)**



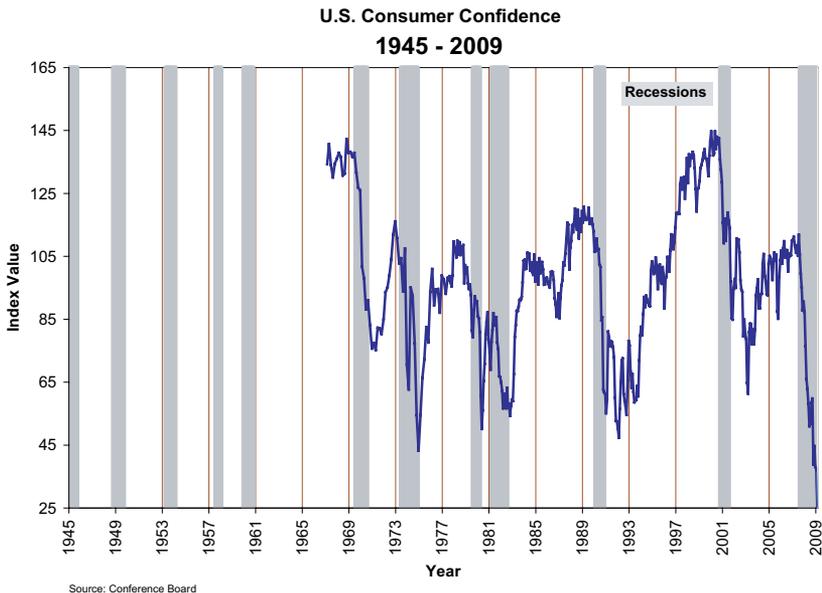
Let's look a bit further into the leading indicators. The biggest pieces of the leading indicators are items like the money supply, stock prices, and interest rate spreads. On a month-to-month basis, you get a whole lot of volatility and that remains true. As you can see from Figure 7, it is difficult to point out anything that is much different than what we've experienced in prior recessions.

**Figure 7 Leading Indicators, Percentage Change Month/Month, 1945-2009**



**Reminder:** Every time we have had a recession, there has been a downturn in the leading indicators; but not every downturn means there is a recession.

**Figure 8 U.S. Consumer Confidence, 1945-2009**



You'll notice from Figure 8 that, in most cases, consumer confidence drops considerably during a recession and responds pretty quickly thereafter. An exception was back in 1990-1993, when it took a couple of years for consumer confidence to come back. My suspicion is that with all of the savings and loans going bankrupt, and hundreds of banks going out of business, consumer confidence was severely rattled.

In 2001, the recession was triggered by the excesses in dot-com's and the aftermath of 9/11. Afterwards, consumer confidence bounced up a bit and then dropped back down around the time we were going to war in Iraq. I recall investors responding to these circumstances as being very careful due to the uncertainties.

This time around, with the problems in our credit markets and financial institutions, it wouldn't surprise me if consumer confidence stays modest – subdued – for a long time coming out of this recession. But, remember, the economy may come back long before a return of consumer confidence, similar to what happened after the 1990 slowdown. Public perception lags the economist's definition and the markets anticipate the economist's definition. That's just the way it works.

**Figure 9 S&P 500 Index, 1945-2009**

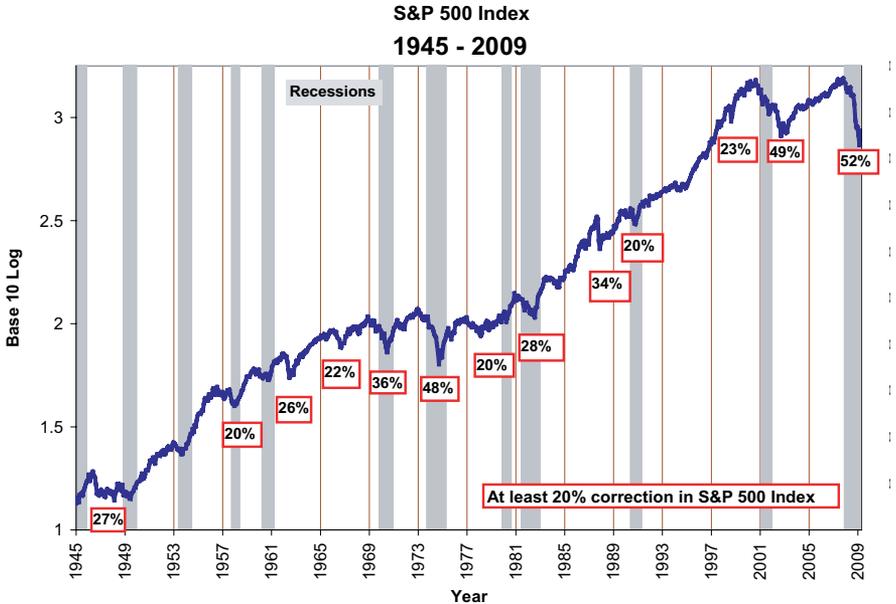
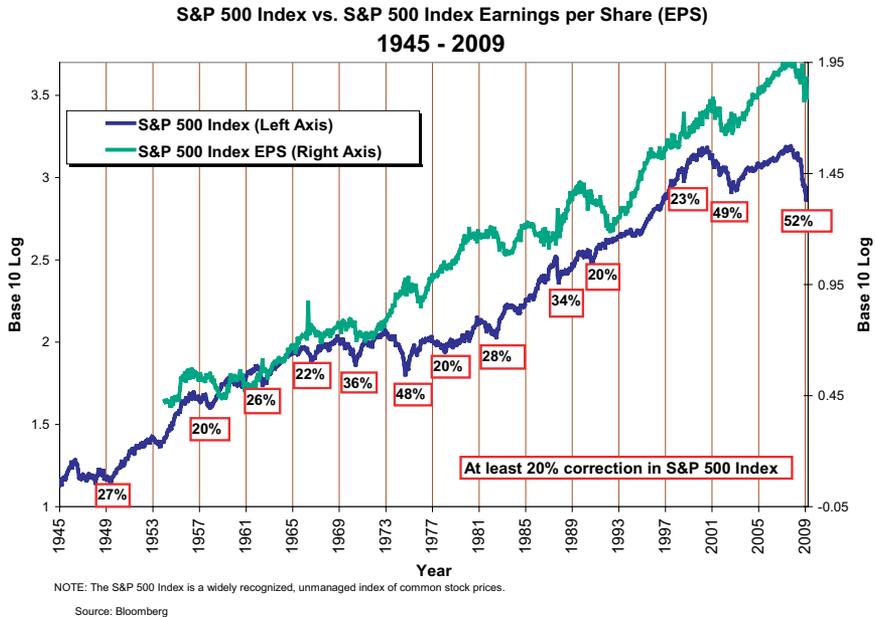


Figure 9 shows corrections of at least 20% or more in the S&P 500 Index since 1945. In most cases, the corrections and recessions are coincident. What's also interesting is, if you wait for the recession to be over, you miss a very good bounce coming out of it. So as an investor, we think you want to invest when people fear a catastrophe and it looks like it may not happen. After all, the only time you can buy a good company cheap is when the public is fearful of something.

## Figure 10 S&P 500 Index vs. S&P 500 Index Earnings per Share (EPS), 1945-2009



As shown in Figure 10, in some cases, the markets are more volatile than earnings; in other cases, they are not. Recently, we have had earnings decline. What's been interesting in the current quarter, while many factors were masked by the credit crisis, a lot of companies have done rather well. They've done better than expected in the current quarter; approximately 65% of earnings are coming in ahead of Wall Street estimates. Granted, Wall Street estimates have been cranked down, but the point is the patterns are fairly familiar to us.

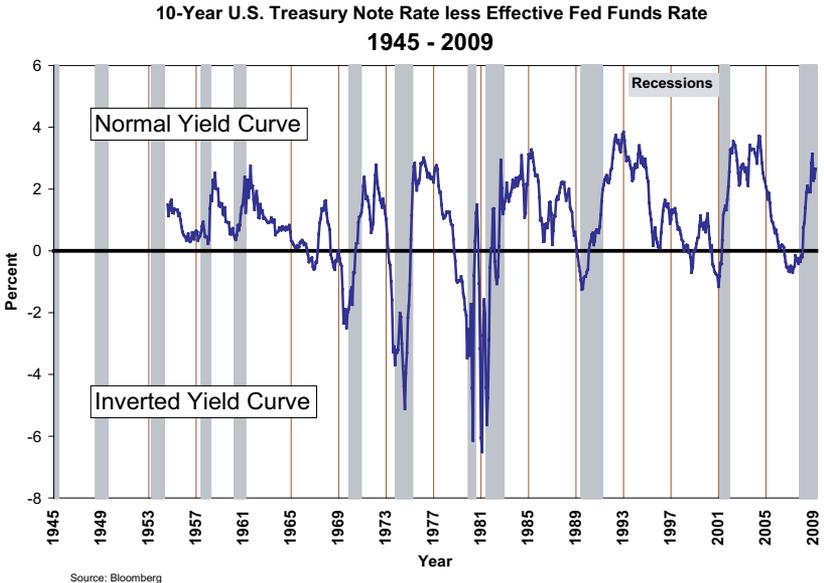
Now let's turn our attention to interest rates:

**Figure 11 10-Year Treasury Note Rate, 1945-2009**



In 1981, 10-year Treasury note interest rates hit 14% to 15%. Presently, the 10-year Treasury rate is at 3%, maybe 3.2 percent.

**Figure 12 10-Year Treasury Note Rate Less Effective Federal Funds Rate, 1945-2009**

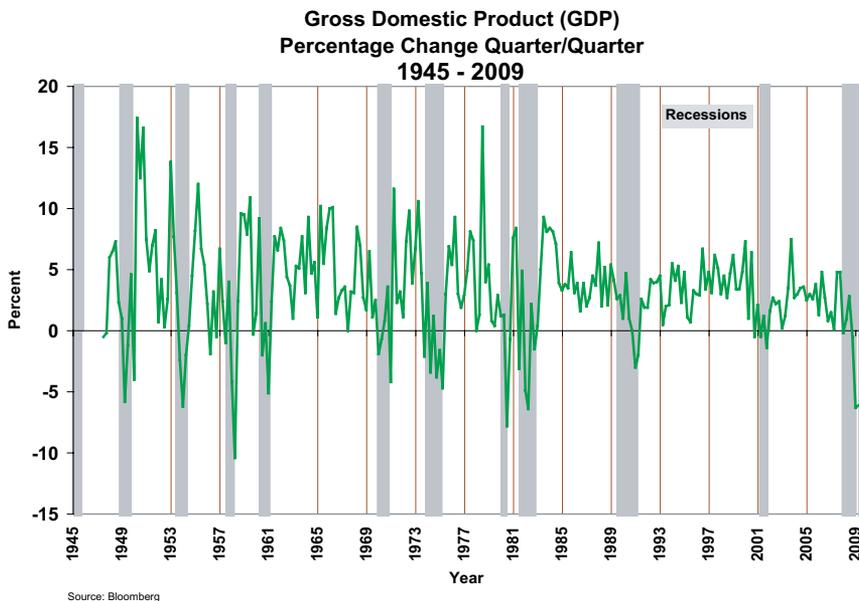


What gets interesting is when you compare the 10-year Treasury note to the Effective Federal Funds Rate.<sup>1</sup> Figure 12 shows the difference in percentage between long-term interest rates on treasuries and short-term rates which the Fed heavily controls.

When the Fed fears inflation is getting out of control, it will raise short rates above long rates, which means the plot line goes to zero or negative. Once negative, it creates an inverted yield curve. (For some time now, an inverted yield curve has tended to preface a recession. It was not quite true in the 1950s, but was certainly true in the '60s and '70s.) When the Fed concludes inflation is no longer a problem, it lowers short rates – and because long rates are reasonably stable, the line goes positive. You'll see this has occurred during every recession identified on Figure 12.

In the last several months, the Fed has lowered short rates; they're now between 0%-0.25 percent. The plot line is now positive, which means the Fed is trying to speed up the economy. Again, this pattern looks similar to what we've seen before.

**Figure 13 Gross Domestic Product (GDP)  
Percentage Change Quarter/Quarter, 1945-2009**



1 The Federal Funds Rate is the interest rate at which banks lend funds at the Federal Reserve to other depository institutions, usually overnight. It is the interest rate banks charge each other for loans.

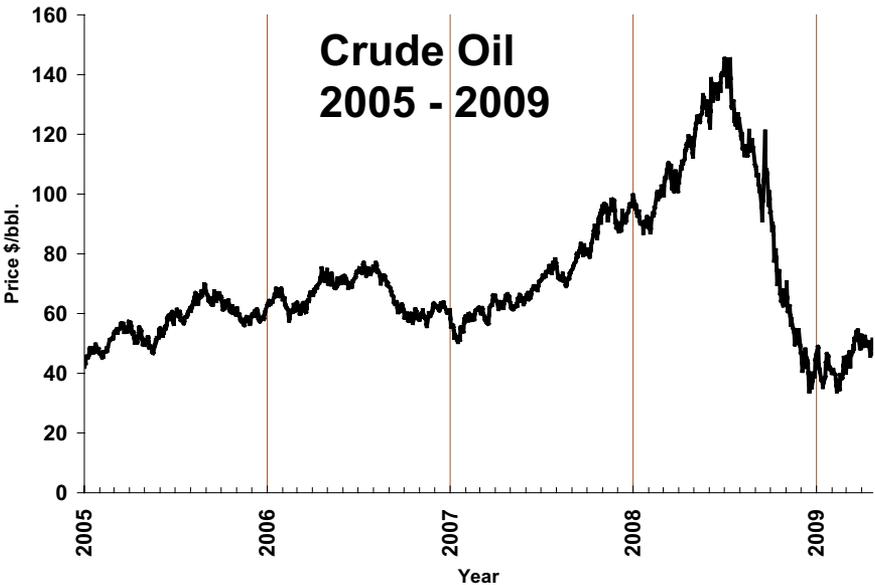
As you can see from Figure 13, there's a lot of volatility in these numbers, but what's important to remember is we've been down at these levels before. The question is: how long are we staying here? In serious recessions, the numbers remain low for a period of time like '73-'74 and '80-'82. If GDP stays down for just a quarter or so, you come out of the slowdown pretty quick.

Most of you know that in the fourth quarter of 2008, GDP was more than -6% annual rate; in the first quarter of 2009, it was in the same place. The downward drivers are significant inventory corrections and negligible spending on capital goods.

## How is the consumer faring today?

One year ago, we were worried about the prices of energy and food stuffs... and we were worried about inflation. Let's take a look at the things we worried about a year ago, and see where we are today.

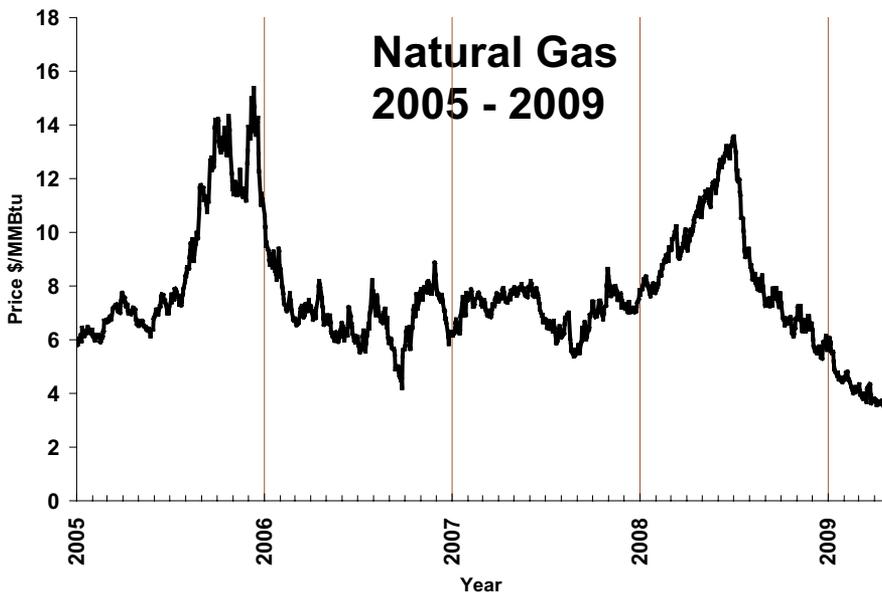
**Figure 14 Crude Oil, 2005-2009**



Source: Bloomberg

Shortly after our presentation last May, the price of crude oil ran to \$140.00 per barrel and came back down to \$40.00. Today, the price is approximately \$60.00 per barrel. So crude oil has neutralized.

Figure 15 Natural Gas, 2005-2009



Source: Bloomberg

Once again the price has neutralized. What was \$12.00 per unit a year ago is now under \$4.00. Currently, the price of natural gas (on an energy basis) is selling for about half the price at which crude is selling.

Let me comment further...

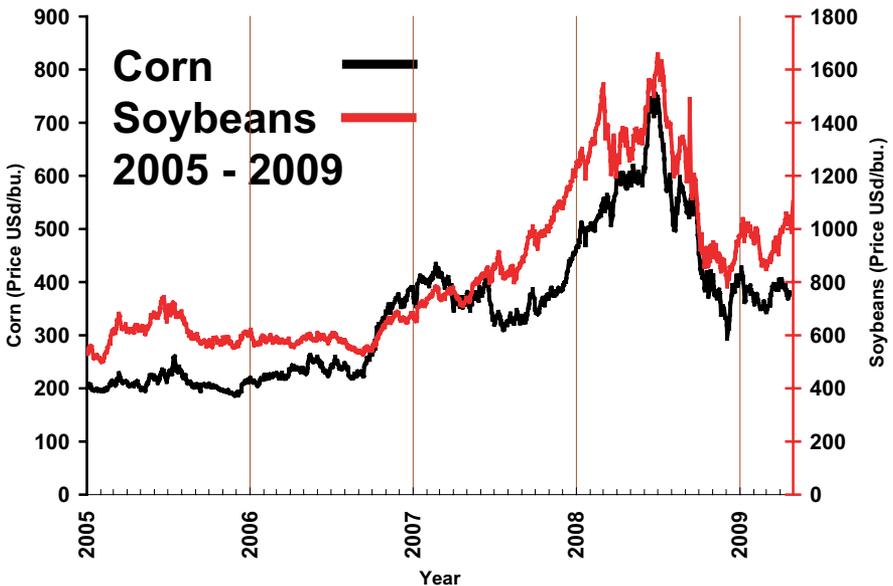
Anybody familiar with Marcellus Shale? Right here in the Appalachian Basin, about 8,000 feet below us, is black shale that has natural gas trapped in it. We've known that for a long time. About five years ago, however, geologists and engineers figured out that if they could drill down to the shale, and then drill sideways, it might make it worthwhile to release the untapped natural gas.

At one company we've talked to, engineers drilled sideways for approximately 2,500 feet in 2007. In '08, the distance was extended to 4,500 feet. In 2009, it extended further to about 6,500 feet. Engineers are drilling down to the shale layer, then, drilling horizontal and using hydraulic pressure to fracture the shale. They deliberately break up the shale and release the gas. As you can imagine, successful wells must yield large volumes of gas to pay for the drilling costs which, relative to a traditional vertical well, can be very expensive. But they are finding tremendous amounts of natural gas; so much so, that on a per MCF (1,000 Cubic Feet) or per BTU (British Thermal Unit) quantity of gas, it is now cheaper to perform horizontal drilling and hydraulic fracturing than pursue the conventional shallow wells. And they keep finding new gas fields!

The point is, I don't often think of drilling for gas as being "high technology." They have been drilling for gas in Butler County, Pennsylvania for over 100 years. At one time, there were five gas wells on my 95-acre farm. The wells were shallow, perhaps 300 or 400 feet. But there are maps; we know where the gas is. We also know that it is only in the last two or three years that it has become economical to harvest the deep gas, the shale gas – and there is enough (at our current rates) to last about 100 years.

Incidentally, if you're a chemist, (I'm not – but I do still have a handbook of chemistry and physics from college days), you know that if you burn natural gas instead of gasoline or coal, you produce about half as much carbon dioxide (CO<sub>2</sub>). In moving towards a hydrogen economy, gas is halfway there. Here's why: the chemical formula for gas is CH<sub>4</sub>; if you combine CH<sub>4</sub> with oxygen, you get one molecule of CO<sub>2</sub> and you get two molecules of H<sub>2</sub>O... water! If you move from using gasoline, oil, or coal, to using natural gas for the same amount of energy, you produce about half of the CO<sub>2</sub>. So I think there's a pretty good future for natural gas. And today, it's dirt cheap.

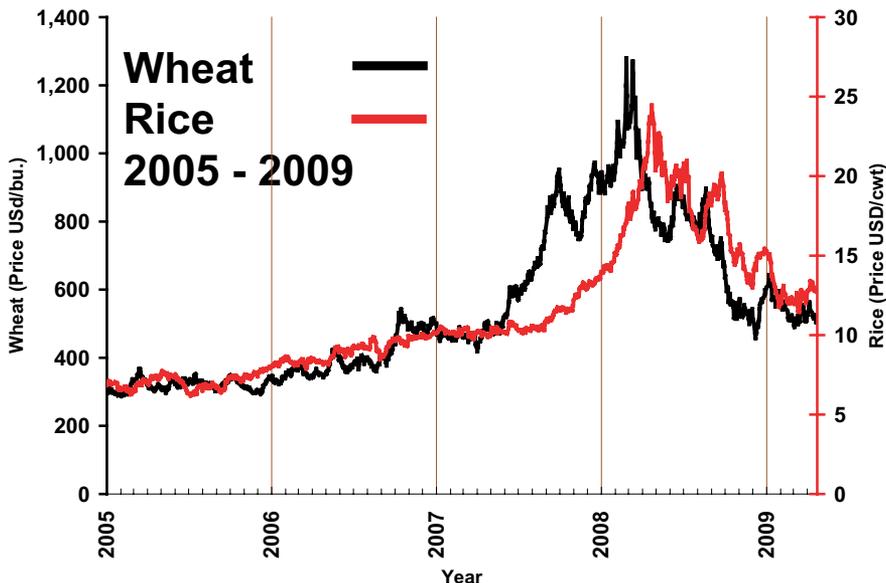
**Figure 16 Corn and Soybeans, 2005-2009**



Source: Bloomberg

Prices of corn and soybeans track together, partly because these crops are grown on the same land. Their prices nearly tripled during the prior year. (The last time the price tripled for corn and soybeans was in 1973-74. Within eighteen months, half of the price gain was given back.) This time around, it took five months, but more than half of the price gain was given back.

Figure 17 Wheat and Rice, 2005-2009



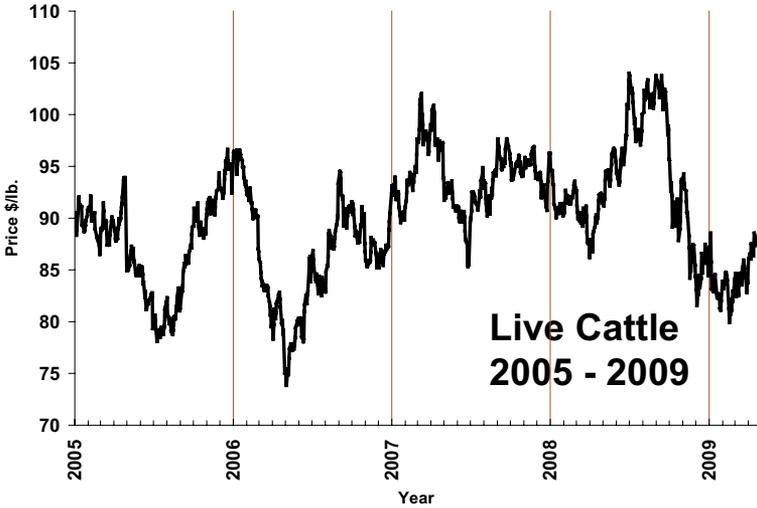
Source: Bloomberg

The prices for wheat and rice peaked before corn and soybeans. Since the peak (when prices nearly tripled), prices are down 30 percent.

**Worth noting:** for the average family in this country, food is about 14% of the budget. So when the price of wheat triples, it's an inconvenience. I am told that in China, food is about 40% of the family budget. So when the price of rice triples, it's a potential catastrophe. A year ago, we were looking at triples in those prices; the prices have now given most of the gains back. As a result, I am not as worried about the potential impact on the Chinese consumer.

The price for live cattle has been basically flat over three years:

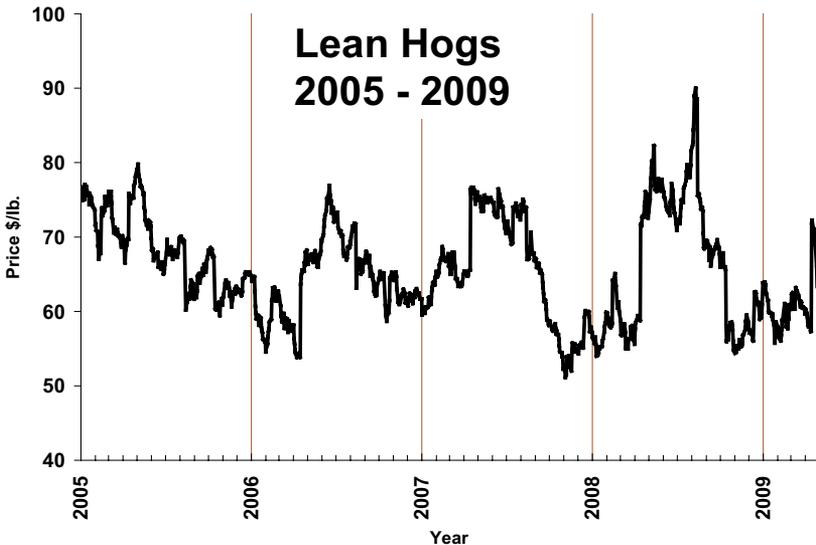
**Figure 18 Live Cattle, 2005-2009**



Source: Bloomberg

As has the price for lean hogs...

**Figure 19 Lean Hogs, 2005-2009**



Source: Bloomberg

Here's where we are: the costs for energy and food are within price ranges of where we have been for the last 3 to 5 years. After having a run up, prices have come back down; so, the direct effect on the consumer has been neutralized. Is the same true for shelter?

**Figure 20 U.S. House Price Index, 1999-2008 (March 31, 1980=100)**

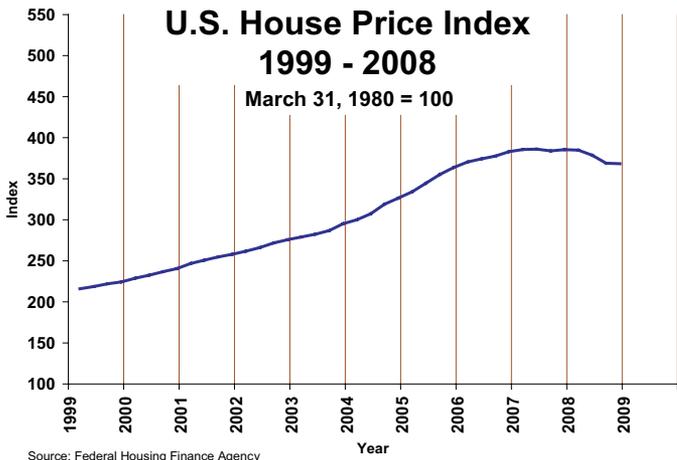


Figure 20 is probably representative of house prices in Pittsburgh. In some areas of the country, the increases were much greater and the declines were much greater. But, what's happened to mortgage rates?

**Figure 21 30-Year Mortgage Rate, 2005-2009**



Currently, 30-year mortgage rates on a conforming mortgage are about 4¾%; 15-year mortgage rates are 4⅔ percent. Mortgage rates have dropped considerably.

With the combination of house prices coming down a bit, and mortgage rates coming down a lot, the housing affordability index is the best that it's been in at least 30 or 40 years:

**Figure 22 Housing Affordability Index, 1971-2009**



In Figure 22, the higher the line goes, the more affordable housing is; i.e. the cost of carrying the house is cheaper.

Remember back in 1981 when mortgage rates were 13%, 14%, and 15 percent? Housing was unaffordable. When mortgage rates were on the order of 6% or 7%, however, house prices were moving up as people bid them up – beyond what they should have been. As a result, affordability came down in '05, '06, and '07. Now, with prices coming down a bit, and mortgage rates coming down a lot, the affordability index has improved.

What does this all mean?

It means if you're a youngster looking to buy your first house, it's much more affordable than a couple of years ago. The flip side is, if you're 75 or 80 years old and looking to sell your house, you don't get as much for it.

What's in between?

I maintain that most people swap from one house to another; Connie and I have swapped houses three or four times. If the price is up, it means you will be paying more, but you also get more. If the price is down, it means you get less, but you also pay less. So unless you plan on swapping your house (and many of us here today won't swap a house until we get that little thing called a coffin), I'm not quite sure why people are so concerned about what house prices do. The long and short of it is housing is in better shape than it was. Incidentally, over the last year, we worked off about half of the inventory backlog. And I think it's going to be a whole lot easier with current mortgage rates to work off the second half of that backlog than it was the first half.

So how is the consumer faring? I always start with the basics: food, clothing, and shelter. Is anybody worried about the price of clothing running up? I'm skipping clothing because I don't think anybody's worried about it. A year ago, we were concerned about the prices for food and energy – and those prices have come back down. The price of housing has come down somewhat; mortgage rates have come down big time; affordability of housing has improved. Unless you've lost your job, your cash flow is probably in better shape than it was two or three years ago. Food, clothing, and shelter are actually cheaper.

In any recession, 3%-5% of people lose their job and we worry about that as we should. But for the 95% of people who don't lose their job, on a cash flow basis, they are probably in better shape than they were two or three years ago.

## How does this recession compare to prior slowdowns?

Figure 23 2008-09 vs. Prior Slowdown / Recession

### **2008-09 vs. Prior Slowdown / Recession**

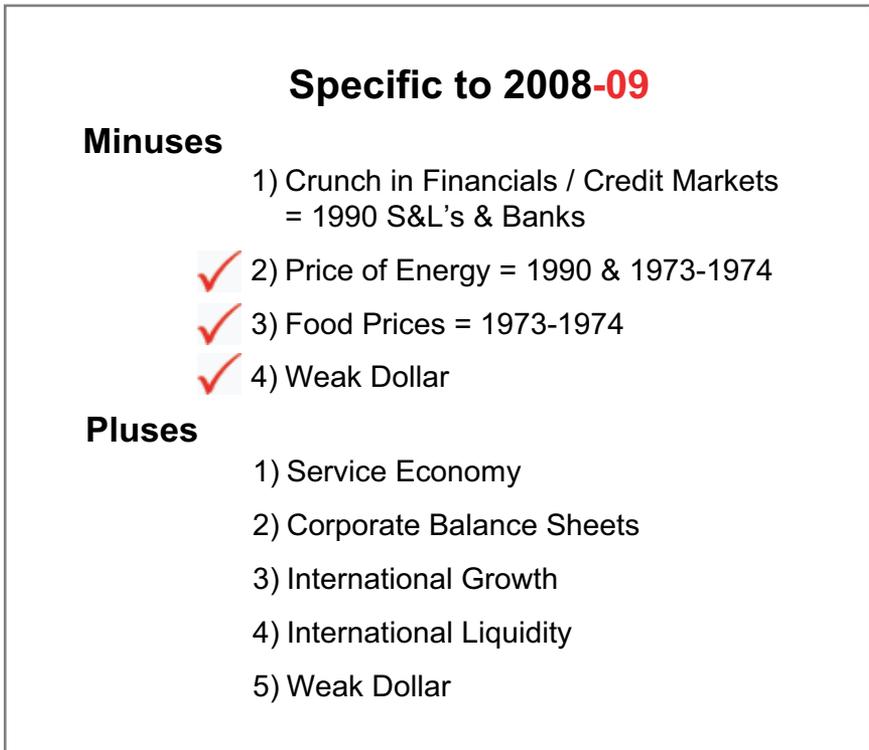
Aggregate #'s Look Familiar

- 1)GDP
- 2)Employment
- 3)Fed Squeeze → Inverted Yield Curve
- 4)Consumer Confidence

I repeat: When we look at the '08-'09 recession versus prior slowdowns, the aggregate numbers look familiar:

- ✓ GDP patterns look familiar;
- ✓ Employment patterns look familiar;
- ✓ The Fed's squeeze gave us an inverted yield curve; i.e. short rates went above long rates. The Fed has now reversed that; and
- ✓ Consumer confidence looks familiar.

**Figure 24 Specific to 2008-09**

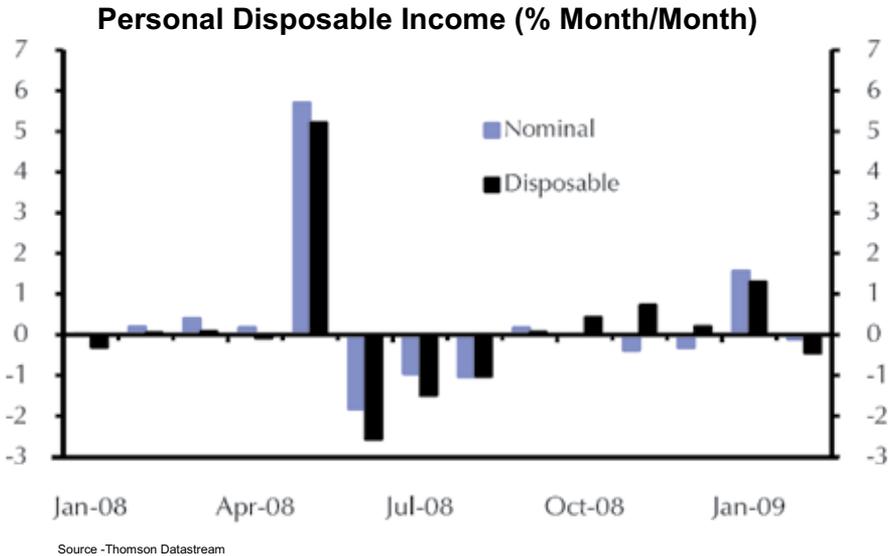


Most of the "minuses and pluses" remain true. What's changing is the dollar; it is becoming stronger. So, in a cyclical sense – worrying about the economic and business cycles that we have been through a dozen times since World War II – much of what has taken place looks familiar to us and we probably passed the crunch of it.

A year ago, I said there are at least two different definitions of recessions. While the economists will tell us we were in a recession after experiencing two consecutive quarter of down GDP, the public says, "It took two years before it got back to the old highs." Those are very different definitions.

So let's try to close the gap in perception by looking further:

**Figure 25 Personal Disposable Income (% Month/Month)**



From Figure 25, you can see the monthly numbers jumped 5%-6% on both nominal and disposable income when the Bush tax rebates went out in April/May 2008. In the following three months, it went negative and then neutralized.

The point is personal disposable income on a month-to-month basis has been flat. It has not declined significantly – it's held up – even though the numbers include 3%-5% of the population that lost jobs. (Folks, in every recession, 3%-5% of people are going to lose their job. That's a fact of recession.)

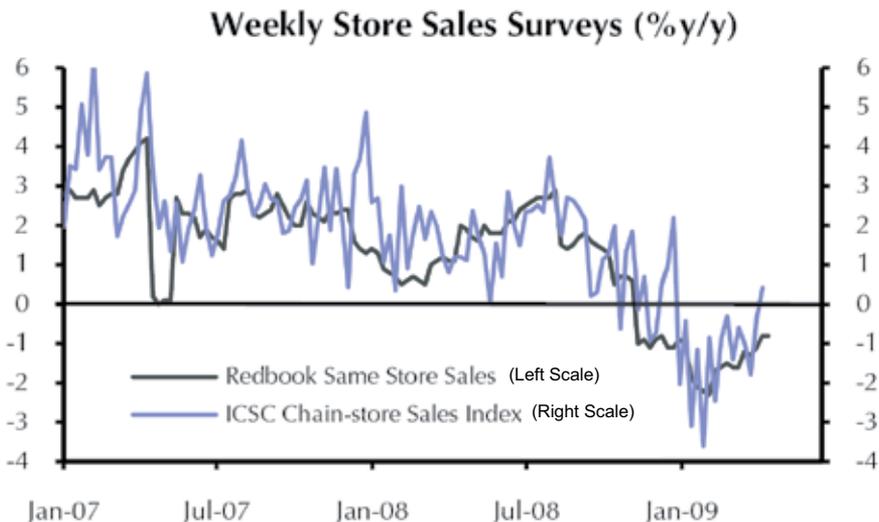
Now let's turn our attention to personal savings:

Figure 26 Personal Saving Rate, 1992-2009



Back in 1992, personal saving was at 8 percent. From 1992-2006, it went from 8% to 0 percent. During the past six months, personal saving went from 0% back up to 5 percent. Some people fear, and some people predict, that having gone from 0% to 5% we're on our way to 10 percent. It looks more like we're leveling off at 5 percent. I'm not saying it won't go back to 10%, but I think it will happen on a gradual basis over a period of time.

Figure 27 Weekly Store Sales Surveys (% Year/Year)



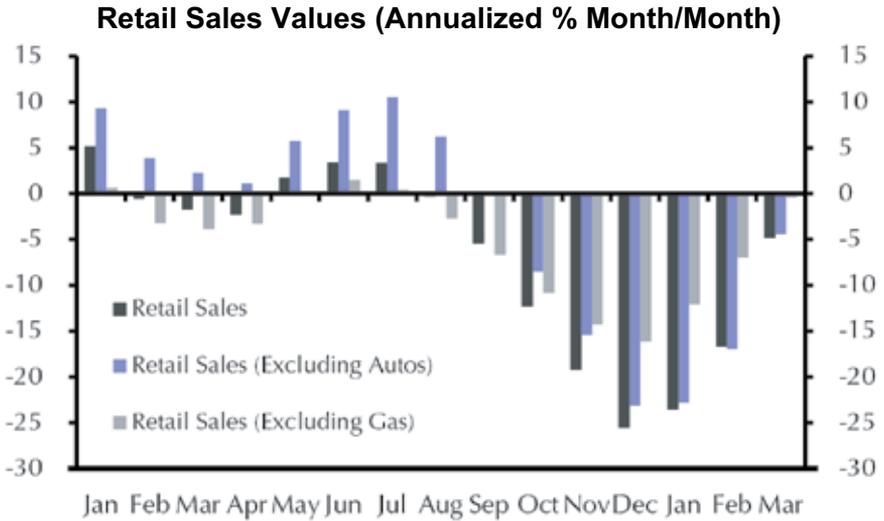
Source - Thomson Datastream

Note: ICSC = International Council of Shopping Centers

As you can see from Figure 27, weekly store sales had been in the 2% range on a year-over-year basis. In the fall of 2008, the numbers went from +2% to -2% in a fairly brief period of time. But, Wal-Mart recently reported that year-over-year sales are up 5 percent. I suspect that sales at Tiffany's are a little less than that... so the mix has changed. A lot of people have taken a step down.

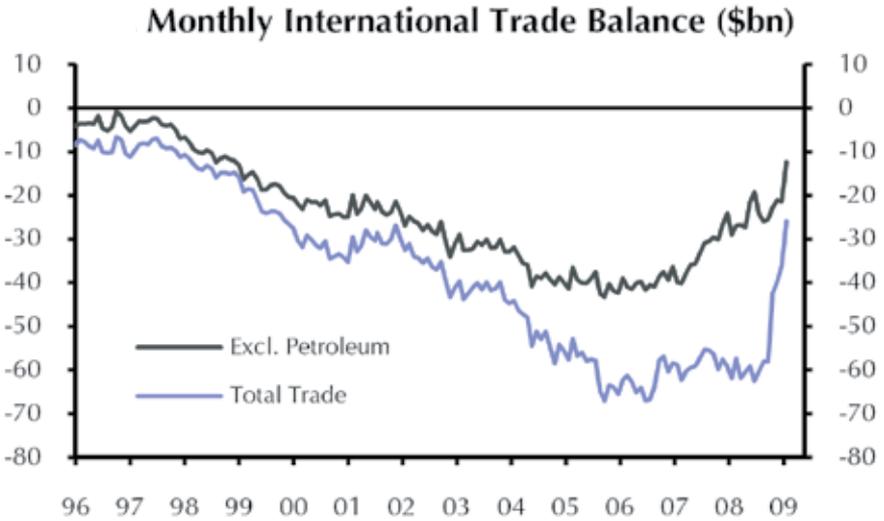
The point is, on a year-over-year basis, having dropped considerably, it looks like the weekly sales numbers are flattening out.

**Figure 28 Retail Sales Values (Annualized % Month/Month)**



Again, last fall, retail sales dropped big time and have gone flat since December. These numbers are working their way flat on a month-to-month basis and are now within a range that's reasonably close to zero.

**Figure 29 Monthly International Trade Balance (\$ Billion)**



Remember the terrible stink about how bad our trade balance was? Have you heard anything about it lately? Ever wonder why that is? It's because the deficit is collapsing.

The blue line on Figure 29 represents total trade including petroleum. When the price of crude oil goes from \$140 per barrel to \$40 per barrel, the dollars get cut in half. Remember, the blue line represents the total, which has gone from -60 to -25. If you exclude petroleum from all the other materials we ship, trade has been cut in half.

What's interesting is that we quit importing a whole lot of goods just as people cut back on their spending. After Lehman Brothers went bust in September 2008, there was a period of time when companies couldn't get financing to buy a container load of goods in China and have it shipped to the U.S. The financial markets just seized up.

So, if you were worried about international trade and our trade deficit, (which is also our investment surplus), two-thirds to three-quarters of the deficit has been neutralized.

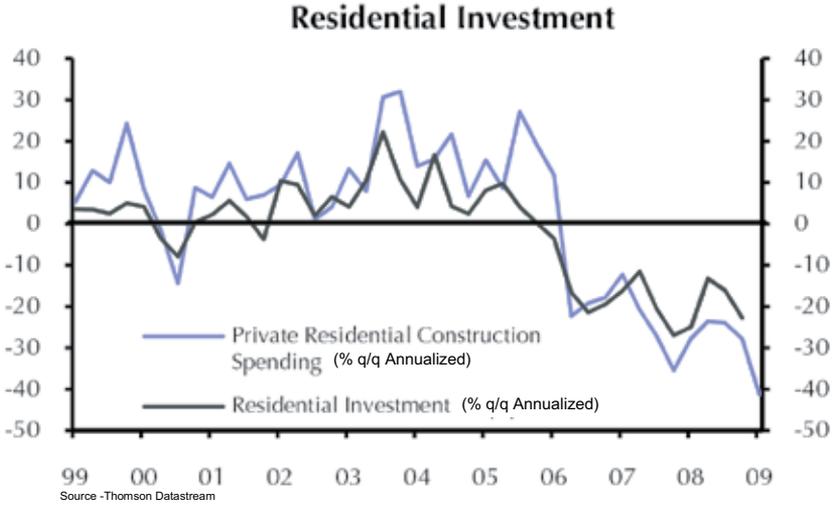
**Figure 30 ISM Activity Indices**



Source -Thomson Datastream

As noted in Figure 30, manufacturing and non-manufacturing fell off a cliff during the last quarter of 2008 and in early 2009. During the past three months (March-May), however, these indices seem to be stabilizing. We're seeing this in truck tonnages, railcar loading, and in retail sales. In fact, a whole lot of economic factors that were growing nicely dropped in the fourth quarter last year and now seem to be stabilizing. Even our politicians are talking about that.

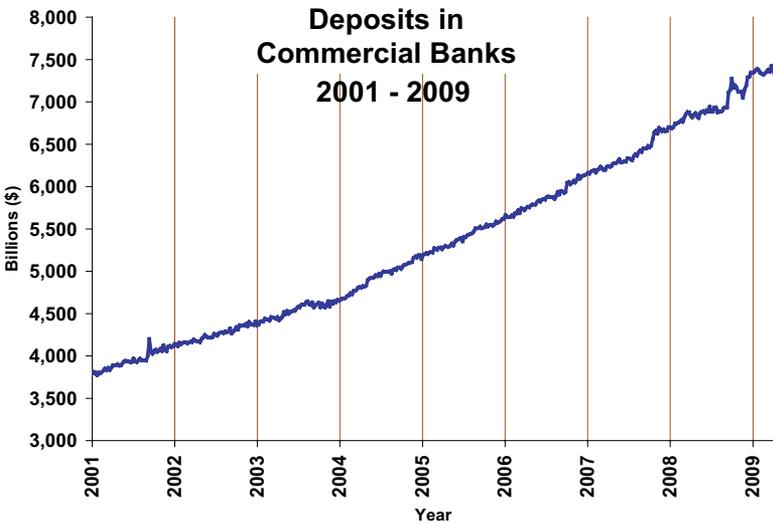
**Figure 31 Residential Investment**



Residential investment had been growing rather nicely, dropped off, and is now stabilizing. That said, I do believe there remains enough empty houses across the country. It's going to take a while to work off the inventory and, in most parts of the country, it's seasonal. Likely, it will take up to next year.

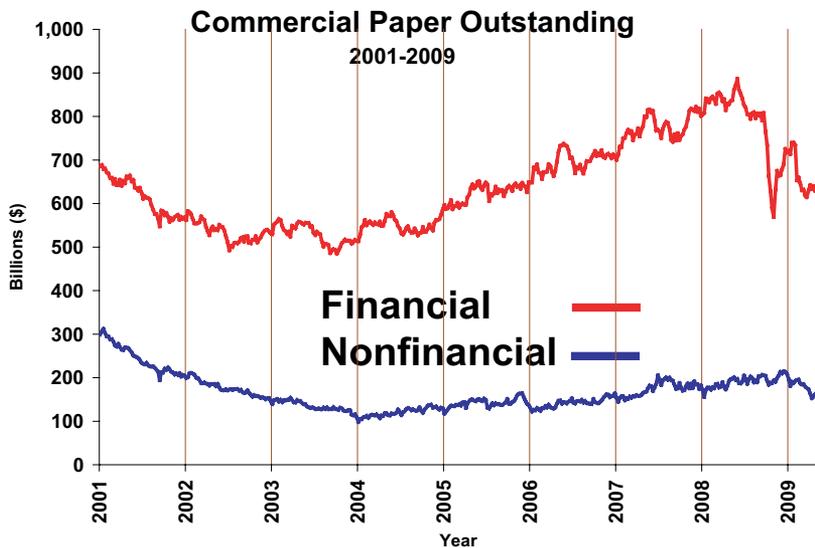
To round out our discussion, let's take a look at what's happening with financial institutions.

**Figure 32 Deposits in Commercial Banks, 2001-2009**



As you can see from Figure 32, deposits in commercial banks continue to grow. In fact, when I talked with my local bankers and inquired about business, I learned their equity is 18% of the assets. They almost have too much equity! But this makes sense. After all, people are saving more and borrowing less. I think this is what's happening with most of the smaller and regional banks in the country – specifically, banks that did not participate in mortgage securities and other sub-prime credit. Their deposits keep on growing.

**Figure 33 Commercial Paper Outstanding, 2001-2009**



Source: Federal Reserve Board

This plot includes both commercial paper (business-to-business) and financial (bank-to-bank) lending. Commercial paper has slowed a bit (as it usually does in recession), but there was a big drop in financial commercial paper.

Remember when you heard that banks were not lending to each other because they lacked confidence? After Lehman Brothers went broke last September, a whole lot of the financial industry just locked up. Financial institutions quit lending to each other, which had strong repercussions in the general economy not only in the U.S., but in other parts of the world. There was a major seize-up last September-October.

Presently, financial paper has bounced a bit and has basically neutralized. We're going to see more of that. In fact, many economic conditions have improved and here are a few more examples:

**Figure 34 LIBOR and T-Bill Rates, 2000-2009**

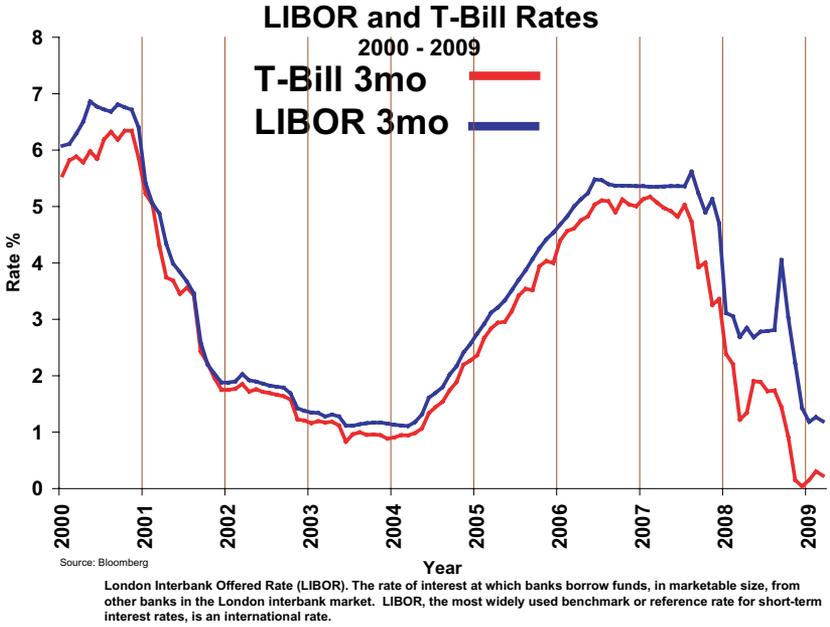
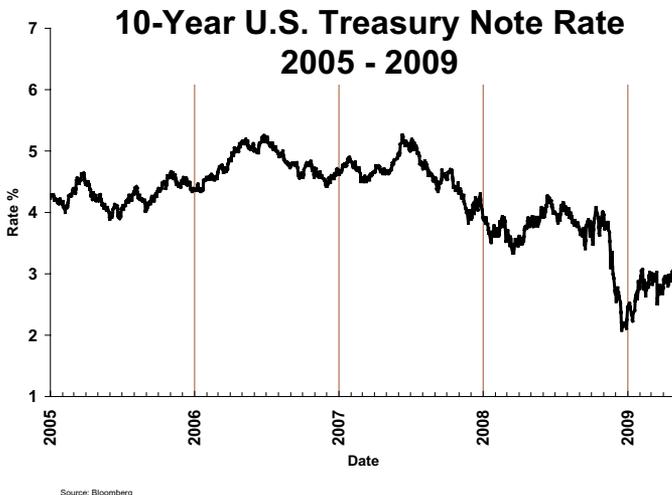


Figure 34 shows both LIBOR (London Interbank Offered Rate), along with three-month T-bill rates since 2000 – the rates at which banks lend to each other. What you'll notice is the rates track together up until early '08, at which time the Fed kept lowering T-bill rates to try to boost the economy. LIBOR started moving sideways. (In the U.S., when people get fearful, it seems they are willing to take an almost zero return for the comfort of treasuries. This is not the case with LIBOR.)

Last fall, when financial lending locked up everywhere, LIBOR spiked. Since then, LIBOR has come back down to the lowest level in a long time, well beyond the timeframe for this plot. There's still a bit of a gap because our treasuries are quite low, but what I'm saying is the factors that seized up the financial industry last fall, for the most part, have worked their way through.

Let's look at other important interest rates:

**Figure 35 10-Year U.S. Treasury Note Rate, 2005-2009**



U.S. 10-year treasuries are the benchmark for long-term lending. As you can see from this plot, when the Fed started buying 10-year treasuries, the rates dropped. They're now creeping up a bit.

**Figure 36 Moody's Corporate Bond BAA, 2005-2009**



When the yield on 30-year investment grade bonds goes from 7% to 9.5%, it means the price drops by over 25 percent. Last year, bonds lost nearly as much money as stocks because in the last quarter of 2008 and early 2009, people got very nervous. Since then, the rates have dropped a bit.

**Figure 37 Moody's Corporate Bond BAA vs. 30-Year Mortgage Rate vs. 10-Year U.S. Treasury Note Rate, 2005-2009**

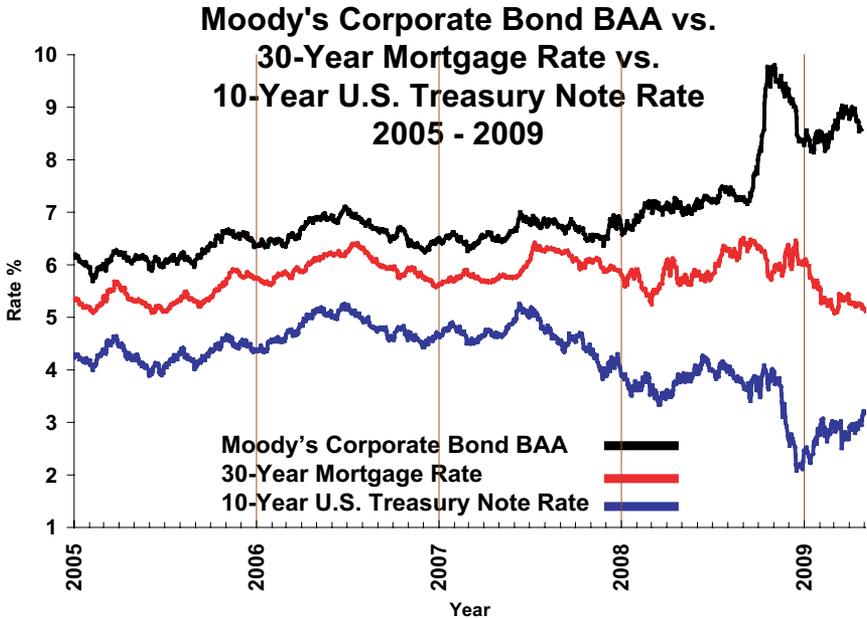


Figure 37 combines the last two plots, and adds 30-year mortgage rates. You'll notice that until the beginning of 2008, the three plots tracked together. During '08, the spreads widened, particularly in the fall of the year.

More recently, as the Fed brought 10-year treasury rates down through its own buying, mortgage rates have come down, too. (You'll note there's a wider than normal gap between mortgage rates and treasuries; we think this is because treasury rates are too low.) As the economy improves, however, treasury rates should move up. By the way, when these rates increase by another half percent or so, they'll probably start being a floor under mortgage rates. As a result, I don't expect mortgage rates to go much lower.

And with corporate bonds, even though the rates have dropped a bit, they remain higher than the 10-year treasury yield. So we think there's decent money to be made in BAA corporate bonds.

But, what about stocks?

For forty years, what I learned was when good companies get cheap, just go buy them – don't worry about the timing; just go buy them. If you did that last year, after buying, the companies got a whole lot cheaper. The question is: how did they get so cheap? We can find out quite a bit by studying auctions.

## **What do the stock market and an estate auction have in common?**

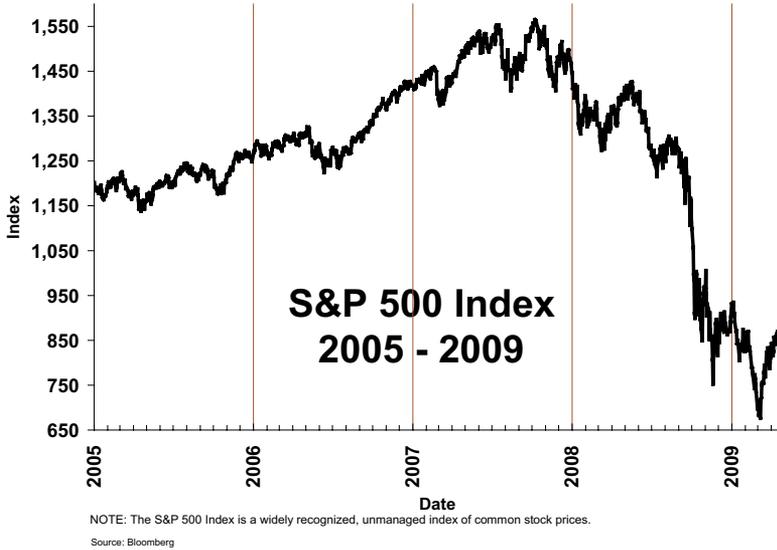
At an estate auction, everything will sell. (At other auctions, there may be a reserve price. For example, the seller says, "I'll sell – but only down to this price. Beyond that, I'll just keep it.") In an estate auction, there are often no reserve prices; everything will sell. How does this relate to the stock market?

At the end of 2007, there was approximately \$1.8-\$1.9 trillion invested in hedge funds. During 2008, hedge funds received nearly \$400 billion in redemptions. Remember: if you run an open-end mutual fund such as we do, or a hedge fund and you receive redemptions, you must send people their money. This means if an investment manager is fully invested, he must sell something to cover the redemption. Imagine the impact when hedge funds received approximately \$400 billion in redemptions in 2008, and another \$100-\$200 billion in January-February of this year!

Add to this situation the leverage with which hedge funds could operate. Let's say a hedge fund had \$1 billion in equity... it might borrow another \$2 billion, \$3 billion, or \$4 billion to buy more stock on that leverage. Well, during the course of last year, hedge funds received word from their lenders that if they were carrying 4-to-1 leverage, the lenders were no longer willing to lend that much anymore – perhaps, only half that amount. (I don't have final numbers, but it looks like their leverage was cut in half during last year.) So, if you add deleveraging to the redemption amounts, you can get to \$1 trillion of forced selling pretty quickly. Of course, there were no forced buyers to offset it.

Folks, we are quite confident the deleveraging is over. At the end of 2007, Morgan Stanley had 30-to-1 leverage. At the end of 2008, it had 11-to-1 leverage. We know Morgan Stanley is not going back to 30-to-1, because it's now a bank, voluntarily. We think this type of huge reduction drove prices well below what was fair, and it probably ended about the end of February.

If nothing else had happened in the economy, but there were people who had to sell \$1 trillion worth of securities last year, what would happen to the price? And, what if the selling was concentrated in October-January? In Figure 37, you saw what happened to BAA bonds in October. On the next page, from Figure 38, you can see what happened to stocks:

**Figure 38 S&P 500 Index, 2005-2009**

We think much of the selling was concentrated in the fourth quarter of 2008, with another round in January-February of 2009.

On top of concentrated selling and deleveraging, there were “rule changes” that also affected the markets:

**Figure 39 Rule Changes**

## **Rule Changes**

Glass-Steagall Act, 1933-1999

Joseph Kennedy's Uptick Rule, 1938-2007

Mark-to-Market Accounting (FASB 157), 1938-2007

HUD-Mandated Mortgage Lending to Low Income, 2004

The Glass-Steagall Act of 1933 was removed in 1999. It stated that if you are a commercial bank, you can't be an investment bank; if you are an investment bank, you can't be a commercial bank. What that meant was the maximum leverage commercial banks could use was on the order of ten-to-one. This applied to banks such as Citigroup, Bank of America, and PNC. There were no leverage restrictions, however, on investment banks, institutions such as Morgan Stanley and Goldman Sachs. But when Citigroup and Travelers merged in 1999, Congress removed this Act.

Another significant rule change was the "Uptick Rule," instituted by Joe Kennedy back in 1938. The Uptick Rule said you can only short a stock<sup>2</sup> on an uptick. Back when FDR appointed Joe Kennedy as Secretary of the SEC, (Securities and Exchange Commission), everybody screamed, "You're putting the fox in charge of the hen house!" But Joe Kennedy knew how he had manipulated the markets to make his fortune, including shorting stocks. At his instigation, Congress enacted the Uptick Rule back in 1938. It came off in 2007. As a result, during 2008, there were companies which had more shares short than they had outstanding, generating a pack of bear raiders on Wall Street who would purposely drive stocks down and drive them out of business.

Another rule change was "mark-to-market accounting" (FASB 157), which was removed back in 1938 at FDR's insistence, and reinstated in November 2007. Since then, banks and insurance companies had to "mark" their assets to the latest market price, considered to be fair value. All the academics loved it. All the traders on Wall Street loved it. So, I asked: "Should mark-to-market accounting apply to mortgages?" and most responded, "Of course." I queried further, "Should it apply to your mortgage?" and they looked at me kind of funny.

To clarify, let me posit the following:

Everybody's familiar with a 30-year fixed-rate mortgage, right? What's the great advantage of a fixed-rate mortgage? Obviously, the lender can't raise the interest rate. How about an adjustable-rate mortgage? The risk is, if interest rates move up, you might have to pay a couple hundred dollars more every month. But what happens if you receive notice from the bank that your 30-year, fixed rate mortgage is secure – the interest will not change – but the principal will need to be adjusted?

- 2 An investor who sells a stock short borrows shares from a brokerage house and sells them to another buyer. Proceeds from the sale go into the short seller's account. He must buy those shares back (cover) at some point in time and return them to the lender. Example: if you sell short 1000 shares of XYZ Company at \$20 per share, your account gets credited with \$20,000. If the stock price of XYZ Company starts to fall, then you might think about "covering" the short for a profit. If the stock price rises, you will have a loss.

Here's the record of transactions if the stock falls to \$10:

Borrowed and Sold Short 1000 shares at \$20: +\$20,000;  
 Bought back and returned 1000 shares at \$10: -\$10,000;  
 Profit: + \$10,000

Let's say the new rules are the bank will take a fresh look at your house on each anniversary date, and the most it will lend you is 80% of what a similar house in your neighborhood sold for recently. Add to the mix that you know a neighbor passed away recently, and the house will be sold as part of an estate. So what happens if a house you think is worth \$300,000, sells for \$200,000?

With an adjustable principal mortgage, you own a house you thought was worth \$300,000, so you can carry a \$240,000 mortgage. But since the bank has to adjust your principal to the latest market bid, it can now only write you a mortgage based on \$200,000. Remember, the bank will lend you 80% of the sale price, so it can offer you a mortgage amount of \$160,000 going forward. To continue with your mortgage, you have to come up with \$80,000! Would that change your financial actions going forward? That's called mark-to-market. It's what every bank and insurance company has had to adjust to in the past year.

Much has been said about banks lacking confidence – but confidence in what, specifically? For one, they didn't trust the rules. The rules kept changing every few weeks. But two, even if the bankers knew the rules, they didn't trust what the appraisal would be on their assets at the end of the upcoming quarter, because starting in November 2007, they had to "mark" these assets to market. This is why buying bonds and mortgages were problematic for banks in '08. It was because if the bid price dropped at all, mark-to-market accounting lowered their asset base. Specifically, it lowered regulatory capital, thereby limiting the amount of business banks could do.

As of mid-March '09, mark-to-market accounting is being neutralized. FASB hasn't suspended it, nor rescinded it, but it has clarified the regulation in ways that look like the continued markdowns of mark-to-market accounting may be over.

And, finally, as we pointed out during our last seminar, HUD (U.S. Department of Housing and Urban Development) mandated new mortgage lending to low-income folks in 2004. (Refer to our booklet, *Bailouts, Your Dollars, & the Whole Credit Mess*, for details.)

## The Sign Posts of Change: What's Happening Now?

Figure 40 Recent Changes (1)

<b>Recent Changes</b>	
<b>Forced mergers:</b>	
	Countrywide Financial
	Bear Stearns
	Merrill Lynch
	Wachovia
	Washington Mutual
	Chrysler ?

Lehman Brothers went bankrupt back in September 2008, but with a little help from the Federal Reserve and the U.S. Treasury, we forced mergers of Countrywide, (sold to Bank of America in January 2008); Bear Stearns, (sold to JP Morgan in March 2008); Merrill Lynch, (sold to Bank of America in September 2008); Wachovia, (sold to Wells Fargo in October 2008); Washington Mutual, (sold to JP Morgan in October 2008); and, probably, Chrysler.

Figure 41 Recent Changes (2)

<b>Recent Changes</b>	
<b>Let Die:</b>	
	Lehman Brothers
<b>Took Over:</b>	
	AIG
	Fannie Mae
	Freddie Mac
	General Motors
<b>Set:</b>	
	Dividend Rates
	Management Compensation Rates
<b>Will Change:</b>	
	Tax Rates
	Health Care
	Energy

On top of this, the federal government took over AIG, Fannie Mae, Freddie Mac, and General Motors. I find it fascinating that the government swears it doesn't want to run banks or General Motors, but look at what's happening... it is setting both dividend and management compensation rates. (This reminds me of telling my kids I would quit telling them what to do, as soon as they started doing what I wanted them to do on their own.)

We know there are changes coming in tax rates and to healthcare and energy, but we don't know what those changes will be. The only thing I know is how to monitor the changes.

Another noteworthy change is this: For forty years, it proved beneficial to monitor what the Fed is doing. When the Fed starts squeezing the economy, you should watch out for a recession, watch out for a market correction. When the Fed starts juicing the economy, it's probably okay to go ahead and buy stocks. But that didn't work for the last two years. To explain further, I'm going to give a little bit of "Economics 101".

### Figure 42 Gross Domestic Product

$$\begin{aligned} &\text{Gross Domestic Product (GDP)} \\ &= \text{Price} \times \text{Quantity} = \text{Money} \times \text{Velocity} \\ &\text{GDP} = \text{PQ} = \text{MV} \end{aligned}$$

GDP is the quantity of goods produced, times the price of goods produced. But you can also equate GDP to the amount of money in use, times the rate at which it turns over. The rate at which money turns over is called velocity. In other words, GDP equals price times quantity, which equals money times velocity.

### Figure 43 Gross Domestic Product and Velocity

$$\begin{aligned} &\text{Gross Domestic Product (GDP)} \\ &= \text{Price} \times \text{Quantity} = \text{Money} \times \text{Velocity} \\ &\text{GDP} = \text{PQ} = \text{MV} \\ &\text{Goal is } > \text{Quantity and Stable Prices} \\ &\text{Fed Controls/Affects Money} \\ &\text{Velocity is the Wild Card} \\ &\text{Velocity} = f \text{ (Turnover \& Leverage)} \end{aligned}$$

What we're trying to achieve is a greater quantity of goods (per capita) at stable prices. The Federal Reserve attempts to manage this process, which is not an easy task. Here's why:

We can measure the quantity of goods pretty well. (Examples: How many tons of steel? How many bushels of wheat? How many cars?) And, we can measure prices pretty well. We can also measure the money supply pretty well; in fact, we measure it about five different ways. But we really can't measure velocity very well.

Here's what velocity means to me:

Forty years ago, when you and I got a mortgage, the bank held that mortgage. If they lent us \$100,000, we agreed over a period of 30 years to pay the \$100,000 back to the bank. To accomplish this, the bank would take deposits from its depositors, lent it to people like us, and we paid it off over a period of 30 years.

Five years ago, if you got a mortgage, the bank would lend you the money (which you would promise to pay back), but it would take your note and run it through Fannie Mae. In turn, Fannie Mae would market the mortgage through Merrill Lynch, which would find an investor who was willing to buy it. So, within a month or so, the bank would get its money back and go out and make another loan. Folks, if that happens twice, the velocity of money just doubled.

Here's another example. Let's say you take your money out of a mutual fund and put it in a hedge fund. If the hedge fund manager borrows an equal amount of debt, twice as much money can be put to work. That, too, doubles the velocity of money.

For most of the past forty years, velocity has been fairly stable. But, over a period of time, velocity gradually built up and overshadowed what the Fed was doing. Let me be clear: The Fed does control the money supply. The velocity of money, however, is a wild card. Velocity is a function of all of the turnover and leverage that goes on in the economy by a whole lot of operators – and no party controls it.

Technically, the Fed did not lose control of the money supply over the last five years, but it lost control of the combination (MV). When the Fed was trying to squeeze the economy in '04 and '05 by raising rates, velocity kept growing and overwhelmed the Fed's actions. Last year, as a result of all the deleveraging and the whole credit mess, velocity fell off a cliff.

Let's say velocity was cut in half. Your goal as head of the Federal Reserve or as Secretary Treasurer is to not let the quantity of goods get cut in half, or the prices of goods to get cut in half, or the combination of the two to get cut in half. You have to double the money supply! All the money the federal government is shoveling into the economy in the last six, eight, nine months has been to offset the collapse in velocity. Folks, I suspect velocity will start growing again. I doubt, however, that it gets back to where it was two years ago in our lifetime.

## What about inflation?

I have been tracking the Fed for over forty years and saying, when money grows too fast – by more than 4% – we were likely to get inflation. Many are now worried about the possibility of inflation from all the money our government is shelling out. The trouble is it's a dance between the money supply and the velocity of money. (And no one knows, not I, nor the Fed, nor anyone else, what velocity will do going forward. So we monitor it.) I think as long as there is ample capacity in every industry over the next couple of years, inflation shouldn't be a problem.

Can anybody think of an industry that doesn't have ample capacity?  
Is there enough capacity in...

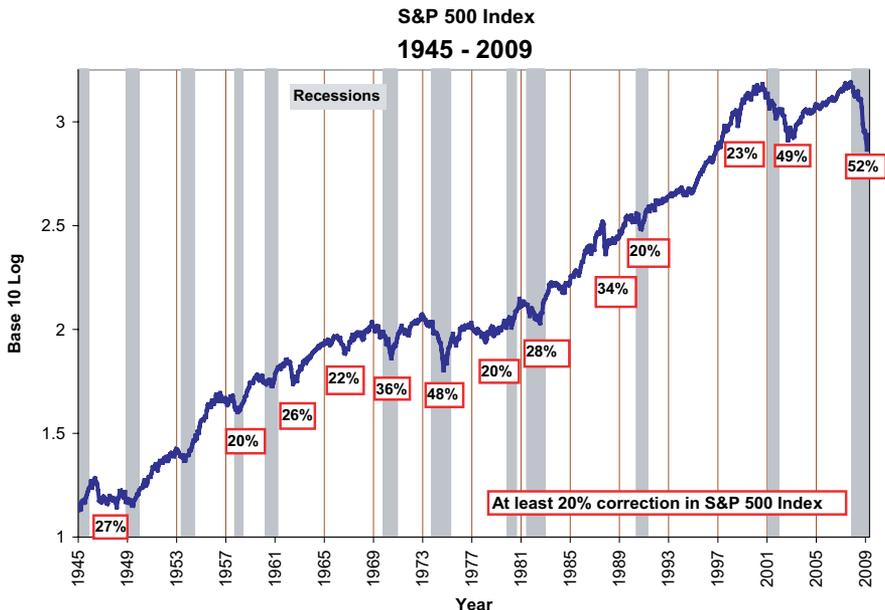
- ✓ Housing?
- ✓ Autos?
- ✓ Retail?
- ✓ Steel?
- ✓ Aluminum?
- ✓ Oil?
- ✓ Gas?

Use any list you'd like...

Yes, we have ample capacity. When growth starts coming back, however, the Fed will have to start soaking up however much money turns out to be extra.

How does this all get reflected in the markets?

Figure 44 S&P 500 Index, 1945-2009 (1)



During this recession, there has been a serious decline on the order of 50% between the top and bottom.

Figure 45 S&P 500 Index, 1945-2009 (2)



Because of ample capacity, margins are going to be tight for a period of time. Company values are less than they were and, partly due to forced selling, prices managed to fall below the values. This is why we are now seeing a bit of a bounce in the markets.

**Figure 46 March 2009**

**March 2009**

**Forced selling is largely completed.**

- 1) Banks and hedge funds have deleveraged.
- 2) Redemptions have slowed.
- 3) Mark-to-Market has been neutralized.

**And...**

- 4) Government programs are now spending;  
= Forced Buying.

As of March '09, the forced selling is largely completed; banks and hedge funds have deleveraged; redemptions have slowed; and mark-to-market accounting has been neutralized. And with the federal government cranking out programs such as TARP (Troubled Asset Relief Program), TALF (Term Asset-Backed Securities Loan Facility), and PPIP (Private-Public Partnership Investment Program), we are now seeing the forced buying of primarily debt-type securities, including credit card debt and auto loans.

In summary, this recession is deeper than average, but it's still following the normal pattern. We believe we are not headed for a depression.

Milton Friedman said there were three things in 1930 that turned a normal recession into depression:

1. In order to protect our gold supply, we raised interest rates. This time, we're lowering them.
2. In order to balance our budget, we raised taxes. Up until now, we've lowered them. (Our current administration wants to raise taxes, but is saying not just yet.)
3. In order to help our manufacturers, we raised tariffs. So far, that has not happened.

Folks, this is the second great economic experiment of my lifetime. The first one was when Ronald Regan and Paul Volcker concluded they could get rid of inflation of the 1970s and foster economic growth by controlling the money supply and lowering tax rates. I think their efforts brought us a generation of prosperity.

Now, we're experimenting with whether more taxes and more regulation makes a fair economy. The risk, of course, is that we won't grow as fast. It's a huge experiment that's going on; past depression was triggered by this. But as long as the combinations of taxes and regulations encourage people to work and to hire, I think we can work our way out of this. If the combinations of taxes and regulation get to the point where they were in the 1970s where it didn't pay to hire, (it paid to work, but it didn't pay to hire), we can create stagflation again, or considerably something worse.

So, we continue to monitor...

**Figure 47 Continue to Monitor...**



In the meantime, we want to own good companies at reasonable prices. Folks, you've heard me say for years that we want to buy Pontiacs and Buicks when they go on sale. Last year, Cadillacs went on sale; so we bought some Cadillacs. Some of them got cheaper; so, in March, we bought some more. We purchased companies with good balance sheets – companies that do not need to borrow. (If you don't have to borrow money, they can't put you out of business.) We have purchased companies that are generating cash. In sum, we're putting our cash to work.

The comments made by Ron Muhlenkamp in this essay are his opinion and are not intended to be investment advice or a forecast of future events.

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**Fund holdings and sector allocations are subject to change at any time and are not recommendations to buy or sell any security. Current and future portfolio holdings are subject to risk.**

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EPS (Earnings Per Share) is the portion of the total profit of a company that may be allotted to each share. EPS is computed by dividing net income (or earnings) by the total number of shares outstanding.

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