140.017 A I

Bd. Min 9- 28- 17; Amended Bd. Min. 6 -29- 23; Amended Bd. Min. 9-12- 24.

A.! Introduction Ð This policy establishes general guidelines for asset classes and associated implementation matters for the following investment pools:
140.012 General Pool [Section s D(2) ÒCore PortfolioÓ and D(3) ÒStrategic PortfolioÓ]
140.013 Endowment Pool
140.015 Retirement, Disability and Death Benefit Plan

B.! Responsibilities and Authorities Ð See CRR 140.010 ÒPolicy for Management and Oversight of Selected University Investment Pools.Ó

C.! Asset Class Guidelines Ð The following asset class descriptions and guidelines may be applicable to investment pools noted above, as specified by targets and ranges within each individual policy. The intent of this section is to provide descriptions and general implementation g uidelines for each of the following asset classes:

1.! Public Equity
The equity risk factor drives the returns of this class. Currency risk may also be present when investing in non -U.S. securities. Investments in this asset class may include U.S. and non- U.S. equity investments, including both long and long/short strategie s with varying characteristics related to market capitalization, style and sector.

Exposure will be obtained through physical securities and/or conventional derivative instruments commonly accepted by other institutional investors such as futures, swaps, options, forward contracts and reverse repurchase agreements. Public Equity exposure s may be used to fund a Portable Alpha Program. Legal account structures may be in the form of separately managed accounts, institutional commingled funds, exchange -traded funds and limited partnership agreements.

2.! Private Equity
These investments are primarily driven by the equity and liquidity risk factors yet, because of their diverse nature, some of these investments may include currency risk and other idiosyncratic risks.

Investments in this asset class may include U.S. and non -U.S. private equity strategies including, but not limited to, buyout, venture, and special situations. Legal account structures will primarily be in the form of limited partnership agreements or othe

agencies, or its instrumentalities (collectively known as U.S. Government Securities) or (ii) by investment grade non-U.S. sovereign governments, their agencies or their instrumentalities (collectively known as non-U.S. Government Securities).

Exposure will be obtained through physical securities and/or conventional derivative instruments commonly accepted by other institutional investors such as futures, swaps, options, forward contracts and reverse repurchase agreements. Sovereign Bond exposures may be used to fund a Portable Alpha Program.

Legal account structures may be in the form of separately managed accounts, institutional commingled funds, exchange-traded funds and limited partnership agreements.

4. ! Core Fixed Income

Specific types of debt exposures include, but are not limited to, sovereign, corporate, inflation-linked, high yield, emerging market, commercial mortgage-backed securities, and residential mortgage-backed securities.

Exposures will be obtained through physical securities as well as derivative instruments commonly accepted by other institutional investors such as futures, swaps, options, forward contracts, and reverse repurchase agreements may be utilized. Exposures may include long/short positions.

Legal account structures may be in the form of separately managed accounts, institutional commingled funds, exchange-trade funds and limited partnership agreements.

5. ! Opportunistic

It is expected that this category will be utilized when market dislocations present unique opportunities to invest at attractive valuations relative to underlying fundamentals across a variety of risk factors and implementations.

No policy target shall be assigned to this category; any capital allocated to this category will be funded from underweight positions relative to policy targets in other asset classes, with the expectation that such opportunistic investments should outperform and/or strengthen the overall diversification of the total portfolio over a given timeframe. Investments in this category should be shorter-term in nature, with final maturities not to exceed seven years.

Exposures may be obtained through public and private securities in various forms and implementations as well as derivative instruments commonly accepted by other institutional investors such as futures, swaps, options, forward contracts, and reverse repurc

Legal account structures will be in the form of separately managed accounts, institutional commingled funds, limited partnership agreements or other similar forms.

6. ! Private Debt

Credit spreads and liquidity risk will be the primary drivers of returns, while interest rate and equity risk may also be present from time to time. Currency risk may also be present when investing in non -

9. ! Real Estate/Infrastructure

These investments may be driven by multiple risk factors depending on how they are positioned in the capital structure. Equity, credit, inflation and liquidity will generally be the primary risk factors. Non-U.S. investments may also possess currency risk.

Specific types of fund investments may be structured as equity and/or debt and include categories broadly defined as core, value added, and opportunistic. In addition, investments may be made in real estate investment trusts and master limited partnerships from time to time.

Legal account structures will primarily be in the form of limited partnership agreements with average tenure of 10-12 years. Separately managed accounts and institutional commingled funds may also be utilized from time to time.

D. ! Portable Alpha Program Ð when any combination of market beta exposures are obtained through the use of derivative instruments, a portion of the cash underlying the notional exposures may be used to fund an Alpha Portfolio. At a total portfolio level, the objective of a Portable Alpha Program is to generate excess returns through alpha exposures which, in aggregate, are diversifying to the total portfolio overall.

1. ! Definitions

a. ! Market Beta Exposure Ð obtained through owning some broad representation of a given market, usually tracked by a benchmark or index. Within Retirement, Endowment and General Pool, examples of market beta exposures include public equities, sovereign bonds, commodities, and other public debt markets. Common ways to obtain market beta exposures include passive or actively managed mutual funds, ETFs or separate accounts holding individual investment securities.

!"#"$"%&inflation-linked bonds,

b. ! Derivative Instruments Ð market beta exposures may also be obtained with derivative instruments commonly used by other institutional investors, such as futures, swaps, options, forward contracts and reverse repurchase agreements.

c. ! Notional Exposure Ð when derivative instruments are used to obtain market beta exposures, the market exposure obtained is not directly connected to the amount of cash required to obtain such market exposure. For example, obtaining a $100 million exposure to the S&P 500 usi ng futures could be done with an initial cash outlay of less than $5 million. In the context of this Portable Alpha Program, $100 million of notional exposure would be initially funded with $100 million in cash. The key takeaway is that wi th a derivatives implementation of market beta exposures, part of the cash underlying the notional exposure is available to fund other types of investment exposures, such as alpha.

d. ! Alpha Portfolio - Alpha represents investing skill that generates returns alongside, or independent of, a given market beta exposure. For purposes of the Portable Alpha Program, the Alpha Portfolio represents a collection of highly skilled alpha managers able to source a lpha independent from a market beta exposure. Alpha managers utilized within the Alpha Portfolio

should be well established and highly institutionalized, have satisfactory liquidity terms, maintain robust risk management systems, and have a demonstrated ability to deliver return streams with generally low volatility and very low correlations (no discernable relationship) to the market beta exposures used to fund the Portable Alpha Program. Common alpha strategies likely contain well-known, empirically tested sources of returns that can be actively or systematically harvested through both long and short implementations including, but not limited to:

1) hedge fund risk premia such as arbitrage, macro, credit, and equity long/short;
2) style risk premia such as value, momentum, carry, defensive and low volatility;
3) other idiosyncratic sources of return.

Legal account structures will be in the form of separate accounts, institutional commingled funds, limited partnerships or other similar forms. The overall mix of investment vehicles and fund structures should allow for at least 20% of the Alpha Portfolio to be redeemed for cash within 90 days, with a minimum of 50% available for cash redemption within six months.

2. Understanding Liquidity Needs / Cash Margin

The primary need for liquidity within the Portable Alpha program is the settlement of gains and losses from the mix of market beta exposures implemented through derivatives, which are used to fund the program. To help illustrate this concept: Assume a $70 million Alpha Portfolio funded by $100 million in US Treasuries (a market beta exposure). Derivatives would be used to obtain $100 million notional in US Treasuries market beta exposure. Of the $100 million in underlying cash, $70 million is used to fund the Alpha Portfolio with the remaining $30 million held in cash (ÒCash MarginÓ). The Cash Margin is needed to settle gains or losses on the derivatives used to obtain the $100 million notional US Treasuries market beta exposure.

As a simplistic example, if US Treasuries gained 10% over a given period, Cash Margin would increase by $10 million ($100 million notional x 10% gain). But if US Treasuries lost 10% over a given period, Cash Margin would decrease by $10 million ($100 million notional x 10% loss). Overall, Cash Margin should be sufficient to cover potential losses in the market beta exposures implemented through derivatives and used to fund the Alpha Portfolio. More specifically, liquidity needs are driven by the market beta exposures funding the Portable Alpha Program, not the Alpha Portfolio itself.

3. Sources of Cash Margin

The following are sources of Cash Margin for the Portable Alpha Program:

a. Cash balances underlying the market beta exposures obtained through derivatives implementation (for example, the $30 million in the illustration noted in the section above).
b. Any unencumbered cash balances held at the total portfolio level, which have been specifically dedicated to the Portable Alpha Program.
c. Any balances of passive market beta exposures held in ETFs or mutual funds which could be settled (cash received) within three business days. For sake of

clarity, assume that the Alpha Portfolio was funded by notional US Treasury exposure. Further, assume that the portfolio had additional US Treasury market beta exposure through an index mutual fund, which could be traded with cash settlement within three b usiness days. Under this provision, using this example, the amount invested in the US Treasury index mutual fund could be counted fully or partially as available Cash Margin. From a practical perspective, these passive mutual fund or ETF holdings could be quickly converted to notional derivative exposures (without changing the portfolioÕs overall market beta exposure), making the underlying cash available for the Portable Alpha Program. Having the flexibility to manage market beta exposures in this way can reduce the financing costs associated with derivative notional implementations while maintaining ready access to cash (liquidity).

d. ! Cash redemptions from Alpha Portfolio managers.

4. ! Measuring / Testing Liquidity Needs

With the Portable Alpha Program being funded by a derivatives implementation of some mix of market beta exposures, the measurement and testing of liquidity needs involves assessing how the given mix of these asset classes performs across a representative s ample of historical economic and market stress scenarios. In managing liquidity needs, the objective is for the Cash Margin to ÒsurviveÓ these modeled scenarios with some minimum level of Cash Margin remaining after the stressed scenario has occurred. For purposes of this policy, Cash Margin sufficiency shall be determined by taking an average of the five worst modeled scenarios as defined as those scenarios having the greatest depletion of Cash Margin. To be clear, assum ing the five worst modeled scenarios consumed 5%, 6%, 8%, 10% and 16% of Cash Margin, the average of these five would be Cash Margin depletion of 9%. The minimum Cash Margin requirement would be 9% plus some additional safety buffer, which would be defined individually in the investment policies for the Retirement, Endowment and General Pool portfolios.

5. ! Managing Liquidity Needs

There are generally six primary ways to manage Cash Margin and liquidity needs during times of market stress. Any of these, or some combination, may be used depending upon the circumstance.

a. ! Utilize existing cash balances underlying the market beta exposures obtained