



TEXAS TECH UNIVERSITY SYSTEM™

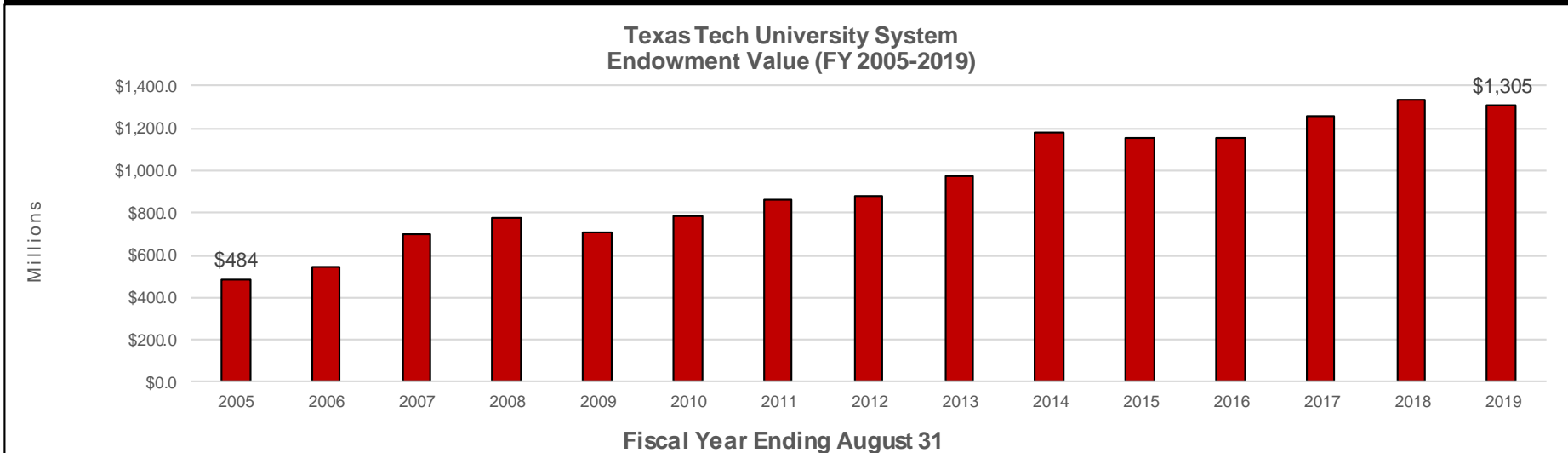
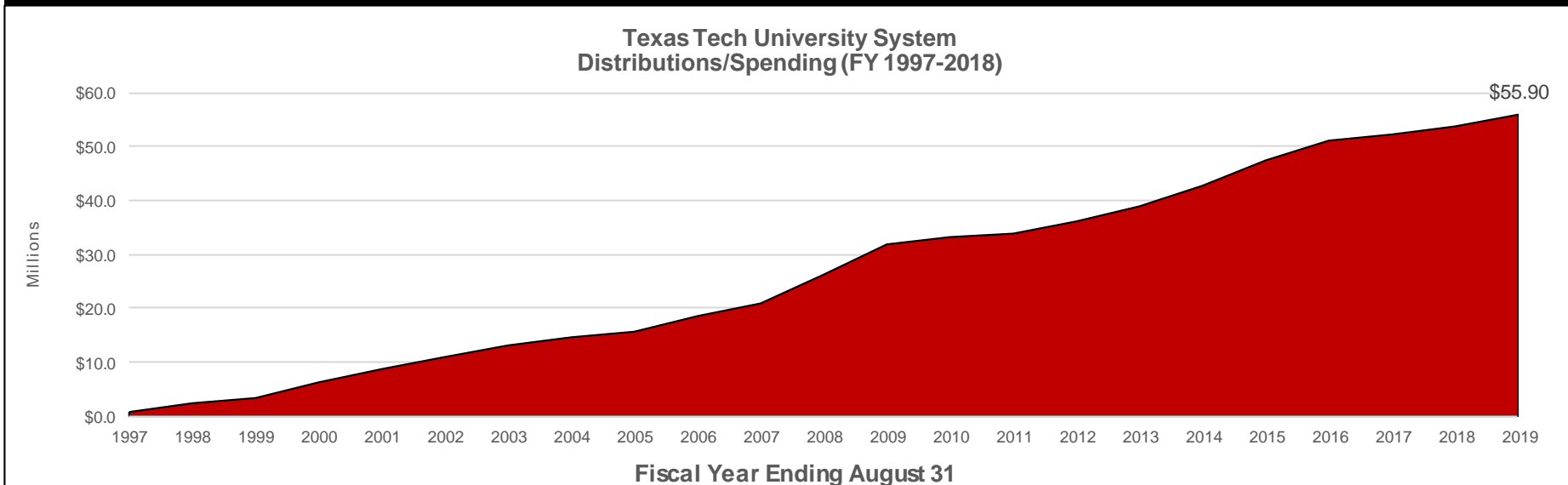
**Board of Regents Report  
for December 2019**

**Texas Tech University Investment Pools**

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**Endowment Data\***

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**HISTORICAL MARKET VALUE (Fiscal Year)**

**HISTORICAL SPENDING (Fiscal Year)**


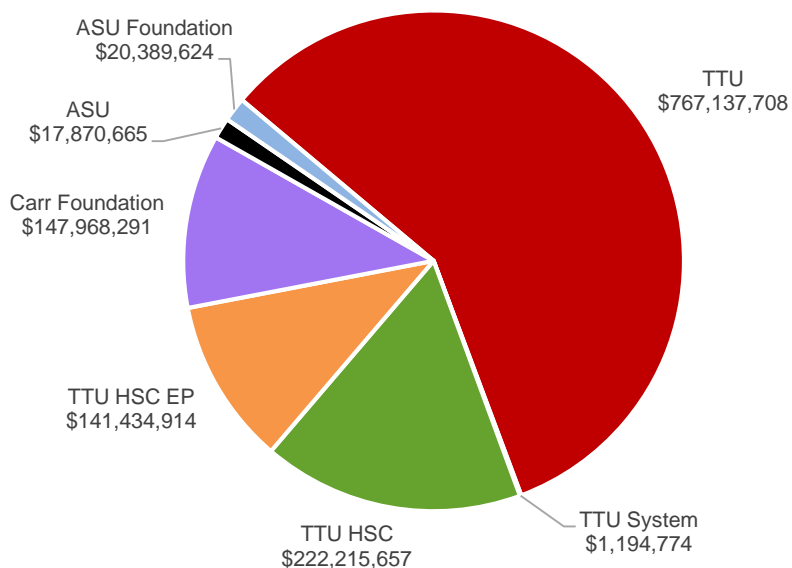
\*Data provided by the TTUS Office of Treasury  
The 4.5% distribution rate has been realized every year since inception.

**Endowment Data\* (cont.)**

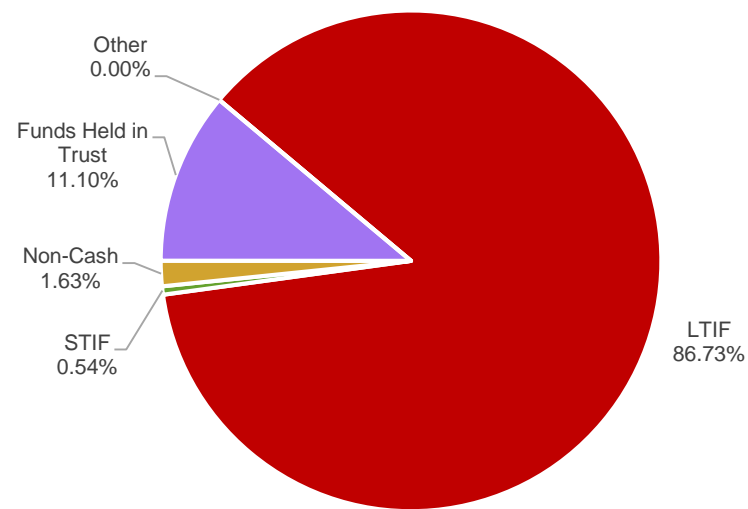
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**TOTAL ENDOWMENT (September 1, 2019 - Nov 30, 2019)**

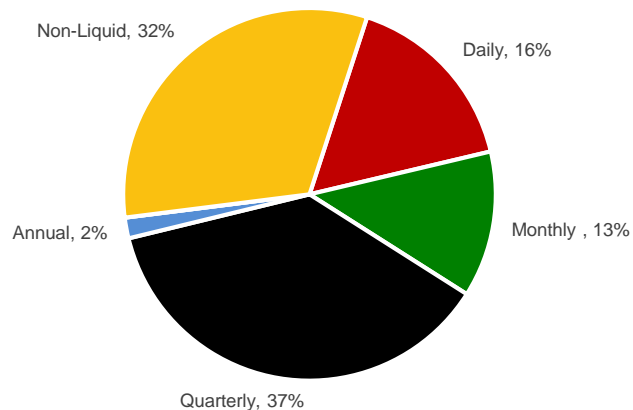
**Texas Tech University System  
Endowment Breakout  
by Institution**



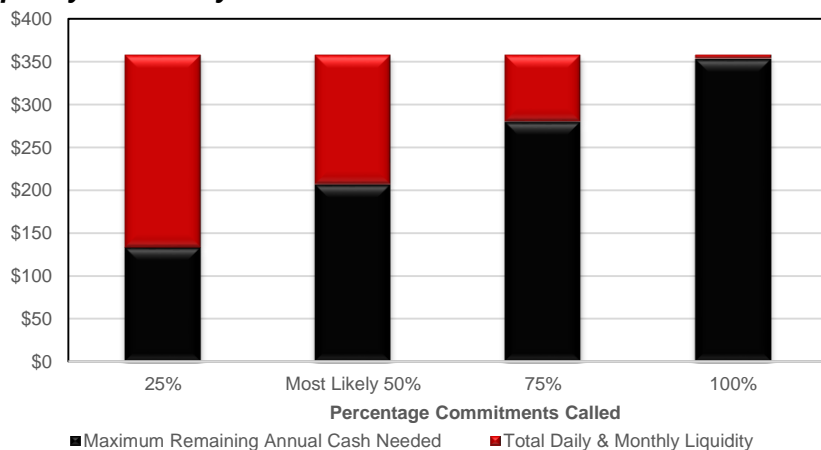
**Texas Tech University System  
Endowment Breakout  
by Pool**

**Summary of Endowment**

	TTU	TTU System	TTU HSC	TTU HSC EP	Carr Foundation	ASU	ASU Foundation	Total
LTIF	\$712,428,002	\$1,186,774	\$153,806,617	\$107,232,228	\$130,733,664	\$17,477,175	\$20,389,624	\$1,143,254,083
STIF	\$4,171,217	\$8,000	\$2,509,486	\$5,181	\$0	\$393,469	\$0	\$7,087,353
Non-Cash	\$3,610,524	\$0	\$678,583	\$0	\$17,234,627	\$0	\$0	\$21,523,733
Funds Held in Trust	\$46,927,965	\$0	\$65,220,971	\$34,197,505	\$0	\$0	\$0	\$146,346,441
Other	\$0	\$0	\$0	\$0	\$0	\$21	\$0	\$21
<b>Total</b>	<b>\$767,137,708</b>	<b>\$1,194,774</b>	<b>\$222,215,657</b>	<b>\$141,434,914</b>	<b>\$147,968,291</b>	<b>\$17,870,665</b>	<b>\$20,389,624</b>	<b>\$1,318,211,632</b>

**LTIF Liquidity****LTIF Liquidity**

LTIF	Liquidity	
Daily	\$201,440,296	16.3%
Monthly	\$156,950,414	12.7%
Quarterly	\$459,728,773	37.2%
Annual	\$22,244,941	1.8%
2-Year	\$0	0.0%
Non-Liquid	\$395,465,611	32.0%
<b>Total LTIF</b>	<b>1,235,830,034</b>	<b>100%</b>

**Liquidity Sensitivity**

	<u>Commitment</u>	<u>Capital Called</u>	<u>Distributions</u>	<u>Account Balance</u>	<u>Remaining Commitment</u>
Private Equity	\$300,482,445	\$202,131,665	\$88,212,160	\$161,462,876	\$98,350,780
Private Credit	\$489,739,797	\$343,062,179	\$104,838,678	\$104,674,822	\$146,677,618
Private Real Assets	\$288,316,339	\$241,407,797	\$252,884,739	\$93,494,444	\$46,908,542
<b>Total Illiquid Assets</b>	<b>\$1,078,538,581</b>	<b>\$786,601,641</b>	<b>\$445,935,577</b>	<b>\$359,632,142</b>	<b>\$291,936,940</b>
<b>Annual Spending</b>					<b>\$61,000,000</b>
<b>Total Committed Funds</b>					<b>\$352,936,940</b>

**Unfunded Commitments - Sensitivity Analysis**

Maximum Remaining Annual Cash Needed  
 Percentage of Daily & Monthly Liquidity

<u>25% Called</u>	<u>Most Likely 50% Called</u>	<u>75% Called</u>	<u>100% Called</u>
\$133,984,235	\$206,968,470	\$279,952,705	\$352,936,940
38%	58%	78%	99%



## Market Data

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Benchmarks	Underlying	Weight	MTD Perf.	QTD Perf.	Calendar YTD	Fiscal YTD	Nacubo YTD	1 Year Perf.	3 Year Perf.	5 Year Perf.	10 Year Perf.
<b>Calculated Policy</b>			<b>2.02%</b>	<b>3.87%</b>	<b>13.17%</b>	<b>4.94%</b>	<b>4.92%</b>	<b>13.17%</b>	<b>8.66%</b>	<b>6.74%</b>	<b>7.84%</b>
Equity	Global Index (MSCI ACWI with USA Net)	30%	3.52%	8.95%	27.16%	11.29%	9.06%	27.16%	12.79%	8.74%	9.02%
Debt	Global Bonds (Barclays Global Agg)	20%	0.58%	0.49%	6.84%	-0.54%	1.20%	6.84%	4.27%	2.31%	2.48%
Diversifying Assets	HFRX Global Hedge Fund	20%	1.22%	2.57%	8.62%	3.03%	4.22%	8.62%	2.41%	3.60%	4.53%
Private Investments	Private Market Composite	30%	2.02%	2.02%	6.94%	3.71%	3.71%	6.94%	11.29%	9.84%	12.38%
<b>Other Benchmarks</b>											
Equity	S&P 500 Total Return		3.02%	9.07%	31.49%	11.11%	10.92%	31.49%	15.27%	11.70%	13.56%
Equity	Non US Developed Equity (MSCI EAFE)		3.25%	8.17%	22.01%	11.27%	7.01%	22.01%	9.56%	5.67%	5.54%
Equity	EM Equities (MSCI EMF)		7.46%	11.84%	18.42%	13.97%	7.09%	18.42%	11.57%	5.61%	3.69%
Debt	EM Bonds (JPM EM Bond Index)		1.88%	2.09%	14.42%	1.72%	3.45%	14.42%	6.06%	5.88%	6.57%
Cash & Alpha Pool	90 Day T-Bills		0.13%	0.40%	2.12%	0.56%	0.91%	2.12%	1.69%	1.08%	0.58%
Hedge Funds	HFR1 FOF Composite		1.64%	3.03%	8.33%	2.57%	2.04%	8.33%	3.87%	2.35%	2.82%
Private Investments	Private Market Composite		2.02%	2.02%	6.94%	3.71%	3.71%	6.94%	11.29%	9.84%	12.38%

### CIO NOTES:

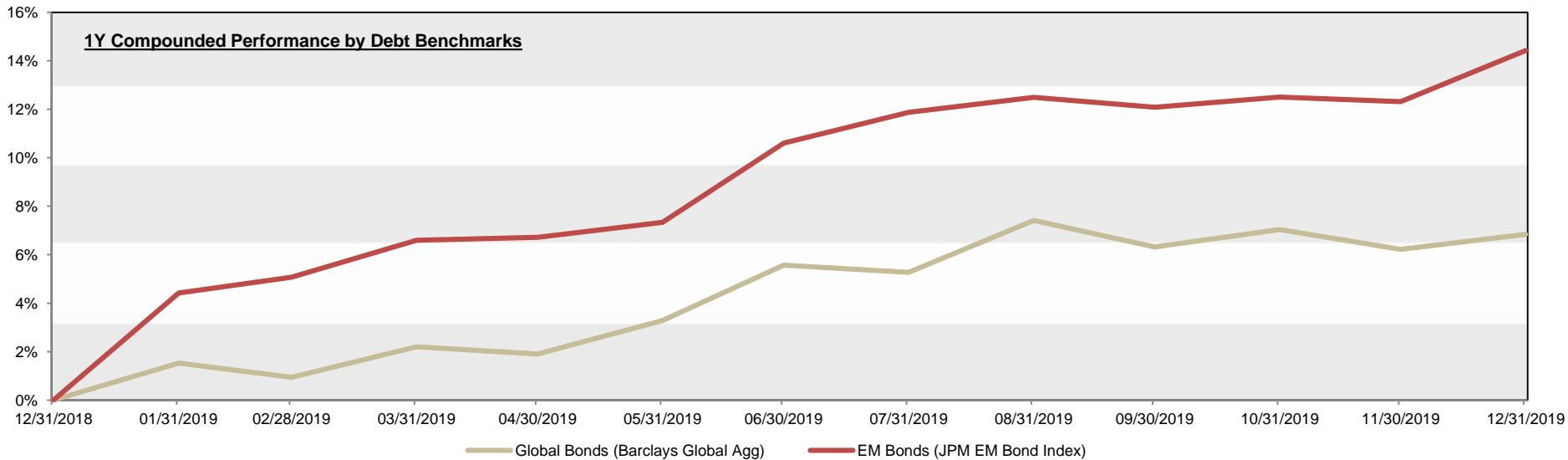
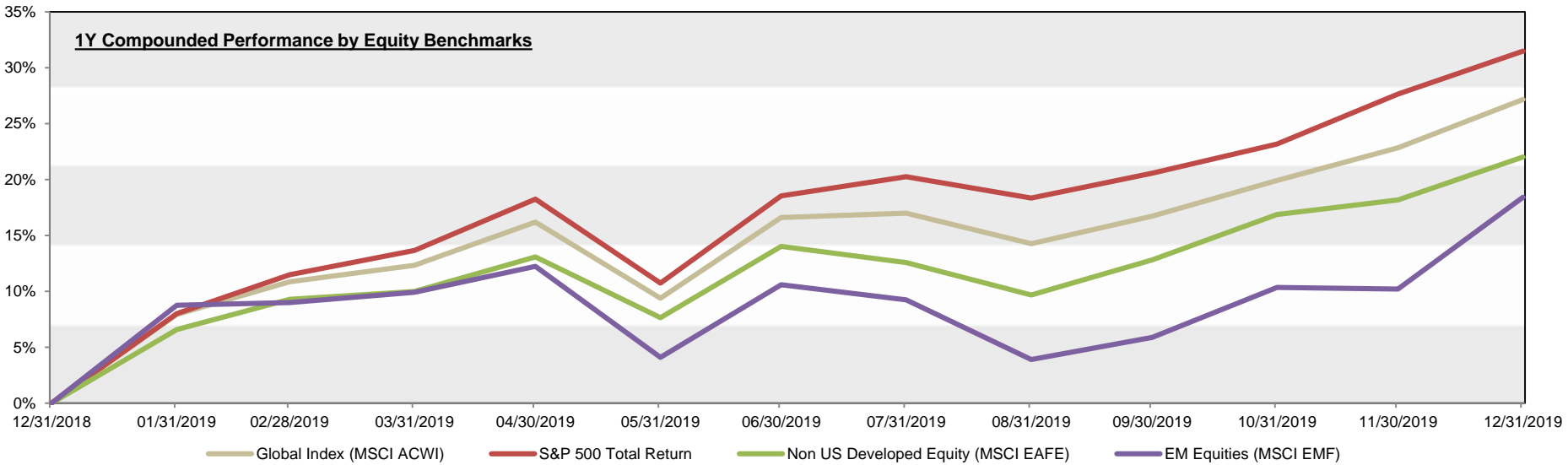
Global equities went out with a bang, building on their already robust returns for the year, with the MSCI ACWI Index up 27% in 2019. US stocks led the charge with the S&P 500 Index returning 31.5% for the 12 months ended December 31. International and emerging markets also posted solid results, with the MSCI EAFE and MSCI Emerging Markets indexes up 22% and 18.4%, respectively, during the same period.

In fixed income, rates ended December modestly higher with the 10- and 30-year Treasury yields increasing 14 and 19 basis points, respectively. Despite this movement, yields in most developed markets are significantly lower relative to 2018. Additionally, spreads continued to compress across the credit spectrum with spreads on the Barclays US Investment Grade and High Yield indexes declining 12 and 34 basis points, respectively, last month. High-yield spreads experienced the most significant move in 2019, falling 1.90% to end the year at 3.36%. Within emerging markets, local-currency debt outperformed hard-currency securities during the month as currencies broadly appreciated relative to the US dollar.

Within real assets, spot WTI Crude Oil increased 5.1% during the month, reflecting heightened geopolitical risks and dwindling supply. Spot prices increased 35.3% for the year – marking the largest annual gain since 2016.

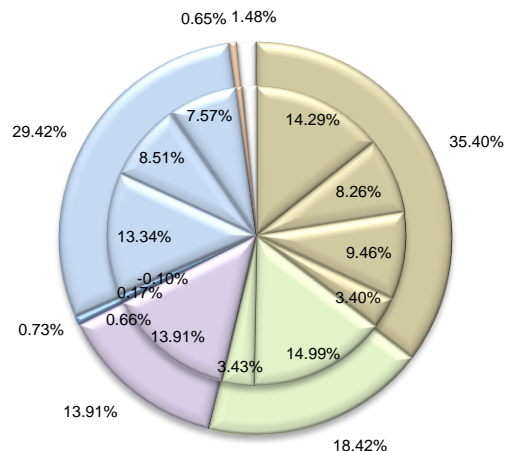
**Market Data (cont.)**

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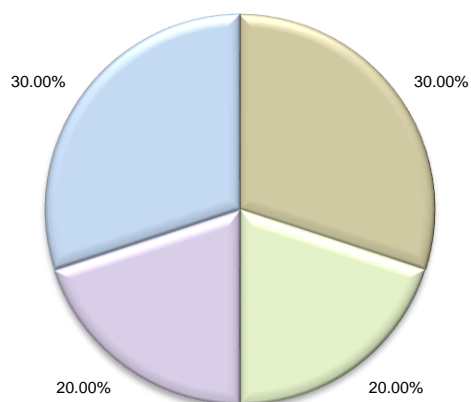


# LTIF: Asset Class Allocation: Actual vs. Target

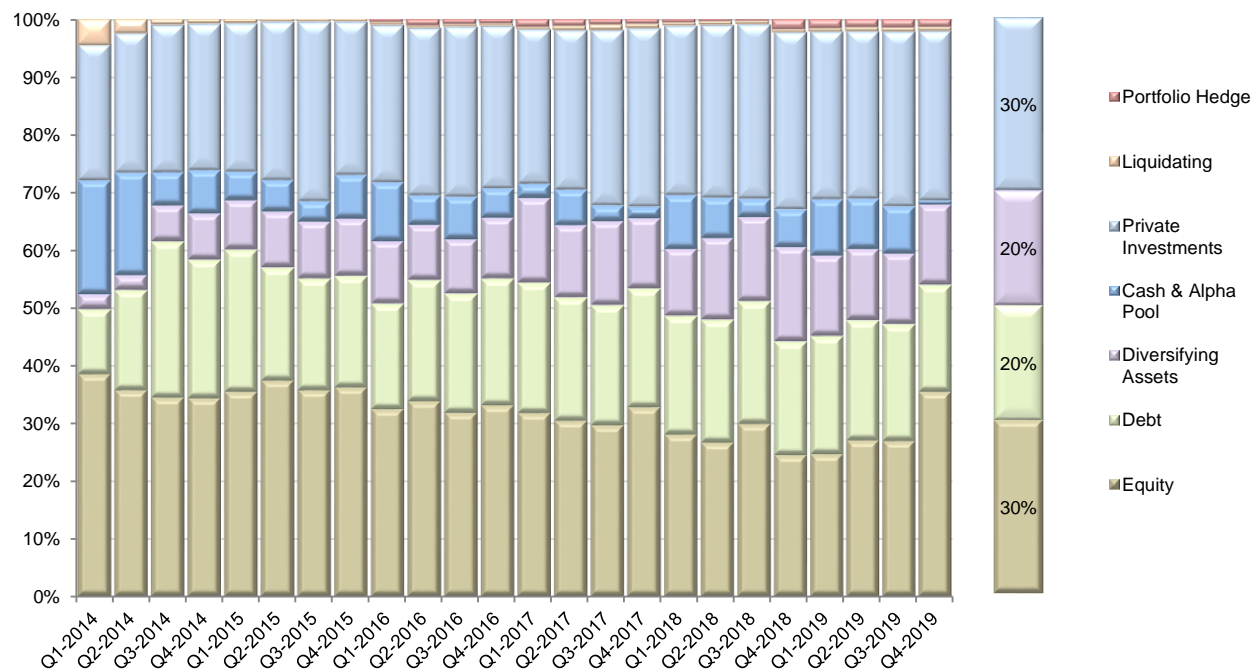
## Actual Allocation



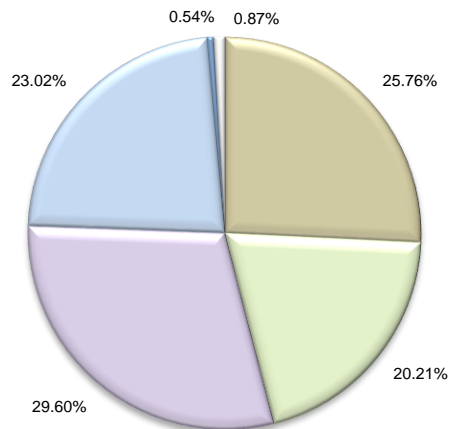
## Target Allocation



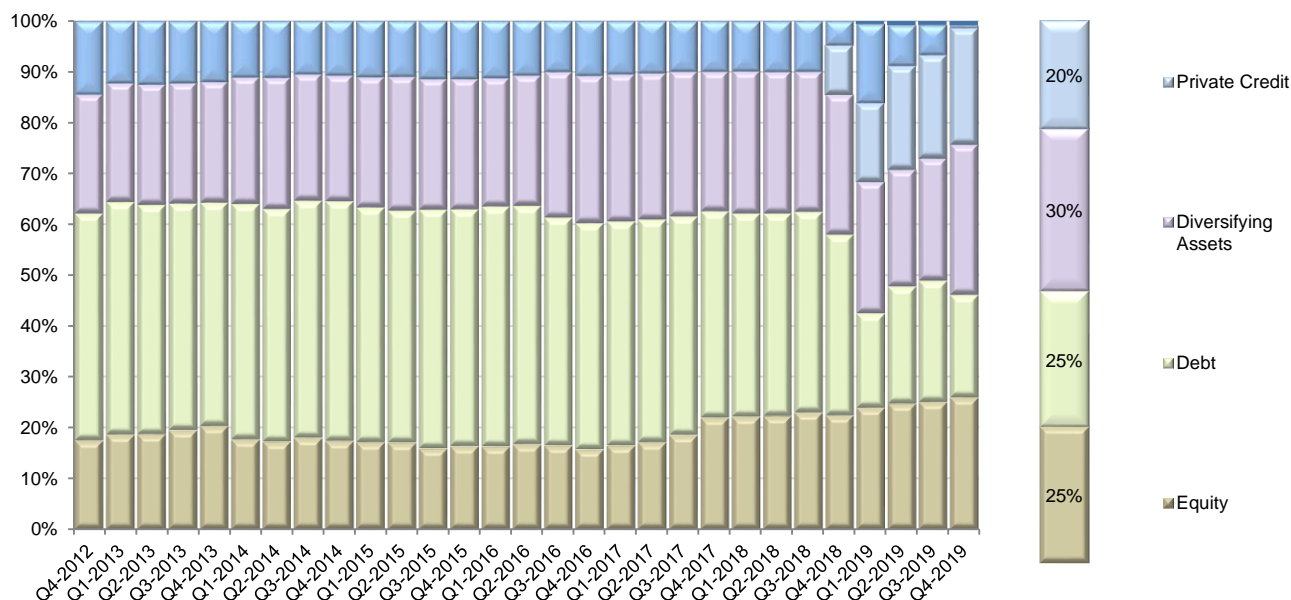
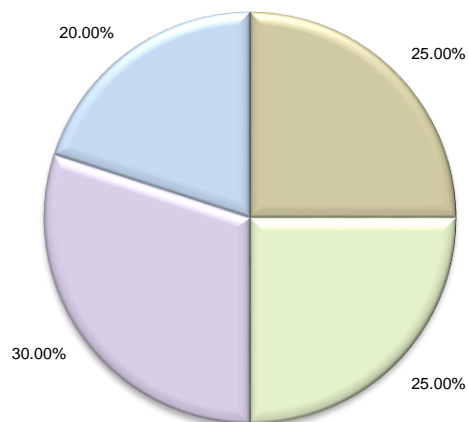
Asset Class	Actual \$ Allocation			Total % Allocation	Target % Allocation	Target Range
	Physical	Synthetic	Total			
Equity	102,024,504	335,448,114	437,472,617	35.40%	30%	20% - 40%
Debt	227,669,528	0	227,669,528	18.42%	20%	10% - 30%
Diversifying Assets	151,910,363	19,964,472	171,874,835	13.91%	20%	10% - 30%
Cash & Alpha Pool	366,870,917	-357,901,304	8,969,613	0.73%	0%	0% - 10%
Private Investments	363,567,594	0	363,567,594	29.42%	30%	20% - 40%
Liquidating	8,024,568	0	8,024,568	0.65%	0%	
Portfolio Hedge	15,762,560	2,488,718	18,251,278	1.48%	0%	
Total	1,235,830,034	0	1,235,830,034	100%	100%	



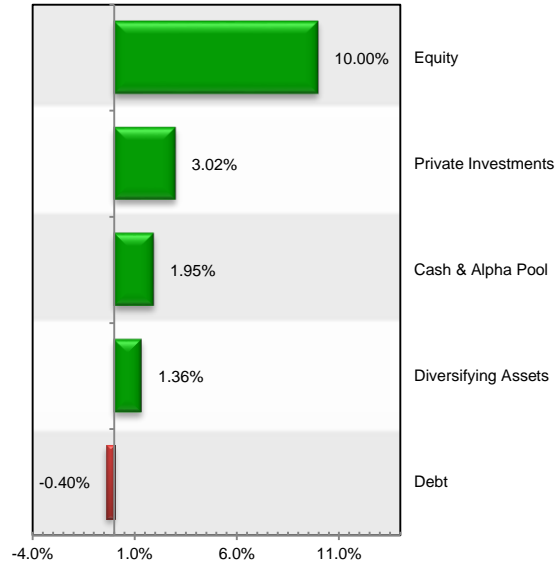


**ITIF Asset Class Allocation: Actual vs. Target**
**Actual Allocation**


Asset Class	Actual \$ Allocation	Total % Allocation	Target % Allocation	Target Range
Equity	215,011,313	25.76%	25%	20% - 30%
Debt	168,646,499	20.21%	25%	20% - 30%
Diversifying Assets	247,064,779	29.60%	30%	25% - 35%
Private Credit	192,088,081	23.02%	20%	15% - 25%
Cash	4,507,843	0.54%	0%	0% - 15%
Portfolio Hedge	7,247,567	0.87%	0%	0% - 15%
<b>Total Exposure</b>	<b>834,566,082</b>	<b>100%</b>	<b>100%</b>	

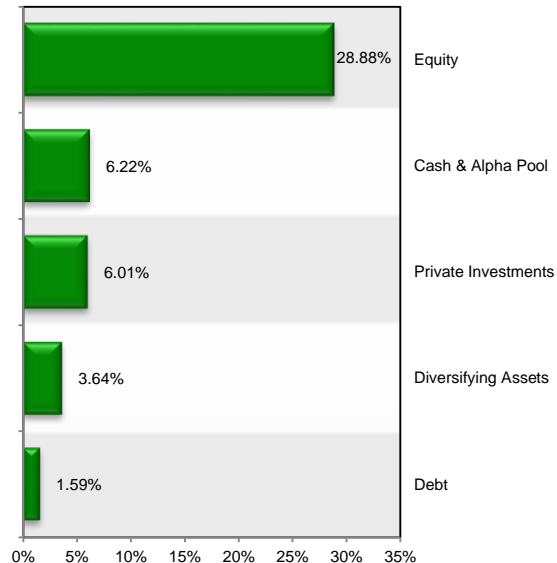
**Target Allocation**


\*Total Exposure value includes the synthetic portfolio hedge exposure.

**LTIF Asset Class Performance: Actual vs. Policy**
**QTD Performance**


Asset Class	Month				
	Physical Return	Synthetic Overlay	Alpha Pool + Cash	Total Return	Policy
Equity	2.96%	3.74%	0.98%	4.28%	3.52%
Debt	0.24%			0.24%	0.58%
Diversifying Assets	0.16%	-0.12%	0.98%	0.24%	1.22%
Cash & Alpha Pool	0.98%			0.98%	
Private Investments	1.90%			1.90%	2.02%
Portfolio Hedge Contr.				-0.05%	
Total	1.19%	3.48%	0.98%	1.94%	2.02%

Asset Class	QTD				
	Physical Return	Synthetic Overlay	Alpha Pool + Cash	Total Return	Policy
Equity	7.51%	8.70%	1.95%	10.00%	8.95%
Debt	-0.40%			-0.40%	0.49%
Diversifying Assets	1.01%	1.86%	1.95%	1.36%	2.57%
Cash & Alpha Pool	1.95%			1.95%	
Private Investments	3.02%			3.02%	2.02%
Portfolio Hedge Contr.				-0.19%	
Total	2.08%	8.24%	1.95%	3.82%	3.87%

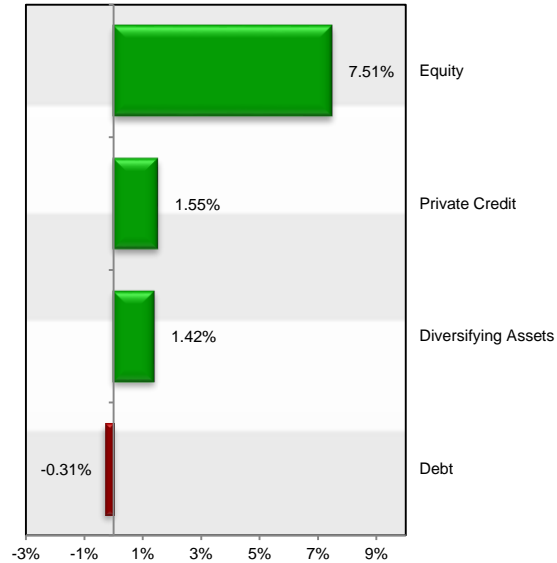
**One Year Performance**


Asset Class	Calendar YTD				
	Physical Return	Synthetic Overlay	Alpha Pool + Cash	Total Return	Policy
Equity	27.96%	21.84%	6.22%	28.88%	27.16%
Debt	1.59%			1.59%	6.84%
Diversifying Assets	4.63%	-5.27%	6.22%	3.64%	8.62%
Cash & Alpha Pool	6.22%			6.22%	
Private Investments	6.01%			6.01%	6.94%
Portfolio Hedge Contr.				0.39%	
Total	6.07%	18.28%	6.22%	10.92%	13.17%

Asset Class	1 Year				
	Physical Return	Synthetic Overlay	Alpha Pool + Cash	Total Return	Policy
Equity	27.96%	21.84%	6.22%	28.88%	27.16%
Debt	1.59%			1.59%	6.84%
Diversifying Assets	4.63%	-5.27%	6.22%	3.64%	8.62%
Cash & Alpha Pool	6.22%			6.22%	
Private Investments	6.01%			6.01%	6.94%
Portfolio Hedge Contr.				0.39%	
Total	6.07%	18.28%	6.22%	10.92%	13.17%

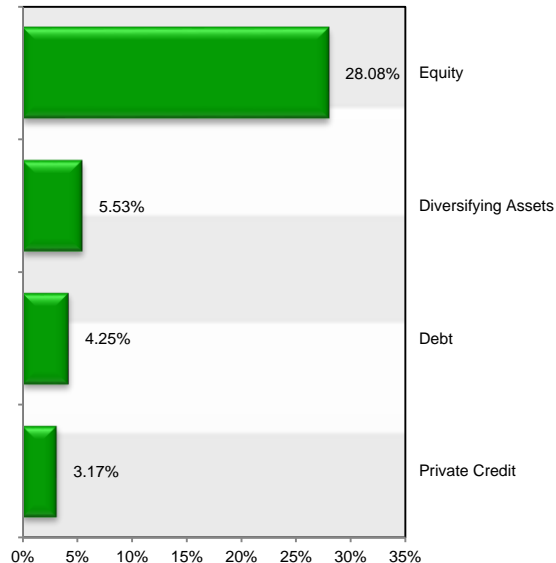
**ITIF Asset Class Performance: Actual vs. Policy**

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**QTD Performance**

Asset Class	Month	
	Total Return	Policy
Equity	2.96%	3.52%
Debt	0.24%	0.58%
Diversifying Assets	0.27%	1.22%
Private Credit	0.08%	1.61%
Portfolio Hedge Contribution	-0.03%	n/a
Total	0.74%	1.71%

Asset Class	QTD	
	Total Return	Policy
Equity	7.51%	8.95%
Debt	-0.31%	0.49%
Diversifying Assets	1.42%	2.57%
Private Credit	1.55%	1.61%
Portfolio Hedge Contribution	-0.11%	n/a
Total	2.26%	3.42%

**One Year Performance**

Asset Class	Calendar YTD	
	Total Return	Policy
Equity	28.08%	27.16%
Debt	4.25%	6.84%
Diversifying Assets	5.53%	8.62%
Private Credit	3.17%	5.53%
Portfolio Hedge Contribution	n/a	n/a
Total	9.29%	12.05%

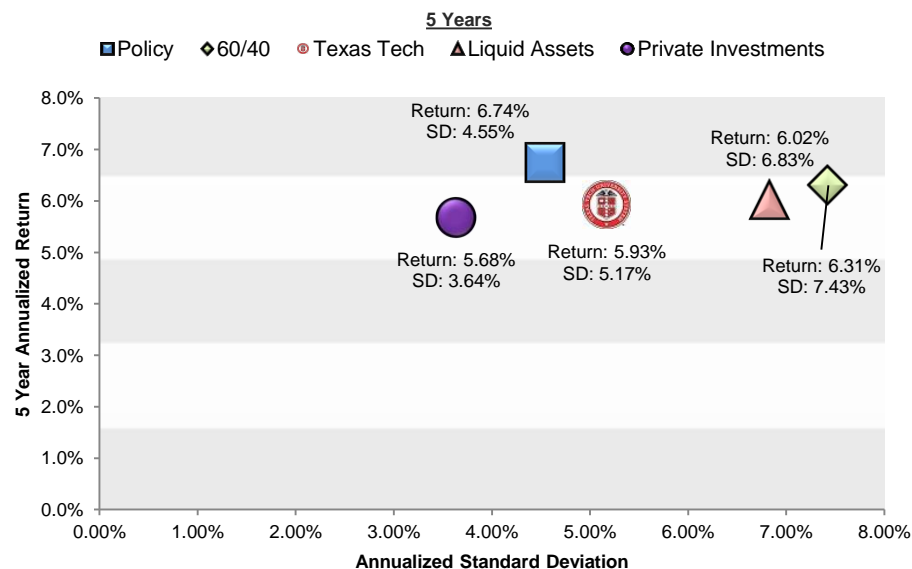
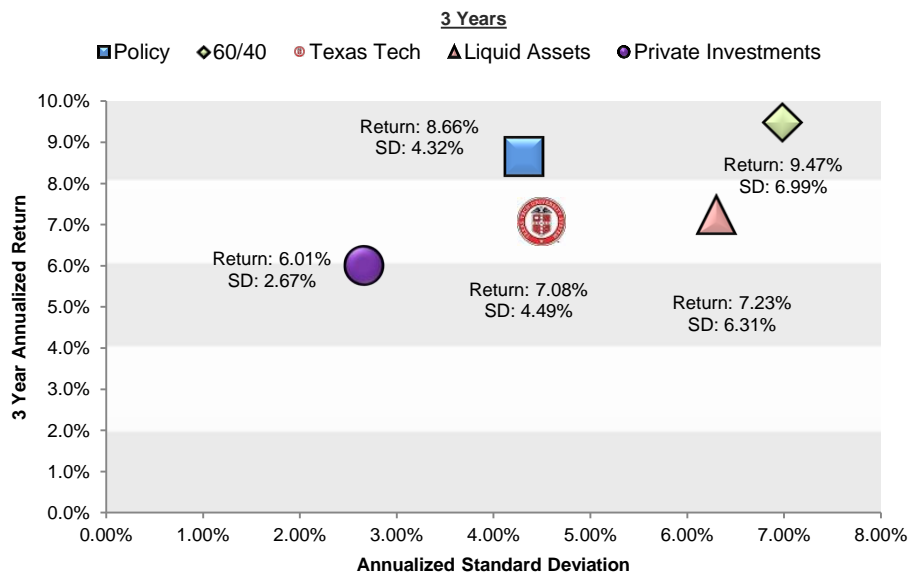
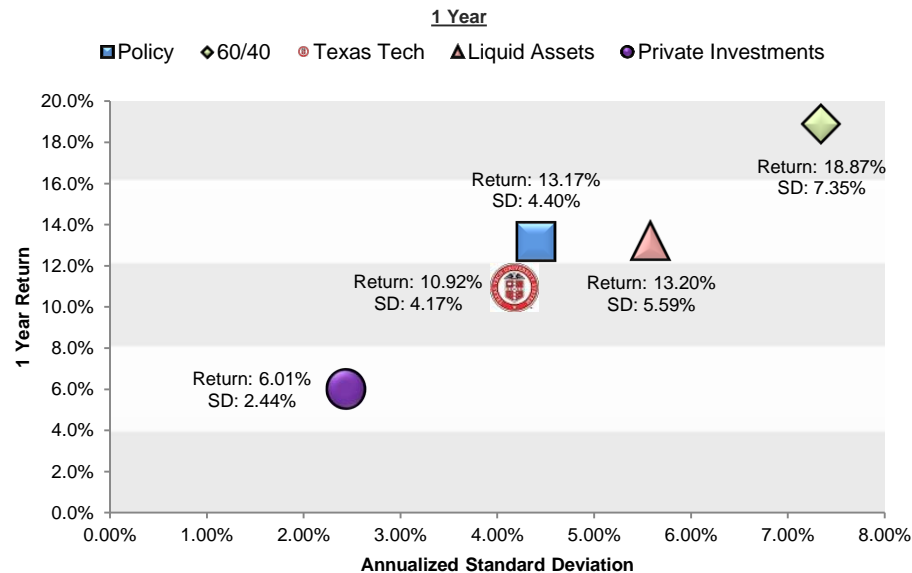
Asset Class	1 Year	
	Total Return	Policy
Equity	28.08%	27.16%
Debt	4.25%	6.84%
Diversifying Assets	5.53%	8.62%
Private Credit	3.17%	5.53%
Portfolio Hedge Contribution	n/a	n/a
Total	9.29%	12.05%

**LTIF: Risk/Return of Endowment vs. 60/40 Portfolio & Policy Returns**

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**Commentary**

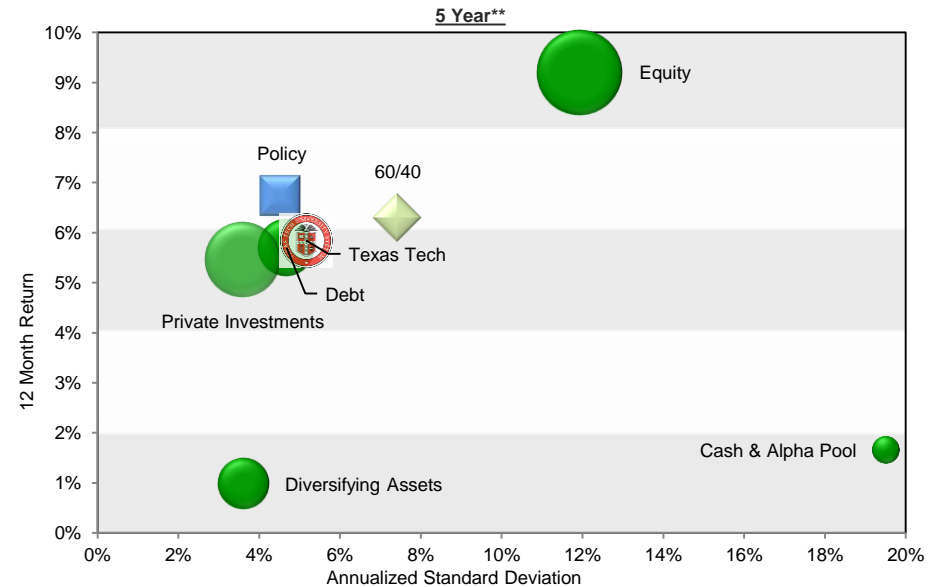
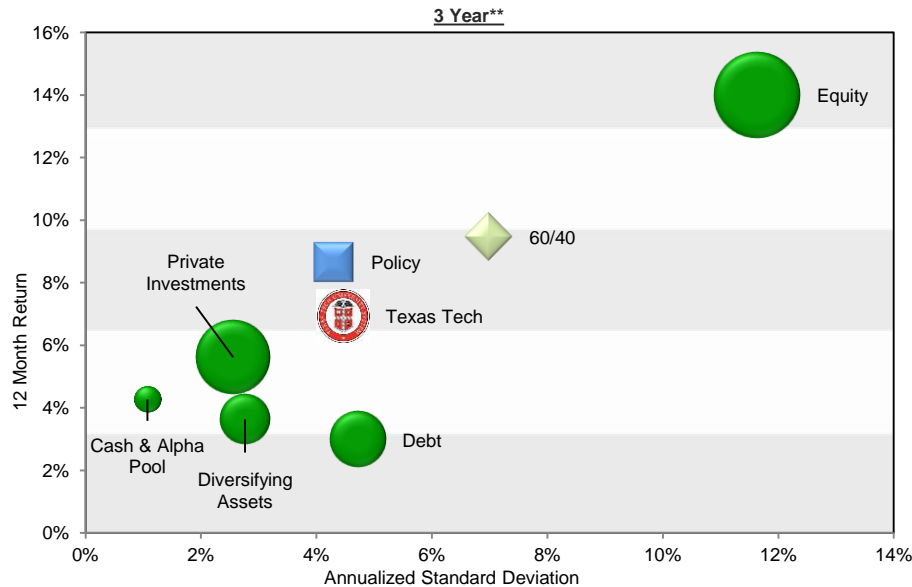
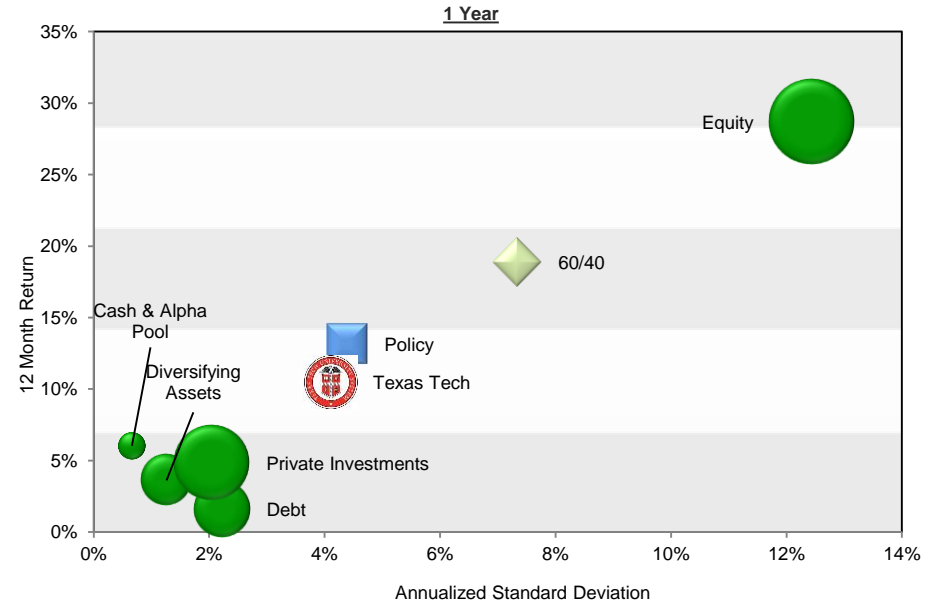
- The Texas Tech portfolio is less volatile than the 60/40 portfolio over all time horizons.
- The Texas Tech portfolio underperforms the 60/40 over all time horizons.
- Volatility (measured by standard deviation) on the Texas Tech portfolio has decreased over the past 12 months compared with the annualized 3-year and 5-year volatility.



LTIF: Risk Profile\*

Commentary

- Private Investments and Cash & Alpha Pool have provided the highest risk adjusted returns over the last 12 months
- Debt has generated the lowest risk adjusted returns over the last 12 months.



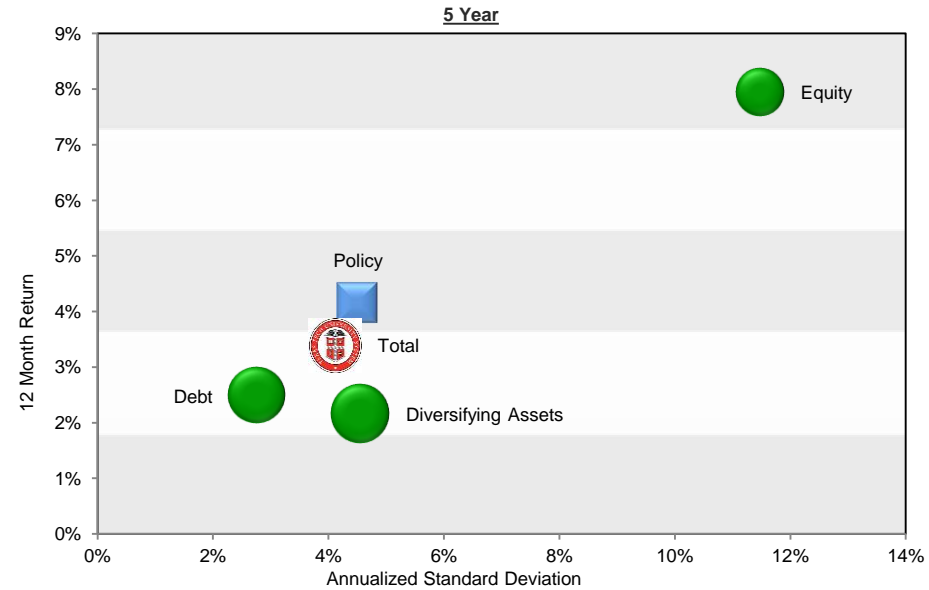
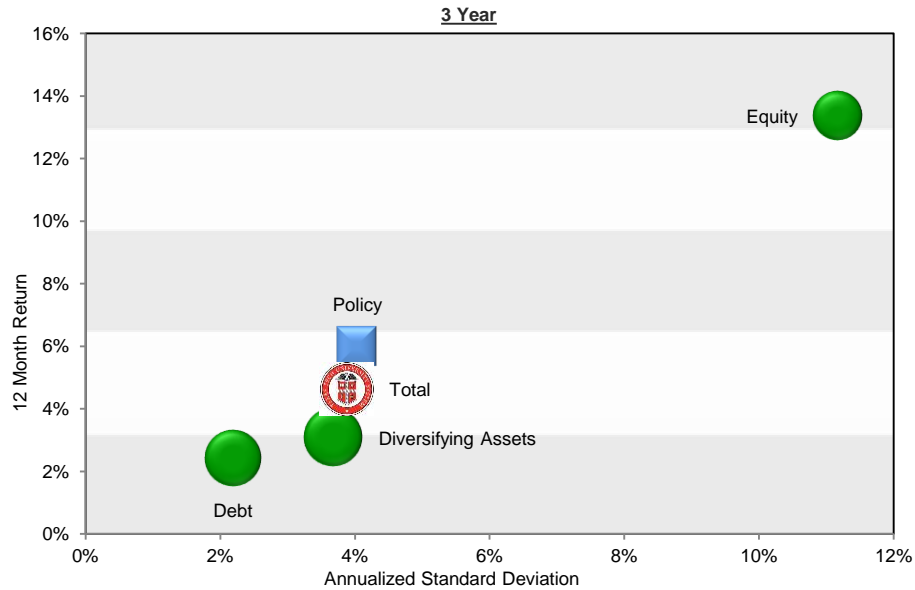
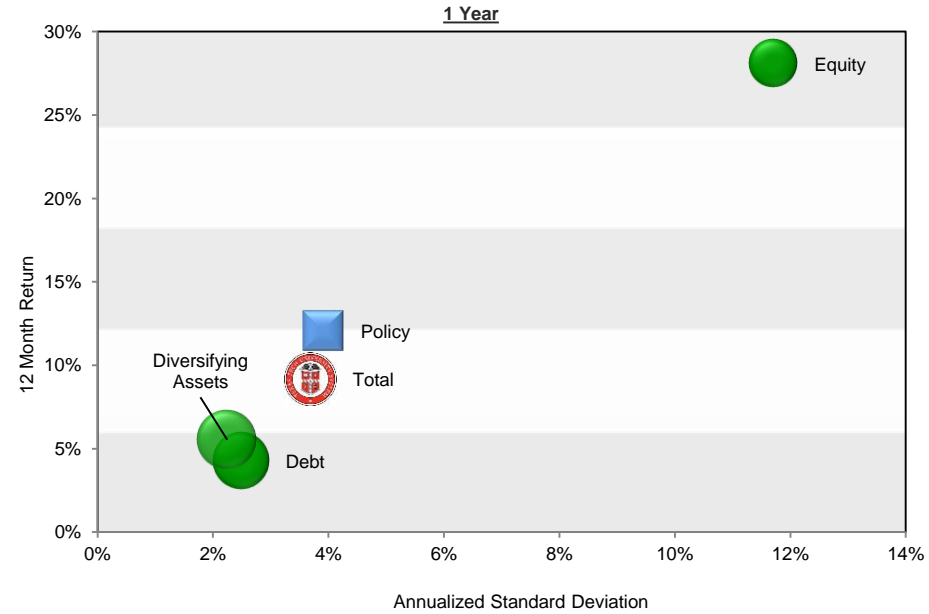
\* Excluding Liquidating

\*\* Cash & Alpha Pool values are post-Aegis

## ITIF: Risk Profile

*Commentary*

- Equity has provided the highest risk adjusted returns, and Debt has provided the lowest risk adjusted returns.




**LTIF: Appendix I – Sub-Asset Detail**

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Fund	Current Exposure	MTD Perf.	QTD Perf.	Calendar YTD	Fiscal YTD (08/31)	Nacubo YTD (06/30)	Trailing 1 Yr	Trailing 3 Yr	Trailing 5 Yr	Trailing 10 Yr
<b>TOTAL</b>	<b>1,235,830,034</b>	<b>1.94%</b>	<b>3.82%</b>	<b>10.92%</b>	<b>4.30%</b>	<b>3.59%</b>	<b>10.92%</b>	<b>7.08%</b>	<b>5.93%</b>	<b>6.63%</b>
<b>Policy</b>		<b>2.02%</b>	<b>3.87%</b>	<b>13.17%</b>	<b>4.94%</b>	<b>4.92%</b>	<b>13.17%</b>	<b>8.66%</b>	<b>6.74%</b>	<b>7.84%</b>
<b>Portfolio Hedge Contribution</b>	<b>18,251,278</b>	<b>-0.05%</b>	<b>-0.19%</b>	<b>0.39%</b>	<b>-0.36%</b>	<b>-0.21%</b>	<b>0.39%</b>	<b>-0.25%</b>	<b>n/a</b>	<b>n/a</b>
<b>Equity</b>	<b>437,472,617</b>	<b>4.28%</b>	<b>10.00%</b>	<b>28.88%</b>	<b>12.86%</b>	<b>10.36%</b>	<b>28.88%</b>	<b>14.04%</b>	<b>9.23%</b>	<b>9.53%</b>
<i>Equity Policy Benchmark (MSCI ACWI with USA Net)</i>		<b>3.52%</b>	<b>8.95%</b>	<b>27.16%</b>	<b>11.29%</b>	<b>9.06%</b>	<b>27.16%</b>	<b>12.79%</b>	<b>8.74%</b>	<b>9.02%</b>
<b>US Equity</b>	176,554,355	4.10%	10.57%	31.98%	13.13%	12.51%	31.98%	15.49%	11.98%	12.52%
<i>Benchmark: S&amp;P 500 Total Return</i>		3.02%	9.07%	31.49%	11.11%	10.92%	31.49%	15.27%	11.70%	13.56%
<b>Global Equity</b>	102,024,504	2.96%	7.51%	28.03%	9.50%	7.42%	28.03%	14.97%	9.71%	n/a
<i>Benchmark: MSCI ACWI with USA Net</i>		3.52%	8.95%	27.16%	11.29%	9.06%	27.16%	12.79%	8.74%	9.02%
<b>Non US Developed Equity</b>	116,886,259	4.00%	9.67%	26.22%	13.84%	9.02%	26.22%	10.50%	6.55%	6.63%
<i>Benchmark: MSCI EAFE (Net)</i>		3.25%	8.17%	22.01%	11.27%	7.01%	22.01%	9.56%	5.67%	5.54%
<b>Non US Emerging Markets Equity</b>	42,007,500	9.62%	14.60%	22.55%	16.72%	8.76%	22.55%	16.83%	10.57%	6.94%
<i>Benchmark: MSCI EMF (Net)</i>		7.46%	11.84%	18.42%	13.97%	7.09%	18.42%	11.57%	5.61%	3.69%
<b>Alternative Equity</b>	-	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>Benchmark: MSCI ACWI with USA Net</i>		3.52%	8.95%	27.16%	11.29%	9.06%	27.16%	12.79%	8.74%	9.02%
<b>Debt</b>	<b>227,669,528</b>	<b>0.24%</b>	<b>-0.40%</b>	<b>1.59%</b>	<b>0.11%</b>	<b>-1.02%</b>	<b>1.59%</b>	<b>2.99%</b>	<b>5.69%</b>	<b>6.32%</b>
<i>Debt Policy Benchmark (Barclays Global Agg)</i>		<b>0.58%</b>	<b>0.49%</b>	<b>6.84%</b>	<b>-0.54%</b>	<b>1.20%</b>	<b>6.84%</b>	<b>4.27%</b>	<b>2.31%</b>	<b>2.48%</b>
<b>Sovereign/Investment Grade Bonds</b>	-	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>Benchmark: Barclays Global Aggregate</i>		0.58%	0.49%	6.84%	-0.54%	1.20%	6.84%	4.27%	2.31%	2.48%
<b>Credit</b>	185,247,146	0.95%	0.13%	2.38%	0.66%	0.16%	2.38%	5.76%	7.52%	8.63%
<i>Benchmark: Barclays Global Aggregate</i>		0.58%	0.49%	6.84%	-0.54%	1.20%	6.84%	4.27%	2.31%	2.48%
<b>Emerging Markets Debt</b>	42,422,382	-2.77%	-2.70%	-1.63%	-2.28%	-6.00%	-1.63%	-4.91%	2.48%	4.95%
<i>Benchmark: JP Morgan EM Bond Index</i>		1.88%	2.09%	14.42%	1.72%	3.45%	14.42%	6.06%	5.88%	6.57%
<b>Diversifying Assets</b>	<b>171,874,835</b>	<b>0.24%</b>	<b>1.36%</b>	<b>3.64%</b>	<b>1.18%</b>	<b>1.37%</b>	<b>3.64%</b>	<b>3.64%</b>	<b>0.99%</b>	<b>-0.24%</b>
<i>Benchmark: HFRXGL Index</i>		1.22%	2.57%	8.62%	3.03%	4.22%	8.62%	2.41%	3.60%	4.53%
<b>Cash &amp; Alpha Pool**</b>	<b>8,969,613</b>	<b>0.98%</b>	<b>1.95%</b>	<b>6.22%</b>	<b>2.26%</b>	<b>3.12%</b>	<b>6.22%</b>	<b>4.33%</b>	<b>4.10%</b>	<b>4.00%</b>
<b>Cash Collateral</b>	94,835,899	0.13%	1.07%	2.76%	1.23%	1.61%	2.76%	1.63%	1.02%	n/a
<b>Collateral Held Elsewhere</b>	1,224,637	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	n/a	n/a
<b>Adjustments for Synthetic Exposure</b>	(357,901,304)									0.00%
<b>Alpha Pool</b>	260,337,750	1.33%	2.43%	7.92%	2.82%	3.90%	7.92%	5.77%	5.03%	5.65%
<i>Benchmark: HFRI FOF Index</i>		1.64%	3.03%	8.33%	2.57%	2.04%	8.33%	3.87%	2.35%	2.82%
<b>Cash</b>	<b>10,472,631</b>	<b>0.28%</b>	<b>0.55%</b>	<b>2.12%</b>	<b>0.63%</b>	<b>1.06%</b>	<b>2.12%</b>	<b>1.84%</b>	<b>-2.85%</b>	<b>-1.32%</b>
<b>Liquidating</b>	<b>8,024,568</b>	<b>-2.38%</b>	<b>5.09%</b>	<b>2.75%</b>	<b>6.03%</b>	<b>-0.29%</b>	<b>2.75%</b>	<b>29.90%</b>	<b>20.24%</b>	<b>9.53%</b>
<b>Private Investments</b>	<b>363,567,594</b>	<b>1.90%</b>	<b>3.02%</b>	<b>6.01%</b>	<b>2.30%</b>	<b>2.41%</b>	<b>6.01%</b>	<b>6.01%</b>	<b>5.68%</b>	<b>8.52%</b>
<i>Benchmark: Private Market Composite</i>		2.02%	0.00%	6.94%	3.71%	3.71%	6.94%	11.29%	9.84%	12.38%
<b>Private Equity</b>	164,854,489	3.79%	3.80%	8.37%	3.94%	4.02%	8.37%	5.00%	4.73%	8.09%
<b>Private Credit</b>	105,107,909	0.08%	1.55%	3.17%	0.01%	0.13%	3.17%	6.73%	6.32%	8.12%
<b>Private Diversifying Assets</b>	93,605,196	0.65%	3.24%	5.54%	2.23%	2.38%	5.54%	5.71%	5.30%	8.91%

\* Including Aegis

\*\* Excluding Aegis

Private Benchmark, as of 7/1/2018, is defined as the trailing 5 year return of 70% MIMUAWON Index, 15% LF98TRUU Index, 15% LG30TRUU Index, rolled quarterly, + 250bps p/a



## ITIF: Appendix II – ITIF Sub-Asset Detail

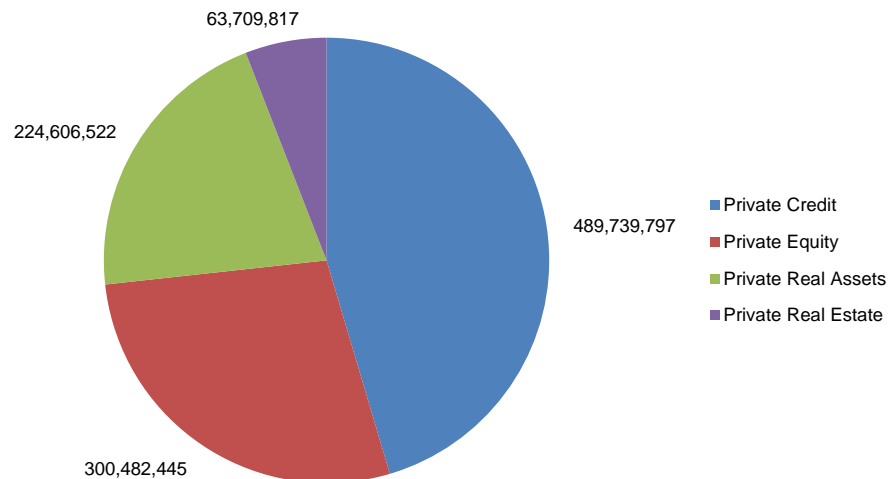
16

Fund	Current Exposure	MTD Perf.	QTD Perf.	Calendar YTD	Fiscal YTD (08/31)	Nacubo YTD (06/30)	Trailing 1 Yr	Trailing 3 Yr	Trailing 5 Yr
<b>TOTAL</b>	<b>834,566,082</b>	<b>0.74%</b>	<b>2.26%</b>	<b>9.29%</b>	<b>2.32%</b>	<b>1.93%</b>	<b>9.29%</b>	<b>4.66%</b>	<b>3.41%</b>
Policy		1.71%	3.42%	12.05%	4.13%	4.43%	12.05%	5.99%	4.15%
Portfolio Hedge Contribution	7,247,567	-0.03%	-0.11%	n/a	-0.21%	-0.12%	n/a	n/a	n/a
Total Legacy Portfolio	32,406,253	0.98%	3.24%	11.81%	2.69%	3.31%	11.81%	5.41%	3.85%
Total Current Portfolio	802,159,829	0.73%	2.22%	8.12%	2.33%	1.81%	8.12%	n/a	n/a
<b>Equity</b>	<b>215,011,313</b>	<b>2.96%</b>	<b>7.51%</b>	<b>28.08%</b>	<b>9.50%</b>	<b>7.42%</b>	<b>28.08%</b>	<b>13.36%</b>	<b>7.95%</b>
Benchmark: MSCI ACWI with USA (Net)		3.52%	8.95%	27.16%	11.29%	9.06%	27.16%	12.65%	8.53%
Legacy Equity	-	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Current Equity	215,011,313	2.96%	7.51%	27.96%	9.50%	7.42%	27.96%	n/a	n/a
<b>Debt</b>	<b>168,646,499</b>	<b>0.24%</b>	<b>-0.31%</b>	<b>4.25%</b>	<b>0.13%</b>	<b>-0.67%</b>	<b>4.25%</b>	<b>2.40%</b>	<b>2.48%</b>
Benchmark: Barclays Global Aggregate		0.58%	0.49%	6.84%	-0.54%	1.20%	6.84%	3.99%	3.05%
Legacy Debt	-	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Current Debt	168,646,499	0.24%	-0.40%	1.59%	0.11%	-1.02%	1.59%	n/a	n/a
<b>Diversifying Assets</b>	<b>247,064,779</b>	<b>0.27%</b>	<b>1.42%</b>	<b>5.53%</b>	<b>1.12%</b>	<b>1.65%</b>	<b>5.53%</b>	<b>3.08%</b>	<b>2.15%</b>
Benchmark: HFRXGL Index		1.22%	2.57%	8.62%	3.03%	4.22%	8.62%	6.83%	4.77%
Legacy Diversifying Assets	32,406,253	0.98%	3.76%	7.21%	2.70%	3.10%	7.21%	n/a	n/a
Current Diversifying Assets	214,658,526	0.16%	1.01%	4.63%	0.87%	1.41%	4.63%	n/a	n/a
<b>Private Credit</b>	<b>192,088,081</b>	<b>0.08%</b>	<b>1.55%</b>	<b>3.17%</b>	<b>0.01%</b>	<b>0.13%</b>	<b>3.17%</b>	<b>n/a</b>	<b>n/a</b>
Private Market Composite		1.61%	1.61%	5.53%	3.00%	3.00%	5.53%	n/a	n/a
<b>Cash</b>	<b>4,507,843</b>	<b>0.99%</b>	<b>1.33%</b>	<b>3.52%</b>	<b>1.38%</b>	<b>2.60%</b>	<b>3.52%</b>	<b>n/a</b>	<b>n/a</b>

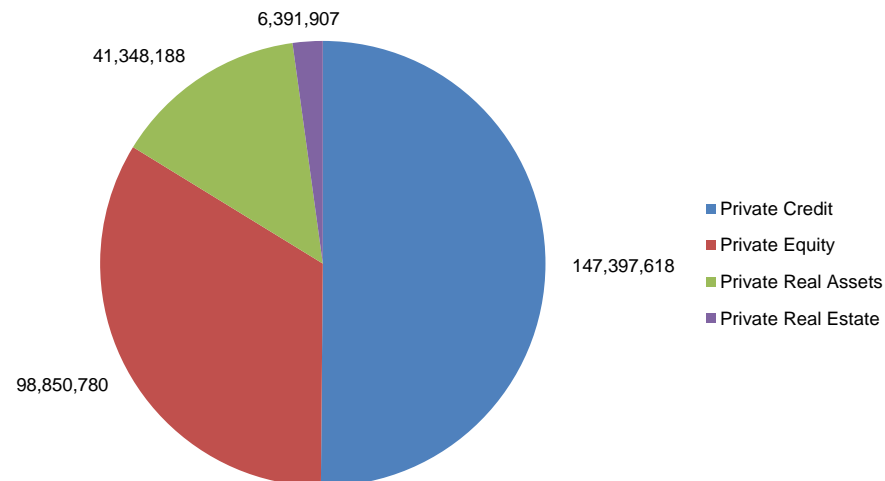


**Appendix III - Private Markets Report (as of December 2019) - Total Commitment**

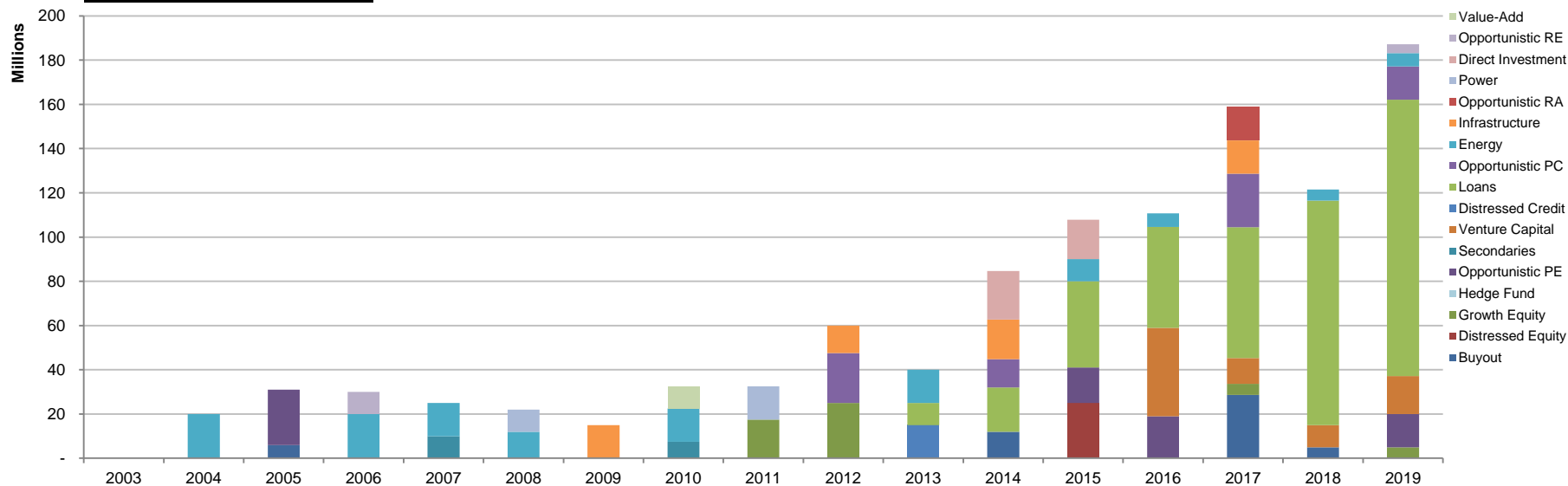
**Total Commitment**



**Total Unfunded**



**Commitment by Vintage Year**





## Appendix III - Private Markets Report (as of December 2019) - Performance Analysis by Asset Class & Strategy Type

### Performance by Asset Class

Asset Class	# of Funds	Commitment	Funded	Paid-In Capital	Distributions	% Drawn	Reported Valuation	Adjusted Valuation	IRR	TVPI
Private Equity	27	\$300,482,445	\$202,131,665	\$211,418,482	\$88,212,160	70%	\$163,824,009	\$160,375,497	5.00%	1.18
Private Credit	25	\$489,739,797	\$343,062,179	\$350,957,613	\$104,838,678	72%	\$279,535,620	\$289,914,061	6.57%	1.12
Private Real Assets	18	\$224,606,522	\$184,089,887	\$200,350,388	\$213,923,732	89%	\$60,436,328	\$59,474,208	13.55%	1.38
Private Real Estate	5	\$63,709,817	\$57,317,910	\$59,536,456	\$38,961,007	93%	\$33,683,036	\$30,431,515	3.34%	1.17
<b>Total</b>	<b>75</b>	<b>\$1,078,538,581</b>	<b>\$786,601,641</b>	<b>\$822,262,939</b>	<b>\$445,935,577</b>	<b>76%</b>	<b>\$537,478,993</b>	<b>\$540,195,281</b>	<b>7.57%</b>	<b>1.20</b>

### Performance by Strategy Type

Asset Class	Strategy	# of Funds	Commitment	Funded	Paid-In Capital	Distributions	% Drawn	Reported Valuation	Adjusted Valuation	IRR	TVPI
Private Equity	Buyout	5	\$51,610,000	\$43,301,119	\$44,718,778	\$13,958,626	87%	\$37,793,289	\$37,978,909	6.32%	1.16
	Distressed Equity	1	\$25,000,000	\$11,262,492	\$12,024,992	\$1,162,372	48%	\$9,603,391	\$9,603,391	-6.93%	0.90
	Growth Equity	5	\$52,500,000	\$39,822,549	\$44,089,645	\$21,436,640	84%	\$34,896,333	\$33,743,807	6.57%	1.25
	Secondaries	5	\$75,047,195	\$49,689,091	\$50,367,388	\$28,344,584	67%	\$33,689,489	\$32,282,789	3.80%	1.20
	Venture Capital	2	\$17,500,000	\$16,405,508	\$17,259,760	\$15,508,595	99%	\$4,518,403	\$4,518,403	3.02%	1.16
	<b>Total</b>	<b>9</b>	<b>\$78,825,250</b>	<b>\$41,650,906</b>	<b>\$42,957,919</b>	<b>\$7,801,343</b>	<b>54%</b>	<b>\$43,323,104</b>	<b>\$42,248,198</b>	<b>11.75%</b>	<b>1.17</b>
Private Credit	Distressed Credit	<b>27</b>	<b>\$300,482,445</b>	<b>\$202,131,665</b>	<b>\$211,418,482</b>	<b>\$88,212,160</b>	<b>70%</b>	<b>\$163,824,009</b>	<b>\$160,375,497</b>	<b>5.00%</b>	<b>1.18</b>
	Loans	1	\$15,000,000	\$15,000,000	\$15,129,068	\$4,857,587	101%	\$8,822,788	\$8,822,788	-1.84%	0.90
	Opportunistic PC	18	\$400,221,750	\$274,839,018	\$281,485,040	\$61,800,436	70%	\$239,591,926	\$250,181,974	7.33%	1.11
	<b>Total</b>	<b>6</b>	<b>\$74,518,047</b>	<b>\$53,223,161</b>	<b>\$54,343,505</b>	<b>\$38,180,655</b>	<b>73%</b>	<b>\$31,120,906</b>	<b>\$30,909,299</b>	<b>8.78%</b>	<b>1.27</b>
Private Real Assets	Energy	<b>25</b>	<b>\$489,739,797</b>	<b>\$343,062,179</b>	<b>\$350,957,613</b>	<b>\$104,838,678</b>	<b>72%</b>	<b>\$279,535,620</b>	<b>\$289,914,061</b>	<b>6.57%</b>	<b>1.12</b>
	Infrastructure	11	\$124,106,522	\$116,609,774	\$123,390,057	\$132,975,832	99%	\$31,568,775	\$30,524,202	13.28%	1.34
	Power	4	\$60,500,000	\$42,483,554	\$50,963,225	\$61,853,145	84%	\$22,100,395	\$22,182,848	27.52%	1.65
	Opportunistic RA	2	\$25,000,000	\$21,959,059	\$22,922,879	\$16,762,892	92%	\$5,751,156	\$5,751,156	-0.43%	0.98
	<b>Total</b>	<b>1</b>	<b>\$15,000,000</b>	<b>\$3,037,500</b>	<b>\$3,074,227</b>	<b>\$2,331,863</b>	<b>20%</b>	<b>\$1,016,002</b>	<b>\$1,016,002</b>	<b>4.04%</b>	<b>1.09</b>
Private Real Estate	Direct Investment	<b>18</b>	<b>\$224,606,522</b>	<b>\$184,089,887</b>	<b>\$200,350,388</b>	<b>\$213,923,732</b>	<b>89%</b>	<b>\$60,436,328</b>	<b>\$59,474,208</b>	<b>13.55%</b>	<b>1.38</b>
	Opportunistic RE	2	\$39,709,817	\$39,709,817	\$41,637,448	\$28,499,510	105%	\$25,534,169	\$22,229,229	6.19%	1.22
	Growth Equity	2	\$14,000,000	\$10,053,419	\$10,107,834	\$0	72%	\$3,679,370	\$3,732,789	-9.57%	0.37
	<b>Total</b>	<b>1</b>	<b>\$10,000,000</b>	<b>\$7,554,674</b>	<b>\$7,791,174</b>	<b>\$10,461,497</b>	<b>78%</b>	<b>\$4,469,497</b>	<b>\$4,469,497</b>	<b>12.27%</b>	<b>1.92</b>

**Appendix IV – Glossary****Major Asset Classes**

Alpha Pool: Investments that tend to be uncorrelated with “traditional” stock and bond investments. Not technically an asset class, but rather an investment construct within a \*portable alpha framework

Cash & Equivalents: Cash and short term investments held in lieu of cash and readily converted into cash within a short time span (i.e., CDs, commercial paper, Treasury bills, etc.)

Global Debt: Investments in debt instruments located in developed markets, may include various credit, mortgage-backed and emerging markets debt securities

Global Equity: Investments in companies domiciled in developed market countries and may include opportunistic investments in emerging market countries

Liquidating: The residual investment in terminated managers

Liquid Real Assets: Liquid investments in strategies whose values are sensitive to inflation

Private Equity: Investments in equity securities and debt in operating companies that are not publicly traded on a stock exchange

Private Real Assets: Investments in equity securities and debt in operating companies that are not publicly traded on a stock exchange and whose strategies are sensitive to inflation

**Sub-Asset Classes**

Alternative Equity: Investments in companies globally through both long and short positions and may include non-equity instruments such as fixed income, commodities, CDS, options, etc.

Credit: Investments in companies, often stressed or distressed, principally through the debt portion of capital structure

Emerging Market Debt: Investments in debt securities in emerging market countries, primarily in three categories - external sovereign, local sovereign, and corporate debt

Emerging Market Equity: Investments in companies located in emerging market countries

Investment Grade Bonds: Investments in investment grade rated debt securities

Non-US Developed Equity: Investments in companies domiciled in developed market countries

US Equity: Investments in companies domiciled in the US