

# Monthly Chartbook

## September 2006

# De-constructing inflation

The impact of Katrina – one year later  
(Our thoughts on the future of oil prices)

## *Executive summary*

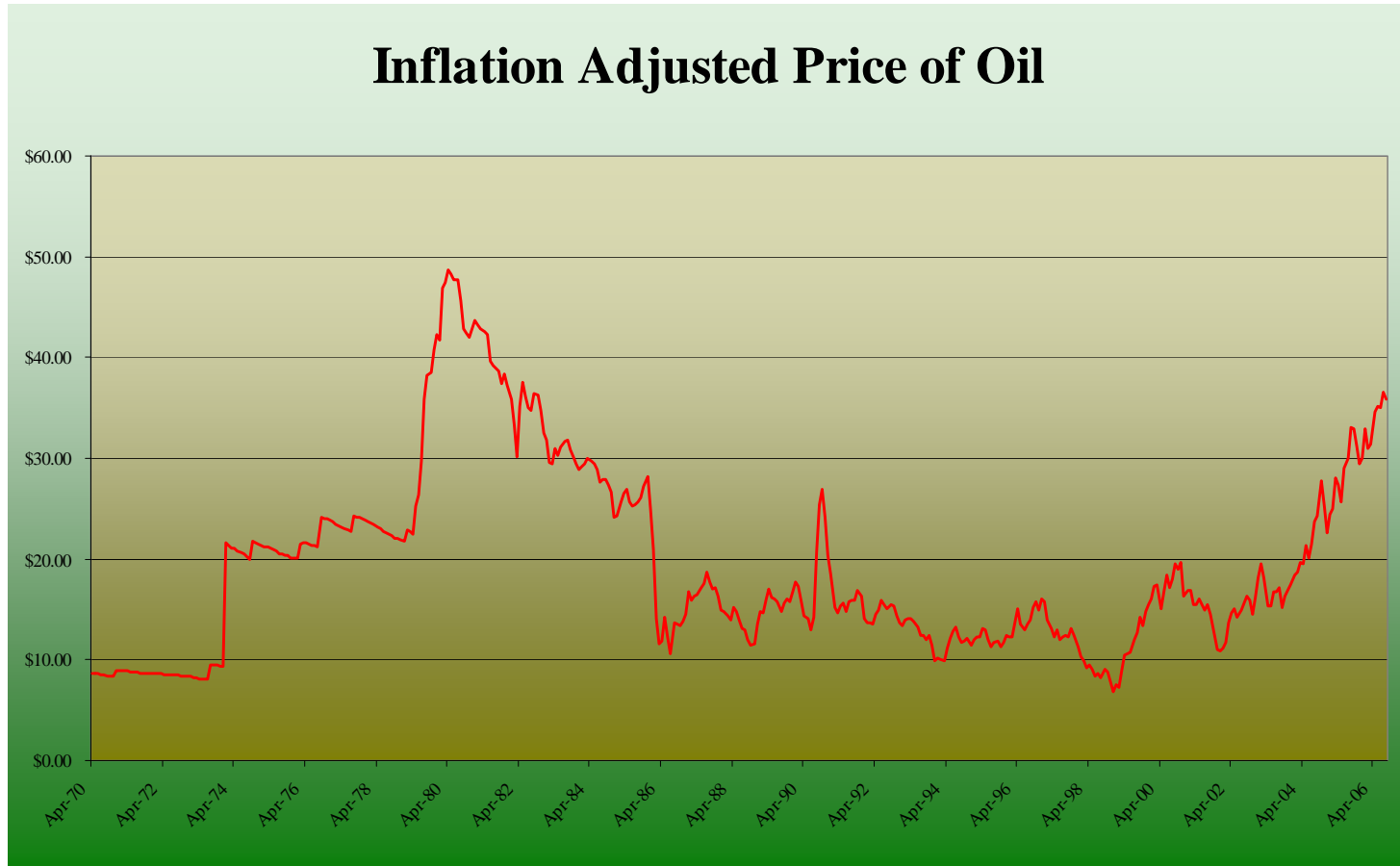
With Katrina behind us, the price of oil on a year-over-year basis may provide for easier inflation comparisons. We ran the analysis under simplified assumptions with the price of oil declining as well as with it remaining near \$70; in both cases, inflation on an annualized basis is lower than current rates.

Does this mean the market has been right all along with its TIPS estimate for future inflation?

Don't forget, though, that there remain inflationary pressures – watch potential wage increases as well as consumer spending as measured by the PCE.

Also, don't worry about this Fed printing money... monetary conditions are as tight as they have been in a long time. The media seems to love Dr. Bernanke now, even taking to affectionately calling him “Big Ben”; but this affair may end when the effect of this (in our opinion) correct monetary policy comes to fruition.

# Macro-economic research



Historically, the price of oil has remained between \$10 and \$20 per barrel on an inflation-adjusted basis. As the commodity market started to really heat up in 2004, the price moved outside of that boundary. Katrina did nothing to abate this as oil prices increased almost 10% after the storm.

# *Macro-economic research*

*Some assumptions about the price of oil (for our next chart)...*

The price will gradually decrease to pre-Katrina levels of \$58 per barrel prior to the 2007 summer driving season. Then, the price will increase approximately 10% during the peak driving time to approximately \$64 per barrel.

This remains well below the \$74 price reached in July 2006. We believe a reasonable price per barrel based on the fundamentals of the market is between \$40 and \$50.

*Factors associated with the price of oil...*

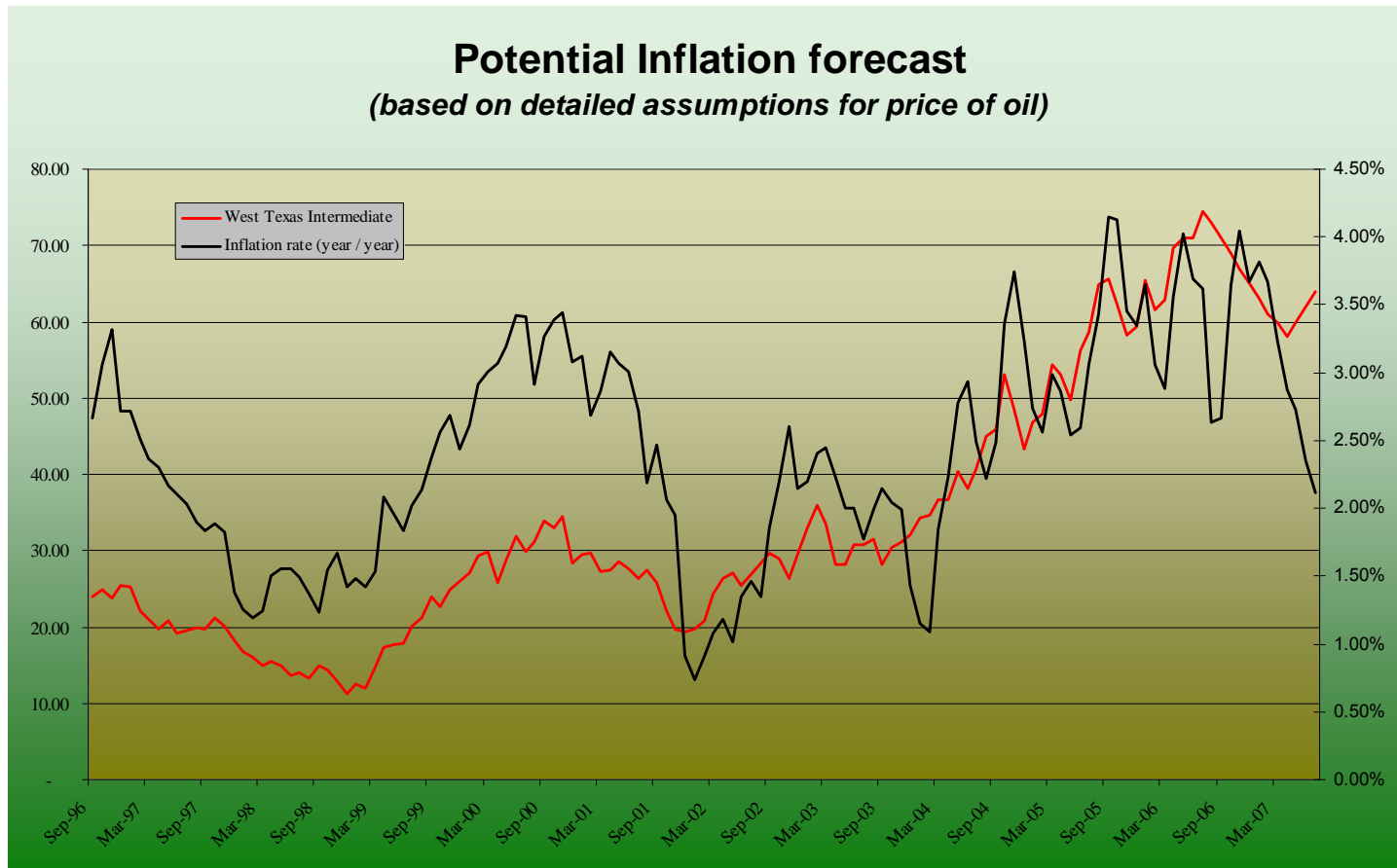
The price is set by demand at the margin – meaning that increased demand from fast-growing economies pushes demand for the marginal production.

There is a terror premium associated with the price of oil on global markets due to the politics and policies of the nations owning this natural resource.

The activity of hedge funds increases the volatility of all asset prices, and petroleum is no exception.

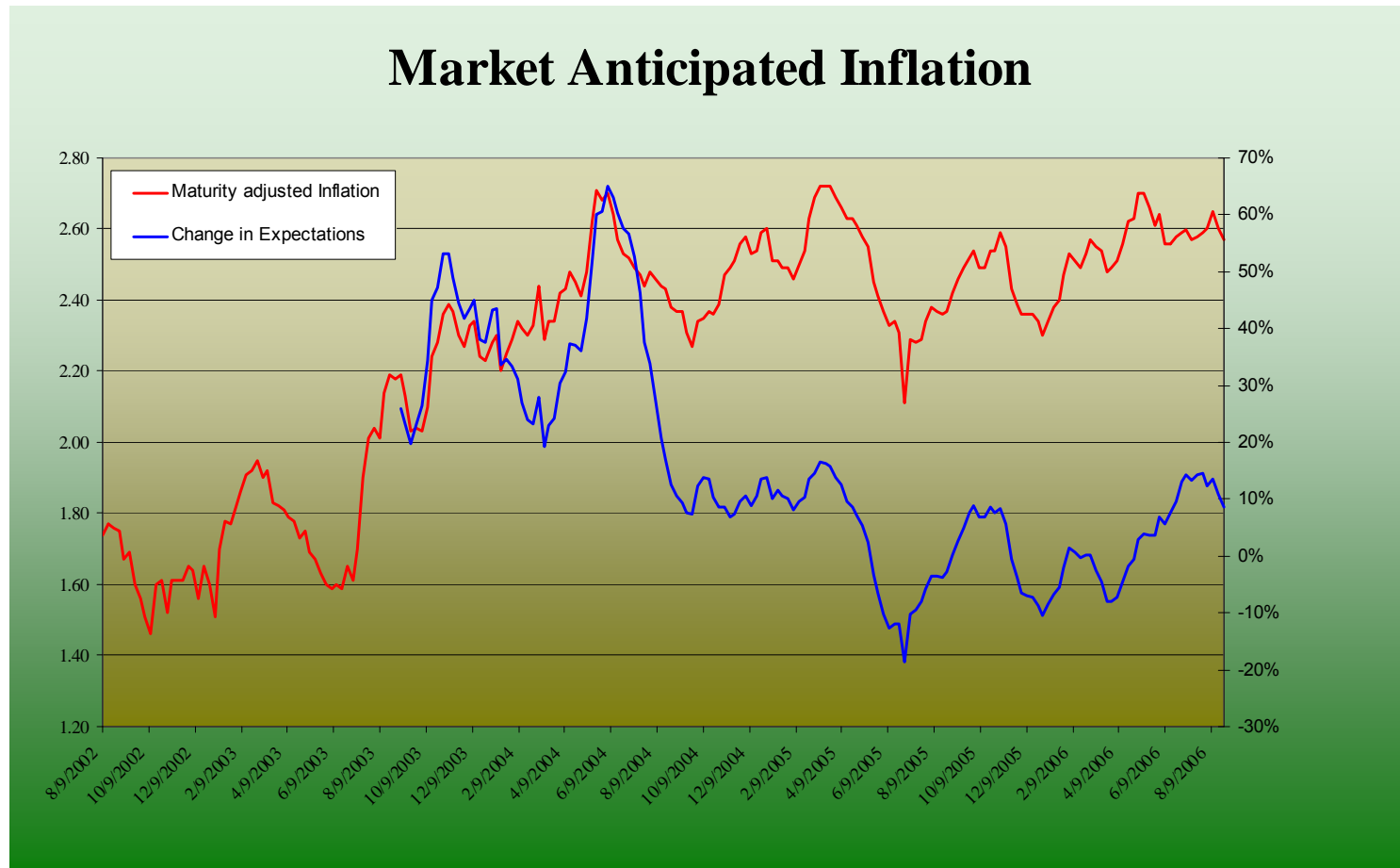
There has not been much incentive for exploration and development in the last decade due to low prices and environmental constraints; now, high prices have enticed a lot of investment.

# Macro-economic research



Under these assumptions, year over year inflation tumbles to around 2% all other things being equal.

# *Inflation Expectations*



This forecast is much closer to the long-term inflation rate of 2.57% the market anticipates over the coming ten years using TIPS as a guideline. Did the market anticipate the duration of the price increase all along?

# *Macro-economic research*

## *How we made our calculations...*

Using our rough estimates for the price of oil as a proxy for energy costs within the Consumer Price Index, we re-calculated the index using the relative weight of energy within the index at the year-over-year rate given our price assumptions.

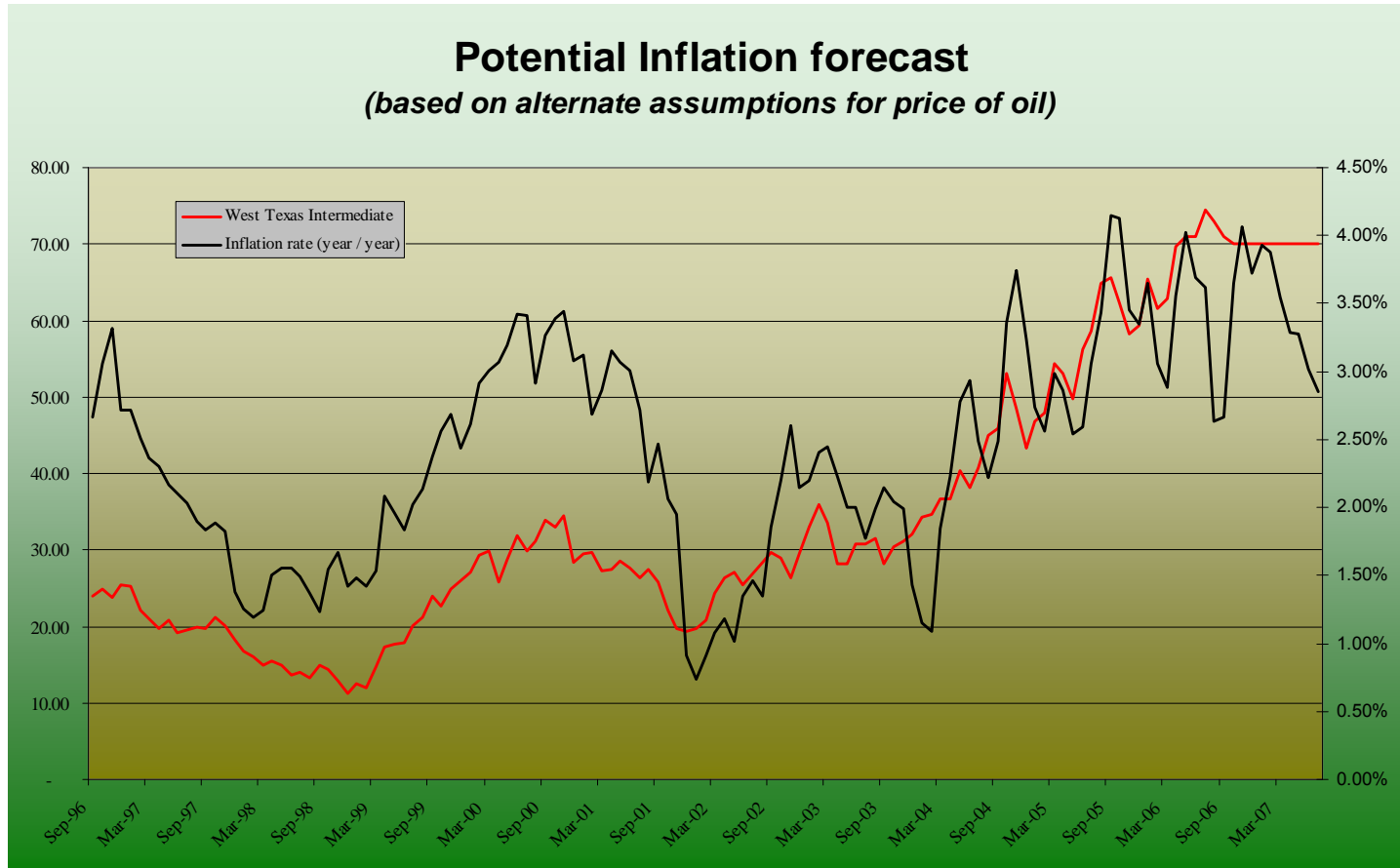
The remainder of the index (91%) was weighted with the last annualized rate of inflation for non-energy items of 2.6%.

## *Potential flaws...*

We believe there are other inflationary forces at work that will make their way through the costs of goods over the coming months. This may render our non-energy rate of inflation a little too low.

The analysis is simplified for the analysis of one commodity and is truly meant to only provide a starting point for analytical discovery rather than an ending point.

# Macro-economic research



Under an alternate scenario where oil remains at \$70 per barrel (notice trend of red line), there is still a decrease of year-over-year inflation to below 3%.

# Macro-economic research

## *Other inflation observations...*

Energy (in all its forms) represents about 8.7% of the consumer price index, but had an annualized rate of increase near 20% for the past twelve months.

Overall allocations within the index are as follows:

Food and beverages	15.05%
Housing	42.38% (includes 4.5% energy costs)
Apparel	3.79%
Transportation	17.42% (includes 4.2% energy costs)
Medical care	6.22%
Recreation	5.64%
Education / communication	6.05%
Other goods / services	3.46%

We recently read a quote in the Wall St. Journal that indicated there was inflation on the items that we need (such as education and health care) and dis-inflation on the goods that we wanted (plasma televisions, assorted plastic trinkets, etc.). This is certainly borne out when the price increases over the last twenty years are considered within this analysis.

Since 1984, the sub-categories with the highest increase in the price index are medical care and education-related items (educational books and supplies, tuition and school fees) while the relative prices for apparel and recreation have not increased much at all over that time. It is also a fascinating study to view the dis-inflation in communication and technology over the time period.

# Inflation expectations

Although our analysis for the price of oil leads us to believe the rate of inflation will likely cool during the coming months, we still feel there are some inflationary pressures that must not be overlooked.

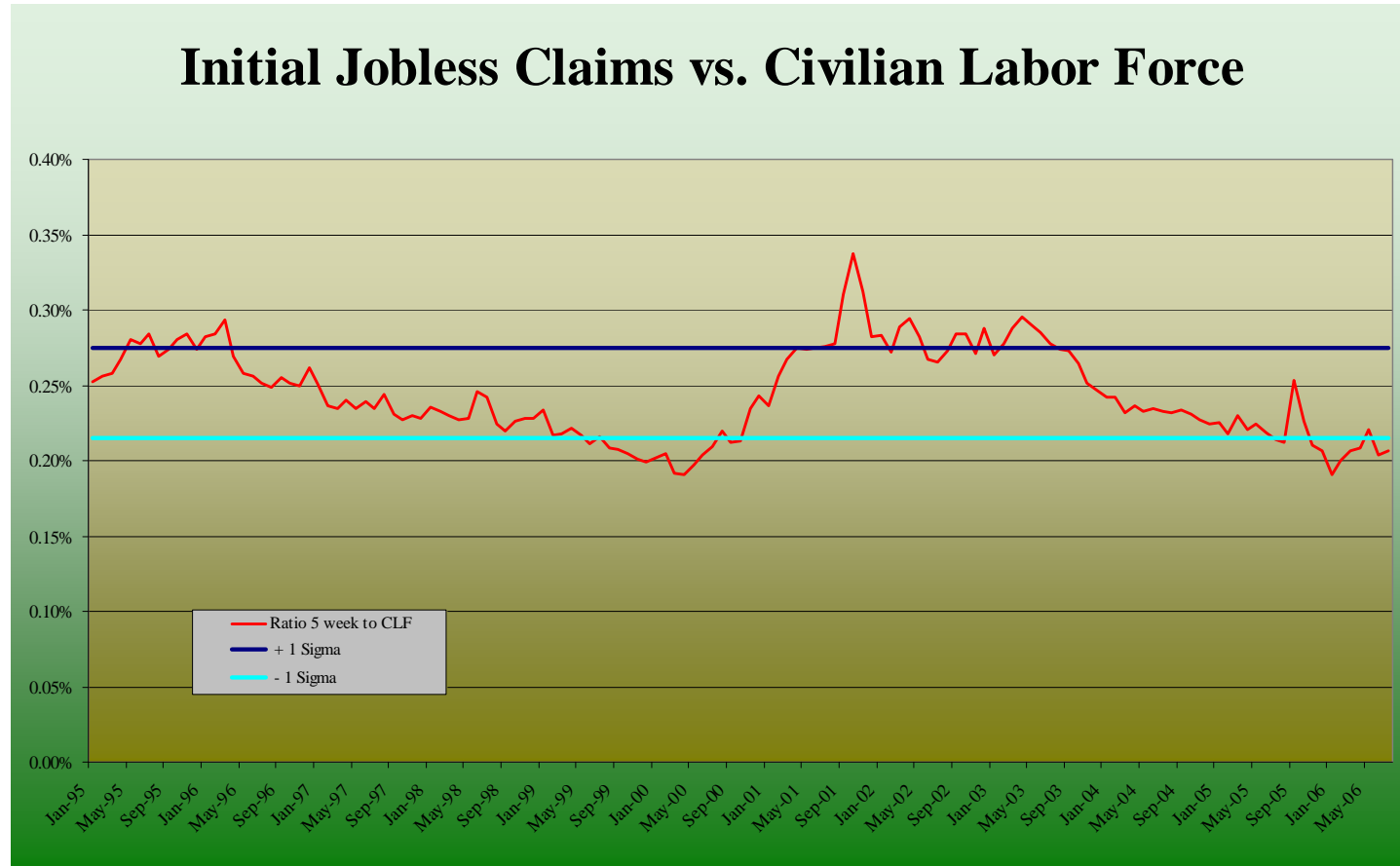
Remember, a commodity representing less than 9% of the price index had considerable sway over the index as a whole; therefore, other factors that may affect the remainder of the index must be considered...

## *Our biggest concerns are the following:*

Potential wage inflation that may be over-looked by traditional employment measurements.

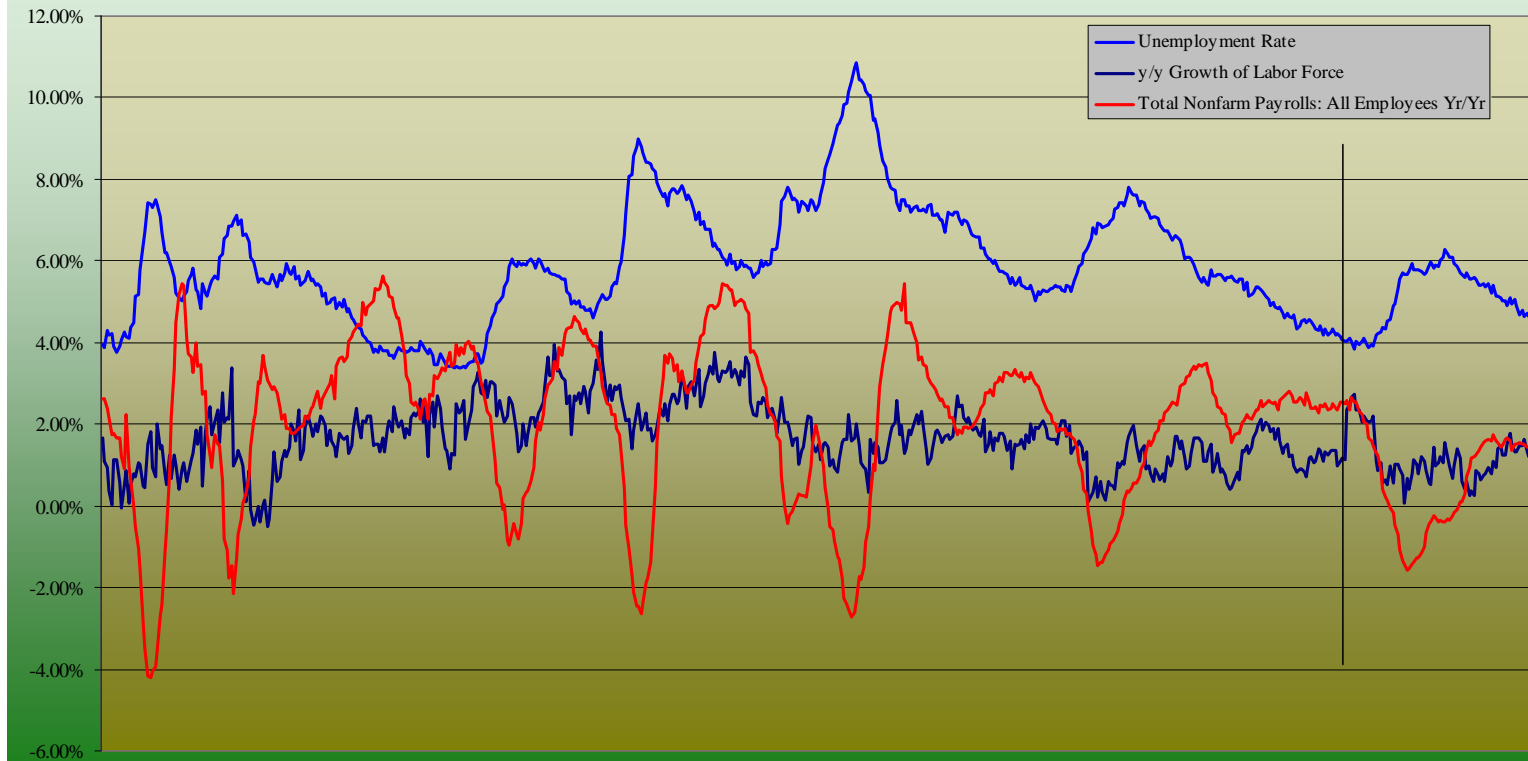
Personal Consumption Expenditures are still considerably above trend-line and the level of comfort for the Federal Reserve.

## Macro-economic research



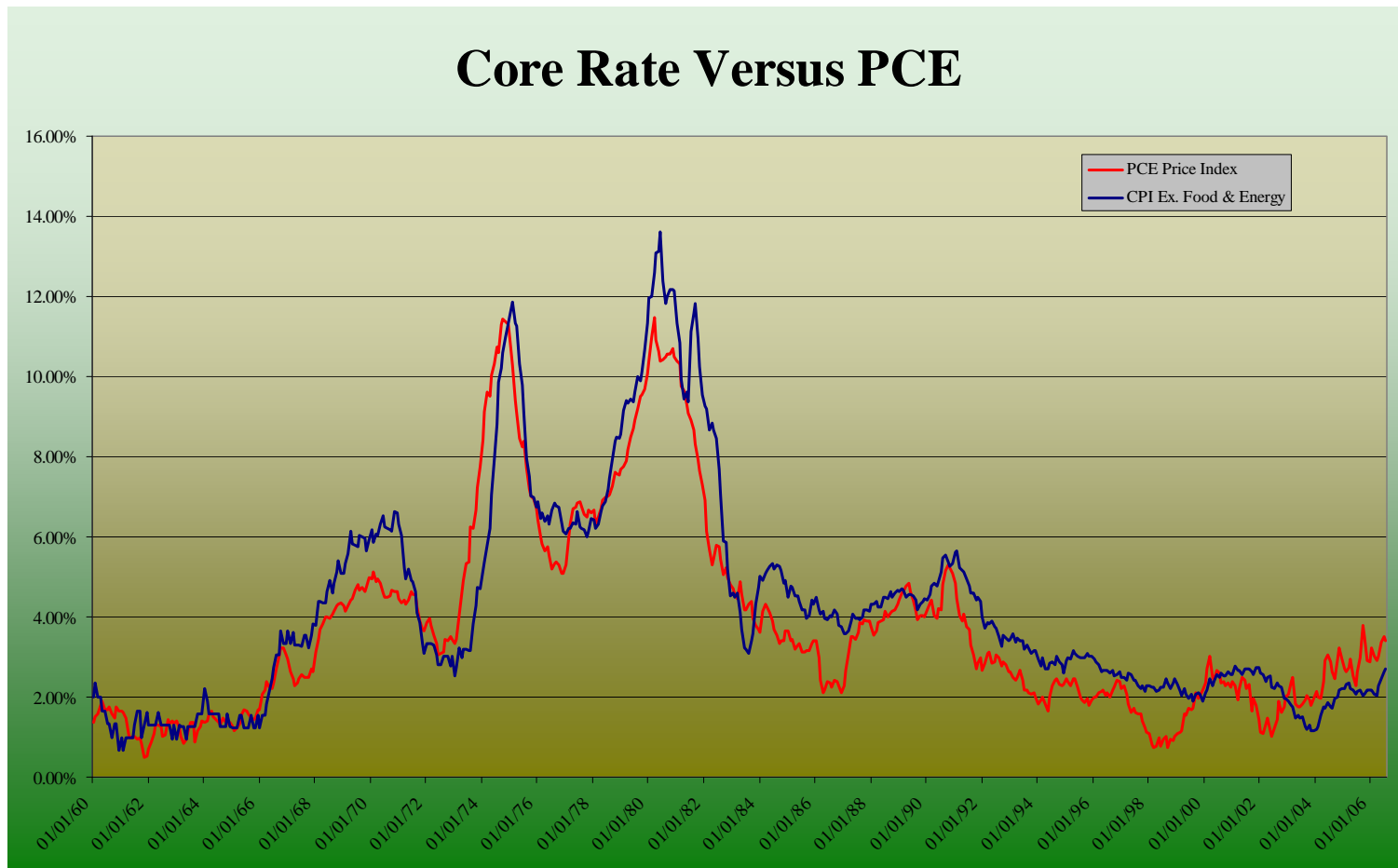
Jobless claims as a percent of the Civilian Labor Force remain towards the lower end of their range over time. This should be indicative of a strong labor market.

## Unemployment vs. Labor Force Growth



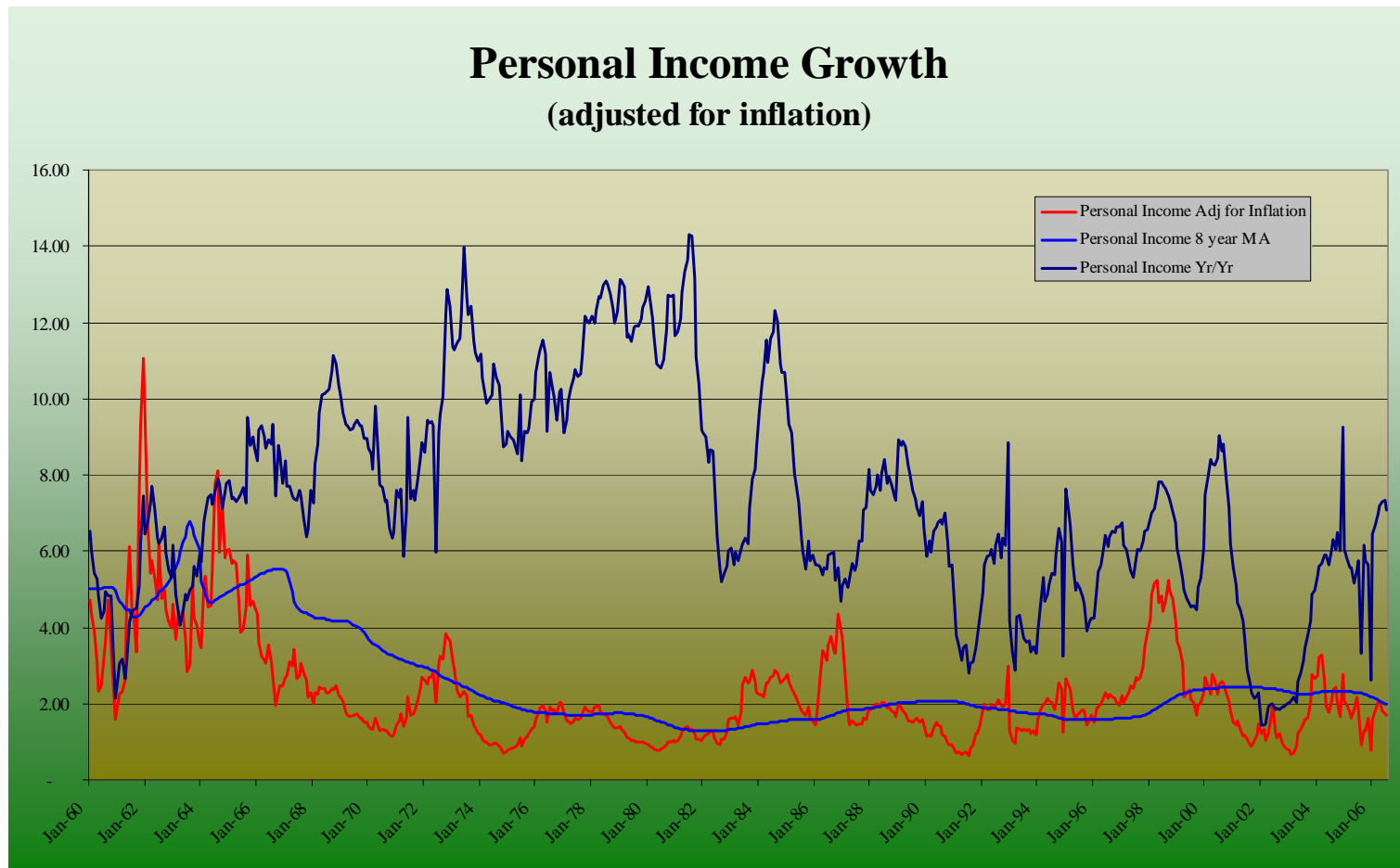
Traditional measures of employment seem to be ignoring a large number of self-employed who are collectively decreasing the unemployment rate beneath what would be expected given the tepid growth in non-farm payrolls. To the right of the vertical line is FY 2000 and beyond.

## *Inflation expectations*



The personal consumption expenditures index remains outside of the Federal Reserve's target of 1-2% for price stability; it is currently up 3.42% yr/yr.

## Macro-economic research



Year over year growth in personal income (adjusted for inflation) remains towards the lower end of its long-term range. If there is a decline in inflation due to lower oil prices, employees will have higher discretionary funds as personal income has increased over the past couple of years, yet another sign of employee power.

# Federal Reserve Watch

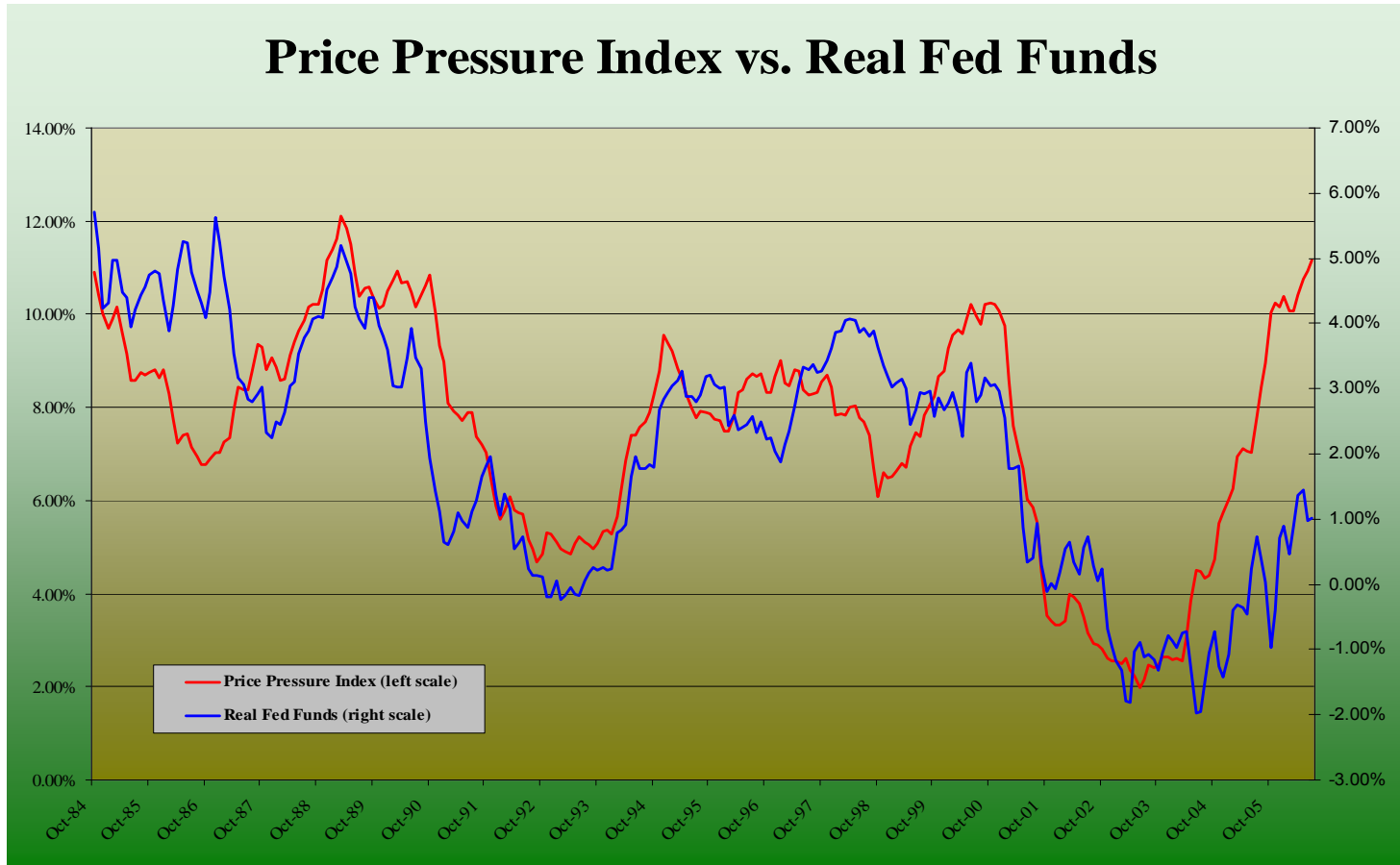
To counter potential inflationary pressures, the Federal reserve has not been accommodative with monetary conditions...

Money supply growth is low, both on an absolute basis and relative to GDP growth.

Overall monetary conditions reflect this reality.

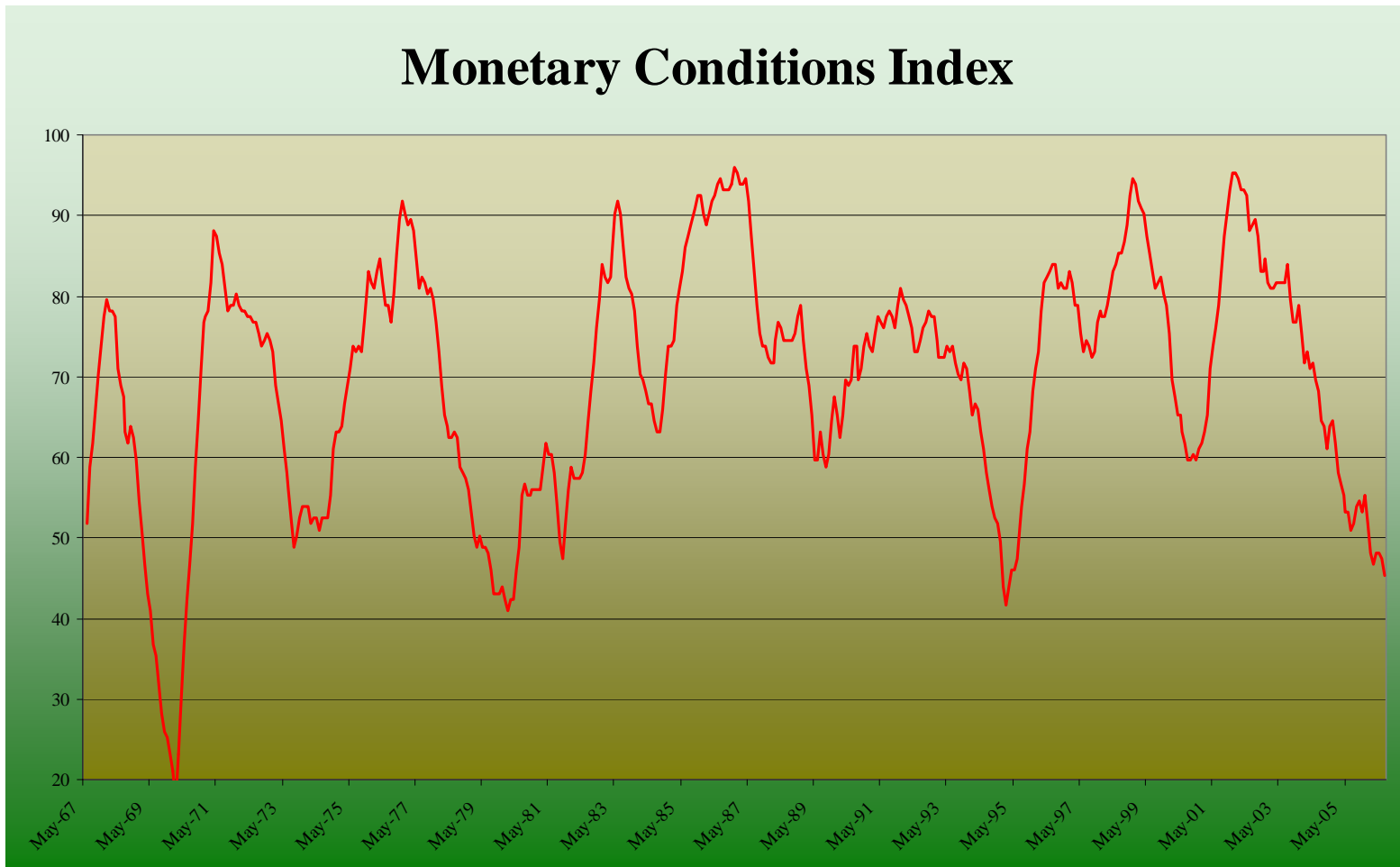
However, households and Congress still have problems reigning in spending; they're the ones we need to worry about "printing money."

## Federal Reserve Watch



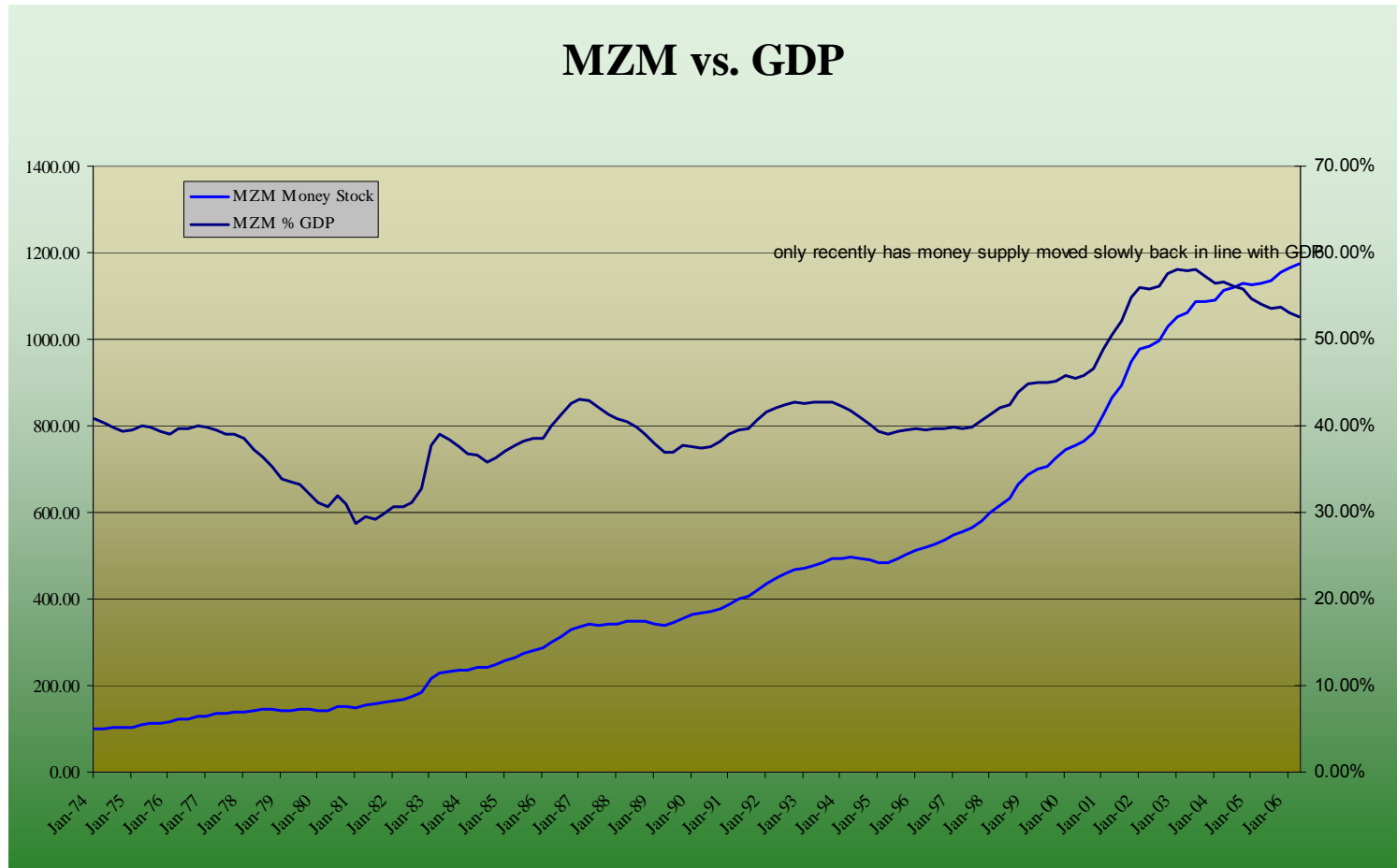
Until this relationship returns to parity, we anticipate tightening money supply (perhaps even through interest rate increases).

## Federal Reserve Watch



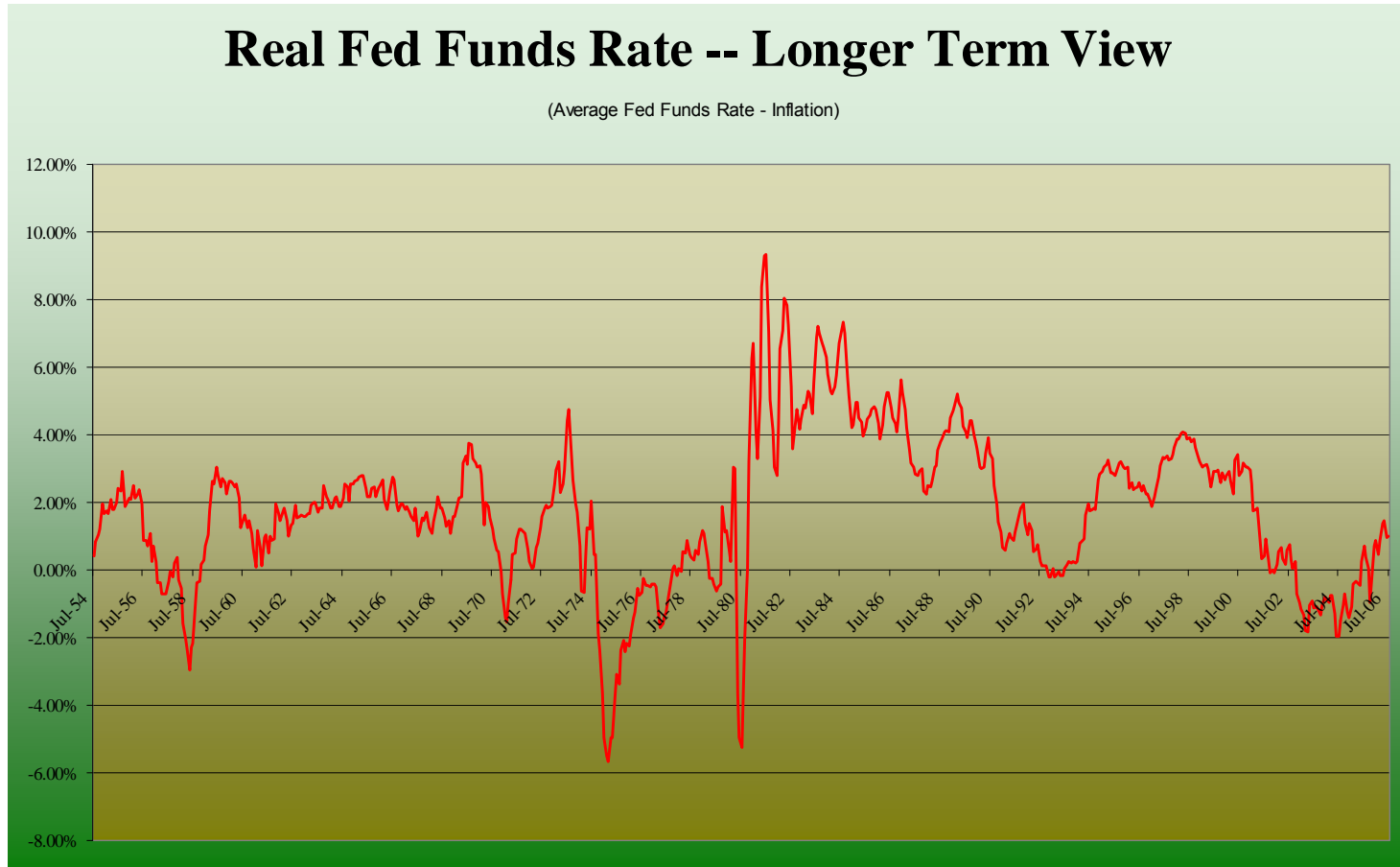
Overall monetary conditions (as measured by Cornerstone's proprietary Monetary Model) are now as poor as they have been in the last decade.

## Federal Reserve Watch



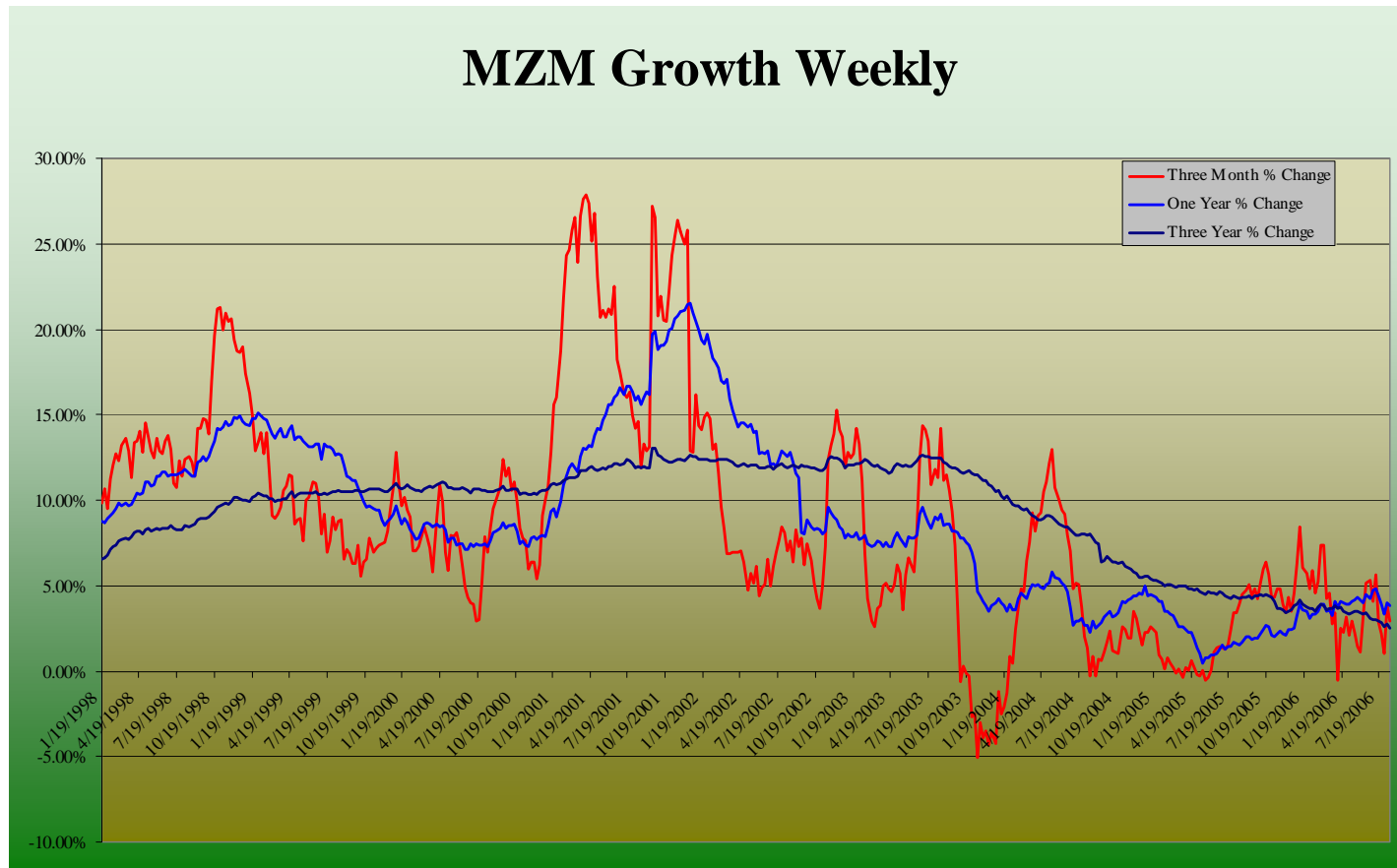
Money supply growth continues to move more in line with GDP growth; this is hardly “printing money” from Helicopter Ben.

## Federal Reserve Watch



People are again being encouraged to save as there is real yield in short-term fixed income, but the Fed is having to work hard given the increases in inflation. Given our thoughts on oil, this pressure may abate in the near-term.

## Federal Reserve Watch



Money supply growth is low and declining on a one year and three year basis.

# Outlook and Forecast

## *Capital Markets Expectations*

Index	Current	Forecast		Range	Time Frame
<b>S&amp;P 500</b>	<b>1303.82</b>	<b>Trading range</b>	↔	<b>1225 - 1350</b>	<b>End of 2006</b>
<b>Ten Year Treasury</b>	<b>4.77%</b>	<b>5.10%</b>	↓	<b>4.75%-5.25%</b>	<b>6 months</b>
<b>Inflation (all Urban)</b>	<b>4.15%</b>	<b>3.75%</b>	↑	<b>3.50%-4.25%</b>	<b>6 months</b>
<b>Fed Funds</b>	<b>5.25%</b>	<b>5.50%</b>	↓	<b>5.25%-5.50%</b>	<b>6-9 months</b>
<b>S&amp;P 500 Earnings</b>	<b>\$77.37</b>	<b>\$77.00</b>	↑	<b>\$74 - \$77.50</b>	<b>4q2006</b>
	Legend:	↑ "Good"	↓ "Bad"	↔ "Indifferent"	