BOARD APPROVED
December 6, 2019
Janice Indrutz
Corporate Secretary

PURDUE
UNIVERSITY

To: Members of the Finance Committee
Don Thompson, Chair
Sonny Beck
Vanessa Castagna
Mike Klipsch

Fr: Christopher A. Ruhl, Senior Vice President – Strategic Initiatives
David C. Cooper, Chief Investment Officer

Date: November 25, 2019

Re: Endorsement of Investment Policy Statement

At the December meeting we will be seeking your endorsement of changes to the Endowment's Investment Policy Statement (IPS). A red-lined version is attached as Exhibit A. The PRF Board of Directors approved the changes at their November meeting, pending your endorsement. We recommend for your endorsement revisions to the IPS to reflect how the relationships with outside consultants have evolved as PRF has added internal investment staff and to reflect the shift from active to passive management in public markets. Other revisions include miscellaneous minor clean-up items.

Recommended IPS Language

Revisions regarding consultant relationships – consultant relationships remain an important part of the investment process, but with the additions to the internal staff, some language within the IPS needed to be updated. Highlighting some changes:

- 'investment staff' was added to page 2 in the Introduction.
- Changed frequency with which the consultant will meet with the Investment Committee from quarterly to annually. Please note that the investment staff continues to be in constant communication with the consultant, but the formal meeting with the Investment Committee will only happen once per year.
- Deleted the consultant's requirement to formally review the IPS, however, per the Introduction to the IPS they are expected to 'propose revisions to the policy whenever the existing policy would impede meeting the Endowment's investment objectives.' The investment staff and Investment Committee are expected to do the same.
- Added 'and when appropriate' to the final bullet in order to fully encompass when the consultant should be proactively reaching out regarding concerns or investment opportunities.

Revisions regarding Active Management – within public market investing, passive investment management (also known as indexing) will be utilized to a greater extent. The changes here reflect that, along with clarifying the appropriate time horizon for manager evaluation.

Other Miscellaneous Clean-Up Items – multiple grammar, wording and formatting inconsistencies and errors were fixed. In addition, the Blended Benchmark weights were updated to match the current target asset allocation, which was not captured in the IPS with the 2016 approval of the asset allocation.

With the Board's endorsement, the recommendation will be accepted as a final approval.

c: Chairman Mike Berghoff
Vice Chairman Tom Spurgeon
President Mitch Daniels
Provost Jay Akridge
Treasurer Bill Sullivan
Assistant Treasurer Jim Almond
Corporate Secretary Janice Indrutz
Legal Counsel Steve Schultz

Attachment

PURDUE
RESEARCH FOUNDATION

Endowment Investment Policy

Endowment Investment Policy
For Approval by the Board of Directors
Date: November 15, 2017 (UPDATE)

Purdue Research Foundation
Endowment Investment Policy

Introduction

This Investment Policy governs the investment management of Purdue Research Foundation's Purdue Investment Pool, also known as the Endowment, and the Separately Held Endowments, and will be effective until modified by the Board of Directors as conditions warrant. ~~Both T~~the Investment Committee, investment staff, and investment consultant are expected to propose revisions to the policy whenever the existing policy would impede meeting the Endowment's investment objectives.

Investment Imperatives

The overall financial objectives of the Endowment are to support the current and future operations of Purdue Research Foundation and to preserve and enhance the purchasing power of the Endowment.

1. Achieve a long-term total rate of return for the Endowment that is greater than distributions, inflation, and all costs.

2. Achieve the needed long term return as efficiently and effectively as possible by focusing on net return per unit of risk.

Spending Policy

The spending policy is meant to ensure that the Endowment's purchasing power (real market value) is maintained over time by keeping the long-term rate of annual spending from the Endowment equal to or less than the long-term real (inflation-adjusted) investment return of the Endowment. The Investment Committee will routinely review spending policy and practices to ensure that the policy remains aligned with financial objectives.

The Endowment consists of True, Term, and Quasi Endowments. True Endowments are funds for which a donor or other outside agency has stipulated, as a condition of the gift instrument, that the principal is to be maintained inviolate and in perpetuity and invested for the purpose of producing current and future income. Term Endowments are similar to True Endowment funds except that, upon the passage of a stated period of time, or the occurrence of a stated event, all or part of the principal may be expended. Quasi Endowments are defined as funds for which the University, rather than the donor, has determined that the corpus is to be retained and invested. Since these funds are internally designated rather than externally restricted, the management of the University has the right to decide at any time to expend the principal.

To facilitate equitable allocation of investment returns and income distribution among the various endowed funds that participate in and comprise the Endowment, the Endowment employs unitized fund accounting.

True, Term, and Quasi Endowments that participate in the Unitized Endowment Pool will receive a distribution of current income (interest and dividends less appropriate expenses) plus capital appreciation semi-annually based on the most recently available market values.

The Investment Committee will establish the distribution for True, Term, and Quasi Endowments at an annualized rate of up to five percent (5.0%) within the range of (a) the current market value of the Unitized Endowment Pool and (b) the average of the ending market values for the prior twelve quarters. The distribution will be allocated based on participating units during the current period, with the proceeds either remitted to or reinvested on behalf of the participating units depending on designated needs and uses.

Core Beliefs

Risk

The anchor to the Purdue Endowment is a risk for acceptable return-focused strategy. The Endowment will not stretch for returns but will focus on risk and receive the return from the agreed upon risk profile. The Endowment must take risks in order to achieve the expected total return but will be thoughtful in choosing which risks and their magnitude. Quantitative views as well as qualitative views of risk are important.

Time Frame / Measurement

Measuring all aspects of the Endowment is prudent and leads to further learning and progress. The total Endowment performance is judged over a seven- to ten-year time frame. However, three-year performance may be impactful given the distribution policy. There is little relevance to one-year performance of the Endowment. Individual managers ~~will be judged over three to five years~~will be judged in a manner that is consistent with their mandate.

Diversification

Diversification is a basic tenet of investing and is achieved in both dollar allocation and risk allocation. The portfolio should be well diversified. Diversification through asset allocation is much more important than manager selection. Each asset class should have a defined purpose.

Beta / Risk Premium

Beta (market risk), is a more reliable~~uch stronger~~ driver of long-term returns than Alpha (manager skill). Assets' return (Beta) expectations are based off of an excess return (risk premium) above risk-free rates.

Alpha

Public markets are exceedingly efficient and thus a manager's skill (Alpha) is difficult to predict, obtain, and repeat. Changing strategies, changing managers and moving money in general incurs costs and should be done infrequently.

Tactical Tilts

Any tactical tilts employed will be measured for success (return and risk) and impact to the overall portfolio. Questions regarding any tactical measures should include the following before a decision is made to implement:

- Is this going to move the needle in both return and risk terms?
- What if we are wrong?
- What do the ranges of wrong look like?

Passive / Active

Passive management (index use) in the public markets has a significant role in the portfolio since public markets are quite efficient and the majority of return is derived from Beta. ~~Passive management is also utilized as a rebalancing source or recipient with the offset being active management in the public markets.~~

Alternative Investments - Hedge Funds, Natural Resources, Private Equity, Real Estate, Venture Capital

Alternative assets can be appropriate for inclusion in the Endowment but their contribution to the portfolio in terms of diversification, added return, manager skill, etc., should be clearly defined as well as their measures of success (return and risk) in advance. Performance of alternative managers shall be based on a net of all fees basis. It is understood that comparing measures of volatility or efficiency of alternatives compared to public market managers may be skewed due to the infrequency of marking the net asset value by alternative funds.

Rebalancing

Rebalancing should be performed in a thoughtful and disciplined manner. Raising funds for distributions is an opportunity to rebalance. Effective rebalancing includes redeeming from outperforming asset classes and adding to underperforming asset classes.

Fees

Fees are an input in evaluation and managers will be evaluated on a net of all fees basis. Being mindful of costs is an important component in achieving the return imperative. For each one point saved in fees, ceteris paribus, reduces the return needed by one basis point.

Illiquidity

The Endowment is a going concern and has the perpetual time horizon to be rewarded from an illiquidity premium for a portion of the portfolio.

Leverage

There is leverage exhibited in multiple forms throughout the investments of the Endowment. In a total portfolio perspective, leverage is necessary to achieve the imperatives. The Office of Investments does not manage portfolio level leverage. All leverage is at the manager and investment level.

Investment Managers

The Endowment will engage with managers who are fiduciary partners and whose interests are aligned with the success of the Endowment. Expectations of investment managers' risk and return shall be clearly delineated such that success is defined in advance.

Peers

The Endowment has its own specific imperatives and core beliefs. Peer groups are not utilized to shape investment strategy. Therefore, comparison among peers is not an imperative but is a factor in having a comprehensive situational assessment for the Endowment. The peers to which Purdue most closely compares itself are:

- Colleges and Universities - $1 billion - $3 billion
- Big Ten Universities
- "Majors"

Activity and Achievement

There is an inherent risk in the investment industry to have constant activity without focusing on the achievement. Reasons for this vary from fear of career risk to intellectual curiosity. It is important that the engaged initiatives are meant for the sole purpose of achievement of the imperatives.

Inflation Measurement

The Endowment utilizes U.S. CPI as its inflation measurement.

Portfolio Composition and Asset Class Purposes

U.S. Equity

The publicly traded U.S. Equity (stocks) portion of the portfolio is intended to be a liquid and efficient asset class with an expected risk premium above both cash and bonds. The portfolio includes market capitalizations, sectors, and individual stocks that resemble the total market portfolio as represented by the

Russell 3000. Although over long periods of time, the expected risk-adjusted return of stocks is similar to other asset classes (0.25 Sharpe), its additional risk in the form of leverage and position in the capital structure require an expected total return above cash and bonds. The reason equities are a large portion of many asset allocations is that the leverage is "packaged" for the investor and presented in a liquid security structure. Over long periods of time, U.S. Equities should expect to return a risk premium over cash of between 4% and 6%, depending on many factors.

Stocks perform best in a rising growth, falling inflation economic environment. It should be noted that the rising growth, falling inflation factors are compared to what is already priced into equities. Thus, stated more precisely, equities perform best in a better than expected (or priced-in) rising growth and falling inflation environment. Stronger-than-expected growth will impact companies due to a rise in revenues and widening margins, resulting in an increase in profits. Lower-than-expected inflation will lead to a decline in interest rates, increasing the present value of future earnings, and reducing debt costs. Lower inflation may also benefit profit margins as input costs are usually more sensitive to disinflation than output costs. This also helps productivity by lowering uncertainty and increasing incentives for capital expenditures.

Developed Market ex U.S. Equity

The developed international equity (stocks) asset class holds true, similar characteristics with U.S. Equity with a few portfolio beneficial exceptions. The additional countries add diversification to the U.S. Equity portion of the portfolio. Although markets have become much more globalized, differences in economies may still occur in regions such as Europe, Asia, and Australia. This may serve as diversification within the broader asset class of public equities. The other differentiation between developed international and domestic equities is currency. Unlike U.S. Stocks, which are priced in U.S. dollars, international stocks are priced in their respective currency which adds currency risk (or diversification) to the portfolio. Over time, currencies are not expected to have a risk-premium above one another. When the U.S. dollar strengthens, the currency portion of the international equities will be a detractor to returns. Conversely, as the U.S. dollar weakens, the currency portion of the international equities will be a positive contributor to returns.

Emerging Market Equity

The Emerging Market Public Equity (stocks) asset class is similar to the domestic and international developed asset class with some exceptions. First, the Emerging Equity Markets are not as liquid as the larger, more developed U.S. and developed markets. Thus, there should be a liquidity risk premium that warrants itself over time. Second, the Emerging Markets, by definition, are not fully developed and demonstrate growth risks and expected returns above that of the developed markets. Finally, because many of the emerging markets are commodity exporters, there is some correlation between emerging market equities and various commodities.

Hedge Funds

The hedge fund portion of the portfolio is intended to provide diversified returns which are lowly or completely uncorrelated to other asset classes. Given the fees and other risks associated with hedge funds, the intent is to exhibit differentiated returns to traditional Beta (market risk) as well as net of fee returns that are equal to or accretive to the total return imperatives of the Endowment. The reason it is important for the hedge funds portion to exhibit different return streams than traditional Beta is because traditional Beta is inexpensive and easy to replicate. For example, if it were true that hedge funds always exhibited returns in between stocks and bonds, then a much cheaper portfolio of actual stocks and bonds could be purchased. An additional diversifying portion of the portfolio is expected to increase the efficiency of the overall total return of the Endowment.

Private Equity (PE)

PE investments are investments in privately held companies, which trade directly between investors instead of via organized exchanges. Although private equity performs directionally the same to public equity in respective environments, there are several differences between the two forms of equity investment. First, there are no active markets or exchanges for private equity, which means that private equity is mostly illiquid and the lack of reliance on efficient markets can make tradable valuations difficult. The time horizon of private equity is typically from 10-15 years which forces an investor to stay committed (which can be positive) but also limits ability to rebalance into or out of the asset class. Even if an Endowment portfolio would like to be tactical with private equity (or other private asset classes), the illiquidity as well as the time to employ commitments, makes tactical moves difficult. There are secondary markets in which private equity is sold but oftentimes it is not traded at the current marked value. Private equity has an expected risk premium above public equity of several hundred basis points to compensate investors for illiquidity as well as the leverage that often exceeds that of the public equity markets.

Venture Capital (VC)

Venture capital is contained within the private equity allocation of the portfolio. VC represents the financing that investors provide to startup companies and small businesses that are believed to have long-term growth potential. For startups without access to traditional capital markets, VC provides a source of capital in exchange for ownership and many times includes board seats as well. VC is riskier than traditional buyout private equity because of the size and unproven record of venture companies. The higher risk is commensurate with a higher *expected* return.

VC also has a secondary purpose in the Endowment. Given Purdue's focus on science, technology, engineering and math (STEM), synergy of ideas can be exchanged between the VC portfolio and the Purdue Foundry, Office of Technology Commercialization, and the University. Each VC manager must stand on their own to be included in the portfolio from a fiduciary perspective, but there may be added benefits to the University by the exposure to top tier venture capital managers.

Private Real Estate

Private real estate investment vehicles are similar to private equity. Usually the structure is in the form of a private partnership with the managers acting as general partner and the investor acting as the limited partner. The private real estate assets in which a manager may invest include: Office, Hotel, Multi-Family, Retail, Industrial and niche markets such as Student Housing, Storage, or Infrastructure. There are also different risk levels of real estate depending on the property's appropriate classification of core, value-added, or opportunistic. The differences among the classification depends on the amount of occupancy as well as the amount of leverage.

The long-term objective of the real estate portfolio is to provide equity-like returns while providing a partial hedge against inflation. The amount of inflation hedge exhibited by the real estate holdings will depend on how quickly they have the ability to pass along increases in rents. It will also depend on the occupancy level at the time. Many of the asset classes in the Endowment portfolio are not expected to hedge inflation, one of the variables in the return imperative. Real estate and natural resources help in that regard.

Real Estate Securities

Real Estate Securities (REITs) exhibit some of the same underlying characteristics of private real estate but also exhibit some characteristics of public~~al~~ly traded equities since they are often traded on the same markets and there is overlap in some of the same indices in which they are both components. One of the most beneficial purposes of the Real Estate securities assets are to accompany the private real estate portfolio and serve as a rebalancing tool between the two portfolios. Because of REITs' liquidity and private real estate's illiquidity, the public securities can serve as a lever to gain exposure to real estate and to rebalance between the two. The portfolio can also serve as a source of capital calls for private real estate as well as depository for distributions of private real estate.

Private Natural Resources

Private natural resources are invested in similar structures as other private investments. Private natural resources may include commodity-related investments such as oil and gas infrastructure, metals and mining, and timber. The purpose of the natural resources portion of the allocation is to hedge inflation while also providing a real return above inflation. Most of the assets in private natural resources are inflation-sensitive or inflation-linked and provide substantial diversification to the portfolio, especially when combined with the fixed income portfolio.

Natural Resource Equity
Natural resource equity plays a similar role to private natural resources as REITs do to private real estate. Treasury Inflation Protected Securities (TIPS) would also fall under this category.

Fixed Income
The fixed income (bonds) portion of the portfolio's purpose is to provide diversification to other asset classes within the portfolio. Although bonds have less risk on an absolute basis, the risk-adjusted return of bonds is similar to that of Stocks (0.25) over long periods of time. Bonds included in the portfolio include, among others: Treasuries, Corporate Bonds, and Mortgages (both Residential and Commercial). The intent of fixed income assets is to generate stable flows, as well as hedge other parts of the portfolio. When growth is weaker than expected, private sector demand for credit is weak, which puts downward pressure on yields. Additionally, in periods of weak growth, central banks tend to engineer lower yields to stimulate the economy. As bond yields fall, the price of bonds rise. Bonds are also a safe haven in times of market stress. In environments of falling growth and poor equity performance, capital will likely flow from equities to bonds. Also, lower-than-expected inflation causes bond yields to fall as investors typically demand a premium above expected inflation. Thus, when inflation falls, the required return falls. The duration exhibited in fixed income is essentially interest rate risk. For example, if a fixed income portfolio has a duration of 5 years, then a parallel shift in interest rates, across the curve, down by 1%, will translate to an unrealized gain of approximately 5% and vice versa. Therefore, the longer the duration is in the fixed income portfolio, the more sensitive to interest rate risk the portfolio is. Although bonds, other than Treasury Nominal Bonds, such as Corporate Bonds, exhibit the characteristics of Treasury Bonds themselves, they also have an additional "Credit Spread" component that may exhibit characteristics of equities in that they perform well in rising growth environments. As an economy or individual company grows and is seen as less risky, the credit spread portion of the bond tightens (falls) and increases the price. The converse is also true. Fixed income's purpose is also to ensure funds are available for distributions in times of stress.

Cash and Cash Equivalents
In the form of Money Market instruments, the term cash represents a daily liquid currency instrument. Cash provides optionality to the portfolio. The portion of cash in the portfolio is intended to be sourced for rebalancing as well as distributions in the forms of expenses and the semi-annual spending distribution. Cash can be thought of as more of a dilutor than a diversifier. Cash has no expected risk premium as it is the instrument of which most asset class risk premiums are based. There are periods of time in which cash does have a real yield component. This means that the return of cash outperforms inflation. This is notable because one of the University's imperative variables that must be covered is inflation. There are times, however, when cash has a negative real yield. For example, from 1964 to 2014, cash averaged a positive real yield of approximately 1%. However, in more recent times, cash has exhibited a negative real yield. Under normal conditions, the amount of cash should be minimized in the portfolio. Other assets exhibit long-term risk premiums *above* cash, thus the more cash in the portfolio, the more cash "drag" expected over the long term.

Purdue Research Foundation Endowment
Policy Portfolio Asset Allocation

Asset Class	**Long-Term Targets (%)**	**Range (%)**
U.S. Equity	20.0	10 - 30
International Developed Market Equity	15.0	5 - 20
Emerging Markets Equity	5.0	0~~0~~ - 10
Marketable Alternative Assets	15.0	0 - 25
Venture Capital and Private Equity	20.0	10 - 25
Real Estate	9.0	~~0~~5 - 15
Natural Resources	6.0	~~0~~0 - 10
Fixed Income	10.0~~%~~	5~~%~~ - 15~~%~~
Cash and Cash Equivalents	0.0	~~0~~0 - 10
Total	**100.0~~%~~**	

For audit purposes the Investment Committee will classify the individual managers within one of the asset classes listed in the Policy Portfolio Asset Allocation table.

A single active manager or affiliated groups of active managers will not represent more than 10 percent of the total Endowment's market value. A single passive manager or affiliated groups of passive managers will not represent more than 25 percent of the total Endowment's market value.

Guidelines for Equity Investments

1. Equities include all "ownership" positions, not just common stocks. The Investment Committee has adopted a Policy Portfolio allocation which seeks to achieve investment objectives without exposing the Endowment to unacceptable levels of systematic (U.S. stock market) risk. In addition to U.S. and non-U.S. marketable securities, at the discretion of the Investment Committee and within parameters established by these policies, the Endowment's funds may be invested in other forms of equity investments with the objective of enhancing returns and/or reducing the Endowment's volatility.

2. The capitalization and style characteristics of the U.S. equity component of the equity investments should not be overly different from the broad market.

3. Equity managers may invest in common stocks, preferred stocks or fixed income instruments convertible into common stocks, and ADRs of domestic and foreign corporations. All common stocks, and common stocks into which convertible securities may be converted, must be listed on the New York Stock Exchange (NYSE), the American Stock Exchange (AMEX), or the National Association of Securities Dealers Automated Quote System (NASDAQ), or, for foreign securities, equivalent exchanges in their country of domicile.

4. The return objective for the equity investments is to, at a minimum, achieve or beat ~~outperform~~ (net of fees) the blended benchmark as established by the Investment Committee. Performance

will be monitored on a regular basis and evaluated over rolling five-year periods. ~~It is recognized that the return objective may be difficult to attain in every three to five-year period, but should be attainable over a series of three to five-year periods.~~

5. Diversification will be achieved at the equity investments level and not necessarily at the level of individual stock portfolios. To produce overall diversification, investment managers may be selected to employ different equity management philosophies, which together achieve the desired degree of diversification. Portfolios will be monitored for adherence to these philosophies.

6. Decisions as to individual security selection, security size and quality, number of industries and holdings, current income levels, turnover and the other tools employed by active managers are left to broad manager discretion, subject to the usual standards of fiduciary prudence. No equity manager shall invest or have invested more than 10 percent (at market) of the Endowment assets entrusted thereto in the stock of one company, nor more than 40 percent (at market) of the Endowment assets entrusted thereto in any single major economic sector.

7. With the approval of the Investment Committee an investment manager may place funds in commingled investment vehicles, including mutual funds. These investment vehicles may have investment guidelines that are not in strict compliance with the Endowment Investment Policy guidelines in this section. In these cases, the Investment Committee will review and authorize the manager's investment guidelines for the specific investment.

8. Equity managers may, at their discretion, hold investment reserves of either cash equivalents or bonds, with the understanding that performance will be measured against Investment Committee assigned benchmarks.

Guidelines for Fixed Income Investments

1. As a partial hedge against periods of economic contraction, when equity investments tend to perform poorly, a commitment to intermediate- and long-term bonds should be maintained. This is intended to enable the Endowment to maintain its spending stream without forcing the sale of equities during periods of depressed market valuations.

2. The return objective of the fixed income investments is to equal or exceed the benchmark established by the Investment Committee. Performance will be monitored on a regular basis and evaluated over rolling three to five-year periods.

3. Fixed Income managers may invest in the following types of debt securities:
   - Government and agency bonds, notes, bills, and similar obligations.
   - Any evidence of indebtedness, the principal and interest of which is absolutely and unconditionally guaranteed by the United States Government.
   - Bonds, debentures, notes and other evidences of indebtedness issued by United States domestic corporations.
   - Other dollar denominated securities (e.g., Yankees and Eurodollars).
   - Preferred stocks.
   - Convertible bonds (when considered a debt issue).
   - Mortgage and other asset-backed securities.
   - Tax exempt and taxable municipal bonds.
   - The Investment Committee may hire a dedicated fixed income manager that may invest 100 percent of the assets in foreign fixed income.
   - A U.S. investment manager may invest in foreign fixed income securities equivalent in quality to permitted domestic securities, but not to exceed 20 percent of the assets entrusted to the

manager. All currency exposures are to be hedged into the U.S. dollar unless otherwise approved by the Investment Committee.

4. There is no limit on the amount of holdings of United States Government bonds, notes, bills, agency obligations or obligations, the interest and principal of which are fully, absolutely and unconditionally guaranteed by the full faith and credit of the United States Government. Otherwise, no fixed income manager shall have invested, at any point in time, more than 5 percent of the Endowment's assets entrusted thereto in the fixed income obligations of a single issuer.

5. Portfolios will be invested in securities that result in a weighted average credit quality rating of "AA" or better. No fixed income manager shall have invested, at any point in time, more than 10 percent of the Endowment assets entrusted thereto, in fixed income obligations rated less than BBB (or its equivalent) by Moody's or Standard & Poor's. Should an issue have a split rating, the lower rating will apply.

6. With the approval of the Investment Committee an investment manager may place funds in commingled investment vehicles, including mutual funds. These investment vehicles may have investment guidelines that are not in strict compliance with the Endowment Investment Policy guidelines in this section. In these cases, the Investment Committee will review and authorize the manager's investment guidelines for the specific investment.

Guidelines for Alternative Investments

1. The Investment Committee may from time to time employ investment managers or funds of funds to pursue investments in "alternative assets" for the purpose of diversifying the market exposure of the Endowment, to lower correlations to equity and fixed income investments, and/or to enhance returns. These might include, without limitation, managers or partnerships investing in marketable alternative strategies (e.g., arbitrage, long/short equity, and distressed securities), private equity, venture capital, natural resources, private real estate or other asset classes. These investments will not generally fall within the guidelines established for the more traditional asset classes that make up the majority of the Endowment's investments.

2. The Investment Committee shall consider certain criteria, including, but not limited to, the following in its evaluation of alternative asset managers:
   - Tenure and track record of management as a team
   - Expertise in targeted areas of investment
   - Diversification relative to other investments
   - Use of leverage
   - Liquidity of investments
   - General Partner investment, fees and potential conflicts of interest
   - Unrelated Business Income Tax ("UBIT")

Guidelines for Cash Equivalent Holdings

1. Equity and fixed income managers may invest in the following cash equivalent vehicles as a means for the temporary employment of funds:
   - Repurchase agreements, providing that contemporaneous with the disbursement of the funds, the Endowment's agent receives, as collateral, physical possession of United States Government securities having a market value at least equal to 102 percent of the amount disbursed. Additionally, the collateral should be marked to market on at least a weekly basis and additional collateral provided if the coverage drops below 102 percent of the amount disbursed.
   - Money market funds and other commingled short-term cash investment vehicles.

- Commercial paper not exceeding 180 days to maturity at the time of purchase.
- Bankers acceptances.
- Certificates of deposit.
- United States Government and agency obligations.

2. Commercial paper must be rated A-1/P-1 by each rating service rating said credit. Bankers acceptances and certificates of deposits must be issued by a bank having a Keefe Bruyette & Woods rating of A or A/B or B. All securities discussed herein must be issued by domestic entities.

Guidelines for Derivatives

1. Investment managers will utilize derivative securities only in a manner that is consistent with the policies stated in their manager-specific guidelines.

2. The primary intent of derivative security transactions will be to hedge risk in portfolios or to implement investment strategies more efficiently and at a lower cost than would be possible in the cash market. In the case of equity portfolios, derivative securities primarily include index futures, options on stock or index futures, and currency futures and forwards. In the case of bond portfolios, derivative securities primarily include interest rate futures, options on interest rate futures, currency futures and forwards, and collateralized mortgage obligations. With the exception of hedge fund managers so authorized, derivatives will not be used to leverage portfolios, and derivative-based investment strategies will not expose the portfolios to greater risk than would be typical under a strategy utilizing only cash securities.

3. Investment managers will have in place processes and procedures to control and measure risk related to derivative positions.

4. Derivatives will not be used for funds managed internally by the Office of Investments' staff.

Miscellaneous Guidelines

1. As a general guideline, transactions should be entered into on the basis of best execution, which is interpreted normally to mean best realized price.

2. A securities lending program may be administered through the master trustee/custodian. The proceeds of the securities lending program may be collateralized through the master trustee/custodian's securities lending temporary investment funds or collateralized in a form acceptable to the Investment Committee.

Monitoring of Objectives and Performance Results

1. All objectives and policies are in effect until modified by the Board of Directors. They will be reviewed at least annually for their continued appropriateness.

2. The Endowment will be monitored on a continual basis for consistency in each manager's investment philosophy, return relative to objectives, investment risk as measured by asset concentrations, exposure to extreme economic conditions, and market volatility. On a regular basis the Investment Committee will review external investment manager performance and all internally managed holdings. Results will be evaluated over rolling seven to ten year periods. However, the Office of Investments, on behalf of the Investment Committee, will regularly review managers in order to confirm that the factors underlying performance expectations remain in place and report any findings to the Investment Committee.

3. Each investment manager will report to the Office of Investments, master trustee/custodian, and investment consultant within 45 days of quarter-end (except limited partnership arrangements such as private equity and venture capital managers which typically report on a one-quarter lagged basis) total return net of all commissions and fees, returns for the equity and fixed income portions of the account, additions and withdrawals from the account, current holdings at cost and at market value, and purchases and sales for the quarter. Regular communication concerning investment strategy and outlook is expected. Additionally, managers are required to inform the Purdue University Office of Investments of any significant change in firm ownership, organizational structure, professional personnel, account structure (e.g., number, asset size and account minimums), or fundamental investment philosophy. Annually, the Foundation requires reporting on all of the above information as of the end of its fiscal year. The Investment Committee or the staff of the Office of Investments shall meet with investment managers at least every 18 months to review performance. Meetings may be by telephone conferences.

4. On an annual basis, each manager will provide a copy of its form ADV.

Delegation of Responsibilities

1. **Board of Directors**
   - The Board of Directors of Purdue Research Foundation has fiduciary responsibility for the Endowment. The Board will ensure that appropriate policies governing management of the Endowment are in place and that these policies are being effectively implemented. The Endowment Investment Policies are approved by the Board of Directors and delegated to the Treasurer and the Investment Committee for implementation under the oversight of the Finance/Audit Committee of the Board of Directors.

2. **Finance /Audit Committee**
   - The Finance/Audit Committee of the Board of Directors has oversight responsibilities for the Investment Committee and will submit an annual report to the Board of Directors.

3. **Investment Committee**
   - The Investment Committee responsibilities include the development of the Endowment Investment Policies, selection and termination of the master trustee/custodian, selection and termination of investment consultants and investment managers, monitoring performance of investment managers and the entire portfolio on a regular basis, maintaining sufficient knowledge about the portfolio and its managers so as to be reasonably assured of their compliance with the Endowment Investment Policies, and submitting periodic reports to the Finance /Audit Committee and the Board of Directors.
   - The Investment Committee will establish and modify as necessary the appropriate performance benchmarks for the portfolio and the individual managers and monitor performance.
   - The Investment Committee will consist of the Chief Financial Officer and Treasurer, Chief Operating Officer, President, and the Chief Investment Officer of the Purdue Research Foundation and the Treasurer and Assistant Treasurer of Purdue. The Chief Investment Officer of the Purdue Research Foundation shall provide the administrative support for the Committee. The Investment Committee will select a Chair from the policy appointed members. Other members will be appointed by the agreement of the Committee members.
   - The Investment Committee shall advise the Treasurer on investment strategies and specific investment management decisions. The Treasurer may engage an external investment consultant to advise the Investment Committee.

- The Investment Committee shall submit an annual report to the Board of Directors and three quarterly reports to the Finance/Audit Committee of the Board of Directors.

- The Investment Committee will routinely review the Endowment Investment Policy and make recommendations to the Finance/Audit Committee and the Board of Directors as needed.

4. **The Office of Investments – Purdue Research Foundation**
   - The Office of Investments is responsible for managing the Endowment in accordance with the Endowment Investment Policy under the direction of the Investment Committee.
   - The Office of Investments is responsible for oversight and interactions with the portfolio managers, the preparation of analysis and materials for the Investment Committee, the execution of rebalancing actions as directed by the Investment Committee, management of the custodial relationship, coordination of the annual audit process, performance monitoring and accounting reconciliations
   - The Office of Investments will immediately inform the Investment Committee of any material events that are discovered or reported during the ongoing due diligence process or that are required to be reported by the investment managers to the Office of Investments.

5. **Investment Managers**
   - The investment manager will select specific portfolio holdings in accordance with the Endowment Investment Policy and manager-specific guidelines.
   - The investment manager will notify the Office of Investment immediately of (1) any guideline that impairs or prevents the achievement of performance objectives; (2) new developments or circumstances that warrant a change in the guidelines; (3) verification that the manager is in compliance with all professional standards (such as AIMR) to which it subscribes, and any disciplinary action by any regulatory authority or non-compliance with any AIMR, SEC or other professional standards; (4) any significant change in investment strategy and/or portfolio structure; (5) a material change in portfolio managers, analysts, or ownership control of the manager; (6) a list of new clients and clients that have terminated the manager; (7) any soft dollar use and its impact on the Endowment; (8) any affiliated broker relationships; and (9) performance reporting as specified previously in this document.

6. **Investment Consultant**
   - The consultant will meet ~~quarterly~~ annually with the Investment Committee, or more often if needed.
   - ~~The consultant will provide the Investment Committee with an annual review of the Endowment Investment Policy statement.~~
   - The consultant will monitor investment managers on a regular basis and report investment manager performance within 45 days of quarter-end.
   - The consultant will report on issues and developments that may have a material impact on the performance of the Endowment and other such information as reasonably requested and when appropriate.

7. **Master Trustee/Custodian**
   - The master trustee/custodian will provide monthly portfolio transaction reports and monthly asset reports no later than the tenth business day following month end.
   - The master trustee/custodian will provide the Investment Committee, the Office of Investments, its investment managers, and investment consultant special reports as reasonably requested.
   - The master trustee/custodian will communicate immediately any concerns regarding portfolio transactions or valuation, or material changes in trustee personnel or procedures.

Appendix A
Current Asset Class Performance Benchmarks

Adopted by the Investment Committee on February 13, 2012

Asset Classes	**Benchmarks**
U.S. Equity	Russell 3000
International Developed Market Equity	MSCI EAFE
Emerging Market Equity	MSCI Emerging Markets Index
Marketable Alternatives	Hedge Fund Research Fund of Funds Diversified Index
Private Equity and Venture Capital	Russell 3000
Real Estate	FTSE EPRA/NAREIT Developed Index
Natural Resources	MSCI World Natural Resources Index
Fixed Income	Barclays Aggregate Bond Index
Cash and Cash Equivalents	91 Day T-Bills
Total Endowment	CA Endowment Median Benchmarks A and B (see below)

Blended Benchmark A (by Target Allocation)
Measures success of tactical asset allocation

~~*28 percent R3000 + 13 percent MSCI EAFE + 5 MSCI Emerging markets + 25 percent HFRI Diversified Index + 7 percent FTSE EPRA/NAREIT Developed Index + 7 percent MSCI World NR Index + 15 percent Barclays Aggregate Bond Index*~~

Benchmark Weight	Component
40 percent	R3000
15 percent	MSCI EAFE
15 percent	HFRI Diversified Index
10 percent	Barclays Aggregate Bond Index
9 percent	FTSE EPRA/NAREIT Developed Index
6 percent	MSCI World NR Index
5 percent	MSCI Emerging Markets

Blended Benchmark B (by Actual Allocation)
Measures success of manager selection

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Actual allocation at quarter-end applied to target policy asset class indices