ENNISKNUPP

MEMORANDUM

To: Select Committee on Deferred Compensation
Milwaukee County

From: Francois Otieno, Investment Manager Research
Brady O'Connell, CFA, Investment Manager Research
Laurel Nicholson
Maritza Martinez

Date: July 28, 2009

Re: Update on PIMCO Total Return Fund

Summary

EnnisKnupp remains confident in the skills and abilities of Pacific Investment Management Company (PIMCO) as a fixed income manager. PIMCO relies heavily on derivatives and employs complex investment strategies, an approach which has served investors well, even during the recent market crisis when PIMCO outperformed most peers. Investors relying on PIMCO as their sole bond manager may want to consider diversifying into more traditional fixed income managers or an index fund to broaden their exposure. This move may be appropriate for those plan sponsors who want to offer participants a "plain vanilla" approach after the recent upheaval in an asset class that is used by many as an anchor for safety in their portfolios. The simplest and lowest-cost vehicle would be an index fund.

This memorandum provides a six-part detailed review of PIMCO's Total Return Fund (TRF). The following pages provide a broad overview of: 1) PIMCO's investment strategy, 2) its use of derivatives, 3) its accounting and economic leverage, 4) a detailed review of its liquidity-backing strategy, and 5) an analysis of TRF's historical performance.

Background

The past 18 months have been extraordinarily challenging for active fixed income managers. As spreads widened to historical levels, the vast bulk of active fixed income managers were overweight non-Treasury sectors and suffered significant underperformance relative to benchmarks as all segments of the bond market outside ultra-low risk Treasuries struggled. In fact, about 90% of the actively managed core-plus universe underperformed the Barclays Capital Aggregate Bond Index in 2008.[1]

[1] Source: BNY Mellon Performance & Risk Analytics

Ennis Knupp + Associates
10 South Riverside Plaza, Suite 1600
Chicago, Illinois 60606-3709

vox 312 715 1700
fax 312 715 1952
www.ennisknupp.com

Against the backdrop of this challenging environment, the TRF performed well relative to peers. In 2008, the TRF ranked in the 13th percentile in the core plus universe, while the Barclays Capital Aggregate Bond Index ranked 9th. Even given PIMCO's strong performance we think it is important to analyze the sources of PIMCO's returns given the complexity of its portfolio.

Investment Strategy

PIMCO's team employs a strategy that combines active sector rotation and interest rate anticipation. The manager forecasts long-term secular trends in global economies, short-term cycles in the markets, and bases its duration targets and sector weightings on these forecasts. For example, over the past few years PIMCO's forecast called for an economic slowdown in the US and in the UK. That view was implemented by duration and yield curve positioning that successfully anticipated short term rate reductions.

PIMCO's objective is to add value by using innovative portfolio management techniques and by identifying superior sector and issue opportunities. The manager seeks to consistently add 75 to 125 basis points of excess return to the Barclays Capital Aggregate Bond Index on a gross-of-fees basis with a corresponding 75 to 125 basis points of tracking error. The manager utilizes a broad array of sectors (within the confines of certain guideline restrictions) to fully implement its views. The out-of-benchmark sectors include high yield, currency, non-U.S. bonds, and emerging market debt.

In addition, PIMCO makes strategic use of cash collateral and other more liquid instruments to support its derivative positions. PIMCO categorizes securities that are less than one year in duration as "cash equivalents." While this practice is not uncommon and even conventional for fixed income managers, it can mask certain risks for investors who interpret cash equivalents as low-risk securities devoid of credit or default risk.

Derivative Usage

The most unique aspect of the TRF is its extensive use of derivative securities. Derivatives have been used as an integral part of PIMCO's strategies since 1980. It primarily uses these instruments to manage risk and take advantage of market inefficiencies. It does so by adjusting the fund's interest rate and yield curve exposures and as a substitute for physical securities. Table 1 compares performance of accounts that allow futures to those that do not. It indicates that PIMCO adds more value with some consistency when using futures. The futures enabled accounts have outperformed consistently, although not each and every year. Note that the largest dispersion of returns occurred in 2008 when PIMCO's Eurodollar futures positions paid off as rates fell. In fact, PIMCO's underperformance of 199 basis points (bps) in 2008 would have been 376 bps behind the index had it not taken these futures positions.

Table 1: PIMCO Composite Performance

	Composite With Futures	Composite Without Futures	BC Aggregate Bond Index	Alpha From Futures *(Columns 1 less 2)*	Alpha Without Futures *(Columns 2 less 3)*	*Total Alpha (Columns 1 less 3)*
1998	9.64%	9.22%	8.69%	42 bps	53 bps	95 bps
1999	-0.63	-1.08	-0.82	45	(26)	19
2000	11.97	12.06	11.63	(09)	43	34
2001	9.21	8.64	8.44	57	20	77
2002	9.78	9.28	10.26	50	(98)	(48)
2003	5.82	5.27	4.10	55	117	172
2004	5.15	4.99	4.34	16	65	81
2005	2.89	2.98	2.43	(09)	55	46
2006	4.22	4.22	4.33	0	(11)	(11)
2007	8.82	7.74	6.97	108	77	185
2008	3.25	1.48	5.24	177	(376)	(199)
YTD 5/31/09	5.86	4.69	1.33	117	336	453

As of March 31, 2009, PIMCO had 821 derivative positions in the TRF. Many of these were short-term instruments, such as Eurodollar futures contracts, as well as long Treasury swap positions, but the TRF also held significant *long and short* positions in credit default swaps.

Our recent review of the TRF holdings showed that PIMCO employs a variety of derivative instruments in the normal course of running this fund.

- Eurodollar futures cash positions are broadly used in the TRF mainly to manage exposure at the front end of the yield curve and express PIMCO's expectations for future short term rates. There is meaningful exposure to short-term money market rates such as Eurodollars, Euribor, and UK Gilts, all of which are cleared by an exchange. These short-term derivative instruments are settled in cash.

- Credit default swaps (CDS) are used to manage corporate credit exposure without buying or selling securities outright. There are two ways to initiate positions in the CDS market, by either buying protection against a potential default (which is comparable to "shorting the bond") or by selling protection (which is comparable to "going long the bond"). PIMCO's recent CDS strategy was mainly to sell protection on both single name U.S. corporate and emerging markets issuers and on index products (i.e.: CDX) to gain long exposure. Conversely, PIMCO bought protection on single name bonds on several of the very issuers it holds outright in the TRF to hedge its cash bond positions.

- Interest rates swaps are used to adjust interest rate and yield curve exposures and substitute for physical securities. PIMCO's recent heavy use of interest rate swaps was predicated by the relative attractiveness between nominal Treasury rates and swaps. PIMCO's primary use of such instruments was to manage the TRF's mortgage duration. In recognition of the increased risks among counterparties, PIMCO recently reduced its interest rate swap exposure in a significant way.

- Forward contracts are primarily used by PIMCO to initiate positions in the mortgage sector via what is most commonly known as the "To Be Announced" (TBA) market. This strategy is influenced by the relative attractiveness between the cash market (buying specified mortgage pools) or the mortgage TBA market. In a normal market environment PIMCO has generally found the TBA market as a less expensive way of obtaining exposure to the mortgage sector. Specifically, the return of the invested cash (its liquidity-backing strategy) has to exceed the financing rate embedded in the derivative contract.

Leverage

Leverage can be measured in many ways, including accounting and economic terms. With a significant portion of the fund in derivative instruments, and occasionally a "negative cash" position, it is important for investors to monitor the TRF's leverage. Table 2 reviews accounting leverage over the past three quarters. "Accounting leverage" occurs when total portfolio assets are greater than net capital or net worth. The formula for accounting leverage is defined as the total notional value of assets less the netted portfolio (longs netted against shorts) divided by the net value itself.

Table 2: TRF Accounting Leverage

	Notional Value ($ in billions)	Market Value ($ in billions)	Account Leverage
9/30/2008	$1,850.00	$130.10	13 times
12/31/2008	2,382.00	133.10	17 times
3/31/2009	745.50	145.00	4 times

PIMCO's accounting leverage has fluctuated significantly over the six month period shown and can vary depending on PIMCO's views on the markets and most importantly, the tools it chooses to implement these views. PIMCO uses accounting leverage is to express its market views in different ways. One illustration is the use of money market derivatives such as Eurodollar futures to express a view that interest rates will decline at the front end of the yield curve. However, the manager argues that accounting leverage alone should not be a concern as there are more appropriate risk measures to consider. PIMCO manages leverage on an "economic basis" rather than on an "accounting basis." It defines economic leverage as the magnification of market exposure (as measured by interest rate, spread duration or other portfolio risk metrics) versus the benchmark. There is a bit of ambiguity in the term economic leverage. In PIMCO's view, economic leverage should be viewed in terms of risk characteristics relative to a designated benchmark. PIMCO argues that if in aggregate the

TRF risk statistics (duration, spread duration, credit quality, and tracking error) are similar to those of the benchmark, then it does not employ economic leverage.

While the presence of significant amounts of gross notional exposure and offsetting long and short exposures may unusual, this fund is in compliance with Securities and Exchange Commission (SEC) regulations and the guidelines outlined in the prospectus. While this fund employs strategies more common in the hedge fund space, it does have a high beta relative to the bond market and should be expected to track closely the returns of the bond market. Furthermore, PIMCO is a leader in risk management and portfolio construction, and significant resources are dedicated to managing total risk relative to the benchmark.

PIMCO's "Liquidity-Backing Strategy"

Recently a number of prominent fixed income managers employing cash-backing strategies suffered immensely as a result of investing cash collateral for derivative positions into risky instruments such as subprime mortgages to earn higher yields. PIMCO's liquidity-backing strategy was far more conservative than many of its peers but it is complex and sometimes difficult to analyze. As an example, let's assume PIMCO purchases a $100 10-year Treasury futures position. The manager would have to post $5 margin, and back the remaining $95 market exposure with a cash equivalent instrument. If the Fund's cash equivalent balance is $85, then the net cash position would be a negative $10, which will have to be backed by other liquid instruments.

A negative cash position will result from the liabilities in the fund (most notably derivatives and other unsettled trades) exceeding available cash equivalent securities. Per the prospectus, PIMCO can back these derivative instruments with liquid securities, including those not defined as cash equivalents. Of note, money market derivatives are not part of the cash backing calculation as they do not require delivery of an asset at expiration. The TRF showed a negative cash balance at 3/31/09, the result of this liquidity-backing strategy.

In circumstances when there is a negative cash position in the Fund, PIMCO would have to use other liquid instruments (as opposed to cash equivalent securities) to back the remaining liabilities. In other words, the greater the negative cash balance, the greater the amount of non-cash equivalents being used to back the derivatives.

PIMCO broadly defines "liquid" securities as any fixed income instrument that can be converted into cash within a very short period of time. This definition includes investment grade securities (such as agency mortgages and corporate bonds) as well as any below investment grade and any other fixed income instrument it deems liquid, including swaps. PIMCO defines a cash equivalent instrument as any investment grade security with a duration of one year or less. At the total fund level, PIMCO aggregates all cash equivalent securities with a duration of one year or less and nets that amount against all liabilities including derivatives and unsettled trades.

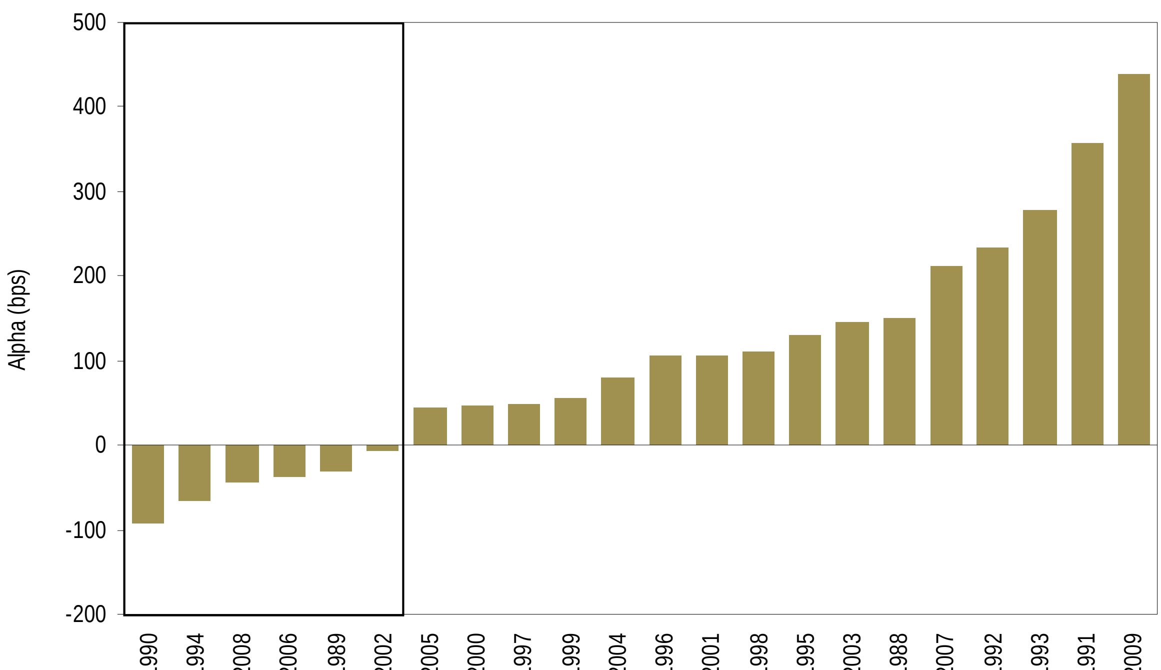
According to PIMCO, the SEC does not define what encompasses liquid securities. The SEC does however define what securities constitute illiquid instruments and they include: private placements, options and swaps at market value, event linked bonds, interest only (IOs), principal only (POs), repos with greater than 7 days to maturity, fixed time deposits, Regulation S (Non-US Corp 144A) securities not listed on an exchange, banker's acceptances and certificates of deposit. However, PIMCO's portfolio managers have the full discretion to declare any of these securities as liquid.

PIMCO manages its liquidity backing strategy in what appears to be a risk controlled framework. The manager segregates the fund's assets by liquidity tiers to ensure that at any given time, there is sufficient liquid assets in the fund available to back its derivatives positions. Historically, the vast majority of the liquidity backing instruments have been of high quality government-backed mortgage securities and high quality investment grade corporate bonds.

Historical Performance

The TRF has outperformed the index in 16 out of 22 calendar years, indicative of a consistent level of relative performance. Most importantly, the number and the degree of positive years by far exceeds the negative ones. However, it is worth noting that four out of the six periods of underperformance occurred in periods of market stress including 1989, 1994, 2002 and 2008. PIMCO underperformed during six calendars years due to the early implementation of its secular views given its longer term investment horizon. For example, in 2006 PIMCO believed that the U.S. economy was slowing and therefore it implemented a yield curve steepener (where the expectations are for short-term rates to fall, while longer dated rates are rising) which ended up detracting from relative performance. In 2007 that trade paid off immensely.

Table 3: Total Return Fund 12 Month Alpha (net of fees)
22 Years 2 Months ending 6/30/2009



The following exhibits illustrates performance and ranks relative to peer fixed income funds and the risk/reward profile of the fund which has been strong. PIMCO has added value over time. Historically, PIMCO has avoided left tail events[2], partly due to its use of derivative instruments designed to hedge certain risk exposures in the portfolios.

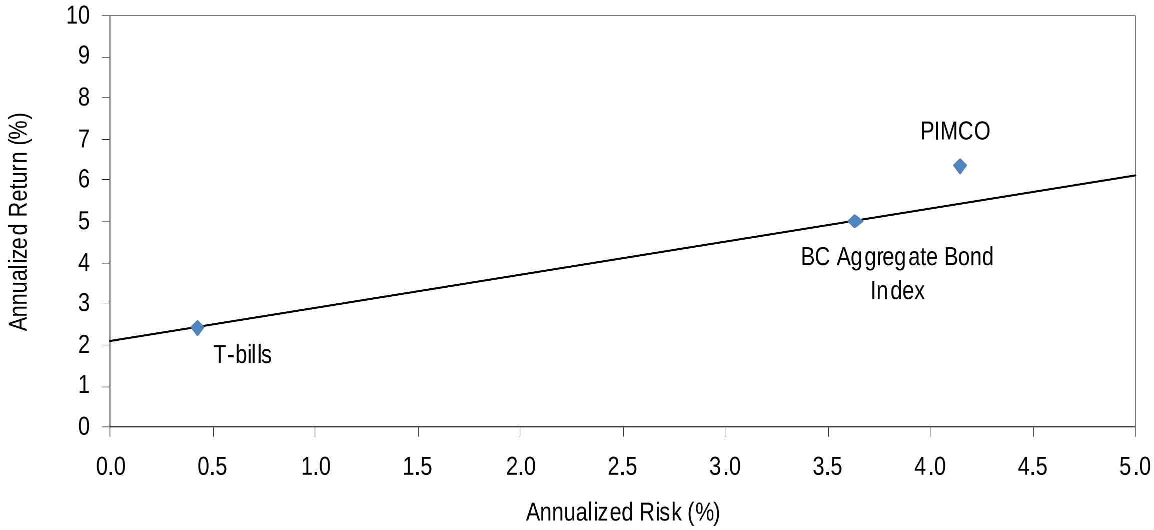
Table 4: Return Summary
Ending 6/30/2009

	PIMCO Total Return Fund	Percentile Rank	BC Aggregate Bond Index	Percentile Rank
1998	9.8%	6	8.7%	22
1999	-0.3	26	-0.8	50
2000	12.1	12	11.6	20
2001	9.5	9	8.4	34
2002	10.2	14	10.3	13
2003	5.6	27	4.1	68
2004	5.1	17	4.3	50
2005	2.9	10	2.4	39
2006	4.0	66	4.3	43
2007	9.1	1	7.0	20
2008	4.8	13	5.2	9
2009 (6 months)*	6.3	--	1.9	--
Trailing 1-Year	9.3%	--	6.0%	--
Trailing 3-Years	8.4	--	6.4	--
Trailing 5-Years	6.4	--	5.0	--
Trailing 10-Years	7.0	--	6.0	--

* Rankings as of 6/30/2009 were unavailable at the time this memorandum was produced.

[2] Unfavorable events that result in returns being on the left tail of a normal distribution

Table 5: Risk-Return
5 Years Ending 6/30/2009



Conclusion

The PIMCO Total Return Fund is a large and complex portfolio. The fund uses strategies that rely heavily on derivatives, in part because the large size of the fund prevents it from effectively transacting in the cash market as the derivative market offers a cheaper, more efficient way to implement strategy. While the derivative exposure may be concerning to some investors, PIMCO manages risks diligently and has navigated recent market turbulence rather deftly. Over time, the fund has displayed a consistent level of performance above its benchmark, with a marginally higher level of volatility.

EnnisKnupp remains comfortable with the PIMCO Total Return Fund and its related strategies. But we acknowledge that this complex strategy relies heavily on derivatives and may not be ideal for all investors, particularly those investors that view their fixed income portfolio as an anchor to windward as opposed to a source of total return. Investors relying on PIMCO as their only bond manager may want to consider diversifying into more traditional fixed income managers or consider an index fund for a portion of their fixed income allocation.

For a plan sponsor of a DC plan this presents a unique challenge as participants may not appreciate the complexities in the PIMCO TRF. Even if a “plain vanilla” bond fund were added to the plan line-up, there may be some participants who do not understand the differences. Regardless, we believe that discussing merits of adding a bond index fund would be an appropriate action for an investment committee.