INFORMATION

TAHOE DONNER

December 7, 2019

Purpose:

The purpose of this information paper is to provide background on, and a rationale for, proposed refinements to Tahoe Donner Association's ("TDA") existing Investment Policy ("IP") which was last revised in November 2015.

This paper has been prepared by members of the Investments working group of TDA's Finance Committee ("FinCom") for consideration by the full FinCom at the December 9, 2019 meeting. If approved by the FinCom, then a Decision Paper (including a marked draft of the revised IP) will be prepared and circulated for the TDA Board Meeting scheduled for December 14, 2019.

Background:

While it is customary to review TDA policies on a five year rotation, the (i) evolution of investment markets and (ii) increased demand for better performance from Tahoe Donner's longer-term fund portfolios (due to persistently low market yields and increased TDA capital investment requirements) are such that an early update to the IP is warranted.

The main objective of this IP update is to introduce a number of new alternatives for both short and intermediate term investment of capital within TDA's several funds (Operating, Development, Replacement Reserve and New Equipment) that will (i) increase potential investment yields (with a very modest increase in risk), (ii) enhance our ability to generate asset, issuer and market diversification, and (iii) provide TDA's Director of Finance with incremental flexibility to administer the portfolio.

As part of our work on this initiative, the authors reviewed the investment policies of the Marin County and Nevada County Treasurer's offices. While not HOAs, their conservative investment policy objectives closely match those of TDA. We also reviewed fixed income research prepared by Capital Advisors Group and Standard & Poor's.

It is important to note that we are not recommending any **material** change to the fundamental investment principles that have been part of TDA's investment portfolio management function for many years. These principles place preservation of capital and safety of funds above the desire for greater investment returns.

Discussion:

The table shown on the next page summarizes the proposed changes to the IP document:

Current IP Section	Proposed Change(s)	Comments
Investment Objective	Add new guidance on the interplay of our preservation of capital and yield objectives	New text acknowledges that TDA has both long and short term funds that have different tenor, liquidity and yield requirements. *(Please see expanded comments #1 below.)*
Authorized Investment Instruments	Changes (i) the minimum credit rating on corporate bonds from "A" to "Baa1/BBB" which represents a two notch movement, (ii) adds new long term alternatives composed of senior debt of two government sponsored enterprises ("GSEs"), FNMA and FHLMC, and (iii) adds highly rated commercial paper to the investment mix.	Moving to a minimum rating of Baa1/BBB+ will very modestly increase overall risk while increasing portfolio returns. FNMA and FHLMC, known as "GSEs", offer the safety of US Government debt obligations with a modest yield pick-up. Commercial paper, the short term equivalent of highly rated corporate debt, presents an opportunity to increase portfolio returns and offers asset and issuer diversification. *(Please see expanded comments #2 below.)*
Instrument Limitations	Sets out (i) new portfolio concentration and credit ratings limits for corporate bonds, government sponsored entities, and commercial paper, (ii) adds the concept of a single issuer exposure limit, (iii) slightly streamlines approval requirements for longer term and in-compliance investments, and (iv) provides improved guidance to the DFA and Treasurer on when taking portfolio losses might be acceptable.	We have set out reasonable portfolio limits on the new investment options (GSEs, Baa1/BBB+ rated bonds and commercial paper). The ratings requirements for commercial paper are effectively the same as our current limits on corporate bonds (minimum ratings of A2/A). We have introduced excluded sectors for Baa1/BBB+ rated corporate bonds (e.g., no financial institutions) and further limited Baa1/BBB+ rated bonds to an effective maximum of 10% of any TDA fund. We have also introduced the concept of a single issuer/obligor concentration limit of 5% of the relevant fund. *(Please see expanded comments #3 below.)*
General Administration Responsibilities	Introduces guidance on (i) the selection of TDA banks and brokerage firms, and (ii) custody arrangements for securities held for the benefit of TDA.	The improved guidance on the selection of bank and broker dealer relationships mirrors what we in effect already practice. The security custody arrangements are new provisions that provide enhanced guidance regarding protection of our financial assets. *(Please see expanded comments #4 below.)*

Further discussion about the changes to the IP noted in the table above appears on the following page.

1. The proposed changes to Section 3 of the Investment Objectives section are not controversial. They codify what in practice we currently do while managing the portfolio.

2. The most significant of our recommendations is for TDA to begin investing in Baa1/BBB+ rated corporate bonds, government agency debt and commercial paper.

   (a) Note that BBB rated bonds are considered to be investment grade and typically carry a designation of Baa3, Baa2, or Baa1 from Moody's, or BBB-, BBB, or BBB+ from S&P (ratings designations listed weakest to strongest).

   We are proposing a 50% maximum sub-limit on Baa1/BBB+ rated bonds in the current overall 20% exposure limit to corporate bonds, or a potential maximum exposure of 10% to Baa1/BBB+ rated bonds. After giving effect to the proposed change, 100% of TDA's long-term, non-bank instrument investment portfolio will continue to be investment grade rated and 90% or more will be rated A3/A- or better.

   According to recent research published by Capital Advisors Group (July 10, 2019), one of the biggest shifts in the US fixed income markets has been the growth in so called "BBB" debt issuance. (Please note that Capital Advisors lumped all bonds rated ether Baa3, Baa2, or Baa1 into a single category labeled "BBB".) Growth in BBB rated debt since 2005 has been remarkable rising nearly 6-fold over the past 14 years. As an indication of the impact that the growth in BBB rated bond issuance has made in the investing universe, as of May 2019 nearly 40% of the Merrill Lynch 1-3 Year Corporate Index consisted of bonds rated some version of BBB as compared to 26% in 2005. Bonds rated BBB offer a deep, liquid investment pool for potential investors.

   It is appropriate to try to quantify the level of increased risk TDA will be exposed to by extending our portfolio to the Baa1/BBB+ category. In that same research piece, Capital Advisors noted the rather modest increase in portfolio risk shifting from the A category to the BBB level from either (i) a default rate perspective (risk of non-timely payment of principal or interest) or (ii) expected loss rate perspective (recovery of less than 100% of principal value). For example, Capital Advisors quotes credit loss information prepared by Moody's in their 2019 Default Study. The average annual default rate among BBB rated issuers over the period 1920 - 2018 was 0.26% compared to 0.09% for A rated issuers. Importantly, the average default rate of BBB issuers since 2009 is just 0.08% and there hasn't been a BBB default since 2014. Moody's' research represents aggregated data for all forms of BBB rated securities. While not stated expressly, it is reasonable to assume that most of the observed portfolio credit quality deterioration would have been in the weaker end of the BBB of the spectrum (Baa3/BBB-). That is why we are recommending that we only consider investing in Baa1/BBB+ rated bonds.

One important point noted by Capital Advisors is that given the short time horizon for most cash investors, the real risk of investing in BBB rated bonds is the potential for *ratings downgrade not default*. Over the time frame 1920-2018, according to the Moody's research, on average the one year risk of credit migration from BBB to BB (sub-investment grade) is approximately 6.2%. This level of risk seems manageable and is one reason that we are recommending that TDA only invest in Baa1/BBB+ rated corporate bonds with a maximum tenor of 5 years. This gives us some latitude (two downward ratings notches) before the bonds would become sub-investment grade.

All else equal, we should expect to earn a superior return by taking on incremental risk as compared to our current corporate bond focus on A2/A corporate bond investments. According to Merrill Lynch data referenced in the previously mentioned Capital Advisors Research report, during the period 1989 – 2018, investors received a 0.45% (45 bp) higher return on BBB rated bonds as compared to A quality bonds. Just as in the previous discussion on credit default, Merrill Lynch uses aggregated data so we might expect to earn slightly less given our self-imposed limitation on the highest level of BBB rated bonds.

(b) The Federal National Mortgage Association (FNMA or Fannie Mae) and the Federal Home Mortgage Corporation (FHLMC or Freddie Mac) are privately owned corporations created by the federal government (via a Congressional charter) to provide liquidity and increase available credit in mortgage markets. Each of FNMA and FHLMC carry long-term senior debt ratings of Aaa/AA+, the same as the US government.

Adding senior ranking debt securities issued by FHLMC and FNMA to the mix of eligible TDA investments enables us to earn a small interest rate premium over US government securities (e.g., US Treasury Notes). For example, in October 2019, FNMA issued new 5 year notes that priced at a 9 bp premium to the yield on the 5 year US Treasury note. At times this yield premium can be much higher, circa 20-25 bp, depending upon market conditions.

It is important to note that GSE debt is not strictly *guaranteed* by the U.S. government. GSE debt is solely the obligation of the issuer (FNMA or FHLMC in this case) and carries slightly greater credit risk than U.S. Treasury securities. However, the strong credit ratings of GSEs, equal to that of the US government, is indicative of the strong implied support of their obligations by the US government.

In summary, GSE bonds give TDA the opportunity to gain a higher return than Treasury bonds, while sacrificing very little in terms of risk or liquidity. We do not see the addition of this investment alternative as controversial; it adds to our ability to diversify investment types though not necessarily investment risk.

(c) Commercial paper is an unsecured form of promissory note that pays a fixed rate of interest. It is typically issued by large banks or corporations to cover short-term requirements and meet short-term financial obligations. As with any other type of bond or debt instrument, the issuing entity offers the paper assuming that it will be in a position to pay both interest and principal by maturity.

Maturities on most commercial paper ranges from a few weeks to months and is generally less than 270 days (due to regulatory purposes). Commercial paper is usually sold at a discount from face value and reflects prevailing market interest rates.

Adding commercial paper as a permissible investment option provides greater diversity to our shorter term investment program in terms of issuers and asset types while offering better yields than US Treasury bills. Over time, this yield premium ranges from __ bp to __bp, according to ______.

We recommend only investing in commercial paper with a rating of A1/P1, from Moody's and S&P, respectively, the highest short term ratings available. (Please note that some enterprises with the strongest credit ratings might have a "+" sign appended to their commercial paper rating.) Typically, issuers must have a long term credit rating of at least A3/A- to qualify for a commercial paper rating of A1/P1. To be congruent with our conservative investment philosophy, we are further requiring that commercial paper issuers that we invest in shall also have an A2/A long term rating.

3. The current TDA IP has a robust set of limitations/controls that well serve our conservative investment objectives. The changes we are recommending in this section are consistent with that conservative approach, and add:

   (a) A sub-limit on our overall exposure to Baa1/BBB+ rated corporate bonds of 50% of the maximum corporate bond allocation (currently 20% per fund). Thus, our allocation to Baa1/BBB+ bonds will never exceed 10% of our total investment portfolio;

   (b) A limit to the final term to maturity of any new GSE investments to 3 years. In practice we will be buying seasoned issues vs. new debt offerings from either FNMA or FHLMC;

   (c) A new requirement that investments in each of GSE obligations and commercial paper are subject to the 20% maximum limit per fund;

   (d) A new requirement that TDA's exposure to all entities (except for direct obligations of the US government and short term deposits and CDs issued by financial institutions on TDA's approved list) shall not exceed 5% of the relevant fund's total balance. *(Note* *this single issuer limit needs to be evaluated and potentially refined in light of how TDA manages the bank deposit and CD program.)*

(e) A slight refinement of current approval limits - to improve flexibility and reduce the investment administration burden - such that otherwise permitted investments with a term to maturity of longer than 3 years need only the concurrence of the Treasurer and the DFA, rather than the existing requirement that three members of the TDA Board approve said investment. These investments are still subject to the provisions which stipulate that all Directors shall be notified within 10 days; and

(f) Clearer guidance to the DFA, the Treasurer and the rest of the TDA Board on the subject of selling investments at a loss. Note that selling investments at a loss will now require the approval of one other member of the TDA Board in addition to the currently required approval of the Treasurer.

4. The final set of changes to the investment policy provide for:

(a) Clearer guidance on the selection criteria for banks, brokerage firms and other financial institutions with whom TDA works. This expanded guidance codifies what we are in effect already practicing. We also have inserted a requirement that the DFA and Treasurer annually review the list of financial services providers; and

(b) Clearer guidance on the custody practices of TDA investments such that they shall be held in "street name" at Depositary Trust Corporation, at approved banks, brokerage firms and third party custody firms. We also have inserted a requirement that the DFA and Treasurer annually review the list of acceptable custody service providers.

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