Biennial Review of Investment Policy and Strategic Treasury Management

BACKGROUND

The Investment Policy requires a biennial review by the Board of Trustees to ensure it remains current. The Vice President for Finance and Administration, in consultation with the Director of Treasury and the university's investment advisor, has reviewed the current policy and determined that the established guidelines continue to be appropriate for OSU.

Nevertheless, the review of the Investment Policy generated several options for discussion about how the university can manage its treasury function in more strategic ways. Staff have identified three specific areas for discussion: (1) consideration of longer-term investment of operating assets, (2) investment of unspent bond proceeds, and (3) development of revenue bond debt issuance strategies. Attachment 1 provides additional references about the university's current treasury management policies and definitions.

MANAGING INVESTMENTS

The quarterly investment reports reviewed by the Finance & Administration Committee reflect *total* university investments including operating assets, endowment funds managed by the OSU Foundation (OSUF), and separately invested endowment funds (see Attachment 2, Figure 1). This summary focuses on the investment duration of *operating assets* currently invested within the Public University Fund (PUF) and how those funds might be invested over longer time horizons for potentially higher returns.

Entering the equities market outside of the PUF is a way to provide for diversification of time (by adding a long-term component) and of the university's overall operating asset investment portfolio, which currently consists solely of fixed-income investments.

Capital market assumptions can be helpful inputs for determining asset allocation targets. For example, the university's investment advisor, PFM, estimates Core Bond strategies are expected to return 1.9% over the next five years (total return basis) due to the rising rate environment. Equity strategies, while more volatile, are expected to return 6.5% (Attachment 2, Figure 2). The investment instruments permitted by the current university investment policy do not specifically address diversification or volatility risk management. However, in considering the allocation of funds to a long-term investment, volatility is an important factor (Attachment 2, Figure 3).

To maintain a conservative investment strategy overall, the university could consider setting aside a portion of its operating assets in a board designated fund to create a long-term investment allocation strategy using 2-10% of the operating fund balance. This diversification would be intended to enhance the investment portfolio, not limit the availability of cash to meet liquidity and coverage needs. A 2% allocation of operating assets currently invested in the PUF to a long-term strategy would approximate $5 million or 1.3% of total university investments (Attachment 2, Figure 4).

Staff recommends amending the investment policy to have the option to establish a board designated fund for investments in long-term fixed income and/or equities, as provided in TAB M of the January 17 meeting materials.

MANAGING UNSPENT REVENUE BOND PROCEEDS

A portion of the university's funds on hand are revenue bond proceeds to be used to fund capital projects that may not be used immediately or within the expected timeframe. The university is requesting an amendment to the investment policy to allow the investment of these funds in a way that further mitigates debt service costs and provides liquidity based on forecasted need.

Cash forecasting of project spending would allow for revenue bond proceeds to be invested by matching maturity dates to the timing of how the funds would be used, mitigating debt service costs until the funds are utilized.

Intermediate-term investments could allow for investment earnings to cover debt service and administration costs, while maintaining the investment objective of safety. Specifically, for taxable revenue bond proceeds, opportunities exist to invest in prior taxable revenue bond issuances that are selling at a discount to par (face value). Guidance parameters have been discussed with bond counsel, and this type of investment would require modification of the investment policy to allow for ownership of longer-dated bonds and municipal bonds.

Staff recommends amending the investment policy to allow for ownership in longer-dated bonds and municipal bonds, as provided in TAB M of the January 17 meeting materials.

MANAGING DEBT

The timing of the university's previous bond issuances, which make up the university debt portfolio (see Attachment 3, Figure 5), was driven based on annual capital project funding needs, rather than on bond market conditions (Attachment 3, Figure 6). Looking over the horizon of the Ten-Year Business Forecast, the projections of the debt service coverage ratio and the primary reserve ratio are currently the most limiting factors for debt capacity. Rising interest rates (Attachment 3, Figure 7) also have a negative impact on debt capacity.

The university could change the way it structures future debt issuances. In a rising interest rate environment, continuing to plan for revenue bond issuances approximately annually to support the cash needs of the capital forecast could decrease overall debt capacity over time, if interest rate increases exceed forecasted expectations within the university's financial model. Another factor to consider is that each individual bond issuance comes with external fees and internal costs.

If the university contemplated bond issuances to cover a five- to six-year window of needs (rather than annually), it could consider a next issuance at $140 million to cover the period through Fiscal Year 2024. Under the current Ten-Year Capital Forecast and debt capacity projections, this would leave approximately $80 million in additional debt capacity for Fiscal Years 2025-2027 needs.

By viewing revenue bond financing needs in this longer-term way, the university could potentially lock-in historically low rates and reduce the potential impacts of prevailing market conditions. De-coupling the timing of borrowing and debt repayment from individual project needs also allows for optimization of the debt portfolio.

Staff recommends a General Revenue Bond issuance in FY2019, as provided in TAB N of the January 17 meeting materials.

NEXT STEPS

The discussion of investment and bond issuance strategies with the Finance & Administration Committee at the January 17, 2019, meeting is to inform the proposed action items: Investment Policy Amendment and Issuance of OSU Revenue Bonds.

Oregon State University – Treasury Management Policy References

Functional relationships of Board-approved treasury management policies

Treasury management is composed of three primary functions: (1) cash management, (2) limited term investment management, and (3) debt management. Board-approved treasury management policies are designed to work in conjunction with each other to ensure controls, objectives, and frameworks are in place to mitigate financial risk.

The policies noted below guide these primary functions:

(1) **Internal Bank Policy**: one of the objectives of the Internal Bank is to facilitate the long-term financial stability of the university through effective asset liability management.

(2) **Liquidity Management Policy**: focuses on meeting financial cash needs during the operating cycle (sources and uses limited to five years).

(3) **Investment Policy:** provides guidelines for suitable investments while maximizing the efficiency of the university's cash management program. Operating assets are invested in the Public University Fund (PUF) managed by the Oregon State Treasury and governed by the Public University Fund Investment Policy. Endowment assets are managed by the Oregon State University Foundation (OSUF) governed by the Oregon State University Fund Management Agreement and Board-approved OSUF Endowment Fund & Pooled Investment Policy.

(4) **Debt Policy:** formalizes the connection between the university's strategic plan and the issuance of debt including coordinating debt management decisions with asset management decisions to optimize the overall funding and portfolio management strategies.

Key terms

- ***Asset allocation*** is a method for organizing the investments in your portfolio between stocks, bonds, and cash by percentages.
- ***Diversification*** is the practice of allocating money between different investments within each asset allocation category.
- ***Volatility*** is the degree of rapid and unpredictable change.
- ***Equities*** are common stock traded in the securities market.
- ***Passive stock investments*** are a marketable security that tracks an index, a commodity, bonds, or a basket of assets like an index fund.
- ***Active stock investments*** requires use of an investment broker to make stock selections and manage investments.

Asset allocation timeframes used in the analysis

- Cash and short-term investments held in less than one year
- Intermediate-term investments held between one to seven years
- Long-term investments held over seven years

Measure 95 – statutory authorization to invest in equity securities

Measure 95 legislation passed in 2016 allows public universities to invest operating assets in equities, whereas the State of Oregon is prohibited from subscribing to, or being interested in "the stock of any company, association or corporation" on behalf of an agency.

Oregon State University – Managing Investments

Figure 1. Investment allocation of university assets including operating and endowment assets as reported in the quarterly investment report as of June 30, 2018.

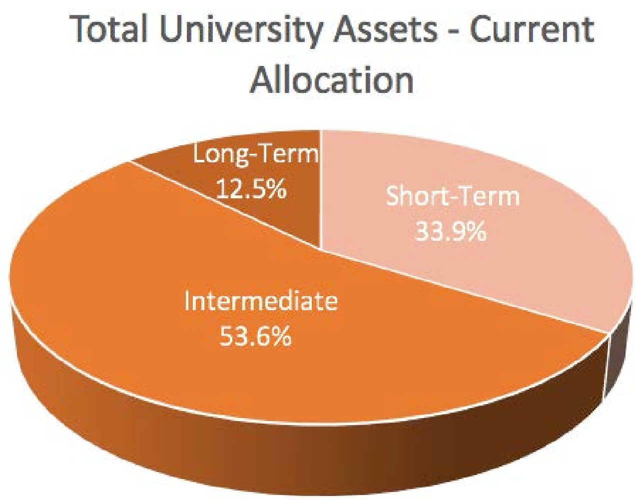


Figure 2. PFM's 2018 Capital Market Assumptions.

	Intermediate: Next 5 Years		Long Term Projections	
	Expected Return	Expected Risk	Expected Return	Expected Risk
US Equity	6.5%	17%	7.7%	16%
International Developed Equity	6.6%	18%	7.7%	17%
Emerging Markets Equity	6.6%	24%	7.7%	20%
Core Bonds	1.9%	4%	5.5%	5%
Intermediate Investment Grade	2.3%	6%	6.3%	7%
Emerging Markets Debt	4.2%	10%	7.3%	10%
High Yield	4.3%	10%	6.8%	10%
Bank Loans	4.0%	6%	5.2%	6%
REITs	5.6%	12%	6.5%	12%
Private Equity Real Estate	6.9%	15%	7.8%	15%
Commodities	4.2%	16%	5.3%	16%
Hedge Funds	5.7%	15%	7.3%	15%
Private Equity	8.0%	25%	9.5%	25%
Cash	2.2%	1%	3.3%	1%

Figure 3. The chart below shows the cash balance invested in the Public University Fund (adjusted to remove the amount of unspent revenue bond proceeds) and the volatility of cash balance changes by month.

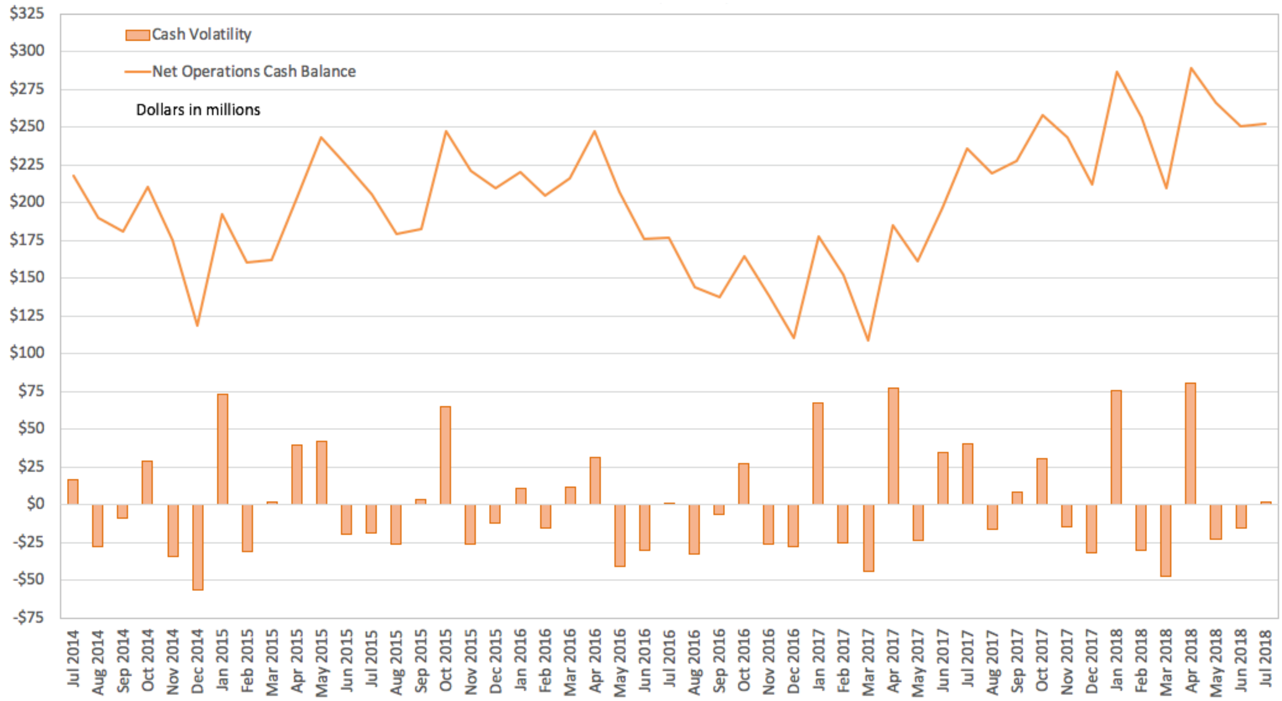
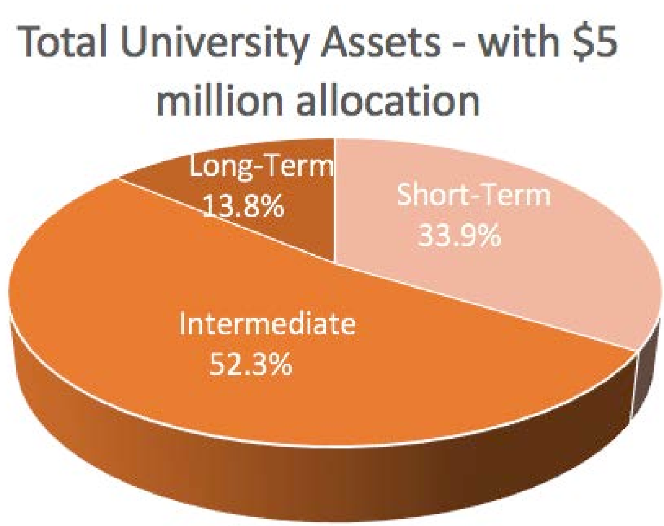


Figure 4. Illustrated investment allocation of university assets including operating and endowment assets as reported in the quarterly investment report as of June 30, 2018, with a proposed $5 million allocation to long-term investments. Compared to the chart in Figure 1, a $5 million allocation of operating assets into long-term strategies funded from the intermediate-term allocation, increases the long-term allocation to 13.8%



Oregon State University – Managing Debt

Figure 5. Current Debt Portfolio. The university's current debt portfolio consists of approximately 88% fixed rate debt and 12% variable rate debt in the form of a line of credit. The university issued 30-year bullet maturities for the three general revenue bond issuances, a structure that protects against rising rates. This structure allows borrowing at short- and intermediate-term rates in a rising interest rate environment, filling in debt service payments in the years prior to 2043.

Type of Debt	Outstanding Amt
OSU General Revenue Bonds(1)	$183,310,000
General Revenue Line of Credit	46,800,000
Contracts Payable to the State of Oregon(2)	300,129,000
State Issued Oregon Department of Energy Loans (SELP)	11,966,000
Total External Debt	$542,205,000

(1)*Amount includes unamortized premium of $10,230,000*
(2)*Article XI-F(1) Bonds, XI-Q Bonds, and Certificates of Participation*

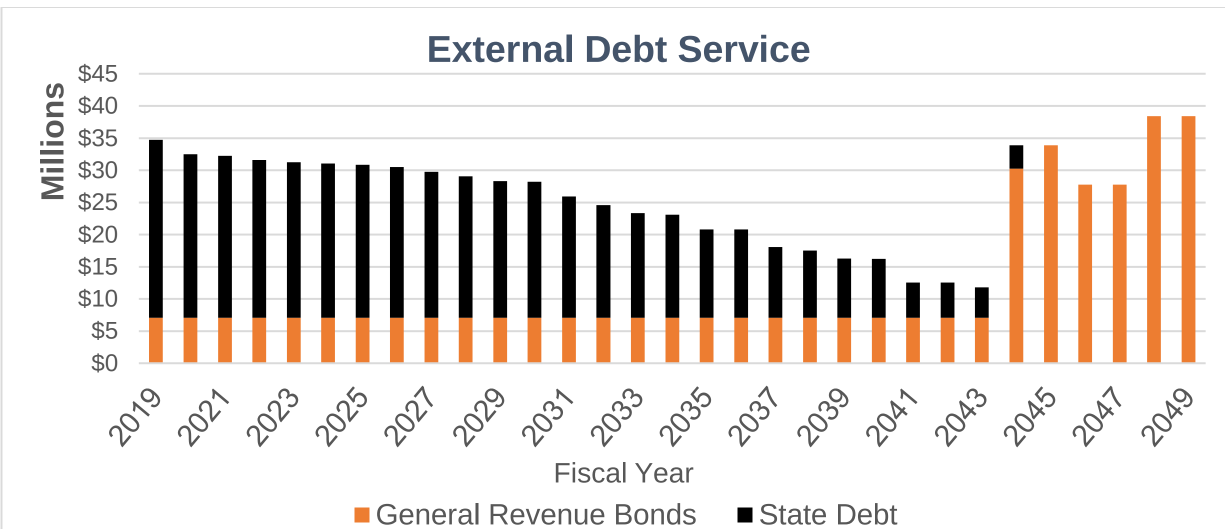


Figure 6. Historical long-term taxable and tax-exempt interest rates.

	Current Rates	Low Point	5 Year Average	10 Year Average
30 Year Treasury	3.32%	2.11% (7/8/2016)	2.97%	3.34%
30 Year MMD	3.28%	1.93% (7/6/2018)	2.98%	3.45%

Figure 7. Quarterly Historical and Forecasted Interest rate projections.