

Home on the Range: *4½-5½% bond yields likely*

Following a decade-long bullish bias, now shift to a neutral secular outlook for bonds

Highlights

- When we first championed the case for a secular decline in interest rates a decade ago, bond yields were in the low-9% area, inflation was running near a 5% pace, real rates stood over 4% and the government was running a deficit of almost 2½% of GDP.
- Now bond yields have reached—and temporarily breached—the 5% level for the first time since the Treasury began selling the 30-year back in 1977. With yields within just 50 basis points of the range we set for the middle of the *next* decade, prospects for additional capital gains are limited. Therefore look to take profits in more speculative positions, and move to a more market neutral duration weighting.
- Annual returns for bonds averaged only about 3.1% between 1926 and 1981, but averaged more than 14.2% since 1982. Real returns, which were essentially flat from 1926 through 1981, have averaged 10.8% since 1982. Looking forward, however, the return prospects for bonds appear far more modest. With yields of just 5¼% or less across the entire Treasury curve, bondholders are now entirely dependent upon capital gains—which will be much harder to come by—to duplicate those same high returns.
- The probability that bonds are the top-performing asset class is currently just 15%. This is well below the equilibrium level (33%), and—despite the recent backup in yields—still one of the lowest levels for bonds during the past two decades. While such a low probability of top performance is not necessarily indicative of an imminent bond market correction, it strongly argues against continued outperformance.
- The Fed is likely to pursue a more accommodative monetary policy through the early part of 1999. However, yields have already dropped sharply in response to the three 25-basis-point rate cuts thus far. Each subsequent easing move can be expected to have a diminished impact upon market yields. Experience suggests it is preferable to move to a neutral duration weighting during the latter stages of an easing cycle, rather than waiting for confirmation that the easing cycle has been completed.
- While secular view for bonds has turned neutral, we certainly don't advocate a wholesale dumping of bonds and a move into cash. We recommend changing profile of positions from *speculative capital gains vehicles* to more *defensive income maximizing instruments*. This entails *shortening duration, increasing current income, shifting more heavily into spread product* and *selectively increasing exposure to callable paper*.

It was a little over ten years ago that we first championed the case for a secular decline in interest rates with our Investment Policy report entitled "The Beauty of Bonds" (September 9, 1988). At that time bond yields were in the low-9% area, inflation was running at a 4.8% pace, real rates stood at 4.2% and the federal government was running a budget deficit (remember those?) of almost 2.5% of GDP. Over the ensuing decade we have frequently updated our rate call, narrowing the focus each time to include specific targets for 30-year Treasury bond yields over some finite time period. In "6 in '96" (April 21, 1991) we argued that a further ratcheting down of inflation pressures to near the 3% level, coupled with a return to a more "normal" real rate environment of just under 3%, would translate into 6% bond yields sometime by 1996.

With yields well on their way to 6% by 1993, we elected to extend our sights through the end of the decade. In "5 at the Turn" (March 21, 1993), we lowered both our inflation and real rate targets, calling for sustainable 5% bond yields by the year 2000. In "It's Still '5 at the Turn'" (May 23, 1994), we reiterated our call for 5% bond yields, despite a temporary cyclical correction that saw bonds retrace to the low-8% level. With yields having reached our 6% target at the beginning of 1996, we elected to extend our call one last time into the middle of the next decade. In "Fours Before Long," (February 5, 1996) we pointed out that "...long bond yields will reach the 5% level by the turn of the century, or even earlier—perhaps as soon as 1997 or 1998." But we also went on to state that "...the powerful secular forces already at work in the economy will help long-bond yields approach the mid-4% range by the middle of the next decade."

Shifting to neutral

Bond yields finally reached—and temporarily breached—the 5% level for the first time since the Treasury began selling the 30-year maturity on a regular basis back in 1977 (Chart 1). Although it has happened a bit faster than we originally envisioned, the rate decline has occurred—for the most part—in the manner we prescribed back in 1993. It's likely that yields will fall still further in the weeks and months ahead. The Fed has cut rates three times so far by a total of 75 basis points, and the market is still discounting additional Fed moves by early next year.

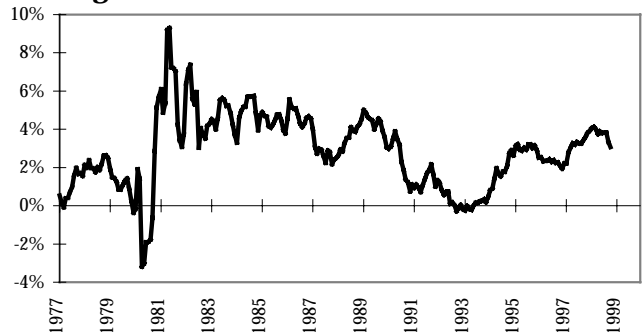
Chart 1
30-year bond yield



Source: DRI.

As a rule, bond yields continue to decline right through the latter stages of easing cycles. And with the real Fed funds rate still near a decade high despite the steps already taken by the Fed, it appears as if there is room for Greenspan & Co. to cut rates further (Chart 2). It is our view that bond yields will fall below 5% again, to perhaps as low as 4½%, in early 1999 as the Fed pursues a more accommodative monetary policy. However, the prospects for additional yield declines beyond this level are limited. In fact, bonds are now within just 50 basis points of the target range we set for the middle of the next decade.

Chart 2
Real target Fed funds rate



Source: Federal Reserve Bank of New York; Bureau of Labor Statistics.

Therefore, it is prudent to take profits in the more speculative positions that were established over the past several years. While the threat of a material backup in yields is fairly low, the return prospects within the bond market will be more modest over the next several years as well. Simply put, after having embraced a bullish secular call on bonds for more than a decade, *we are now shifting to a neutral stance.*

It's been quite a run...

As Chart 1 illustrates, bonds have enjoyed quite a run over the past decade-and-a-half. From a high of almost 15% back in 1982, long bond yields have fallen nearly 1,000 basis points, to just above the 5% level currently. This sharp decline in yields across the entire curve has fueled the most explosive bull market for bonds in history. As Table 1 illustrates, annual returns for bonds averaged only about 3.1% between 1926 and 1981. Since 1982, however, bonds have posted average annual returns of about 14.2%. In fact, only three times during this entire 16-year period did the bond market register negative returns—1987, 1994 and again in 1996 (Chart 3). Real returns have been equally impressive. Real returns for bonds were essentially nil during the 1926-81 period. Since 1982, however, the real return for bonds has averaged about 10.8% per year (Table 2).

Bonds have even fared well relative to stocks. Historically, stocks have consistently provided investors with a much higher annualized return than bonds. For example, from 1926 though 1981 stocks posted an average annual total return of 11.4%, versus just 3.1% for bonds—a premium of nearly 830 basis points (Table 1). Since 1982, however, this return differential has shrunk markedly. While stocks have provided an average annual return of 18.4%, bonds have registered average annual gains of about 14.2%—a difference of just under 420 basis points. In many instances, bonds have been viewed as “stock surrogates,” often providing what can only be categorized as equity type returns.

Table 1

Average nominal annual returns

	S&P 500	Treasury Bonds	Return Differential
1982 - 1997	18.41%	14.23%	4.18%
1926 - 1981	11.40%	3.13%	8.27%

Source: Ibbotson Associates.

Table 2

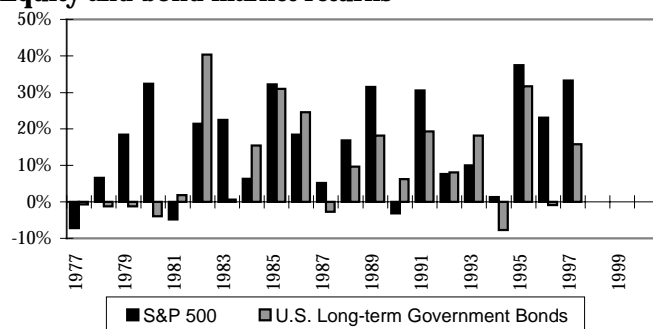
Average real annual returns

	S&P 500	Treasury Bonds	Return Differential
1982 - 1997	14.95%	10.77%	4.18%
1926 - 1981	8.27%	0.00%	8.27%

Source: Ibbotson Associates, Bureau of Labor.

Chart 3

Equity and bond market returns



Source: Ibbotson Associates.

...but further gains will be limited

Looking forward, however, the return prospects for bonds appear far more modest. With coupon income of just 5¼% or less across the entire Treasury curve, bondholders are now increasingly dependent upon capital gains to generate higher returns. For example, an account buying a 10-year Treasury note back in November 1994 would have been assured an annual return of 8% as long as the price of the bond remained unchanged over the ensuing 12-month period—that is, simply “clipping coupons” guaranteed an 8% return. In order to duplicate that same (8%) return today, however, yields on 10-year notes would have to fall 40 basis points over the next year to the 4.40% level. To simply match the average (14.2%) returns for 1982 through 1997, the yield on a 20-year bond¹ would have to fall another 80 basis points over the next year—and remain there. Although bond yields could conceivably fall that far during the next 12 months if the Fed continues to aggressively cut rates, bond holders are now entirely dependent upon such an outcome to merely match the *average returns* generated over the past 16 years.

Bonds relatively overvalued

Perhaps the most useful method for assessing the relative attractiveness of bonds currently is to compare their expected returns with those of competing asset classes (i.e., stocks and cash). Chart 4 shows the probability that bonds are the top-performing asset class relative to both stocks and cash, according to the PaineWebber Asset Allocation Model. In an equilibrium environment, we would expect the probability that bonds are the top-performing asset class to be 33 1/3%—as it would be for stocks and cash as well. However, as this chart reveals, the probabil-

¹ Ibbotson Associates long-term government bond benchmark.

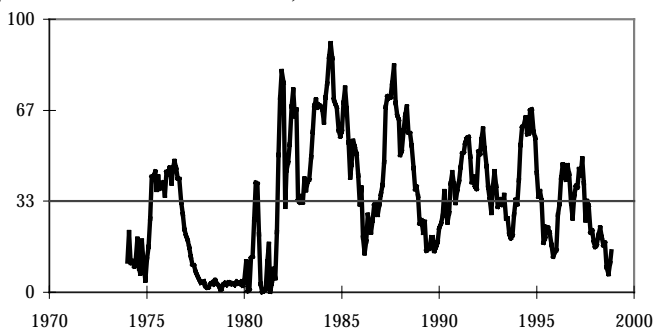
ity that bonds are the top-performing asset class is currently just 15%. Such a low probability of top performance does not necessarily indicate that a bond market correction is imminent. In fact, there have been many instances during which both stocks and bonds became even further “overbought” despite being seemingly overvalued. However, such poor relative valuation argues against continued consistent outperformance. Asset relationships at such extremes are simply unsustainable over the long haul.

Of course, restoring balance within asset allocation relationships does not necessarily entail a sharp sell-off in bonds. Although the probability that bonds are the top-performing asset class stands at just 15%, the probability that cash is the top-performing asset class is 50%. It's not that bond yields are too low, it's more the case that short-term rates are too high. It is likely that balance within the capital markets will be restored as the Fed cuts the funds rates further, and short-term yields decline. However, even as the Fed cuts rates further, bonds are unlikely to present a compelling relative value. Even a 50-basis-point decline in short rates combined with a 25-basis-point rise in 10-year note yields still would not bring bonds back into equilibrium with stocks and cash. In order for bonds to present a compelling relative value, short rates would have to drop radically while stocks continued to rally sharply from here. Not a wholly unlikely scenario; but under such a scenario stocks would register large capital gains as bonds just produced their meager 5+% yields.

Chart 4

Probability bonds are top-performing asset class

(PaineWebber Asset Allocation Model)



Source: PaineWebber.

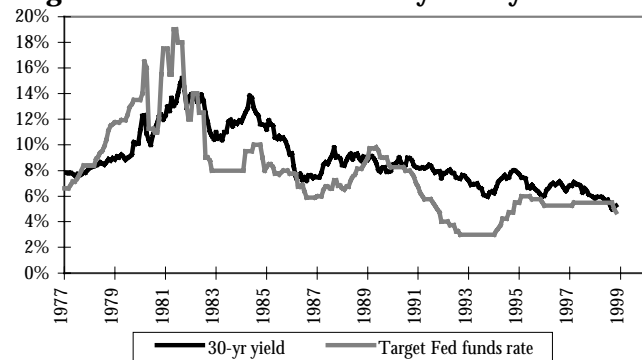
We're probably early

We are probably early in our call to take profits. As we've already noted, the Fed is likely to cut rates further in early 1999. Chart 5 demonstrates that historically there has been a fairly strong relationship between the Fed funds

rate and Treasury bond yields. That is, interest rates in general have tended to move in the same direction with the Fed funds rate. Table 3 shows the historical correlations between the Fed funds rate and yields within the Treasury market. While the differences are fairly wide—ranging from a 92% correlation for 2-year notes, to 65% for 30-year bonds—all are highly positive. This means that as long as the Fed continues to cut rates, bond yields are likely to fall further.

Chart 5

Target Fed funds rate and Treasury bond yield



Source: Federal Reserve Bank of New York; DRI.

Table 3

Correlation: Target Fed funds rate vs Treasuries

	30-yr	10-yr	5-yr	2-yr
Correlation	64%	73%	81%	92%

Source: DRI; PaineWebber

However, yields had already dropped sharply prior to both the September and October rate cuts. In the weeks leading up to the November FOMC meeting, bond yields actually rose despite expectations for the third rate cut within a seven-week period. The recovery in global capital markets has unwound most of the flight to safety and liquidity premium priced into bonds, and has also resulted in some second-guessing over the prospects for further rate cuts. Each additional policy move can be expected to have a progressively diminished impact upon market rates. Table 4 illustrates this point. This table provides a summary of the past three policy shifts by the Fed. On average, the largest moves occur during the eight weeks prior to the first rate cut (with the exception of the extraordinary 1987 crash period). During the same eight-week period prior to the second and third cuts, yields tend to decline somewhat less sharply, and actually begin to rise following the third ease. With the Fed already having lowered rates three times, additional yield declines from here will be limited.

Table 4
Change in 30-year bond yield during easing cycles
(Basis points)

Easing Cycle	8-weeks prior to Fed Ease			8-weeks after Fed Ease		
	1st Ease	2nd Ease	3rd Ease	1st Ease	2nd Ease	3rd Ease
Oct-87 to Feb-88	+125	-75	-59	-115	-2	+24
Jun-89 to Sept-92	-69	-80	-58	-58	+10	+16
Jul-95 to Jan-96	-83	-19	-49	+15	-5	+65
Average*	-76	-49	-53	-22	+2	+40

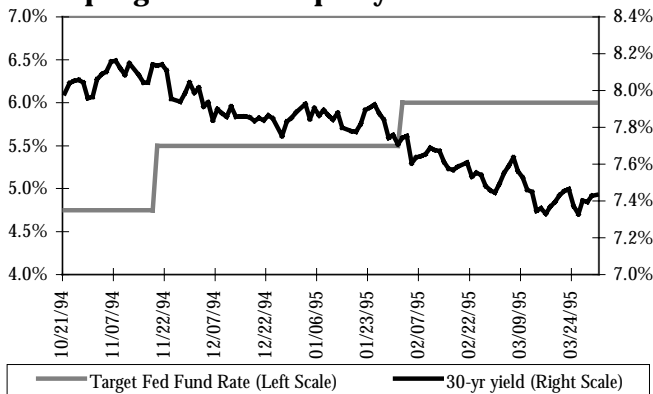
* Oct 87 easing cycle excluded

Source: Federal Reserve Bank of New York; DRI.

It's over before it's over

We pointed out in "It's Over Before It's Over," (April 17, 1997) that at some point, bond yields and the Fed funds rate may actually "de-couple" and begin to head in opposite directions. This typically occurs near the end of a protracted cycle of either easing or tightening. Once market participants begin to perceive that Fed policy had become either overly accommodative or overly restrictive, the link between the funds rate and market rates is severed. Chart 6 provides an illustration of this de-coupling between Fed policy and the bond market. During the 1994-95 tightening cycle, bond yields peaked in November of 1994, yet the Fed continued to raise rates through February 1995. In fact, Treasury bond yields declined about 70 basis points from November through February, while the Fed raised the funds rate twice more by a total of 125 basis points over the same time period.

Chart 6
De-coupling between Fed policy and bond market



Source: Federal Reserve Bank of New York; DRI.

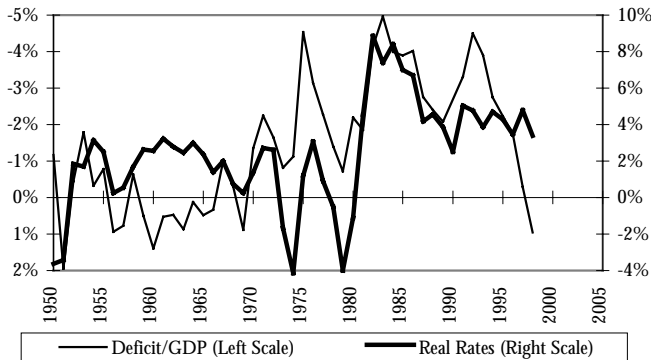
The Fed will cut rates further during the current easing cycle, and as it does bond yields will likely continue to fall as well. However, delaying until an easing cycle has been completed to take profits would probably be too late. Rather than await confirmation that the easing cycle has run its course—either through release of the FOMC minutes or in public remarks from the Fed chairman—now it is appropriate to move toward a neutral duration weighting even though more rate cuts might still be forthcoming. The risks of being "too early" in moving to a neutral duration weighting are diminished with each subsequent rate cut, while the risks of being "too late" rise with each Fed action.

Limited downside

It is now time to begin to liquidate speculative positions because the capital return prospects from this point forward will be modest; not because there is a material risk for a backup in bond yields. In fact, bonds are likely to remain largely within a 4½% to 5½% range through the middle of the next decade. The combination of still high real rates, moderating global inflation pressures and shrinking government borrowing needs will help keep bonds well bid over the next several years:

- *High real rates*—While nominal rates have declined sharply over the past 17 years, real rates have been a bit more sticky. Down from a peak of 4.3% back in September of 1981, real rates have fallen to about the 3.2% level at present—still far above the long-term historical average of about 2.25%. Real rates have further to fall, as chronic budget deficits finally give way to sustainable budget surpluses. As Chart 7 demonstrates, real rates are strongly correlated to fiscal policy. That is, high real rates are typically associated with high budget deficits. But as those deficits are eliminated and surpluses are sustained, those "sticky" real rates will tend to decline. Real rates have remained high despite the first budget surplus in 29 years. This is likely because while investors recognize the achievement of a surplus this year, they demand evidence that those surpluses can be sustained over several years before permitting risk premiums to fall. So as the U.S. sustains the surplus into 1999, real rates will fall further.

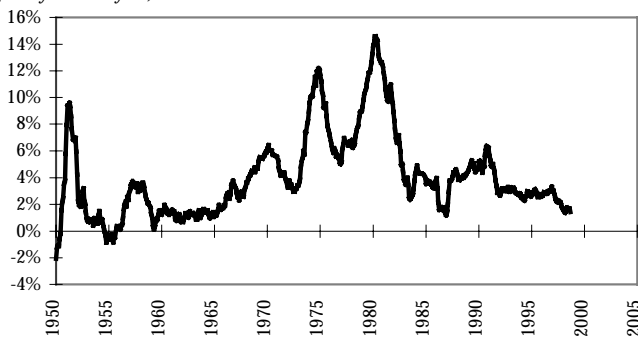
Chart 7
Deficit/GDP vs real rates



Source: BLS; BEA; U.S. Treasury Department.

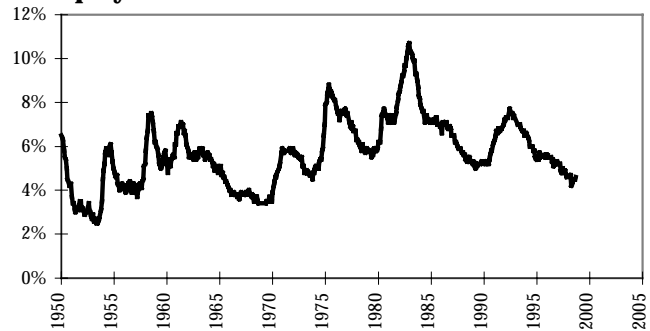
- *Still modest inflation*—Inflation pressures have continued to decelerate in the U.S., despite above-trend growth and the tightest labor markets in three decades (Chart 8 and Chart 9). While a recent bout of deflation overseas has been partly responsible for the surprisingly benign price pressures in the U.S. this year, it has been the improvements in productivity, vigilance of the Federal Reserve, destimulative fiscal policy and an increasingly competitive global economic environment which have been chiefly responsible for decelerating inflation during the past several years.

Chart 8
Inflation rate
(CPI year over year)



Source: Bureau of Labor Statistics.

Chart 9
Unemployment rate

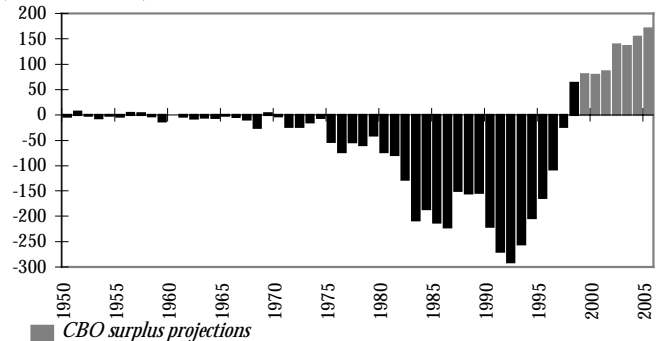


Source: Bureau of Labor Statistics.

The progress on inflation is therefore not a cyclical phenomenon that is likely to reverse once global economic activity picks up again, but is instead a secular event that will remain with us for some time to come. So while near-term inflation expectations of 1% to 1½% (based upon the yield spreads between Treasury Inflation Protected Securities [TIPS] and nominal coupon debt) which are currently priced into the fixed income markets might be a bit too optimistic, sustainable 2% inflation is likely. This argues against a material correction in bonds.

- *Shrinking government borrowing*—One by-product of the shift from deficits to surpluses is a steady paydown in the amount of nominal coupon debt outstanding. Simply put, Uncle Sam is whittling down his debt load for the first time in a generation. The \$70 billion budget surplus for fiscal year 1998 was the first since 1969, and marks the beginning of what is likely to become a string of such surpluses (Chart 10).

Chart 10
Federal budget balance
(Billions of dollars)



Source: Bureau of Economic Analysis.

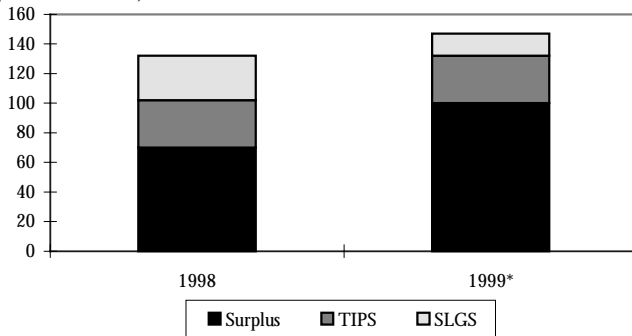
These surpluses, together with increased reliance on TIPS (Treasury Inflation Protected Securities) and SLGS (State & Local Government Series), means that

the amount of nominal coupon debt outstanding will shrink by between \$125 billion and \$150 billion this year and next year (Chart 11). The Treasury has had to reduce auction frequency, eliminate entire maturities and is even considering open market repurchases in order to deal with shrinking borrowing needs. But while supply continues to drop, the demand for Treasury securities—especially overseas—continues to grow. This continuing “bond shortage” will help assure that any reversals in the bond market are both modest, and of limited duration.

Chart 11

Net nominal Treasury coupon debt paydown

(Billions of dollars)



* PaineWebber Projections.

Source: US Department of Treasury; Bureau of Economic Analysis.

Attractive alternatives

While the secular outlook for bonds has turned neutral, we certainly don't advocate a wholesale dumping of bonds to move into cash. Nor do we suggest abandoning those positions established over the past several years to fund long-term liabilities. However, we have recommended an above-average duration weighting for much of the past decade based upon the belief that a further decline in bond yields would generate exceptional capital gains opportunities. Now it is time to begin the process of changing the profile of fixed income positions from speculative capital gains vehicles to more defensive income maximizing instruments. This essentially entails *shortening duration*, *increasing current income* and selectively *increasing exposure to callable paper*.

- **Shorten duration**—Over the past decade, we have advocated an above-average portfolio duration weighting. Given our call for a continued secular decline in interest rates, an above-average market exposure offered the best return prospects. However, now it is appropriate to shift to a more market neutral position. With the prospects for additional material

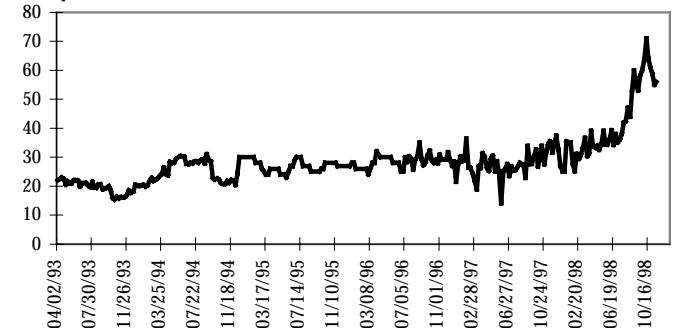
declines in bond yields having diminished, an aggressive above-average duration weighting does little to enhance the return profile for fixed income portfolios—at least on a secular basis. At present, the market duration weighting stands at just about 5½ years. Those with differing benchmarks should move to a 100% weighting against their own duration boogies. This process of reducing market exposure may include liquidating speculative STRIP positions, the unwinding of selective derivative positions, a paring back on the use of leverage, as well as a simple shift in the maturity profile.

- **Increase income**—In addition to shortening the duration of fixed-income holdings, also look to proactively increase current income within the portfolio. The current environment is more likely to be one in which the bulk of returns for bonds comes in the form of coupon income. Therefore, increasing the current yield should offer somewhat improved return prospects—and with less return deviation as well. The inclusion of par and premium bonds, as well as an increased exposure to spread product will enhance returns. The recent sharp rise in credit spreads as a result of a liquidity squeeze and flight to quality flows has dramatically improved the relative attractiveness of most spread product (Chart 12). Therefore increase exposure to higher-quality spread product—such as agencies, mortgages and corporates—in order to capture the higher yield premium, maximize current income and insulate the portfolio from any potential backup in Treasury yields.

Chart 12

10-year agency yield spread

(Basis points)



Source: Bloomberg.

- **Selective call writing**—As a matter of policy, we have continually stressed the importance of call protection during the past decade. We have therefore elected to

avoid those debt instruments which we felt needlessly exposed accounts to the threat of early redemption in an environment of declining interest rates. While an emphasis on well-structured debt instruments remains critical, it is prudent to now embrace a more neutral view toward callable paper. The opportunity to supplement current income through the selective use of call writing is a prudent strategy in the more stable rate environment expected over the next several years.

It's time

We have been bullish on bonds for more than a decade now. During that time there have been periodic cyclical corrections that we have used as opportunities to increase our exposure, and rallies that have led us to move temporarily to the sidelines. However, with yields nearing the targets we established for the middle of the *next* decade, we are now adopting a neutral secular outlook for bonds. This means shifting from an aggressive above-average duration weighting, to a more neutral "market" duration weighting.

Real rates remain high by historical standards and are likely to fall further as deficits give way to surpluses and personal savings rates rebound. However, inflation expectations of 1%-1½% being priced into bonds at present are a bit too optimistic. These expectations are likely to rise modestly once near term deflation fears abate. Yields will likely move still lower in the near term as the Fed cuts rates further. However, the long-term capital gains potential from here has become modest.

November 22, 1998

Edward M. Kerschner, CFA (212) 713-2448
Michael P. Ryan, CFA (212) 713-4671

The information contained herein is based on sources we believe to be reliable, but its accuracy is not guaranteed. PaineWebber Incorporated and/or Mitchell Hutchins Asset Management Inc., affiliated companies and/or their officers, directors, employees or stockholders may at times have a position, including an arbitrage or option position, in the securities described herein and may sell or buy them to or from customers. These companies may from time to time act as a consultant to a company being reported upon.

Copyright © 1998 by PaineWebber Incorporated, all rights reserved