Bianco Research L.L.C.

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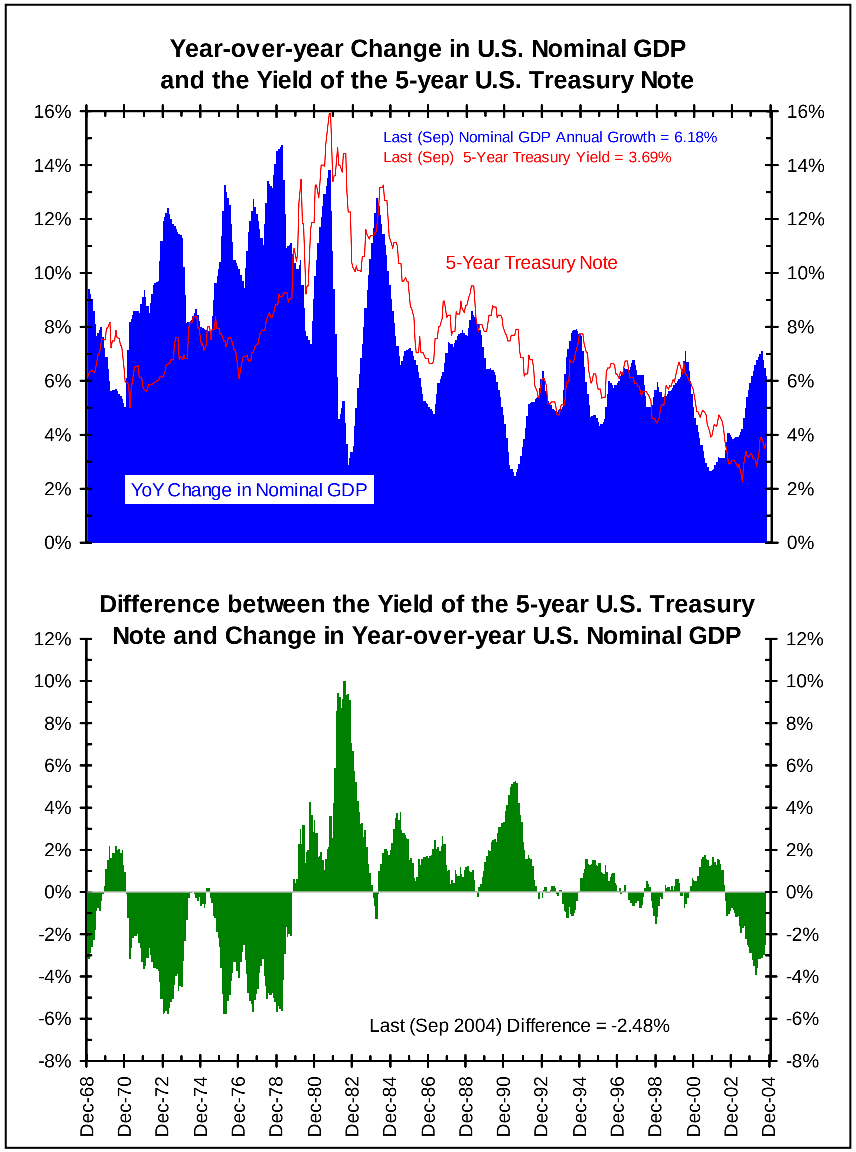
Updating – Leverage In The Bond Market

Presentation Package

November 18, 2004

Long-Term Interest Rates - 1900 to 2003

Valuing Interest Rates - 1



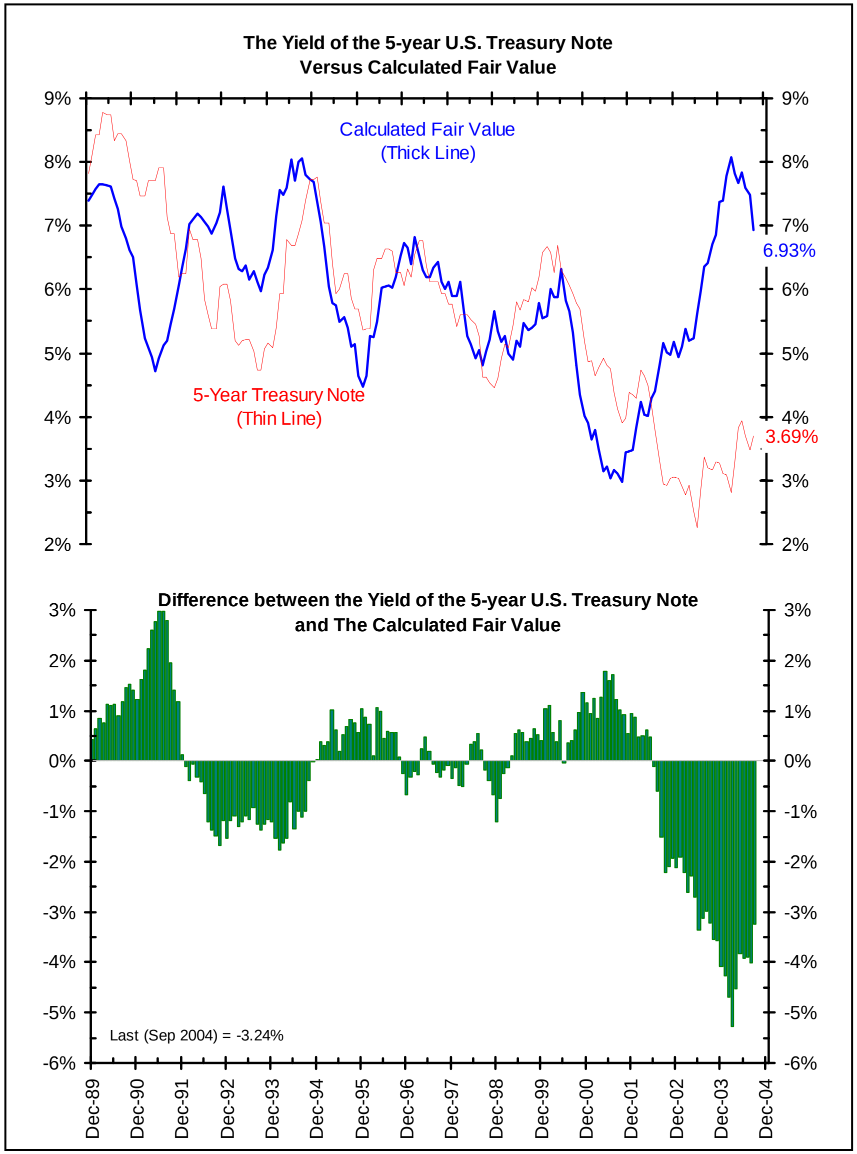
The chart on this page shows what we believe is the best valuation yardstick for the bond market. The bars in the top panel show the year-over-year change in **nominal** GDP (real GDP **plus** inflation). The line in the top panel shows the month-end yield of the 5-year Treasury Note. (We chose the 5-year Treasury Note because it represents the middle of the yield curve and it is close to the “average interest rate” of all Treasury securities. Any other point on the yield curve, or even corporate bond yields, could have been used and would show similar results.)

The bottom panel of the chart shows the difference between the yield of the 5-year Treasury Note and the year-over-year change in nominal GDP. As of September 30, 2004 (the latest GDP measure), nominal GDP annual growth was 6.18%, the 5-year Treasury Note was 3.69%, netting a difference between the two of 2.48%.

Think of this measure as an asset valuation model. If the asset, in this case the entire U.S. economy as measured by nominal GDP, returns a rate higher than the prevailing interest rate (the 5-year Treasury Note), then it makes sense for a business to borrow and expand. One can make money in such an environment because the asset has a higher return than the cost of borrowing. This will cause an increase in the demand for credit and put upward pressure on the price of credit -- interest rates. This will last as long as interest rates are below the year-over-year change in nominal GDP (or at least the perception that interest rates are below expected nominal GDP).

Alternatively, if interest rates (5-year Treasury Note) are higher than the returns provided by the economy (nominal GDP), then borrowing to “buy” is a money-losing proposition. In this case, the demand for credit will fall because the profit incentive is not present. This will drive the price of credit (interest rates) down as long as interest rates are above the expected growth rate, or perceived growth rate, of nominal GDP.

Valuing Interest Rates - 2



The year-over-year change of Q3 2004 **nominal** GDP was 6.18%. This was 2.48% above the yield of the 5-year Treasury Note on September 30 (3.69%).

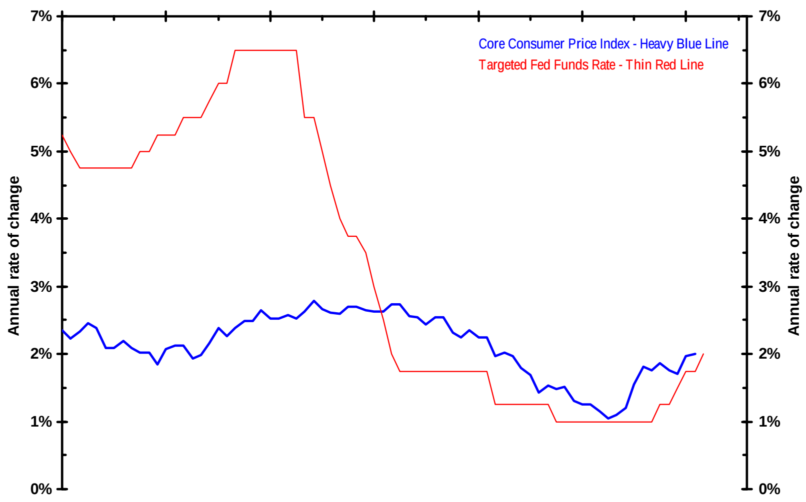
After adjusting the year-over-year change in nominal GDP for supply, the calculated *fair value* for the 5-year Treasury Note rises to 6.93%. This is 324 basis points above the 5-year's yield on September 30.
Given a static snapshot of the economy and supply, interest rates appear to be greatly "under valued." What does this mean?
We believe it means one of two things.

The bond market is pricing in the expectation of a dramatic slowdown in the economy and/or an elimination of the deficit to the point of a significant surplus. In other words, the market expects fair value to move toward the current level of interest rates (by plunging).
It is evidence that the current level of interest rates is "out of whack" with current state of the economy and supply (surplus/deficit).
Anytime interest rates diverge from fair value, option #1 is always a possibility. That is, the market is discounting fair value moving towards current interest rate levels.

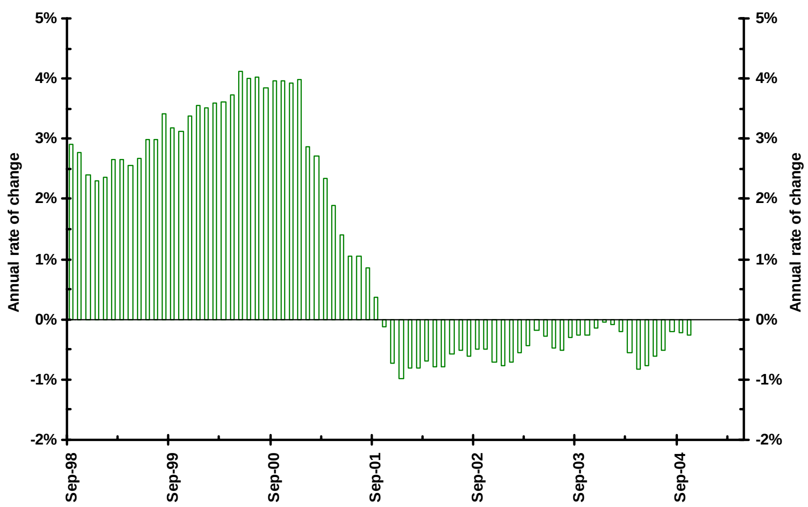
It is, however, option #2 that is most intriguing right now. Given all the talk about leveraged speculation, convexity trading, and accommodative Fed policy (the fed funds rate is below "neutral"), the huge divergence between the current level of interest rates and fair value illustrates how great these "non-economic" factors are driving the bond market. If this is indeed the case, we would look for fair value and interest rates to converge once the Fed starts raising rates. If so, this means the five-year yield will most likely rise – and rise substantially.

Inflation And Inflation Expectations - 1

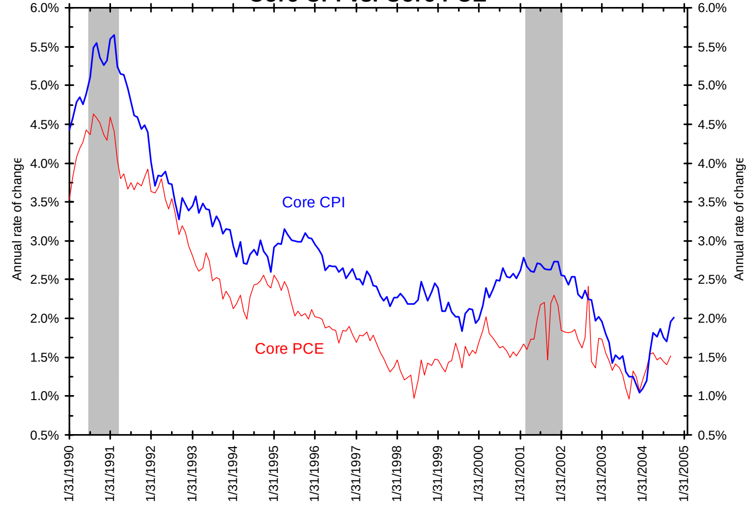
Core CPI & Targeted Fed Funds Rate



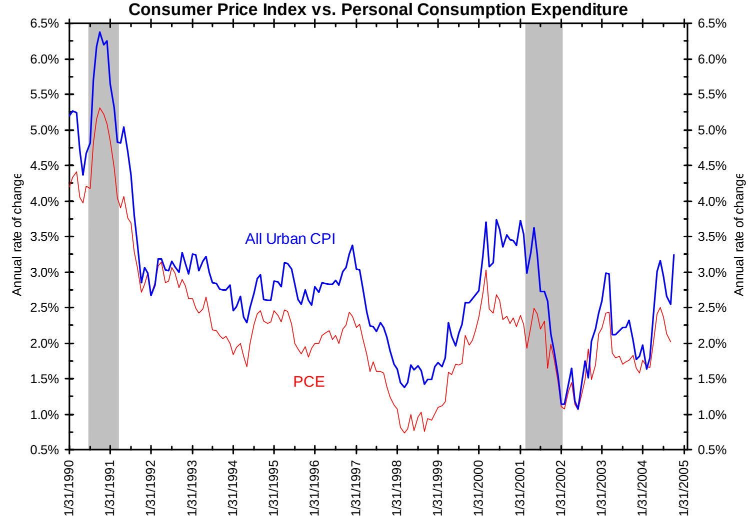
The Difference Between Core CPI and Targeted Fed Funds Rate



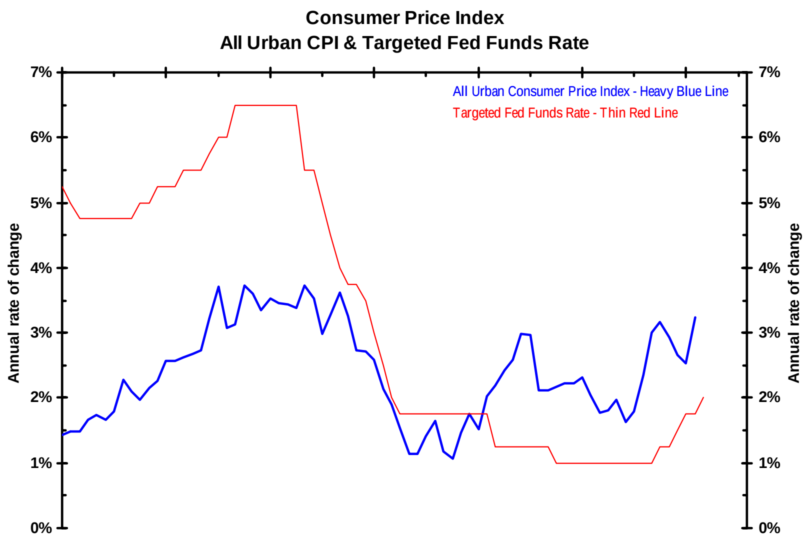
Core CPI vs. Core PCE

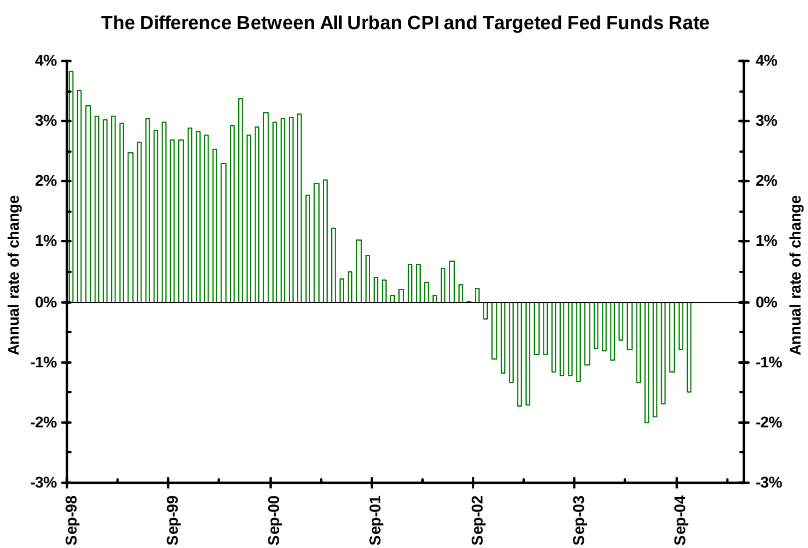


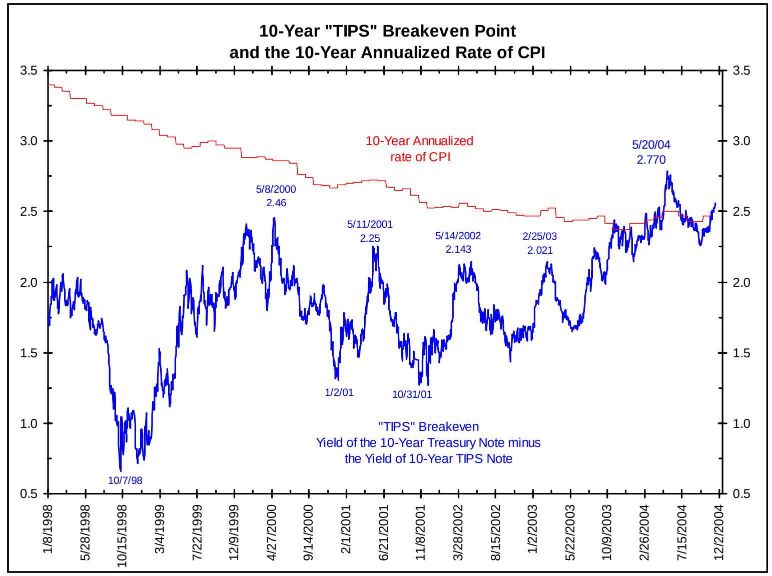
Consumer Price Index vs. Personal Consumption Expenditure

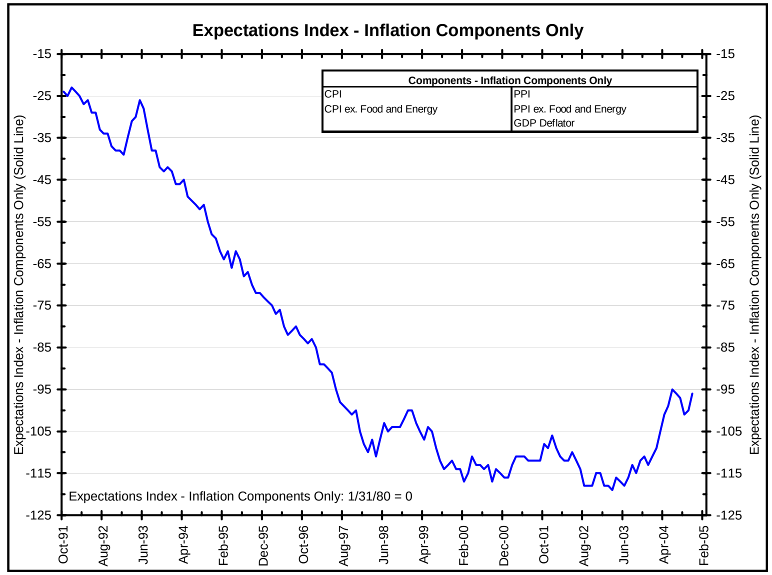


Inflation And Inflation Expectations - 2









What Do Economists Think?

Table 1

The Wall Street Journal Forecasting Survey

Long-Term Interest Rate Forecasts for the Next Six Months[1]

Date of Survey	Forecasted Change in Yield	Actual Change in Yield	Was the Forecast in Direction Correct?	% Of Respondents That Were Forecasting Long-Rates To Be: Higher	Lower	Unchanged
Jul-95	-0.04%	-0.70%	YES	48%	52%	0%
Jan-96	0.06%	0.95%	YES	56%	42%	2%
Jul-96	-0.03%	-0.25%	YES	48%	46%	5%
Jan-97	-0.12%	0.14%	NO	30%	70%	0%
Jul-97	0.01%	-0.86%	NO	49%	51%	0%
Jan-98	0.10%	-0.28%	NO	58%	42%	0%
Jul-98	0.08%	-0.55%	NO	62%	35%	3%
Jan-99	-0.05%	0.89%	NO	37%	54%	9%
Jul-99	-0.15%	0.50%	NO	28%	67%	6%
Jan-00	-0.10%	-0.58%	YES	36%	49%	15%
Jul-00	0.11%	-0.40%	NO	64%	16%	6%
Jan-01	-0.15%	***0.30%*** [1]	NO	20%	69%	11%
Jul-01	-0.10%	-0.38%	YES	39%	59%	2%
Jan-02	0.04%	-0.22%	NO	42%	58%	0%
Jul-02	0.40%	-0.98%	NO	93%	7%	0%
Jan-03	0.60%	-0.31%	NO	95%	5%	0%
Jul-03	0.34%	0.74%	YES	87%	9%	4%
Jan-04	0.50%	0.34%	YES	96%	4%	0%
Jul-04	*0.55%*	*???*	*???*	*98%*	*2%*	*0%*

1 = Starting with the July 2001 survey, the benchmark interest rate changed from the 30-year bond to the 10-year note. The actual change for January 2001 reflects the change of the 30-year bond.

Source: *The Wall Street Journal*

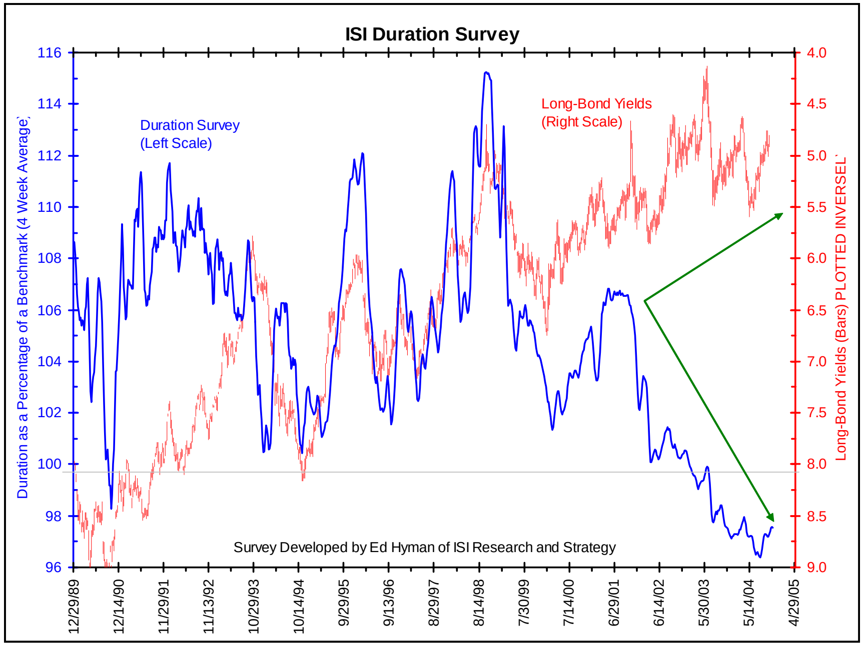
98% (54 of 55) of all economists surveyed are looking for higher interest rates by the end of the year. Only James Smith of North Carolina University was looking for 10-year yields to fall. **This is the most one-sided this survey has ever been.** Likewise, the consensus is looking for 10-year rates to increase 55 basis points – the third most aggressive forecast since this survey began in 1982 (only the January 2003 forecast of an increase of 60 basis points and the January 1991 forecast of a decrease of 59 basis points were more aggressive).

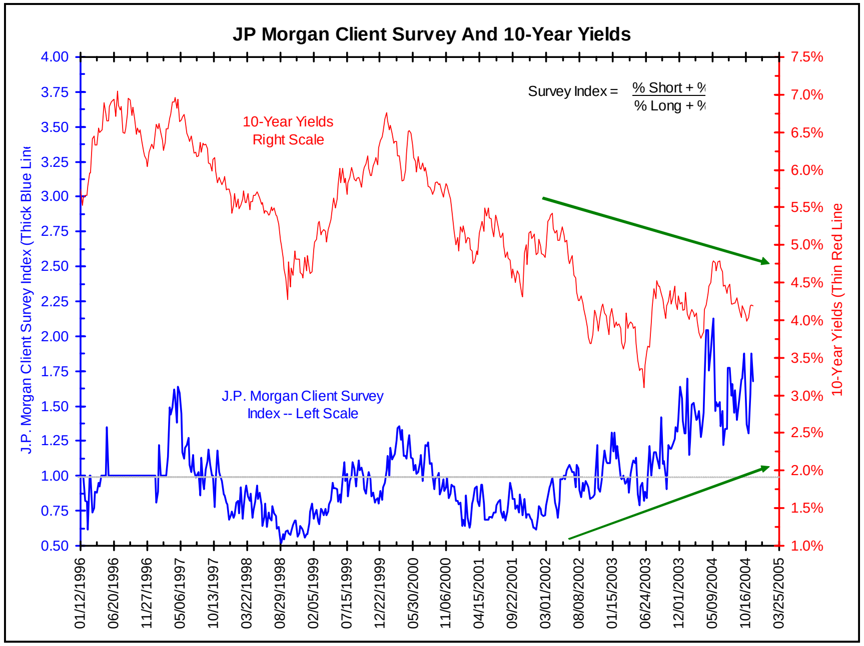
Almost Unanimous - Looking For Higher Rates

Results From Bloomberg's Monthly Economist Survey For The 10-Year Treasury Yield

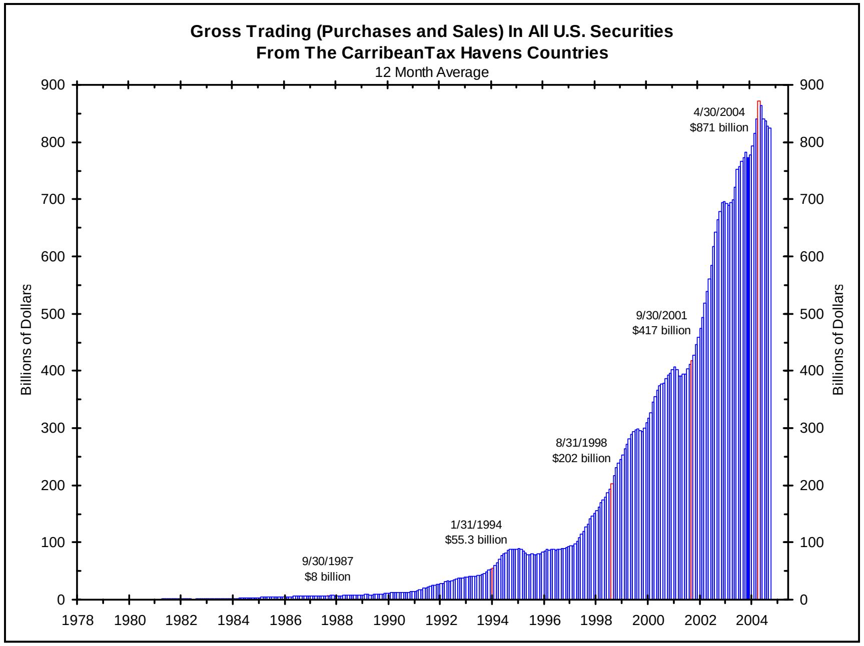
Survey Date	10-Year Yield	Median Forecast 6-Months (2 Qrts) Foreword	Change	Number of Economists Surveyed	% Expecting Higher Rates	% Expecting Lower Rates	Highest Forecast	Lowest Forecsat
17-Dec-02	4.12%	4.40%	0.28%	64	94%	6%	5.10%	3.40%
24-Mar-03	3.97%	4.25%	0.28%	65	83%	17%	5.20%	2.80%
8-May-03	3.68%	4.40%	0.72%	57	93%	7%	5.20%	3.65%
9-Jun-03	3.27%	3.80%	0.53%	51	90%	10%	5.00%	2.75%
2-Jul-03	3.54%	3.90%	0.36%	53	83%	17%	4.90%	2.95%
8-Aug-03	4.27%	4.40%	0.13%	51	67%	33%	5.70%	3.70%
9-Sep-03	4.36%	4.70%	0.35%	57	77%	23%	5.70%	3.60%
6-Oct-03	4.17%	4.50%	0.33%	55	91%	9%	5.80%	3.50%
4-Nov-03	4.30%	4.53%	0.24%	54	89%	11%	5.10%	3.50%
8-Dec-03	4.27%	4.55%	0.28%	61	92%	8%	5.10%	3.60%
7-Jan-04	4.24%	4.70%	0.46%	55	93%	7%	5.50%	4.00%
9-Feb-04	4.05%	4.40%	0.35%	59	100%	0%	5.10%	4.10%
9-Mar-04	3.97%	4.50%	0.53%	67	97%	3%	5.25%	3.75%
6-Apr-04	3.91%	4.50%	0.59%	72	96%	4%	5.25%	3.60%
3-May-04	4.49%	4.70%	0.21%	72	90%	10%	5.10%	4.25%
8-Jun-04	4.65%	5.20%	0.55%	51	96%	4%	5.65%	4.45%
7-Jul-04	4.46%	5.10%	0.64%	53	98%	2%	6.00%	4.44%
9-Aug-04	4.40%	5.00%	0.60%	54	96%	4%	5.70%	3.90%
9-Sep-04	4.20%	4.90%	0.71%	59	96%	4%	5.90%	4.00%
13-Oct-04	4.06%	4.69%	0.63%	60	95%	5%	5.70%	3.80%
9-Nov-04	4.07%	4.50%	0.43%	62	92%	8%	5.50%	2.80%

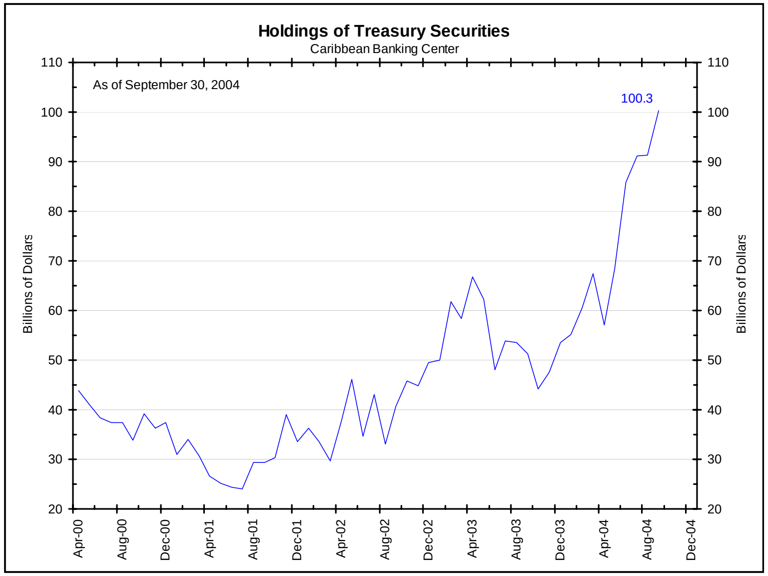
What Do Managers Think?

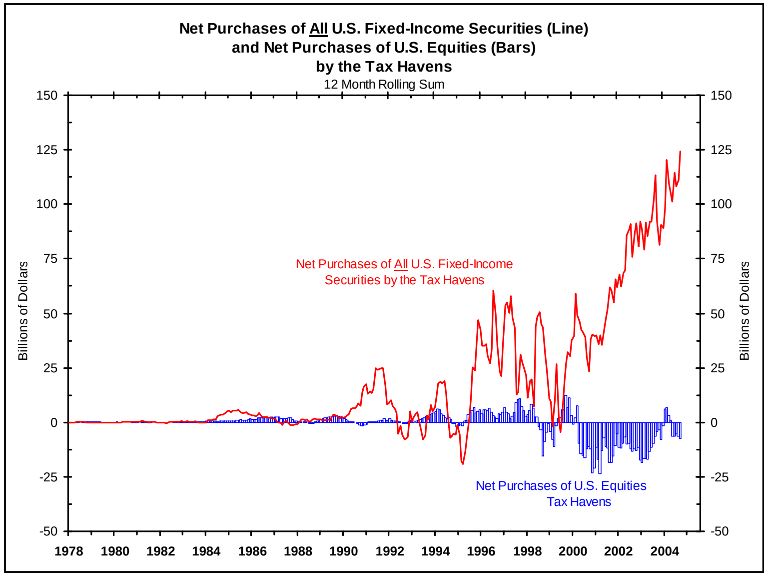




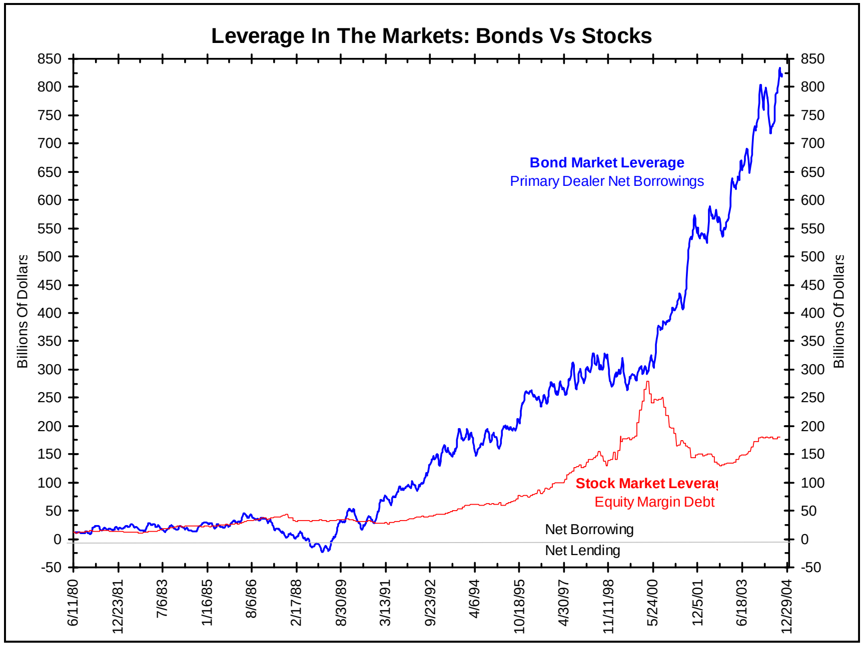
Tax Haven Countries As A Proxy For Hedge Funds

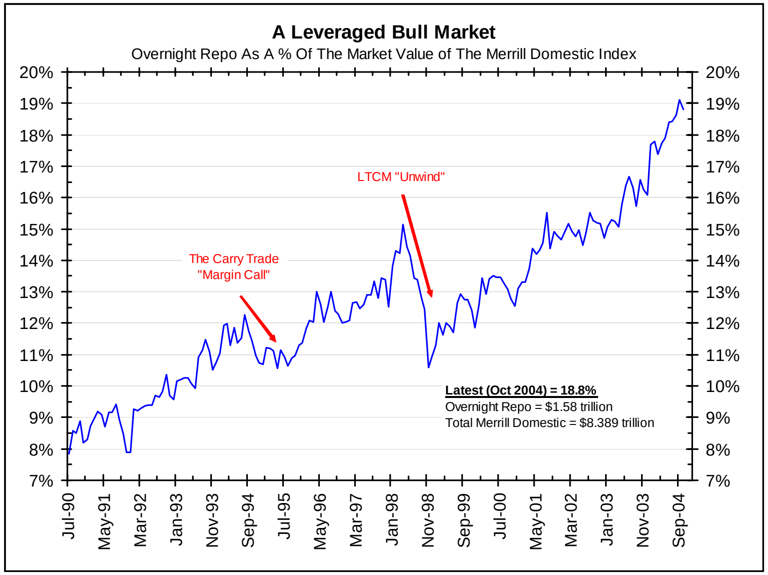


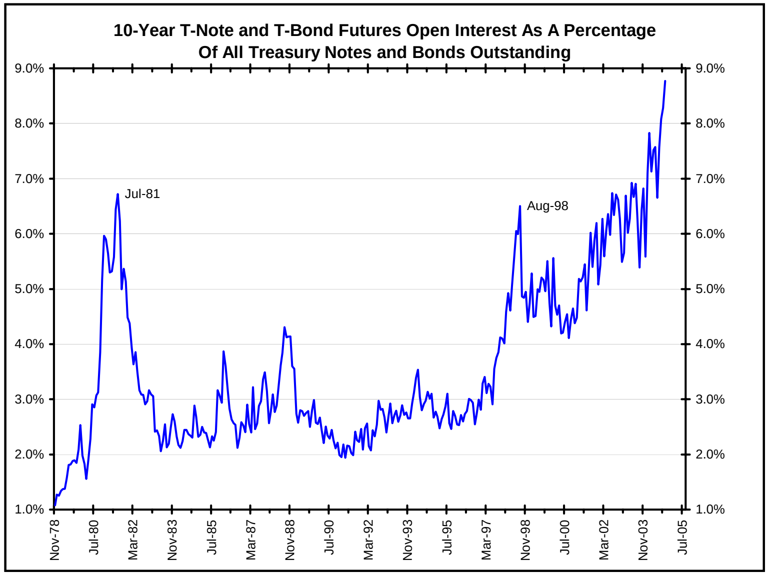




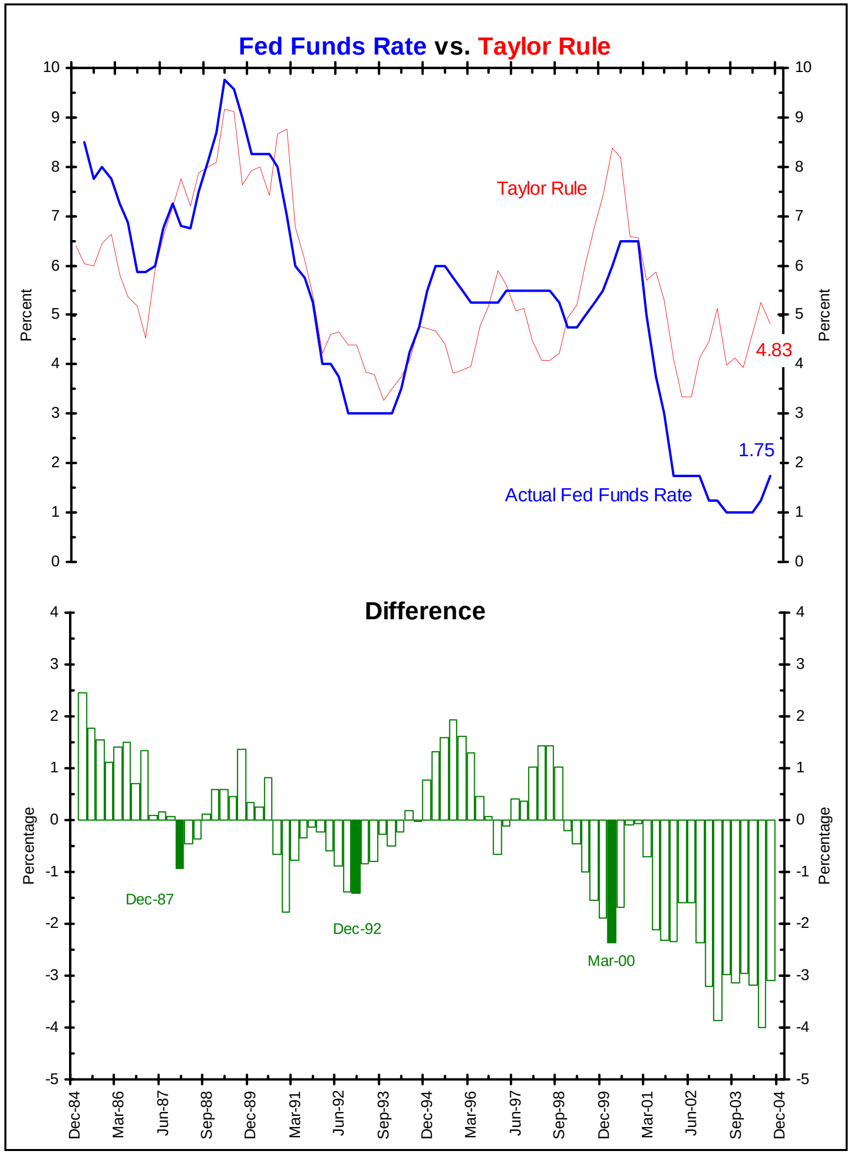
Leverage In The Bond Market







The Taylor Rule



The chart to the left shows the so-called “Taylor Rule.” Stanford Economist John Taylor, who is now the Treasury Undersecretary of Domestic Finance, developed this rule.

The most important component in this measure is potential GDP and potential inflation. The **Congressional Budget Office** (CBO) calculates these statistics. The potential numbers are compared to actual numbers to calculate how much inflation has drifted above or below its preferred level and whether the economy has any spare capacity.

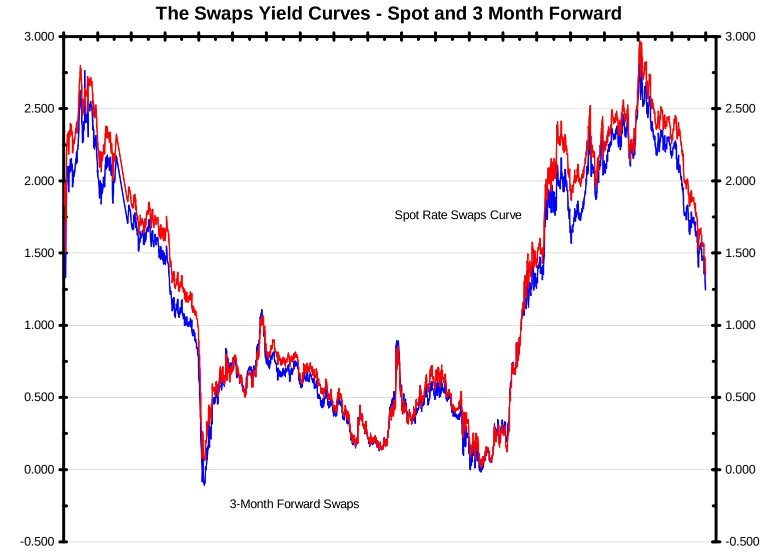
The CBO estimates that potential GDP is running 65 basis points above actual GDP (meaning this part of the calculation subtracts 65 basis point to the fed funds target since the economy still has some spare capacity). Inflation has moved higher in recent quarters thanks to rising energy prices. Currently it is now 1 basis point above preferred rate meaning this part of the calculate adds one basis point to the target funds rate because inflation is running slightly higher than the preferred rate. So in total, these two "adjustments" collectively subtract 64 basis point from the fed funds "neutral rate.“

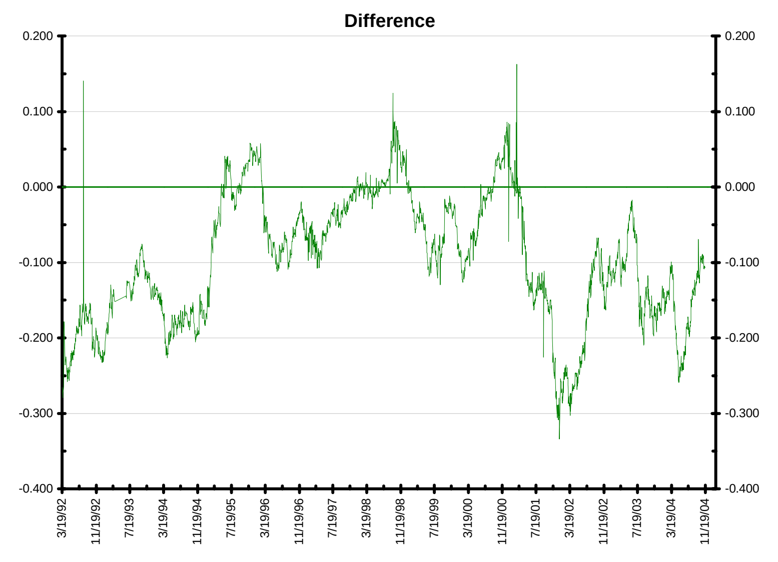
What is neutral? Professor Taylor's original rule used a fixed number of 4.00% (2% for inflation and 2% for real growth). If that number is used, the Taylor rule suggests the funds rate should be 3.36% (4.00% less the 64 basis points of adjustments described above).

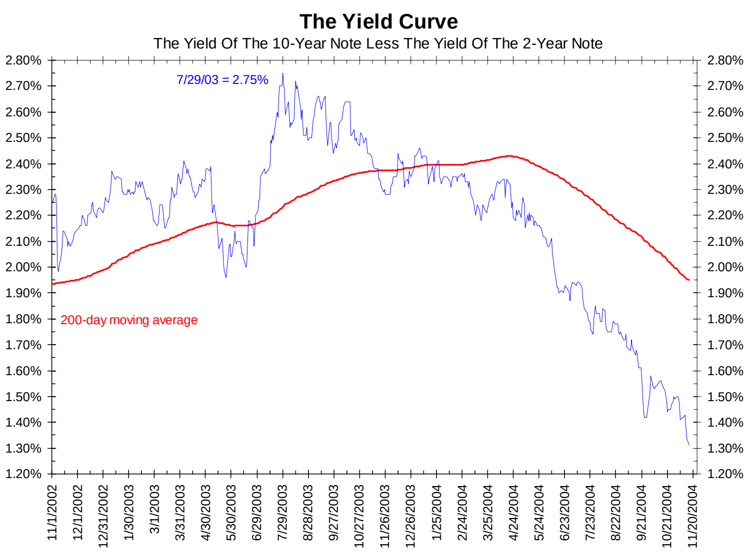
However, we found this part of the equation lacking. So, we use a more dynamic method. Instead of using a fixed 2% for inflation, we use the PCE rate plus the expected increase over the next year (Bloomberg estimate). Or, what is the inflation rate expected to be. Currently this number is 2.15%.

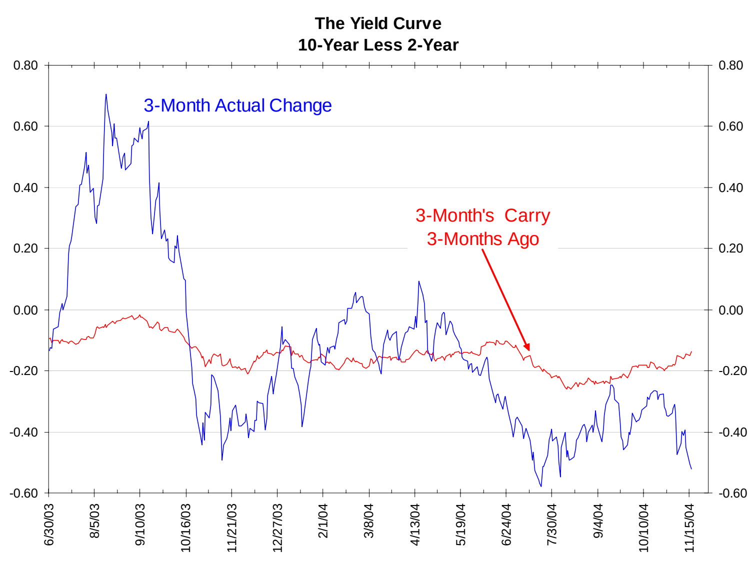
Likewise instead of using a fixed 2% for real GDP, we use an estimate (from the CBO) of what real GDP is expected to be. Currently this estimate is 3.32%. Adding the 2.15% for expected inflation to 3.32% for expected real GDP gives us a neutral rate of 5.47%. Subtracting the 64 basis points of adjustments above give us target rate of 4.83%.

The Yield Curve









The Fed - Starting Step 2?

Fed Increase Would Nearly Finish First Stage of Return to Normal

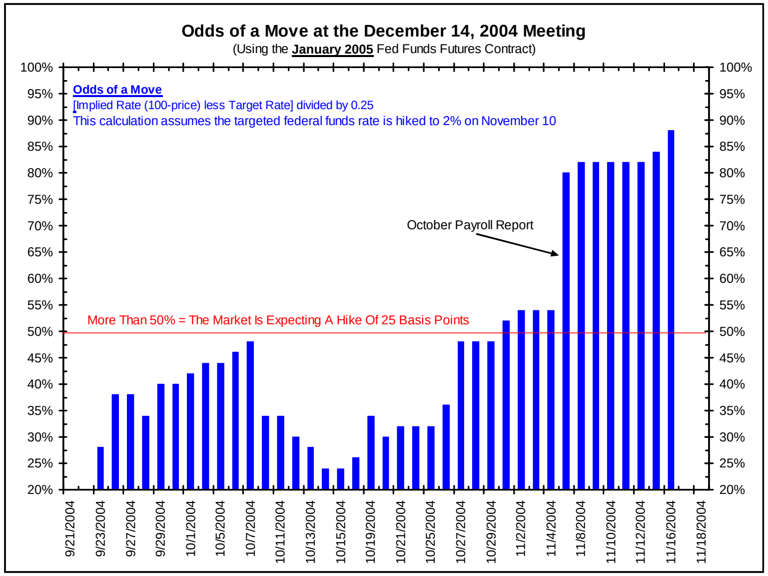
By **GREG IP**
Staff Reporter of THE WALL STREET JOURNAL
September 14, 2004; Page A2

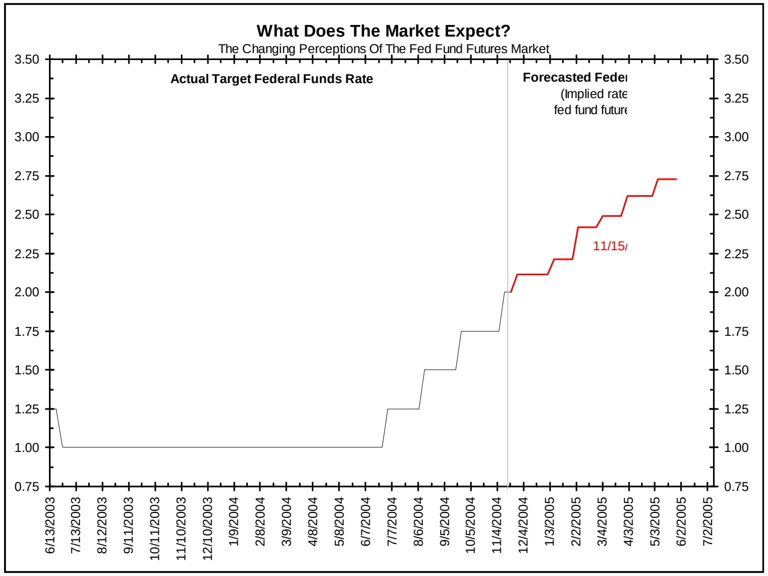
WASHINGTON -- If the Federal Reserve raises interest rates next week as expected, it will be nearing completion of the first stage of what appears to be a two-stage campaign to return interest rates to normal levels.

In the first phase, the Fed is moving to quickly raise the federal-funds rate target from the "emergency" level of 1%, where it stood for a year through June and was the lowest in 46 years. The objective is to push the rate to a still-low, but not excessively so, level -- probably around 2%. The Fed will get there between next week and its December meeting. Next Tuesday, it is likely to raise the target on the federal-funds rate, charged on overnight loans between banks, to 1.75% from 1.5%.

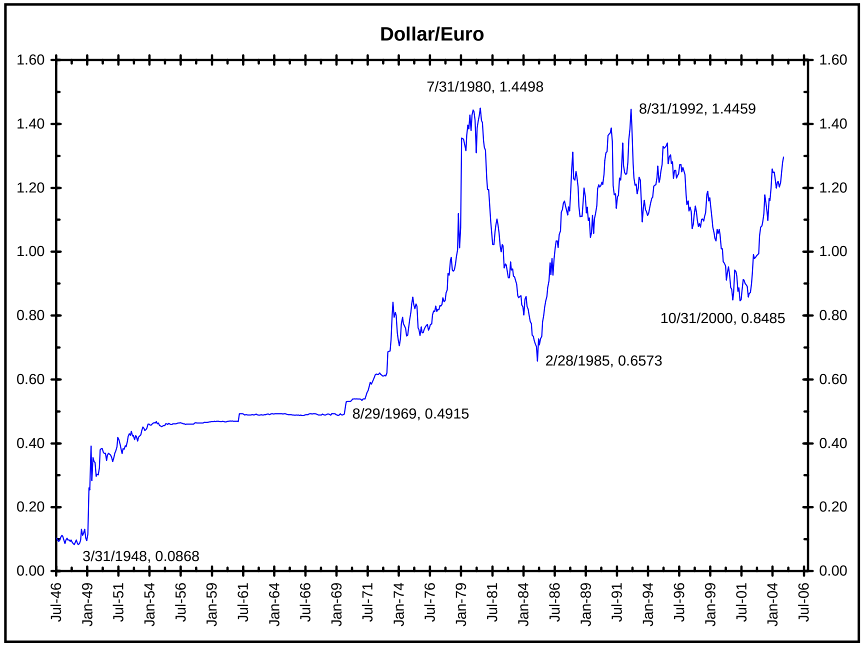
In the second stage of tightening monetary policy, the Fed will seek to raise the federal-funds rate to a more neutral level -- probably between 3% and 5% -- where it neither stimulates nor restrains growth. But the pace of its increases will be more subject to new economic data, in particular the impact of oil prices. Markets expect the rate to reach 2.5% by next July.

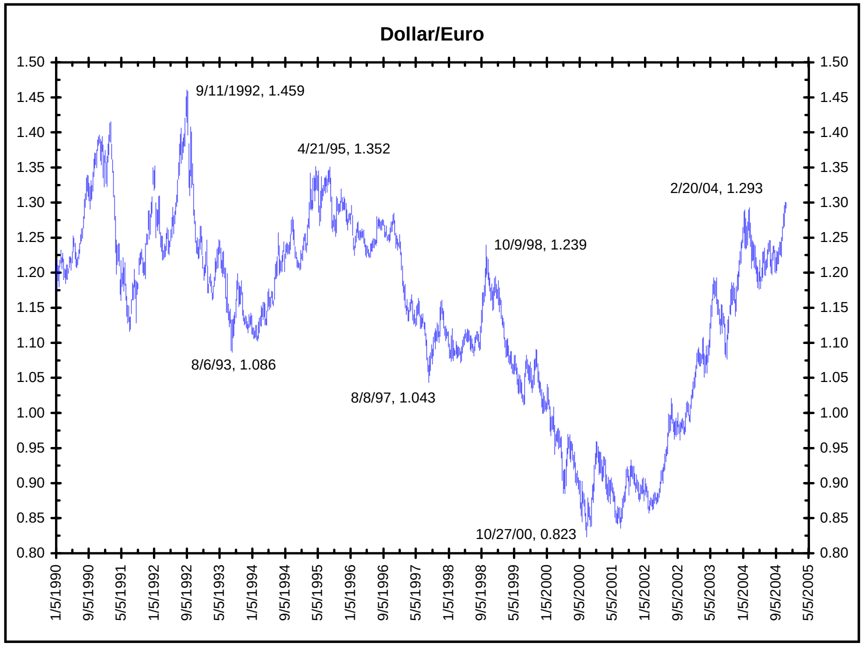
Though Fed officials themselves don't refer to their effort as a two-stage campaign, several say it is a reasonable characterization. Some policy makers' public remarks also point in that direction. Sandra Pianalto, president of the Federal Reserve Bank of Cleveland, said Friday: "I am convinced that the current 1.5% funds rate lies below neutral," which she put at 3% to 5%. "Our economy no longer requires the substantial amount of policy accommodation that it did until relatively recently."



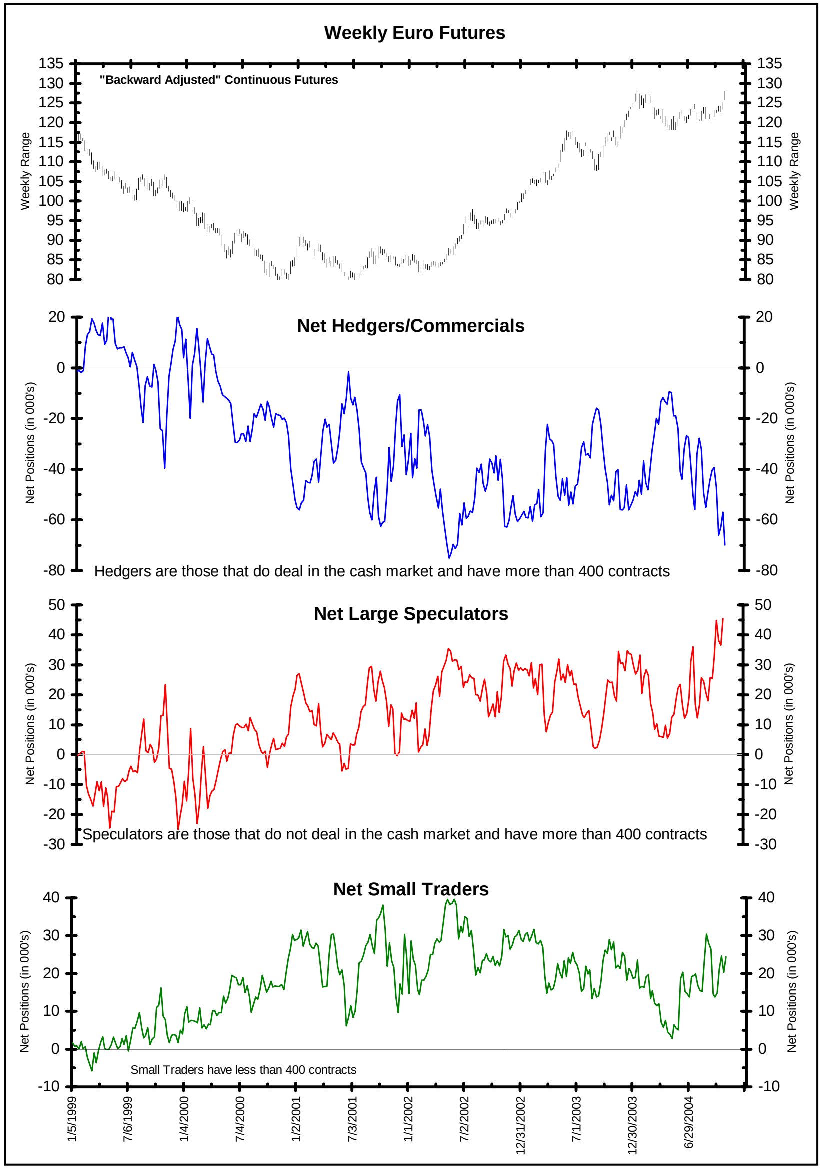


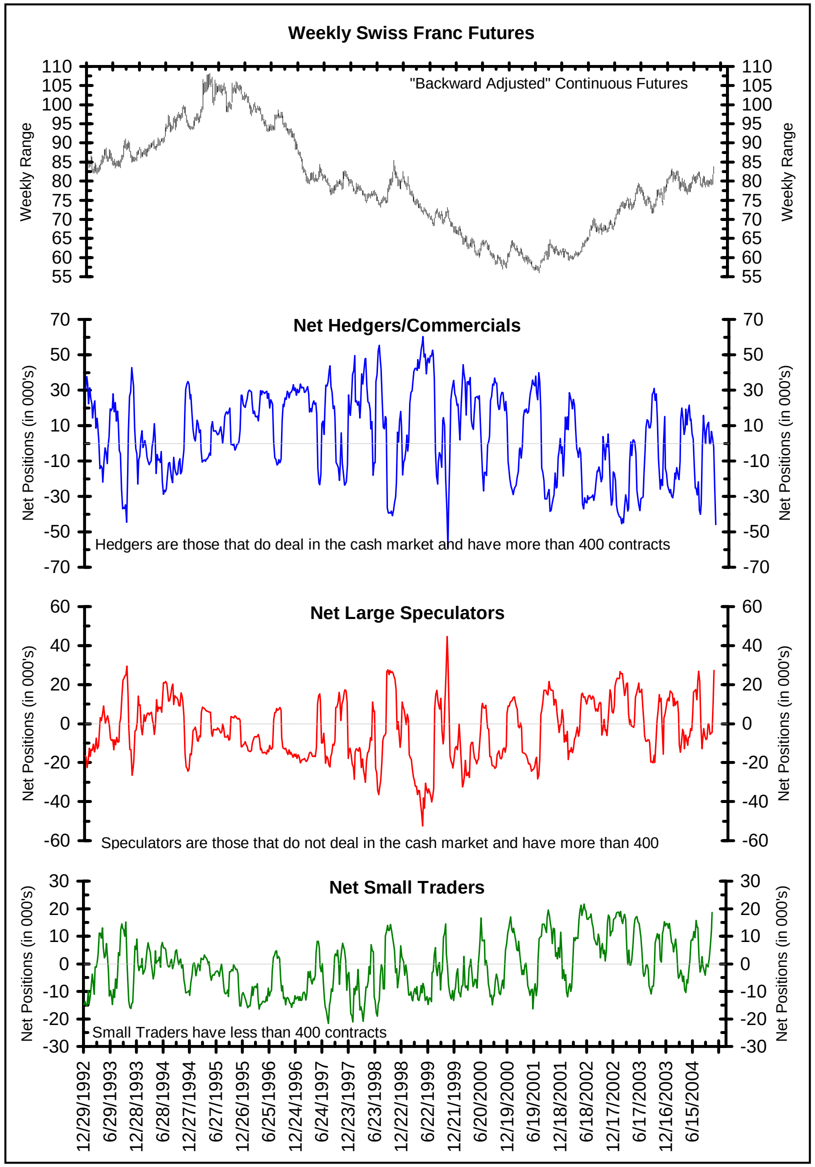
The Euro – Long-Term



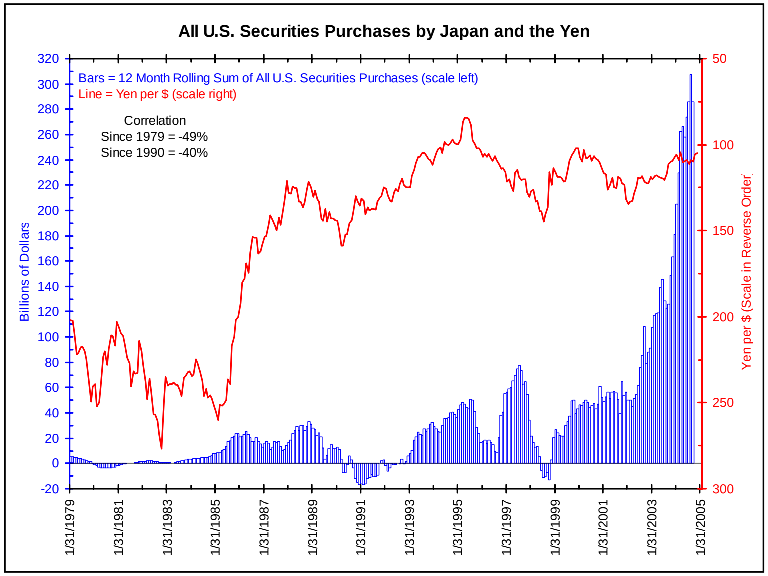


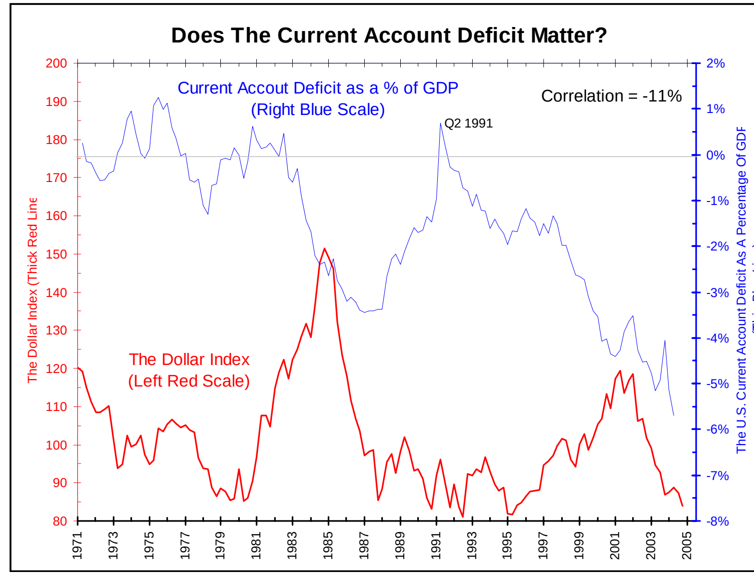
Euro Speculation

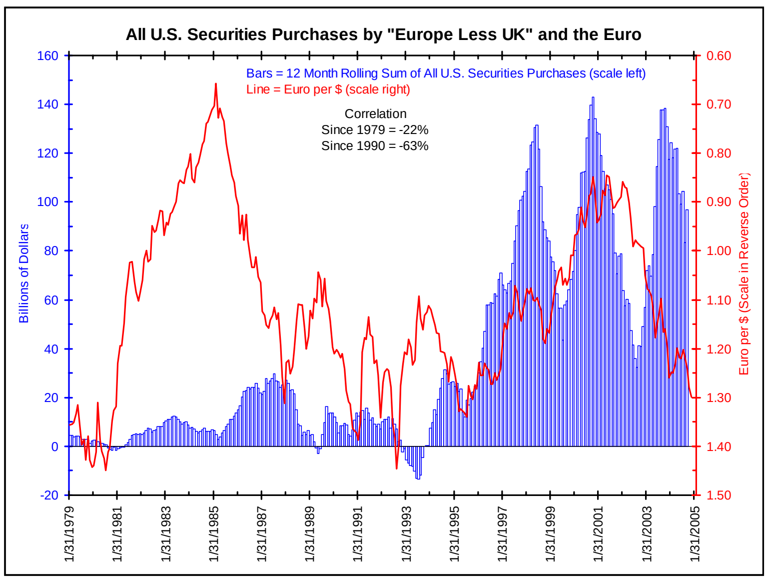


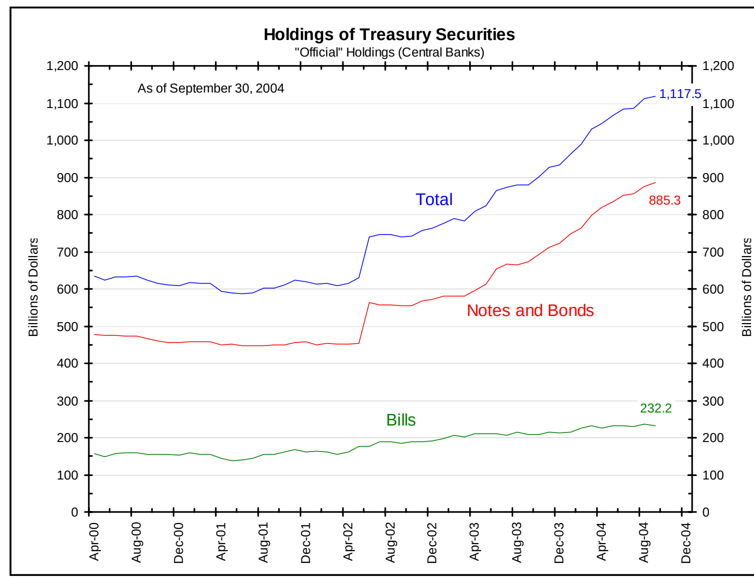


Capital Flows And Current Account Deficits









Bianco Research L.L.C.

1731 North Marcey, Suite 510
Chicago IL 60614

Phone: (847) 304-1511 Fax (847) 304-1749
e-mail: research@biancoresearch.com
http://www.biancoresearch.com

For more information about the contents/ opinions contained in these reports:

President (847) 304-1511
James A. Bianco jbianco@biancoresearch.com

Strategists/Analysts (847) 304-1511
Howard L. Simons hsimons@biancoresearch.com
John J. Kosar jkosar@biancoresearch.com
Greg Blaha gblaha@biancoresearch.com
Neil Bouhan nbouhan@biancoresearch.com

For subscription/service Information:

Arbor Research & Trading, Inc.
Director of Sales & Marketing (800) 876-1825
Fritz Handler fritz.handler@arborresearch.com
Patrick Lovett pat.lovett@arborresearch.com
Peter Forbes peter.forbes@arborresearch.com

Arbor Research & Trading, Inc.

1000 Hart Road, Suite 260
Barrington IL 60010

Phone (847) 304-1560 Fax (847) 304-1595
e-mail inforequest@arborresearch.com
http://www.arborresearch.com

For more information about Arbor Research & Trading and its services:

Director of Fixed-Income Sales (800) 876-1825
Daniel Lustig dan.lustig@arborresearch.com
Director of International Sales (847) 304-1560
James L. Perry james.perry@arborresearch.com

Arbor Research & Trading (UK) LTD

75 Cannon Street London England EC4N 5BN
Phone 44-207-556-7309 Fax 44-207-896-1887

For more information:

Director of Arbor (UK) 44-207-556-7309
Neil Tritton neil.tritton@arborresearch.com
Ben Gibson ben.gibson@arborresearch.com