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Topical Study #53

The Case For Bonds

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I. Prosperity Is Bullish

Earlier this year, many bond investors had their first out-of-body experience. For the first time in their lives, many suddenly realized that strong economic growth might actually be bullish rather than bearish for bonds. In the New Economy prosperity is bullish. I predict that the 10-year government bond yield might fall to 5% by the end of next year, from 6% currently, and to 4.5% by the middle of the decade.

In the New Economy, robust economic growth and low inflation can coexist. The prolonged period of good times has created lots of jobs, boosting incomes and taxes. Federal tax revenues rose above spending during 1998 for the first time in over 30 years. The spread between receipts and outlays is widening, generating a budget surplus of $200 billion over the past 12 months. As a result, the US Treasury is paying down the federal government's debt at an astonishing pace.

US Treasury marketable interest-bearing debt outstanding hovered around $250 million during the first half of the 1970s. It rose above $1 trillion during August 1983 and rose at an increasing rate, finally peaking at $3.5 trillion during March 1997. Since then, government debt is down $565 billion (Exhibit 1 on page 3).[1] Most of the decline has occurred in Treasury notes outstanding, which are down $469 billion since peaking during June 1997. Treasury bills and bonds outstanding are each hovering around $630 billion. The outstanding supply of Treasury bonds is quite small. It is currently equivalent to only 5% of the market capitalization of the S&P 500 (Exhibit 2). US federal debt is now down to 30% of nominal GDP from a peak of 44% during the first quarter of 1996, and the lowest such reading since the third quarter of 1984 (Exhibit 3).

As the federal budget surpluses continue to widen, the Treasury is paying down debt more rapidly (Exhibit 4). The Congressional Budget Office (CBO) now projects surpluses totaling $4.6 trillion from fiscal 2001 through 2010 (Table 1).[2] Skeptics are predicting that this will never happen. Our politicians in Washington are bound to spend and squander most of the funds. That's a possible, but unlikely scenario. A significant portion of the surpluses is off-limits because it is "off-budget." Congress came up with this accounting gimmick to exclude Social Security surpluses from decisions on government spending.

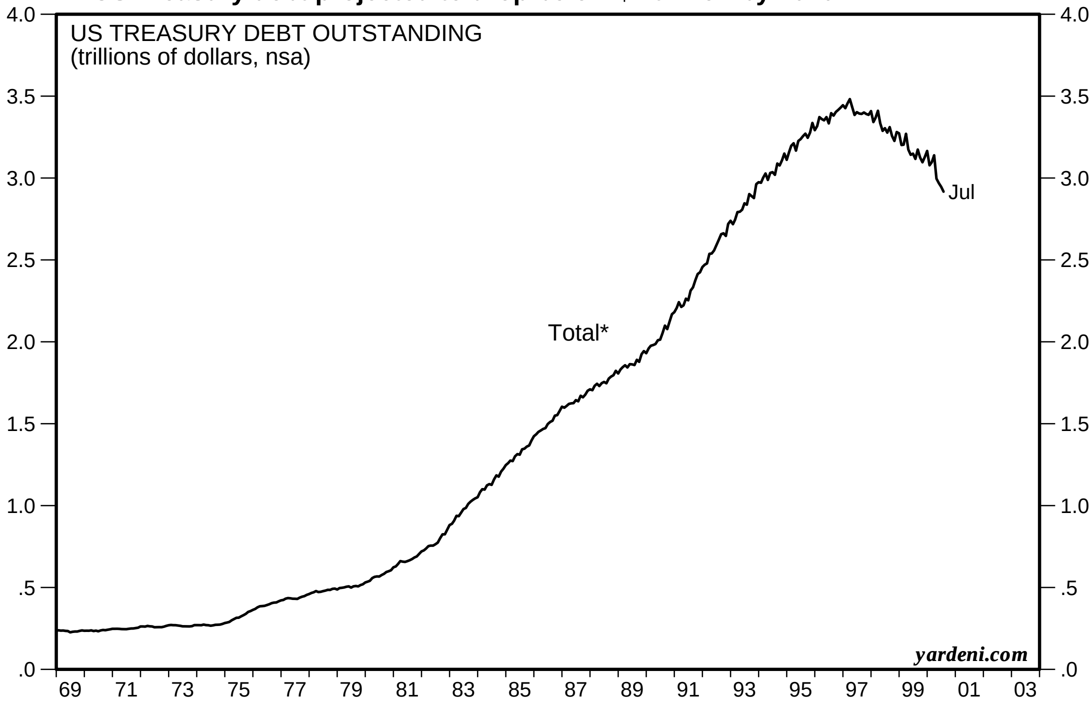
Table 1: The Budget Outlook Under Current Policies* (By fiscal year, in billions of dollars)

	1999a	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2001-2005	2001-2010
On-Budget Surplus	1	84	102	126	143	154	169	222	260	288	332	377	695	2,173
Off-Budget Surplus	124	149	165	186	202	215	232	247	263	278	293	307	1,001	2,388
Total Surplus	124	232	268	312	345	369	402	469	523	565	625	685	1,696	4,561

*Assuming discretionary spending grows at the rate of inflation after 2000.
Source: Congressional Budget Office, "The Budget and Economic Outlook: An Update."

[1] http://www.publicdebt.treas.gov/opd/opd.htm
[2] http://www.cbo.gov/

#1 US Treasury debt projected to drop below $1 trillion by 2010.



* Marketable Interest-Bearing bills, notes and bonds.
Source: Monthly Statement of the Public Debt of the United States.

According to the CBO, the off-budget surplus will add up to $2.4 trillion from 2001 to 2010 (Table 1 and Exhibit 5). This sum alone would lower federal debt outstanding back below $1 trillion. If we "squander" half of the on-budget surplus on spending programs and tax cuts, we would still have another $1 trillion left to pay off all of the government's debt by 2010.

II. Baby Boomers Are Bullish

Demographic trends are also still very bullish for bonds. In the late 1980s, I predicted that there would be a strong correlation between the "Age Wave" and the bond yield through 2010. I defined the Age Wave as the percent of the labor force that is 16 to 34 years old. Looking back now, it turns out that this wave has been remarkably well correlated with the waves in both inflation and the bond yield, using five-year moving averages for each of these two variables (Exhibits 6 and 7).

The age, inflation, and bond yield waves all troughed in the early 1960s and crested during the first half of the 1980s. The Age Wave is still falling. Having peaked at 51% during January 1981, it is now down to 38%, compared to 39% a year ago. The five-year moving average of the CPI inflation rate is down to 2.4%, just about where it should be based on the Age Wave. The five-year moving average of the ten-year bond yield is down to 6.0%, about 200 basis points above the level suggested by the Age Wave model (Exhibits 6 and 7).

III. Metals, Gold & Interest-Rate Sensitive Stocks Are Bullish

Commodity markets and interest-rate sensitive stocks are also sending bullish signals for the bond market. The CRB metals spot price index—including copper scrap, lead scrap, steel scrap, tin, and zinc—fell in mid-August to within 4% of the 1998 Asian crisis low. This index tends to move in sync with the government bond yield (Exhibit 8).

The price of gold, on the other hand, has been an excellent leading indicator for the bond market, usually leading the yield by 15 months. This "gold model" is predicting that the government bond yield will fall to 4.5% by the end of next year (Exhibit 9).

Bond yields are also strongly correlated with both electric utility and homebuilding stock prices. The S&P 500 Electric Utility index bottomed on March 15, 2000, and is up a whopping 36% since then (Exhibit 10). The S&P 500 Homebuilding index also bottomed on March 15, and is up 53% currently (Exhibit 11). Bond yields typically fall when investors are showing a preference for interest-rate sensitive stocks. These stocks seem to have correctly anticipated a limited round of Fed tightening in mid-March, well before this became a consensus view during the summer.

IV. Not So Bullish

In the interest of providing you with a balanced analysis of the prospects for bonds, I should at least list some less-than-bullish factors that might trip the bulls:

1) The correlation between the price of oil and the bond yield has been weak in the past, but astonishingly strong since 1996. Recently, the fit hasn't been as tight (Exhibit 12). Investors probably understand that the jump in oil prices is likely to be a relatively short-lived spike while the shortage of bonds could last a decade or more.

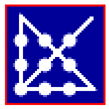
2) While Treasury yields have dropped, corporate yields remain relatively high. Indeed, the spread between Baa yields and the 10-year Treasury yield as well as the spread between the Aaa yield and the 10-year Treasury rate are the widest since the 1998 Asian crisis (Exhibit 13). It is conceivable that investors in Treasury bonds might continue to enjoy good returns, while those holding other bonds might suffer losses. Yields on non-Treasury instruments might rise if the economy weakens, raising renewed concerns about credit quality.

3) Historically, the government bond yield has tended to trade around the annual growth in nominal GDP. In the 1960s and 1970s, the growth in the economy usually exceeded the yield. In the 1980s and until recently, the yield typically exceeded the growth of nominal GDP. Recently, the two have been nearly identical. Nominal GDP growth rose during the second quarter to 6.9%, the highest rate since the first quarter of 1990 (Exhibit 14). This GDP growth model suggests that my outlook for the bond yield may be too bullish.

Fed Chairman Alan Greenspan, earlier this year, implied that higher productivity growth suggests that real interest rates should be higher too:

> Thus, the rise in real rates should be viewed as a quite natural consequence of the pressures of heavier demands for investment capital, driven by higher perceived returns associated with technological breakthroughs and supported by a central bank intent on defusing the imbalances that would undermine the expansion.[3]

The problem with this sensible theory is that the historical correlation between productivity growth and the real bond yield is relatively weak (Exhibit 15).

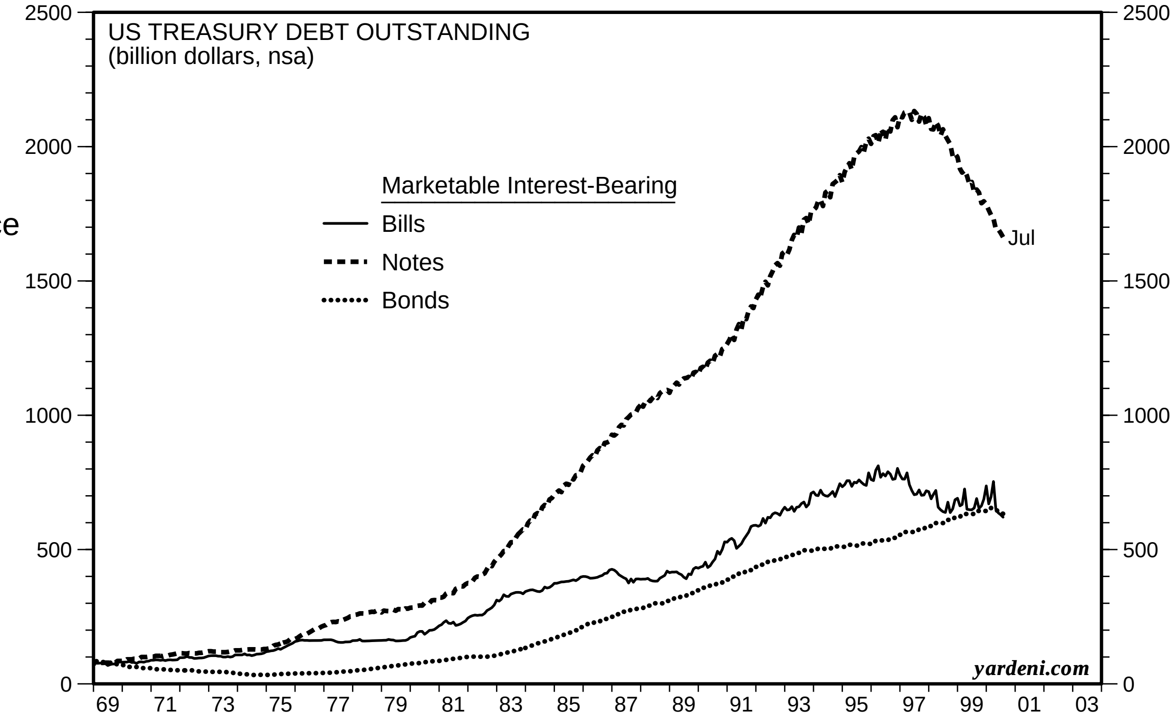


[3] "Technology and the economy," Speech before the Economic Club of New York, January 13, 2000 http://www.bog.frb.fed.us/boarddocs/speeches/2000/200001132.htm

- Treasury Debt -

So far, most of US budget surplus has been used to reduce notes outstanding.

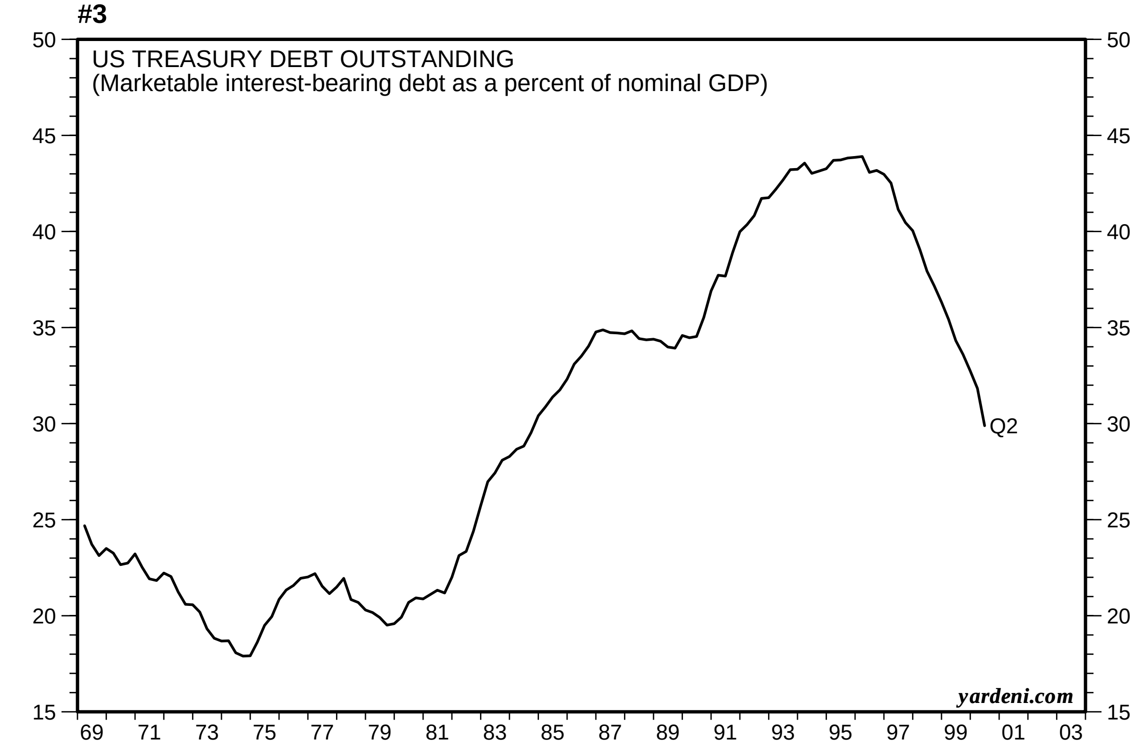
#2



Source: Monthly Statement of the Public Debt of the United States.

US federal debt falls to 30% of GDP from a peak of 44% during Q1 1996.

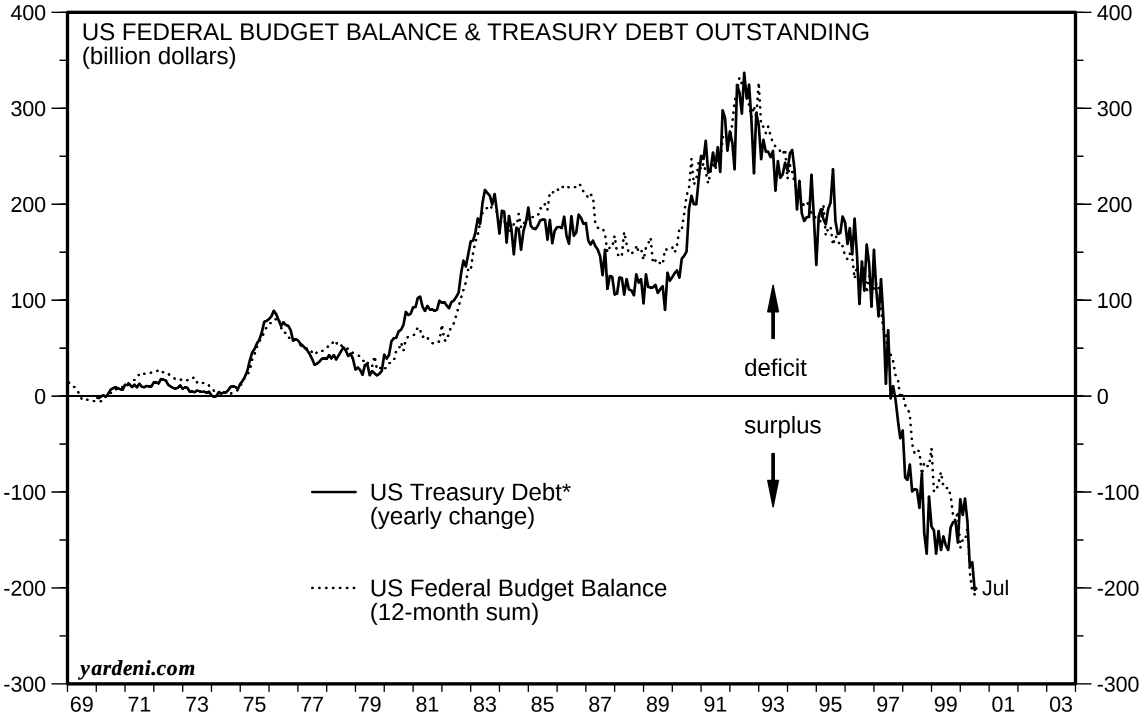
#3



Source: Monthly Statement of the Public Debt of the United States.

- Treasury Debt -

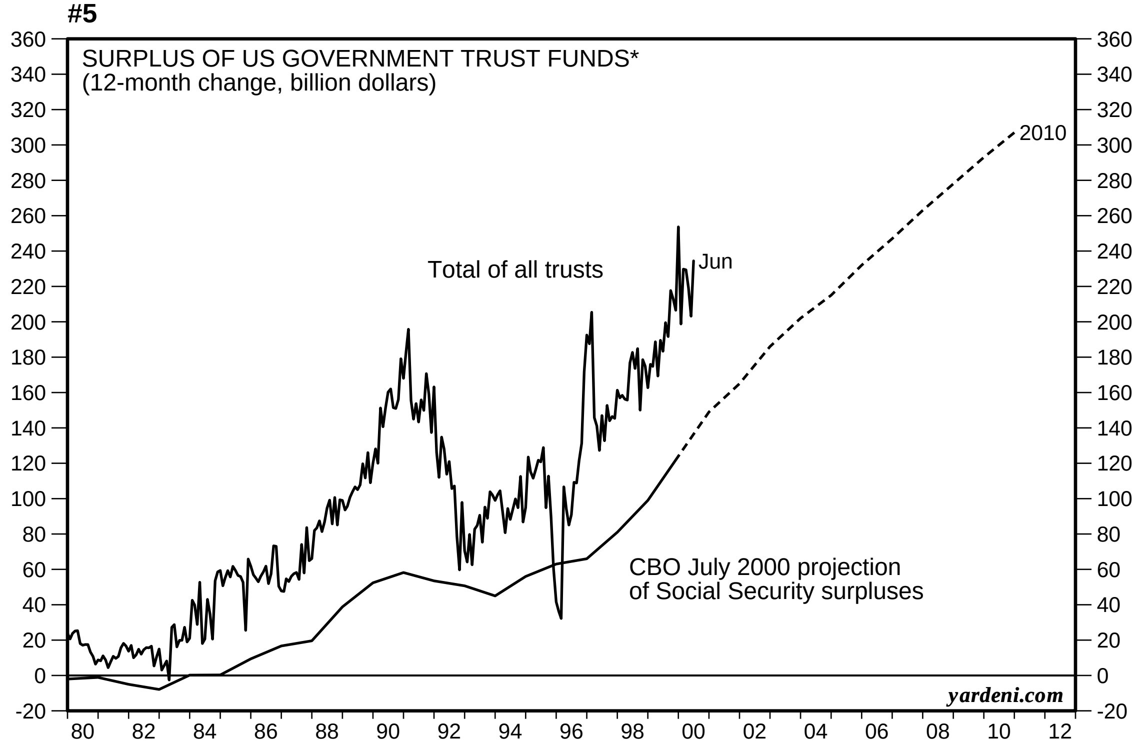
#4



As US budget surplus widens, US Treasury debt shrinks.

* Marketable interest-bearing.
Source: Monthly Statement of the Public Debt of the United States.

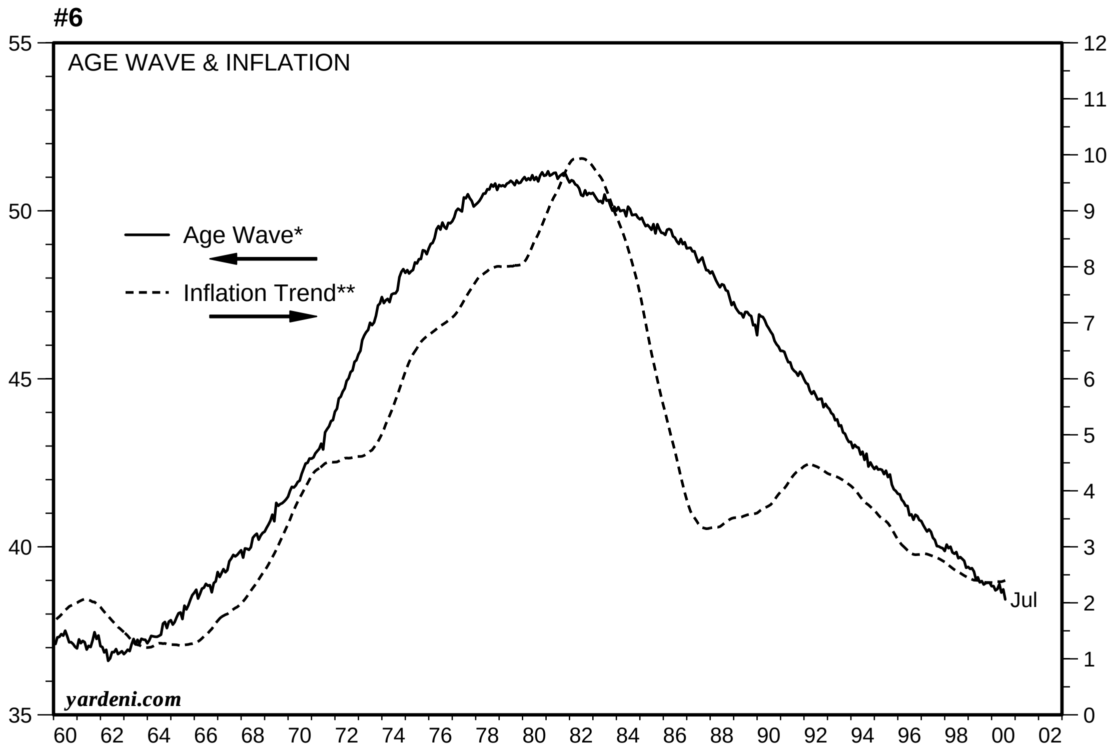
#5



Surplus of Social Security trust fund is "off-budget." So it can't be spent.

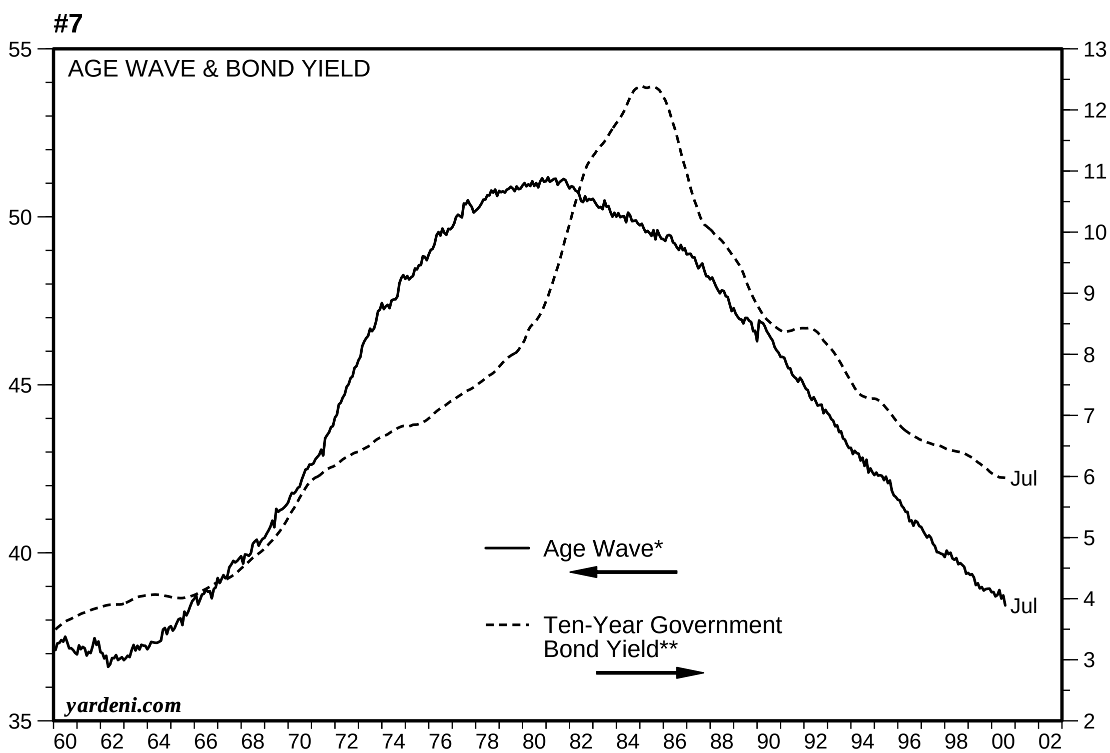
* Gross minus net Federal government debt.

- Demographics -



* Percent of labor force 16-34 years old.
** Five-year moving average of yearly percent change in CPI.

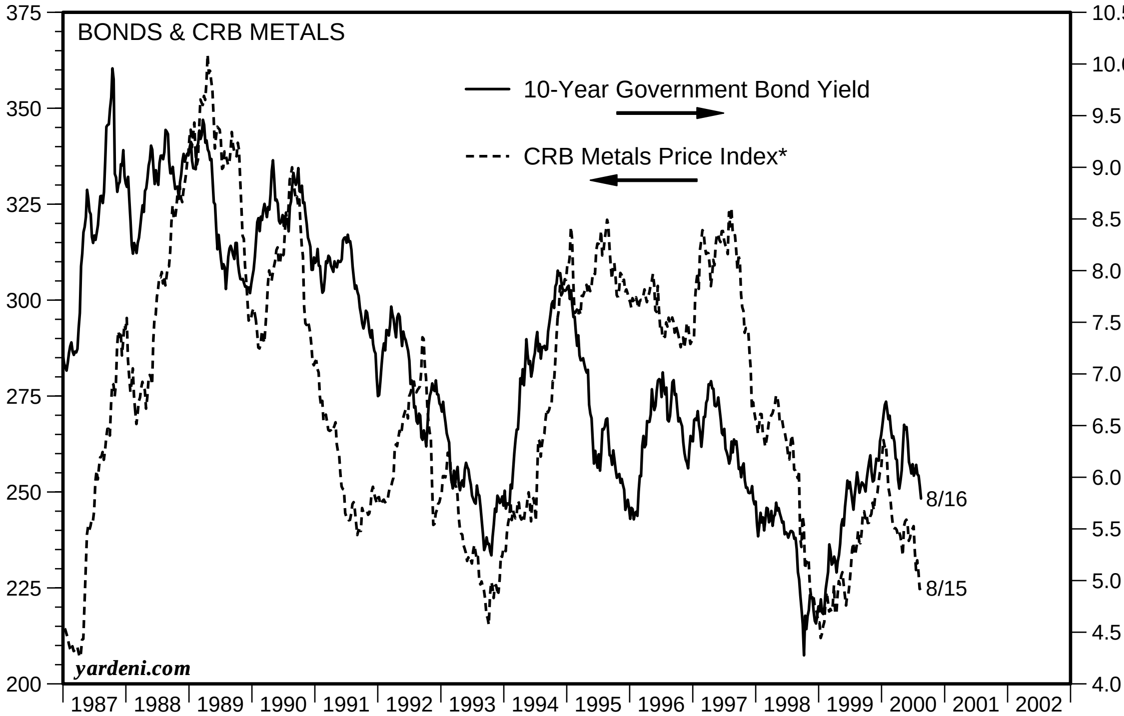
Underlying demographic trends continue to support disinflation trend in bond yields.



* Percent of labor force 16-34 years old.
** Five-year moving average of ten-year government bond yield.

- Commodities -

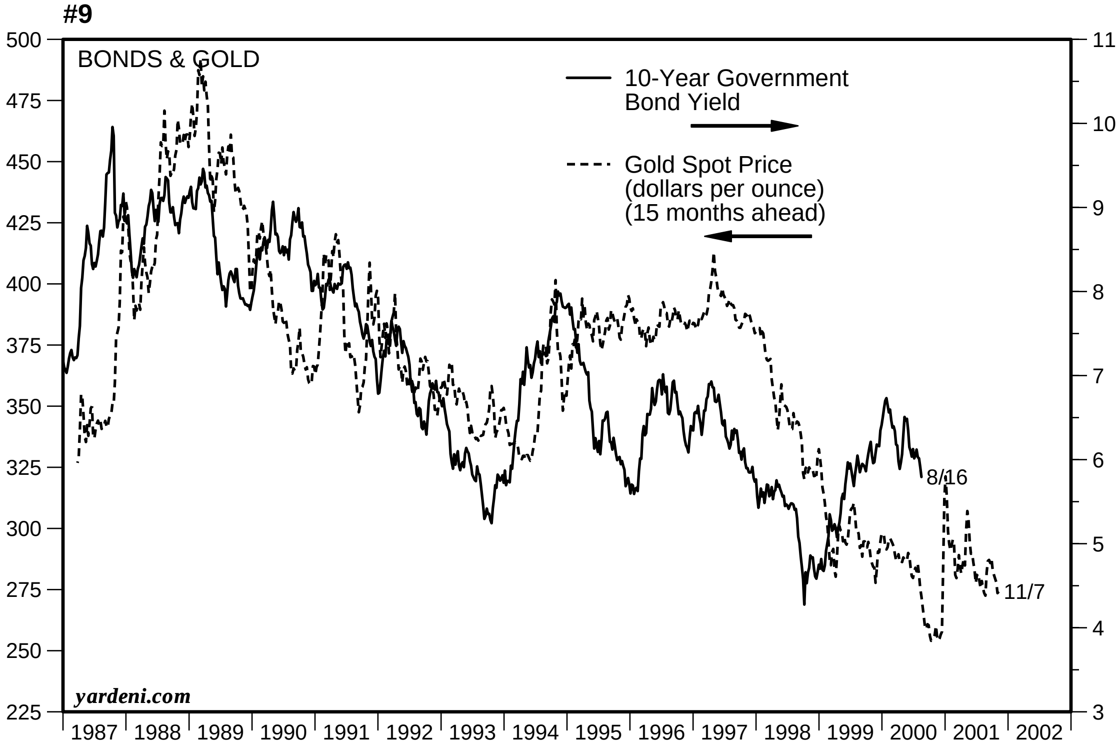
#8



* Includes copper scrap, lead scrap, steel scrap, tin and zinc. 1967=100.

Good correlation between metals prices and bond yield. Despite global boom, metals prices are falling currently, which is bullish for bonds.

#9

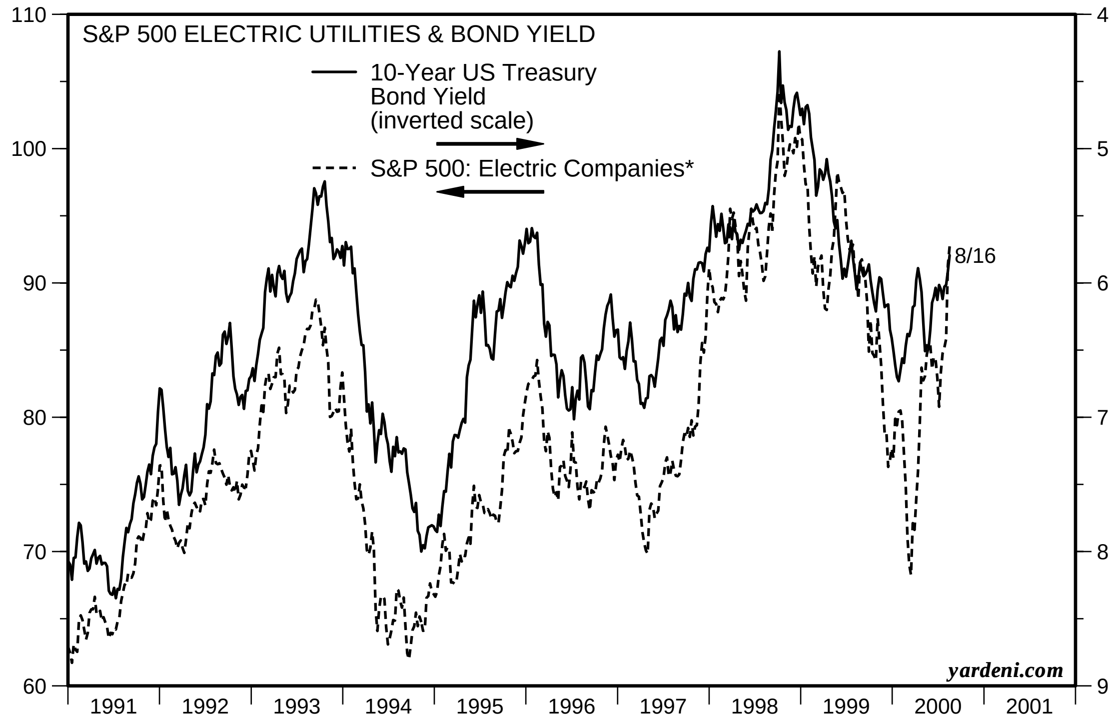


Gold model predicts 4 1/2% bond yield in 2001. Swings in gold prices tend to lead movements in government bond yields by roughly 15 months.

- Interest-Rate Sensitive Stocks -

There's a strong correlation between S&P electric utilities index and the bond yield. Rebound in utility index is bullish for bonds.

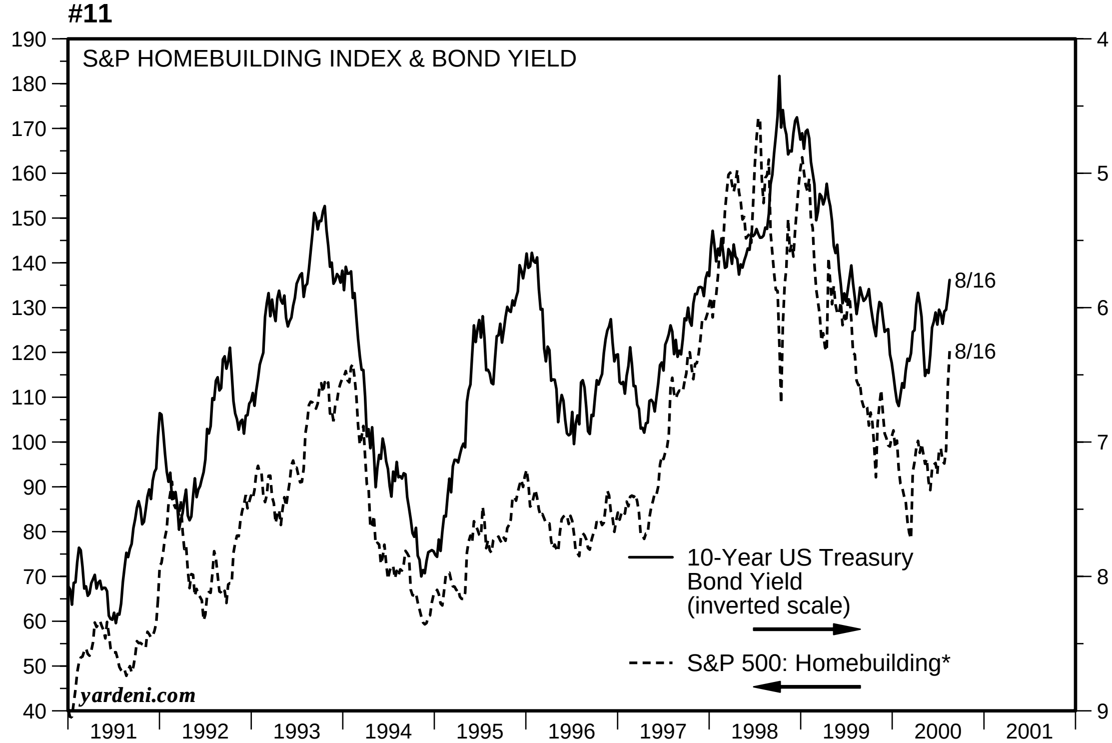
#10



* Currently includes 28 electric companies.

Homebuilding stock price index highly correlated with inverse of bond yield. Recent rebound confirms bullish scenario for bonds.

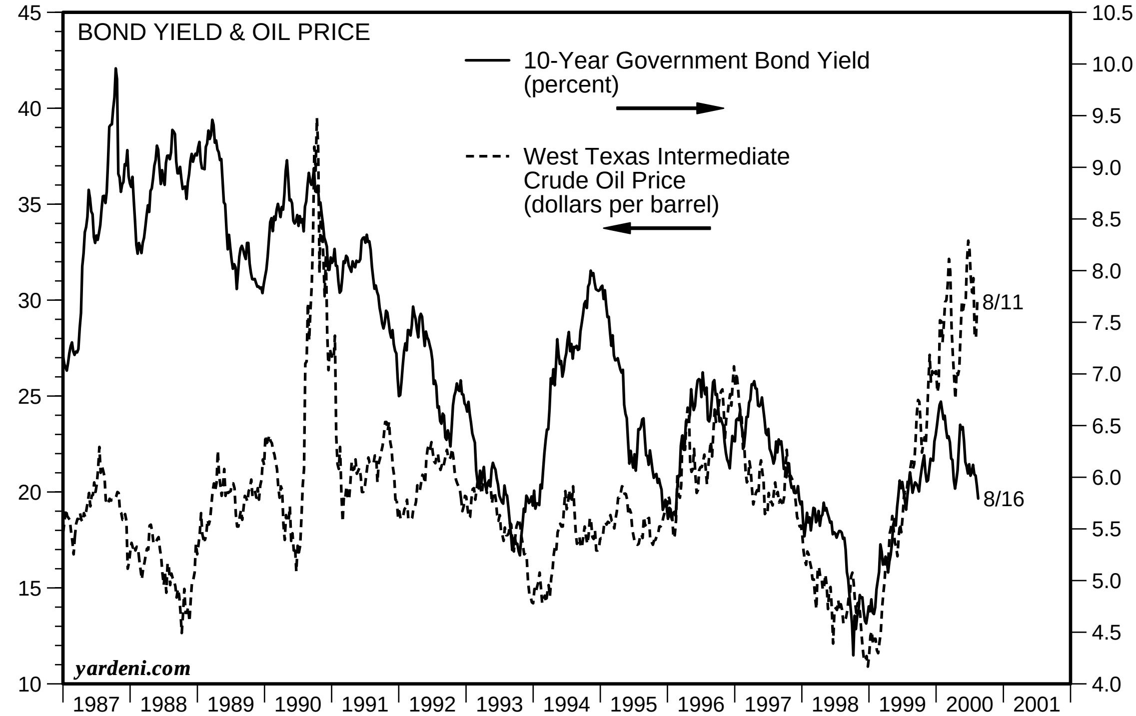
#11



* Includes Centex Corp, Kaufman & Broad Home Corp, and Pulte Corp.

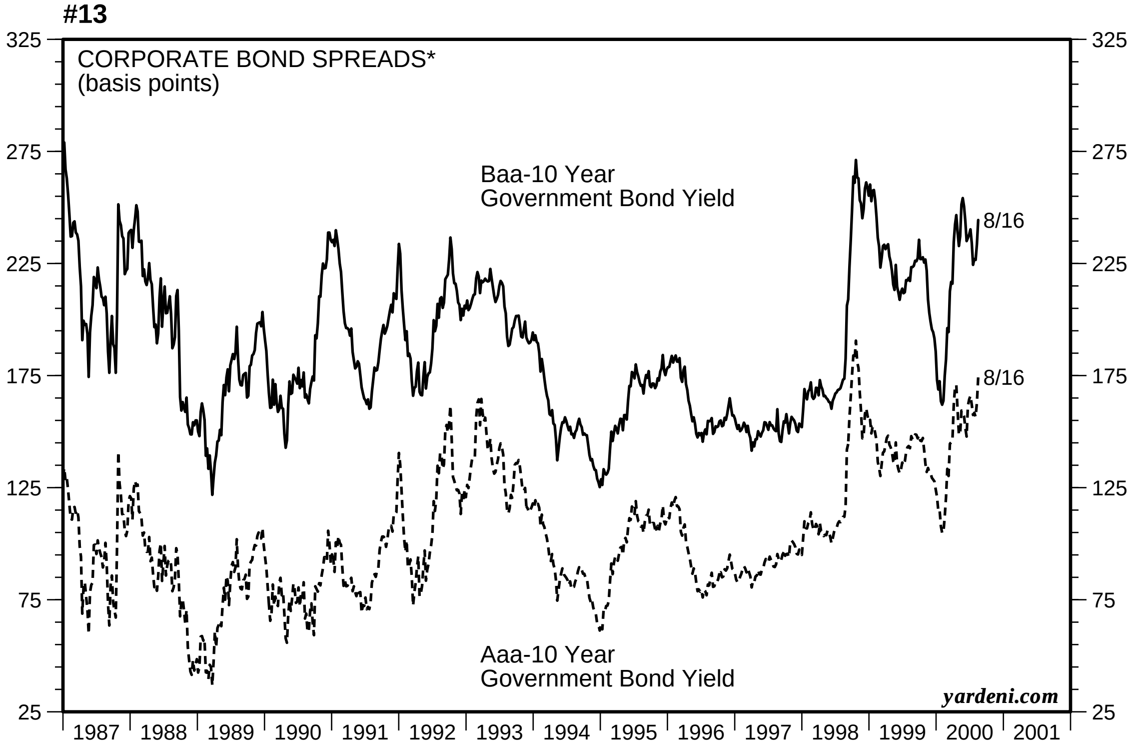
- Corporate Spreads -

#12



Currently, oil prices bearish for bonds, yet bonds are doing well.

#13



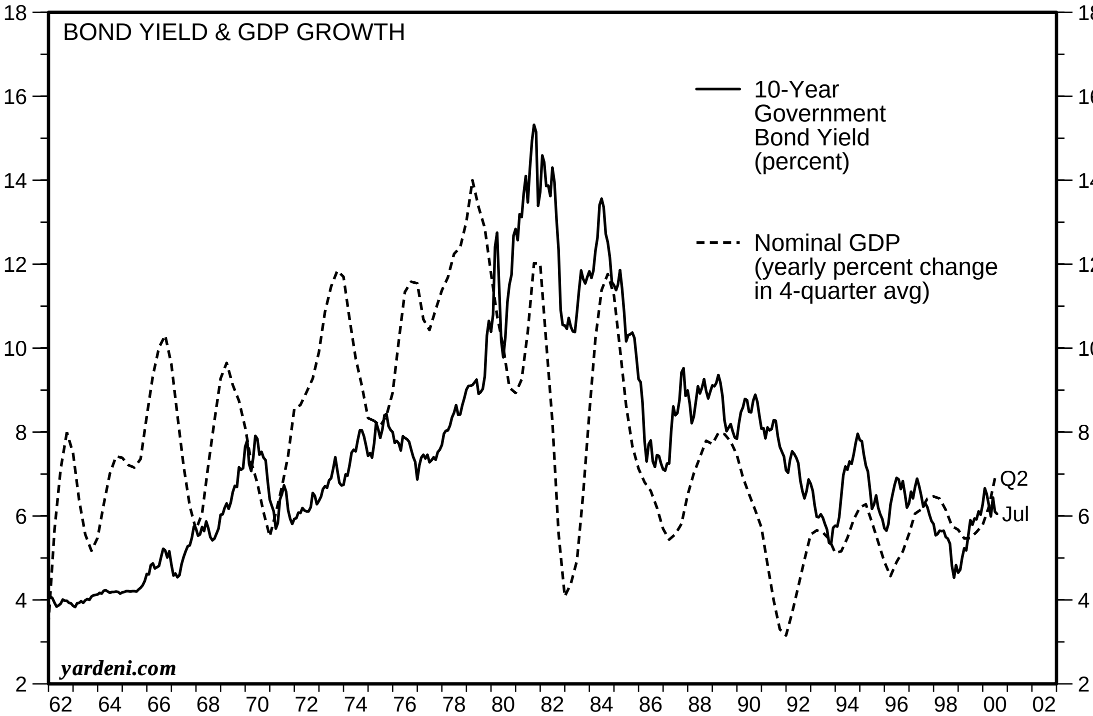
* Source: Moody's Investors Service. Aaa corporates are maturities of 25 years or more.

Credit-quality spreads widen as Treasury bond yield falls while corporate rates don't.

- Bond Models -

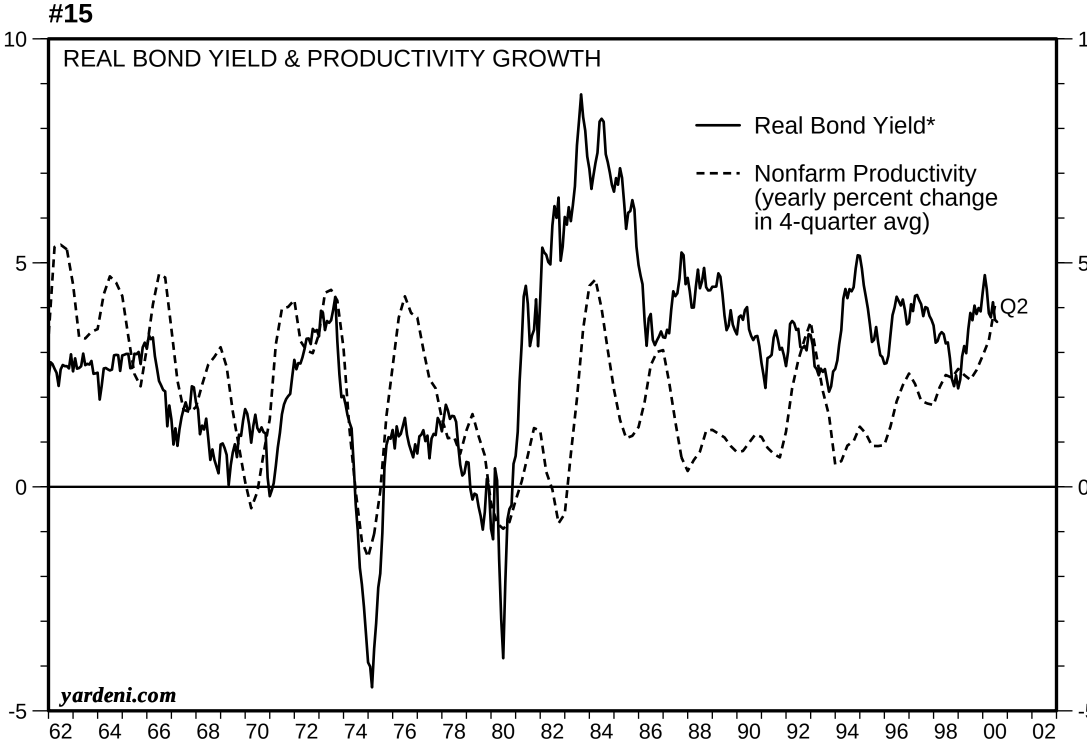
The bond yield is highly correlated with nominal GDP growth. This relationship was especially tight in the 1990s.

#14



Real bond yield is weakly correlated with productivity growth.

#15



* 10-year government bond yield minus yearly percent change in CPI ex food & energy.