



OFFICE OF THE ARIZONA STATE TREASURER

EILEEN I. KLEIN
TREASURER



Investment Summary | May 2018

Overall Performance – Where We Are Now |

➤ State Agency Pools:

- Total assets: \$6,279,072,271.
- Total earnings distributed: \$9,729,372; Fiscal YTD: \$78.2MM, +\$24.4MM YoY.

Outlook |

In the next week we will see \$1.7 billion+ going out to pay state expenses that include K-12 rollover, bond payments, ADOT's large fiscal year distribution, local government funding and public safety pensions. While we have managed for this cash flow, we have also begun taking advantage of the 0.25 point rate hike from the Fed in June and we are expecting another quarter point by September. Other notable moves we've seen are oil hitting \$73/barrel and the Atlanta Fed calling for a potential 4.5% GDP growth in the second quarter. This is compared to an average bank and broker expectation of 4% GDP growth.

Strategy: Cash Flows Precede Duration |

The priority will be paying all the fiscal year's state and local payments laid out above. After this, we can continue to add to duration while maintaining enough liquidity and excess reserves to add more value after September's expected Fed move.

Alternative Scenario: Geopolitical Uncertainty |

There are several scenarios we have been monitoring which we believe could cause a change in the expectation that the Fed will raise rates. The possibility that European rates don't increase, or even a chance of reversion to negative levels for industrial nations, could put undue burden on the global economy. In addition, continued heightened trade tensions with China could lead to a fully recognized trade war, and increasing international trade fears leading to a flight to US debt markets could all impact the Fed's signaled strategy. If these geopolitical concerns change the Federal Reserve's plans to normalize rates, we are formulating contingency plans to adapt to a stagnant, or lower, rate environment.

State Agency Investment Pool Balances |

	May 31, 2018	July 31, 2017	FY Change
Pool 2 FF&C	\$1,078,255,323	\$893,982,531	+184,272,792
Pool 3 Internal	2,240,412,030	1,410,749,796	+829,662,234
Pool 3 External	105,362,451	104,450,097	+912,354
Pool 4 Gov.	956,947,159	961,249,082	-4,301,923
Pool 10 Internal	1,009,905,912	956,963,338	+52,942,574
Pool 10 External	157,417,640	255,729,368	-98,311,728
Pool 12 CAWCD	381,224,153	367,096,808	+14,127,345
Pool 16 ECDHB	349,547,603	354,034,704	-4,487,101
TOTAL STATE AGENCY	\$6,279,072,271	\$5,304,255,729	+974,816,542



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Local Government Investment Pools (LGIP) Summary

Overall Performance – Where We Are Now |

- Local Government Investment Pools:
 - Total assets: \$3,633,919,896.
 - Total earnings: \$4,725,460; +\$2.78MM over May 2017.

Strategy: Highly Liquid for Participant Withdrawals |

Liquidity for the Local Governments will remain our focus through the beginning of the fiscal year. Pools 5 and 7 monthly net yields have increased by 98 and 93 basis points from the same time last year, respectively. The overall participant activity for the year has seen growth of more than \$700 million in market value since the beginning of the fiscal year. Earnings have benefited from our strategy to align investments along expected Fed rate hikes. Over the compared period, the Federal Reserve has risen rates to a level that has led to earnings which are 2.3 times greater than May, 2017. At this point in the year, we will begin another cycle of lowering our carried cash levels and laddering our investments through September as we anticipate another rate hike.

LGIP Investment Pool Balances |

	May 31, 2018	July 31, 2017	FY Change
Pool 5 LGIP	\$1,653,843,422	\$1,127,769,761	+526,073,661
Pool 7 LGIP FF&C	1,479,032,056	1,310,707,855	+168,324,201
Pool 500 LGIP Med.	358,592,274	319,952,281	+38,639,993
Pool 700 LGIP Med FF&C	142,452,143	145,957,694	+3,505,551
TOTAL LGIP	\$3,633,919,895	\$2,904,387,591	+729,532,304

Endowment Summary

Overall Performance – Where We Are Now |

Big Picture:

- FYTD PLETF is outperforming through May 31st
- Total annualized return was 8.67% vs 8.53% – better by 14 basis points overall
- Annualized 10-Year total return through May is 7.26%
- Fair Market Value: \$5.903B
- Up \$124MM MoM
- Up \$308.8MM YoY
- Unrealized Gains: \$3.06B (Up \$413MM or 15.62% YoY)
- May Realized Gains: \$3.8MM
- FYTD Realized Gains: \$191.5MM
- May TRR PLETF 2.32% vs Benchmark 2.39%
- Pool 205 Fixed Income all-time record high at \$2,284,308,108 – outperforming Citi BIG Index by 53bps FYTD

FY 2017 Performance versus Largest Endowment in US:

Endowment	AUM	1-Year %	3-Year %	5-Year %	10-Year %
Arizona PLETF	\$5.9B	11.25%	6.50%	9.67%	6.56%
Harvard University	\$37.1B	8.10%	3.90%	7.60%	4.40%
Alpha		+3.10%	+2.60%	+2.07%	+2.16%

Source: Bloomberg, ASTO

Strategy: Maintain Overweight in Small Cap |

Equity Strategy - Our strategy of being overweight in SmallCap stocks continues to add to our performance. As SmallCap stocks have historically outperformed over long periods of time, our position has taken advantage of this return. Our 10% target is approximately three times more than the SmallCap exposure of the S&P 1500 total market cap. As this fund is invested in perpetuity, our goal is take advantage of this historic outperformance over time. Since inception, our SmallCap exposure has returned 13.79% (+0.79% MoM), outperforming the MidCap exposure at 9.79% (+0.21% MoM), our LargeCap exposure at 5.16% (+0.11% MoM), and our fixed income return of 4.59% (+0.01% MoM).

We will continue to invest in the individual components of the various indices per our investment policy.

Strategy: Keep Duration Short and Add Convexity |

Fixed Income Strategy – Strategy has been to be very defensively positioned on a duration basis such that Pool 205 performs well in a rising rate environment. Presently the portfolio is positioned to perform best in a “bear-steepener” scenario and a “bear-flattener” scenario.

Tim White, Director of Endowments

As the portfolio has benefitted tremendously versus the benchmark FYTD, we will look to lock in relative performance and add more convexity and duration as global economic factors may be changing with European and emerging market weakness. The price of a positively convex security will rise more for a downward move in interest rates than its price declines for an equal upward move in rates.

To do this, we plan to incrementally add longer fixed rate bond positions to hedge against an economic downturn, or any possible credit-driven market dislocations, by adding UST duration at the margin and possibly swapping out of some corporate exposure. Due to larger Prop 123 monthly distributions, pool duration will extend naturally if interest rates do not decrease and our equity portfolios do not realize large appreciation and subsequent cash rebalancing back into our fixed income portfolios. Bearing this in mind, and combined with rising interest rates, we have kept our duration shorter than the benchmark by 2.38 years at 3.65 years (-0.12 MOM) versus 6.03 (-0.03 MOM) for the SBBIG Index – the difference will likely begin to shrink in coming months.

Endowment Monthly Land Sale Proceeds |

- +\$16.2+ MM in May.
- -\$6.5 MM vs April.
- + \$102.2 MM FYTD.

Endowment Prop 123 Distributions |

- \$26.5+ MM total/\$24.6+ MM for K-12 successfully distributed on time from Pool 123 on May 21st
- \$291.6 MM total/\$271.2 MM for K-12 distributed FYTD
- +9.78% K-12 YoY increase
- Pool 123 mechanism working well (2-3 months laddered liquidity)

Pool Performance |

Portfolio standard deviation 6.37 versus benchmark at 6.49.; Portfolio is less risky/volatile versus benchmark.

- Equity Pools:
 - Pool 201 LargeCap Equity virtual match of the index -2bp MOM.
 - Pool 203 MidCap Equity lagged the S&P 400 by -8bps MOM.
 - Pool 204 SmallCap Equity lagged the S&P 600 by -14bps MOM.
 - Pool weightings are within policy tolerance.
- Fixed Income Pools:
 - Pool 205 +0.61% versus SBBIG Index at +0.72% MOM.
 - Pool 205 trailed SBBIG Index by -11bps MOM; outperforming by +89bps YTD.
 - Pool 123 virtually matched its benchmark MOM; currently leading +5bps FYTD.