



Investment Performance Analysis

North Dakota Board of University and School Lands

Period Ended: September 30, 2022



I. Capital Markets Review

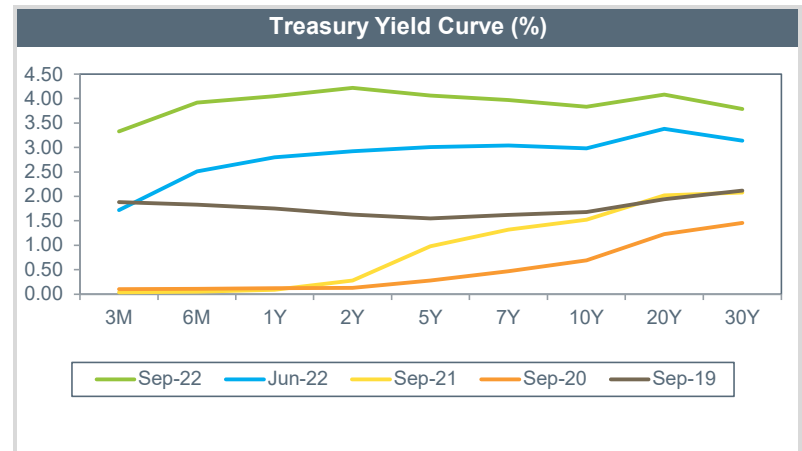


Third Quarter Economic Environment

Key Economic Indicators

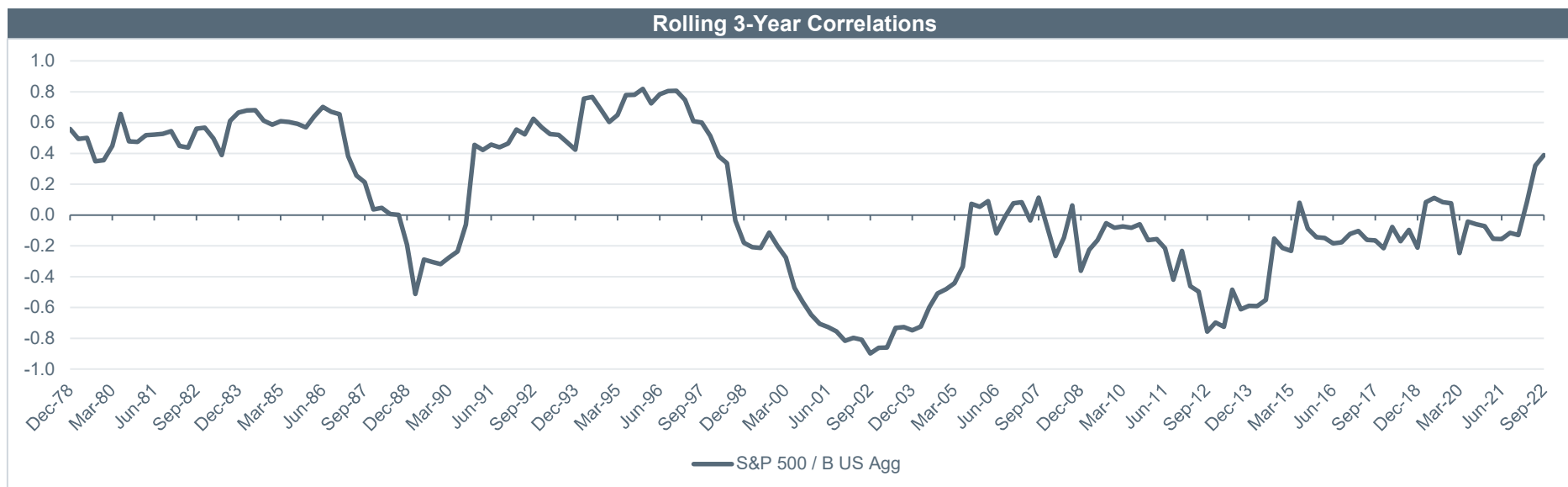
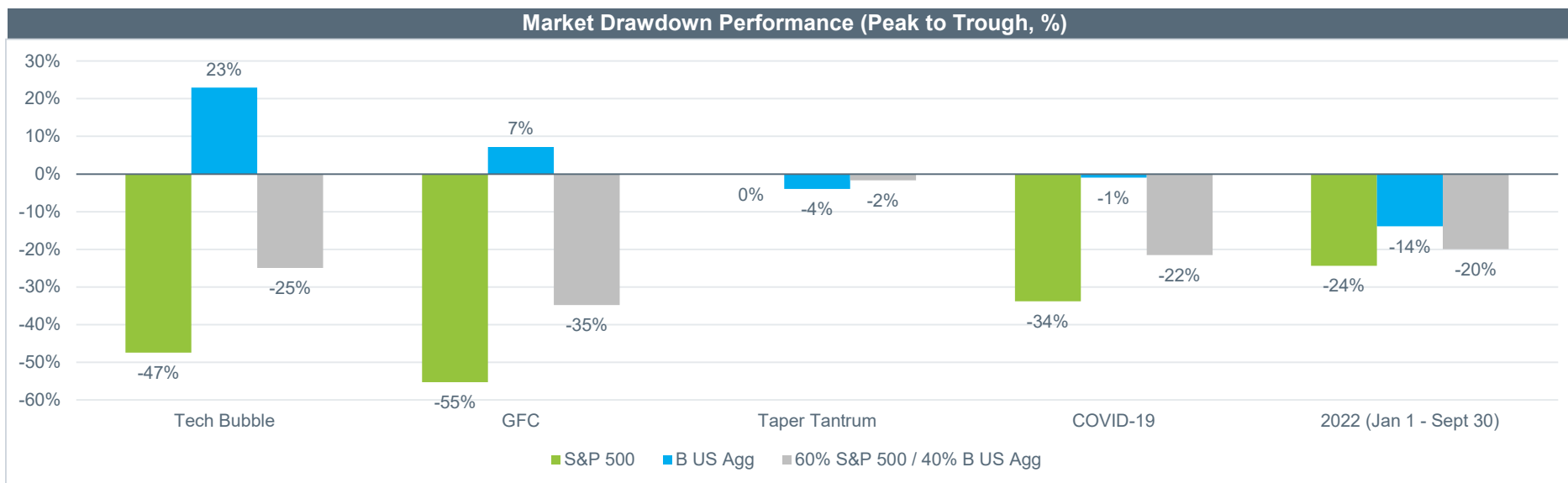
Investor sentiment and market movements continued to be driven by persistently high inflation levels and a corresponding tightening of monetary policy by most global central banks. Strong consumer demand, combined with supply chain disruptions and energy supply constraints caused by the war in Ukraine, exacerbated the difficulties for policymakers aiming to respond to inflation in an effective yet balanced manner. In its interim September 2022 economic outlook, OECD forecasted that headline inflation among G20 countries would finish 2022 above 8%—and only moderate to 6.6% in 2023. The OECD’s inflation forecasts remain elevated compared to historical levels despite actions by global central banks, including the FOMC. In September, the FOMC increased the federal funds rate to a range of 3.00%-3.25%, which represented a third consecutive 0.75 percentage point hike. Global GDP growth forecasts continued to moderate during the quarter. The OECD forecasted real global GDP growth of 3.0% in 2022 and 2.2% in 2023, representing sharp declines from its December 2021 forecasts of 4.5% and 3.2%, respectively. Overall, economic and inflation forecasts are being impacted by multiple factors. In particular, the ongoing war in Ukraine could lead to sudden shifts in conditions, as global economic impacts could follow modifications to sanctions regimes, changes to external military support, pending NATO membership applications, or extreme energy supply shortages in Europe.

Economic Indicators	Sep-22	Jun-22	Sep-21	Sep-19	20 Yr
Federal Funds Rate (%)	3.08 ▲	1.58	0.06	1.90	1.27
10 Year US Treasury Yield	3.83 ▲	2.98	1.52	1.68	2.92
30 Year US Treasury Yield	3.79 ▲	3.14	2.08	2.12	N/A
Consumer Price Index YoY (Headline) (%)	8.20 ▼	9.10	5.40	1.70	2.42
Unemployment Rate (%)	3.50 ▼	3.60	4.70	3.50	6.04
Real Gross Domestic Product YoY (%)	1.80 —	1.80	5.00	2.30	2.03
PMI - Manufacturing	50.90 ▼	53.00	60.50	48.10	53.68
US Dollar Total Weighted Index	127.64 ▲	121.05	114.67	117.95	103.22
WTI Crude Oil per Barrel (\$)	79.49 ▼	105.76	75.03	54.07	67.16



Market Performance (%)	QTD	CYTD	1 Yr	3 Yr	5 Yr	10 Yr	15 Yr	20 Yr
US Large Cap Equity	-9.21	-4.88	-23.87	-15.47	8.16	9.24	11.40	11.70
US Small Cap Equity	-9.58	-2.19	-25.10	-23.50	4.29	3.55	7.51	8.55
Developed International Equity	-9.35	-9.36	-27.09	-25.13	-1.83	-0.84	2.84	3.67
Developed International Small Cap Equity	-11.50	-9.83	-32.11	-32.06	-2.16	-1.79	3.25	5.28
Emerging Markets Equity	-11.72	-11.57	-27.16	-28.11	-2.07	-1.81	3.88	1.05
US Aggregate Bond	-4.32	-4.75	-14.61	-14.60	-3.26	-0.27	0.54	0.89
3 Month US Treasury Bill	0.25	0.46	0.61	0.62	0.59	1.15	0.95	0.68
US Real Estate	0.52	0.52	13.08	22.09	12.37	10.24	9.85	10.92
Real Estate Investment Trusts (REITs)	-12.18	-9.94	-28.13	-16.41	-2.05	2.93	4.86	6.26
Commodities	-8.11	-4.11	13.57	11.80	13.45	6.96	4.49	-2.14

Treasury data courtesy of the US Department of the Treasury. Economic data courtesy of Bloomberg Professional Service. Real Gross Domestic Product YoY (%) is available quarterly. Real estate is reported quarterly; QTD returns are shown as "0.00" on interim-quarter months and until available. Market performance is representative of broad asset class index returns. Please see the addendum for indices used for each asset class.



Source: FactSet

Drawdown performance shown is cumulative. 2022 drawdown returns use a start (peak) date of January 1, 2022 and will differ slightly from CYTD returns.

Correlation is calculated using quarterly periodicity.



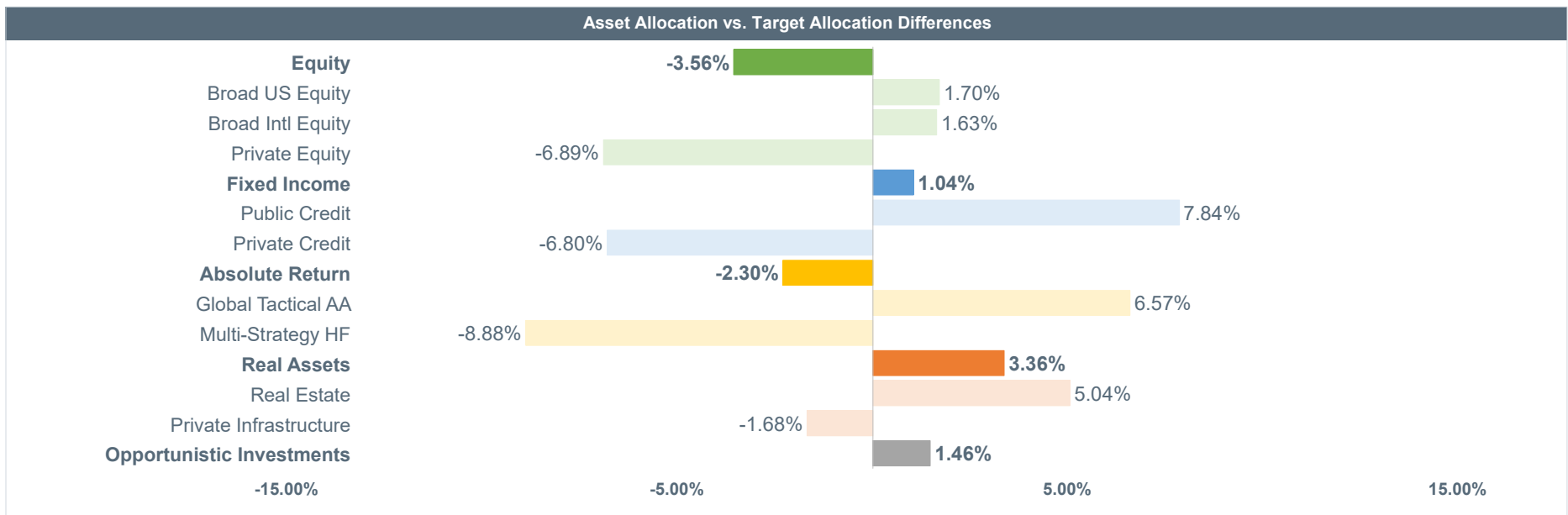
II. Total Fund

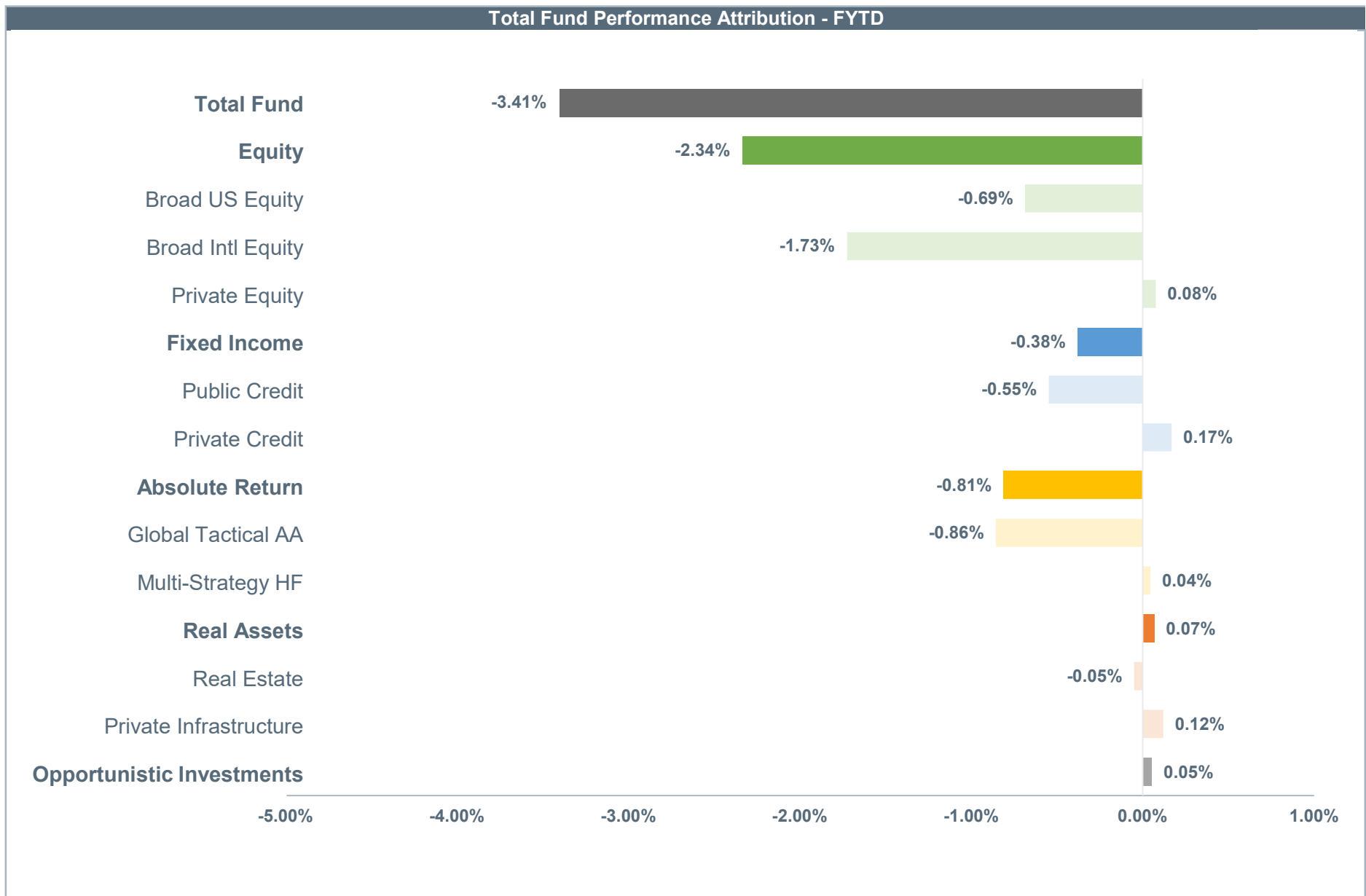


North Dakota Board of University and School Lands
 Total Endowments
 Asset Allocation vs. Long-Term Target Allocation

As of September 30, 2022

Asset Allocation vs. Target Allocation Differences							
	Asset Allocation	Asset Allocation (%)	Target Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)		
Equity	1,957,406,238	34.44%	38.00%		N/A		N/A
Broad US Equity	949,119,585	16.70%	15.00%		12.00%		18.00%
Broad International Equity	945,322,064	16.63%	15.00%		12.00%		18.00%
Private Equity	62,964,588	1.11%	8.00%		0.00%		12.00%
Fixed Income	1,480,078,137	26.04%	25.00%		20.00%		30.00%
Public Credit	729,586,159	12.84%	5.00%		N/A		N/A
Private Credit	750,491,978	13.20%	20.00%		N/A		N/A
Absolute Return	721,747,186	12.70%	15.00%		10.00%		20.00%
Global Tactical Asset Allocation	657,874,166	11.57%	5.00%		N/A		N/A
Multi-Strategy Hedge Fund	63,873,020	1.12%	10.00%		N/A		N/A
Real Assets	1,441,120,022	25.36%	22.00%		N/A		N/A
Real Estate	1,138,888,329	20.04%	15.00%		10.00%		20.00%
Private Infrastructure	302,231,693	5.32%	7.00%		0.00%		11.00%
Opportunistic Investments	83,235,567	1.46%	0.00%		0.00%		5.00%
Total Fund	5,683,587,149	100.00%	100.00%		-		-





Performance shown is net of fees. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Allocations shown may not sum up to 100% exactly due to rounding.

North Dakota Board of University and School Lands
Comparative Performance

As of September 30, 2022

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Total Fund	-3.41	-3.41	-11.99	-8.93	3.19	3.30	5.06	4.86	6.15	08/01/1995
Target Allocation Index (Net)	-3.03	-3.03	-13.95	-10.22	4.23	4.40	5.93	5.83	N/A	
Difference	-0.38	-0.38	1.96	1.29	-1.04	-1.10	-0.87	-0.97	N/A	
Broad US Equity	-4.20	-4.20	-24.24	-18.27	7.48	8.42	10.86	10.94	12.43	07/01/2009
Russell 3000 Index	-4.46	-4.46	-24.62	-17.63	7.70	8.62	10.90	11.39	12.86	
Difference	0.26	0.26	0.38	-0.64	-0.22	-0.20	-0.04	-0.45	-0.43	
Broad International Equity	-9.75	-9.75	-26.55	-24.33	-0.51	-0.76	3.33	4.02	4.42	07/01/2009
MSCI ACW Ex US IM Index (USD) (Net)	-9.69	-9.69	-26.92	-25.72	-1.27	-0.78	3.38	3.19	4.63	
Difference	-0.06	-0.06	0.37	1.39	0.76	0.02	-0.05	0.83	-0.21	
Private Equity	6.73	6.73	5.12	14.70	N/A	N/A	N/A	N/A	15.36	04/01/2021
Cambridge US Prvt Eq Index	0.05	0.05	-3.07	2.79	20.24	17.40	16.18	15.54	14.93	
Difference	6.68	6.68	8.19	11.91	N/A	N/A	N/A	N/A	0.43	
Fixed Income	-1.57	-1.57	-6.29	-5.76	1.22	2.03	2.59	2.35	5.11	08/01/1995
Global Fixed Income Custom Index	-1.55	-1.55	-11.83	-11.83	-2.14	0.44	1.14	N/A	N/A	
Difference	-0.02	-0.02	5.54	6.07	3.36	1.59	1.45	N/A	N/A	
Public Credit	-4.28	-4.28	N/A	N/A	N/A	N/A	N/A	N/A	-4.28	07/01/2022
Bloomberg US Unv Bond Index	-4.45	-4.45	-14.90	-14.92	-3.11	-0.18	0.86	1.17	-4.45	
Difference	0.17	0.17	N/A	N/A	N/A	N/A	N/A	N/A	0.17	
Private Credit	1.23	1.23	N/A	N/A	N/A	N/A	N/A	N/A	1.23	07/01/2022
CS Lvg'd Loan Index +1.5%	1.57	1.57	-2.23	-1.16	3.65	4.55	5.22	5.25	1.57	
Difference	-0.34	-0.34	N/A	N/A	N/A	N/A	N/A	N/A	-0.34	
Absolute Return	-6.30	-6.30	-18.11	-18.11	-2.30	-0.68	1.97	N/A	0.34	07/01/2014
Absolute Return Custom Index	-8.33	-8.33	-23.40	-20.57	0.31	2.15	4.41	N/A	3.21	
Difference	2.03	2.03	5.29	2.46	-2.61	-2.83	-2.44	N/A	-2.87	
Global Tactical Asset Allocation	-6.92	-6.92	N/A	N/A	N/A	N/A	N/A	N/A	-6.92	07/01/2022
60% MSCI ACW (Net)/40% Bbrg Gbl Agg Idx	-6.82	-6.82	-23.27	-20.41	0.14	1.96	4.36	4.12	-6.82	
Difference	-0.10	-0.10	N/A	N/A	N/A	N/A	N/A	N/A	-0.10	
Multi-Strategy Hedge Funds	3.25	3.25	N/A	N/A	N/A	N/A	N/A	N/A	3.25	07/01/2022
HFRI RV Multi Strat Index	-0.01	-0.01	-1.04	-1.71	4.74	3.71	4.01	4.22	-0.01	
Difference	3.26	3.26	N/A	N/A	N/A	N/A	N/A	N/A	3.26	

Performance shown is net of fees, and annualized for periods greater than one year. Composite inception dates are based on availability of data for each asset class. The Global Fixed Income Custom Index and Absolute Return Custom Index are calculated monthly using beginning of month weights applied to each corresponding primary benchmark return. Please see the Addendum for additional custom index definitions. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Fiscal year ends 06/30.

North Dakota Board of University and School Lands
Comparative Performance

As of September 30, 2022

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Real Estate	-0.36	-0.36	11.03	20.90	11.67	9.90	9.64	N/A	9.81	07/01/2015
NCREIF ODCE Index (AWA) (Net)	0.31	0.31	12.36	20.96	11.38	9.26	8.87	9.91	9.06	
Difference	-0.67	-0.67	-1.33	-0.06	0.29	0.64	0.77	N/A	0.75	
Private Infrastructure	2.10	2.10	5.44	N/A	N/A	N/A	N/A	N/A	5.44	02/01/2022
MSCI Wrld Infrastructure Index (Net)	-11.54	-11.54	-13.92	-10.63	-1.82	1.24	3.50	4.08	-13.26	
Difference	13.64	13.64	19.36	N/A	N/A	N/A	N/A	N/A	18.70	
Opportunistic Investments	4.01	4.01	-5.05	-3.76	N/A	N/A	N/A	N/A	15.88	07/01/2020

Performance shown is net of fees. Composite inception dates are based on availability of data for each asset class. Please see the Addendum for custom index definitions. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Fiscal year ends 06/30.

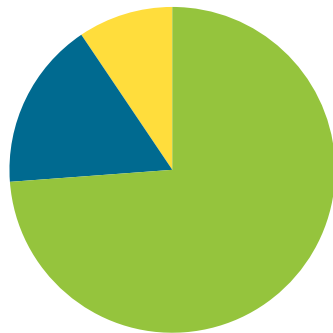


Comparative Performance

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Broad US Equity	-4.20	-4.20	-24.24	-18.27	7.48	8.42	10.86	10.94	12.43	07/01/2009
Russell 3000 Index	-4.46	-4.46	-24.62	-17.63	7.70	8.62	10.90	11.39	12.86	
Difference	0.26	0.26	0.38	-0.64	-0.22	-0.20	-0.04	-0.45	-0.43	
State Street Russell 1000 Index SL (CF)	-4.61	-4.61	-24.63	-17.27	7.90	8.96	N/A	N/A	9.42	06/01/2017
Russell 1000 Index	-4.61	-4.61	-24.59	-17.22	7.95	9.00	11.15	11.60	9.45	
Difference	0.00	0.00	-0.04	-0.05	-0.05	-0.04	N/A	N/A	-0.03	
State Street Russell Mid Cap Index (SA)	-3.41	-3.41	-24.19	-19.31	5.20	6.48	N/A	N/A	6.95	06/01/2017
Russell Mid Cap Index	-3.44	-3.44	-24.27	-19.39	5.19	6.48	8.79	10.30	6.94	
Difference	0.03	0.03	0.08	0.08	0.01	0.00	N/A	N/A	0.01	
NT Small Cap Core (SA)	-5.03	-5.03	-26.06	-25.15	5.55	5.69	9.18	9.27	6.32	07/01/2014
Russell 2000 Index	-2.19	-2.19	-25.10	-23.50	4.29	3.55	7.51	8.55	5.51	
Difference	-2.84	-2.84	-0.96	-1.65	1.26	2.14	1.67	0.72	0.81	

Asset Allocation by Manager

\$949,119,585



- State Street Russell 1000 Index SL (CF)
- NT Small Cap Core (SA)
- State Street Russell Mid Cap Index (SA)

Market Value (\$)	Allocation (%)
700,675,064	73.82
158,896,632	16.74
89,547,889	9.43

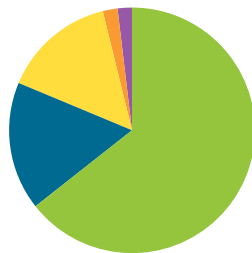
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Comparative Performance

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Broad International Equity	-9.75	-9.75	-26.55	-24.33	-0.51	-0.76	3.33	4.02	4.42	07/01/2009
MSCI ACW Ex US IM Index (USD) (Net)	-9.69	-9.69	-26.92	-25.72	-1.27	-0.78	3.38	3.19	4.63	
Difference	-0.06	-0.06	0.37	1.39	0.76	0.02	-0.05	0.83	-0.21	
State Street World Ex US Index (CF)	-9.21	-9.21	-26.43	-24.13	-1.33	-0.50	3.11	N/A	0.58	07/01/2014
MSCI Wrld Ex US Index (USD) (Net)	-9.20	-9.20	-26.23	-23.91	-1.21	-0.39	3.21	3.62	0.67	
Difference	-0.01	-0.01	-0.20	-0.22	-0.12	-0.11	-0.10	N/A	-0.09	
Acadian International Small Cap	-8.80	-8.80	-29.71	N/A	N/A	N/A	N/A	N/A	-25.75	12/01/2021
MSCI EAFE Sm Cap Index (USD) (Net)	-9.83	-9.83	-32.11	-32.06	-2.16	-1.79	3.25	5.28	-29.15	
Difference	1.03	1.03	2.40	N/A	N/A	N/A	N/A	N/A	3.40	
State Street World Ex US Small Cap Index (CF)	-9.40	-9.40	N/A	N/A	N/A	N/A	N/A	N/A	-25.88	02/01/2022
MSCI Wrld Ex US Sm Cap Index (USD) (Net)	-9.46	-9.46	-31.07	-30.80	-1.27	-1.24	3.64	4.78	-26.01	
Difference	0.06	0.06	N/A	N/A	N/A	N/A	N/A	N/A	0.13	
Arrowstreet Emerging Markets	-12.30	-12.30	-26.55	N/A	N/A	N/A	N/A	N/A	-22.80	12/01/2021
MSCI Emg Mkts Index (USD) (Net)	-11.57	-11.57	-27.16	-28.11	-2.07	-1.81	3.88	1.05	-25.79	
Difference	-0.73	-0.73	0.61	N/A	N/A	N/A	N/A	N/A	2.99	
NT Emerging Markets Index Fund	-12.21	-12.21	N/A	N/A	N/A	N/A	N/A	N/A	-26.88	02/01/2022
MSCI Emg Mkts Index (USD) (Net)	-11.57	-11.57	-27.16	-28.11	-2.07	-1.81	3.88	1.05	-25.75	
Difference	-0.64	-0.64	N/A	N/A	N/A	N/A	N/A	N/A	-1.13	

Asset Allocation by Manager

\$945,322,064



- State Street World Ex US Index (CF)
- Arrowstreet Emerging Markets
- Acadian International Small Cap
- NT Emerging Markets Index Fund
- State Street World Ex US Small Cap Index (CF)

Manager	Market Value (\$)	Allocation (%)
State Street World Ex US Index (CF)	608,600,956	64.38
Arrowstreet Emerging Markets	160,000,670	16.93
Acadian International Small Cap	140,539,177	14.87
NT Emerging Markets Index Fund	18,279,298	1.93
State Street World Ex US Small Cap Index (CF)	17,901,963	1.89

Performance shown is net of fees. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Allocations shown may not sum up to 100% exactly due to rounding. Fiscal year ends 06/30.

Comparative Performance

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Private Equity	6.73	6.73	5.12	14.70	N/A	N/A	N/A	N/A	15.36	04/01/2021
Cambridge US Prvt Eq Index	0.05	0.05	-3.07	2.79	20.24	17.40	16.18	15.54	14.93	
Difference	6.68	6.68	8.19	11.91	N/A	N/A	N/A	N/A	0.43	

Asset Allocation by Manager



Performance shown is net of fees. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Allocations shown may not sum up to 100% exactly due to rounding. Fiscal year ends 06/30. In Q3, MS Ashbridge TS Fund II LP was funded.

Comparative Performance										
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Fixed Income	-1.57	-1.57	-6.29	-5.76	1.22	2.03	2.59	2.35	5.11	08/01/1995
Global Fixed Income Custom Index	-1.55	-1.55	-11.83	-11.83	-2.14	0.44	1.14	N/A	N/A	
Difference	-0.02	-0.02	5.54	6.07	3.36	1.59	1.45	N/A	N/A	
Public Credit	-4.28	-4.28	N/A	N/A	N/A	N/A	N/A	N/A	-4.28	07/01/2022
Bloomberg US Unv Bond Index	-4.45	-4.45	-14.90	-14.92	-3.11	-0.18	0.86	1.17	-4.45	
Difference	0.17	0.17	N/A	N/A	N/A	N/A	N/A	N/A	0.17	
Payden & Rygel Long Term (SA)	-4.82	-4.82	-14.57	-14.45	-2.92	0.19	1.19	1.42	4.90	08/01/1995
Bloomberg US Agg Bond Index	-4.75	-4.75	-14.61	-14.60	-3.26	-0.27	0.54	0.89	4.31	
Difference	-0.07	-0.07	0.04	0.15	0.34	0.46	0.65	0.53	0.59	
JP Morgan Core Bond (SA)	-4.38	-4.38	-13.88	-13.88	-2.92	-0.31	0.34	0.75	0.80	08/01/2012
JP Morgan FI Custom Index	-4.75	-4.75	-14.61	-14.60	-3.17	-0.56	0.13	0.52	0.56	
Difference	0.37	0.37	0.73	0.72	0.25	0.25	0.21	0.23	0.24	
Loomis Sayles Credit Asset (SA)	-2.82	-2.82	-12.73	-12.74	N/A	N/A	N/A	N/A	-6.73	04/01/2021
Loomis Sayles CA Custom Index	-2.37	-2.37	-13.99	-13.58	-1.35	1.17	2.72	2.76	-7.26	
Difference	-0.45	-0.45	1.26	0.84	N/A	N/A	N/A	N/A	0.53	
FLP (Loans)	1.19	1.19	3.43	4.61	4.34	4.89	5.22	5.40	6.85	08/01/1995
ND Land - PTF Cash (SA)	0.51	0.51	0.64	0.64	0.50	1.10	N/A	N/A	1.13	07/01/2017
ICE BofAML 3 Mo US T-Bill Index	0.46	0.46	0.61	0.62	0.59	1.15	0.95	0.68	1.15	
Difference	0.05	0.05	0.03	0.02	-0.09	-0.05	N/A	N/A	-0.02	
Private Credit	1.23	1.23	N/A	N/A	N/A	N/A	N/A	N/A	1.23	07/01/2022
Credit Suisse Leveraged Loan Index+1.5%	1.57	1.57	-2.23	-1.16	3.65	4.55	5.22	5.25	1.57	
Difference	-0.34	-0.34	N/A	N/A	N/A	N/A	N/A	N/A	-0.34	
AG Direct Lending III LP	2.98	2.98	9.12	12.40	11.16	N/A	N/A	N/A	10.64	09/01/2018
CS Lvg'd Loan Index	1.19	1.19	-3.31	-2.62	2.12	3.00	3.67	3.70	2.49	
Difference	1.79	1.79	12.43	15.02	9.04	N/A	N/A	N/A	8.15	
AG Direct Lending IV LP	2.79	2.79	9.11	12.65	N/A	N/A	N/A	N/A	17.21	06/01/2021
CS Lvg'd Loan Index	1.19	1.19	-3.31	-2.62	2.12	3.00	3.67	3.70	-0.84	
Difference	1.60	1.60	12.42	15.27	N/A	N/A	N/A	N/A	18.05	

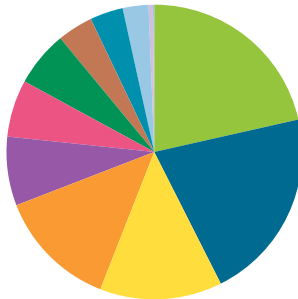
Performance shown is net of fees. The Global Fixed Income Custom Index currently consists of the Bloomberg US Agg Bond Index. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Fiscal year ends 06/30.

Comparative Performance

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
AG Direct Lending BUSL LP	2.01	2.01	N/A	N/A	N/A	N/A	N/A	N/A	3.20	06/01/2022
CS Lvg'd Loan Index +1.5%	1.57	1.57	-2.23	-1.16	3.65	4.55	5.22	5.25	-0.40	
Difference	0.44	0.44	N/A	N/A	N/A	N/A	N/A	N/A	3.60	
Blue Owl Diversified Lending	1.66	1.66	4.56	N/A	N/A	N/A	N/A	N/A	4.86	11/01/2021
CS Lvg'd Loan Index +1.5%	1.57	1.57	-2.23	-1.16	3.65	4.55	5.22	5.25	-1.52	
Difference	0.09	0.09	6.79	N/A	N/A	N/A	N/A	N/A	6.38	
Apollo Defined Return LP	1.34	1.34	N/A	N/A	N/A	N/A	N/A	N/A	-1.02	04/01/2022
CS Lvg'd Loan Index +2%	1.69	1.69	-1.87	-0.68	4.16	5.06	5.74	5.77	-2.25	
Difference	-0.35	-0.35	N/A	N/A	N/A	N/A	N/A	N/A	1.23	
Ares Pathfinder LP	0.84	0.84	7.04	8.23	N/A	N/A	N/A	N/A	55.95	03/01/2021
Schroders Flexible Secured Income (SA)	-0.81	-0.81	-2.84	-2.79	N/A	N/A	N/A	N/A	-2.41	09/01/2021
3 Month LIBOR Index (USD)+1.75%	0.83	0.83	1.70	2.17	2.49	3.09	2.93	2.66	2.14	
Difference	-1.64	-1.64	-4.54	-4.96	N/A	N/A	N/A	N/A	-4.55	

Asset Allocation by Manager

\$1,480,078,137



	Market Value (\$)	Allocation (%)
Payden & Rygel Long Term (SA)	317,502,977	21.45
JP Morgan Core Bond (SA)	312,727,166	21.13
Apollo Defined Return LP	197,955,878	13.37
Schroders Flexible Secured Income (SA)	194,877,267	13.17
AG Direct Lending III LP	111,864,491	7.56
AG Direct Lending IV LP	92,858,253	6.27
Loomis Sayles Credit Asset (SA)	90,188,716	6.09
AG Direct Lending BUSL LP	57,477,331	3.88
Ares Pathfinder LP	53,695,931	3.63
Blue Owl Diversified Lending	41,762,827	2.82
FLP (Loans)	7,142,545	0.48
ND Land - PTF Cash (SA)	2,024,755	0.14

Portfolio Characteristics

	Portfolio	Benchmark
Effective Duration	5.86	5.99
Avg. Maturity	8.08	8.33
Avg. Quality	A1	N/A
Coupon Rate (%)	3.29	2.87
Yield To Worst (%)	5.66	5.22
Current Yield (%)	3.86	N/A

Sector Distribution (%)



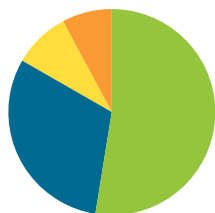
Fixed Income characteristics and sector distributions only include Payden & Rygel Long Term (SA), JP Morgan Core Bond (SA), and Loomis Sayles Credit Asset (SA). Allocation to "Other" consists of Convertibles.

Comparative Performance

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Absolute Return	-6.30	-6.30	-18.11	-18.11	-2.30	-0.68	1.97	N/A	0.34	07/01/2014
Absolute Return Custom Index	-8.33	-8.33	-23.40	-20.57	0.31	2.15	4.41	N/A	3.21	
Difference	2.03	2.03	5.29	2.46	-2.61	-2.83	-2.44	N/A	-2.87	
Global Tactical Asset Allocation	-7.13	-7.13	N/A	N/A	N/A	N/A	N/A	N/A	-7.13	07/01/2022
60% MSCI ACW (Net)/40% Bbrg Gbl Agg Idx	-6.82	-6.82	-23.27	-20.41	0.14	1.96	4.36	4.12	-6.82	
Difference	-0.31	-0.31	N/A	N/A	N/A	N/A	N/A	N/A	-0.31	
PIMCO:All Ast Ath;Inst (PAUIX)	-8.60	-8.60	-21.61	-19.12	-0.64	-0.47	2.67	N/A	-0.14	07/01/2014
All Asset Custom Index (EqI Wtd)	-3.30	-3.30	-13.93	-11.85	1.25	2.69	3.95	3.64	2.99	
Difference	-5.30	-5.30	-7.68	-7.27	-1.89	-3.16	-1.28	N/A	-3.13	
PineBridge Dyn AA;Inst (PDAIX)	-6.36	-6.36	-21.07	N/A	N/A	N/A	N/A	N/A	-21.07	01/01/2022
Consumer Price Index+5%	1.40	1.40	10.43	13.61	10.20	8.94	8.37	7.65	10.43	
Difference	-7.76	-7.76	-31.50	N/A	N/A	N/A	N/A	N/A	-31.50	
Multi-Strategy Hedge Funds	3.25	3.25	N/A	N/A	N/A	N/A	N/A	N/A	3.25	07/01/2022
HFRI RV Multi Strat Index	-0.01	-0.01	-1.04	-1.71	4.74	3.71	4.01	4.22	-0.01	
Difference	3.26	3.26	N/A	N/A	N/A	N/A	N/A	N/A	3.26	
Millennium USA LP	3.25	3.25	9.66	N/A	N/A	N/A	N/A	N/A	9.66	01/01/2022
HFRI RV Multi Strat Index	-0.01	-0.01	-1.04	-1.71	4.74	3.71	4.01	4.22	-1.04	
Difference	3.26	3.26	10.70	N/A	N/A	N/A	N/A	N/A	10.70	

Asset Allocation by Manager

\$721,747,186



- PIMCO:All Ast Ath;Inst (PAUIX)
- PineBridge Dyn AA;Inst (PDAIX)
- Millennium USA LP
- GMO:Bchmk-Fr All;IV (GBMBX)

Market Value (\$)

379,253,266
222,130,528
63,873,020
56,490,372

Allocation (%)

52.55
30.78
8.85
7.83

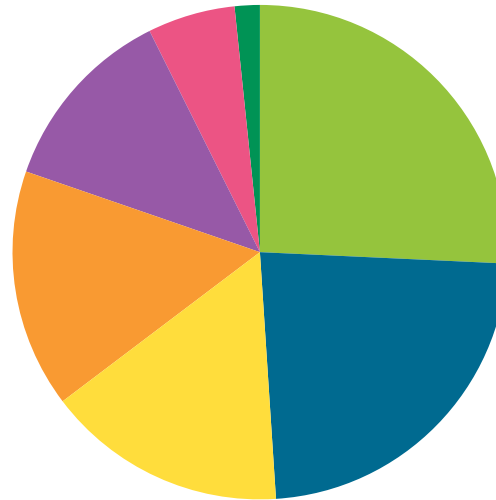
Performance shown is net of fees. The Absolute Return Custom Index consists of 60% MSCI ACW IM Index (USD) (Net) and 40% Bloomberg US Agg Bond Index. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Allocations shown may not sum up to 100% exactly due to rounding. The market value for GMO:Bchmk-Fr All;IV consists of uninvested cash.

Comparative Performance										
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Real Estate	-0.36	-0.36	11.03	20.90	11.67	9.90	9.64	N/A	9.81	07/01/2015
NCREIF ODCE Index (AWA) (Net)	0.31	0.31	12.36	20.96	11.38	9.26	8.87	9.91	9.06	
Difference	-0.67	-0.67	-1.33	-0.06	0.29	0.64	0.77	N/A	0.75	
Morgan Stanley Prime Property LLC	-0.06	-0.06	10.20	20.78	11.24	9.67	9.63	N/A	9.81	07/01/2015
NCREIF ODCE Index (AWA) (Net)	0.31	0.31	12.36	20.96	11.38	9.26	8.87	9.91	9.06	
Difference	-0.37	-0.37	-2.16	-0.18	-0.14	0.41	0.76	N/A	0.75	
UBS Trumbull Property LP	-0.17	-0.17	10.77	16.19	6.83	5.17	5.43	N/A	5.69	07/01/2015
NCREIF ODCE Index (AWA) (Net)	0.31	0.31	12.36	20.96	11.38	9.26	8.87	9.91	9.06	
Difference	-0.48	-0.48	-1.59	-4.77	-4.55	-4.09	-3.44	N/A	-3.37	
Jamestown Premier Property (CF)	-1.74	-1.74	0.63	1.67	-3.79	1.26	3.00	N/A	3.28	07/01/2015
NCREIF ODCE Index (AWA) (Net)	0.31	0.31	12.36	20.96	11.38	9.26	8.87	9.91	9.06	
Difference	-2.05	-2.05	-11.73	-19.29	-15.17	-8.00	-5.87	N/A	-5.78	
Prologis Targeted US Logistics LP	0.16	0.16	18.49	34.33	26.29	22.36	N/A	N/A	21.40	04/01/2016
NCREIF ODCE Index (AWA) (Net)	0.31	0.31	12.36	20.96	11.38	9.26	8.87	9.91	8.74	
Difference	-0.15	-0.15	6.13	13.37	14.91	13.10	N/A	N/A	12.66	
JP Morgan US RE Inc & Grth LP (CF)	-1.96	-1.96	9.58	20.75	10.49	7.92	N/A	N/A	7.94	07/01/2016
NCREIF ODCE Index (AWA) (Net)	0.31	0.31	12.36	20.96	11.38	9.26	8.87	9.91	8.78	
Difference	-2.27	-2.27	-2.78	-0.21	-0.89	-1.34	N/A	N/A	-0.84	
Harrison Street Core Property LP	2.09	2.09	N/A	N/A	N/A	N/A	N/A	N/A	11.04	02/01/2022
NCREIF ODCE Index (AWA) (Net)	0.31	0.31	12.36	20.96	11.38	9.26	8.87	9.91	12.36	
Difference	1.78	1.78	N/A	N/A	N/A	N/A	N/A	N/A	-1.32	
State Street US REIT Index (CF)	-10.39	-10.39	N/A	N/A	N/A	N/A	N/A	N/A	-26.61	04/01/2022
DJ US Select REIT Index	-10.37	-10.37	-29.32	-17.15	-3.29	1.95	3.65	5.49	-26.60	
Difference	-0.02	-0.02	N/A	N/A	N/A	N/A	N/A	N/A	-0.01	

Performance shown is net of fees. Real Estate manager and index performance is available on a quarterly basis. Interim period performance assumes a 0.00% return. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Allocations shown may not sum up to 100% exactly due to rounding. Fiscal year ends 06/30. Jamestown Premier Property and UBS Trumbull Property LP are in queue for redemption.

Asset Allocation by Manager

\$1,138,888,329



	Market Value (\$)	Allocation (%)
Morgan Stanley Prime Property LLC	293,090,937	25.73
Prologis Targeted US Logistics LP	264,562,608	23.23
JP Morgan US RE Inc & Grth LP (CF)	179,169,167	15.73
UBS Trumbull Property LP	177,641,021	15.60
Harrison Street Core Property LP	140,598,609	12.35
Jamestown Premier Property (CF)	65,157,820	5.72
State Street US REIT Index (CF)	18,668,168	1.64

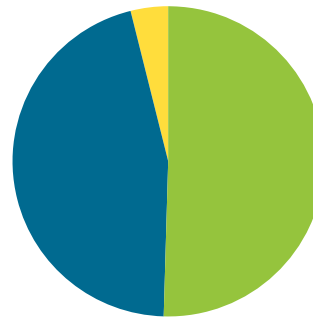
Performance shown is net of fees. Real Estate manager and index performance is available on a quarterly basis. Interim period performance assumes a 0.00% return. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Allocations shown may not sum up to 100% exactly due to rounding. Fiscal year ends 06/30. Jamestown Premier Property and UBS Trumbull Property LP are queue for redemption.

Comparative Performance

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Private Infrastructure	2.10	2.10	5.44	N/A	N/A	N/A	N/A	N/A	5.44	02/01/2022
MSCI Wrld Infrastructure Index	-11.54	-11.54	-13.92	-10.63	-1.82	1.24	3.50	4.08	-13.26	
Difference	13.64	13.64	19.36	N/A	N/A	N/A	N/A	N/A	18.70	
JP Morgan Infrastructure Investments	2.49	2.49	N/A	N/A	N/A	N/A	N/A	N/A	6.10	02/01/2022
MSCI Wrld Infrastructure Index	-11.54	-11.54	-13.92	-10.63	-1.82	1.24	3.50	4.08	-13.26	
Difference	14.03	14.03	N/A	N/A	N/A	N/A	N/A	N/A	19.36	
First Sentier GDIF US HFF	1.45	1.45	N/A	N/A	N/A	N/A	N/A	N/A	2.21	05/01/2022
MSCI Wrld Infrastructure Index	-11.54	-11.54	-13.92	-10.63	-1.82	1.24	3.50	4.08	-13.74	
Difference	12.99	12.99	N/A	N/A	N/A	N/A	N/A	N/A	15.95	
Hamilton Lane Infrastructure Opportunities LP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13.09	08/01/2022
MSCI Wrld Infrastructure Index	-11.54	-11.54	-13.92	-10.63	-1.82	1.24	3.50	4.08	-13.97	
Difference	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	27.06	

Asset Allocation By Manager

\$302,231,693



	Market Value (\$)	Allocation (%)
■ First Sentier GDIF US HFF	152,518,133	50.46
■ JP Morgan Infrastructure Investments	137,929,801	45.64
■ Hamilton Lane Infrastructure Opportunities LP	11,783,759	3.90

Performance shown is net of fees. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Allocations shown may not sum up to 100% exactly due to rounding. Fiscal year ends 06/30. In Q3, Hamilton Lane Infrastructure Opportunities Fund LP was funded.

Comparative Performance

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Opportunistic Investments	4.01	4.01	-5.05	-3.76	N/A	N/A	N/A	N/A	15.88	07/01/2020
Varde Dislocation LP	4.01	4.01	-5.23	-5.05	N/A	N/A	N/A	N/A	14.92	07/01/2020

Asset Allocation by Manager

\$83,235,567



■ Varde Dislocation LP

Market Value (\$)	Allocation (%)
83,235,567	100.00

Performance shown is net of fees. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Allocations shown may not sum up to 100% exactly due to rounding. Fiscal year ends 06/30. In Q3, Apollo Accord Fund IV LP was liquidated.

III. Addendum



North Dakota Board of University and School Lands
Alternative Investment Private Credit Fund Performance Listing

As of September 30, 2022

Fund Name	Vintage	Asset Class	Commitment (\$)	Paid In Capital (\$)	Distributions (\$)	Valuation (\$)	Fund IRR (%)	Quartile	Index IRR (%)	Fund Multiple
AG Direct Lending III LP	2018	Private Credit - Direct Lending	150,000,000	138,000,000	76,126,321	111,864,491	11.08	2nd	-0.11	1.36
AG Direct Lending IV LP	2020	Private Credit - Direct Lending	100,000,000	85,648,632	5,638,094	92,858,253	16.02	2nd	-13.94	1.15
Ares Pathfinder LP	2020	Private Credit - Specialty Finance	100,000,000	45,687,447	2,237,682	53,695,931	23.02	2nd	-13.62	1.22
Varde Dislocation LP	2020	Private Credit - Distressed/Special Situations	100,000,000	79,500,000	100,849	83,235,567	3.75	4th	-9.87	1.05
			450,000,000	348,836,079	84,102,946	341,654,242	11.29		-4.59	1.22

Certain valuations (marked with a **) are preliminary estimates of valuation as of the date of reporting and reflect the estimated impact of subsequent net cash contributions/distributions. These figures may be used in calculations contained in this report. Index IRR represents the dollar-weighted returns calculated using the Barclays US Agg Bond Index assuming an index investment with the same cash flow timing. IRRs are shown only for investments with one year or more of cash flows and for which an accurate IRR could be calculated. Applicable IRRs are marked with 'N/M' for not material. Fund IRR is the annualized since-inception net internal rate for the indicated fund or composite. Fund Multiple is the since inception sum of distributions and valuation divided by paid in capital. Quartile data is based on information provided by Preqin.



North Dakota Board of University and School Lands
Alternative Investment Private Equity Fund Performance Listing

As of September 30, 2022

Fund Name	Vintage	Asset Class	Commitment (\$)	Paid In Capital (\$)	Distributions (\$)	Valuation (\$)	Fund IRR (%)	Quartile	Index IRR (%)	Fund Multiple
Ashbridge Transformational Secondaries II LP	2021	Private Equity - Secondaries	25,000,000	12,250,000	0	15,536,157	N/M	N/A	N/M	1.27
Grosvenor - BUSL LP 2020-1 Investment Series	2021	Private Equity - Multi-Stage	130,000,000	26,260,091	1,730,142	25,882,276	5.23	N/A	-16.27	1.05
Grosvenor Secondary Opportunities III LP	2021	Private Equity - Fund of Funds	150,000,000	18,643,432	0	21,546,155	N/M	N/A	N/M	1.16
			305,000,000	57,153,522	1,730,142	62,964,588	16.88		-23.93	1.13

Certain valuations (marked with a **) are preliminary estimates of valuation as of the date of reporting and reflect the estimated impact of subsequent net cash contributions/distributions. These figures may be used in calculations contained in this report. Index IRR represents the dollar-weighted returns calculated using the Russell 3000 Index assuming an index investment with the same cash flow timing. IRRs are shown only for investments with one year or more of cash flows and for which an accurate IRR could be calculated. Applicable IRRs are marked with 'N/M' for not material. Fund IRR is the annualized since-inception net internal rate for the indicated fund or composite. Fund Multiple is the since inception sum of distributions and valuation divided by paid in capital. Quartile data is based on information provided by Prequin.



North Dakota Board of University and School Lands
 Alternative Investment Real Assets Fund Performance Listing

As of September 30, 2022

Fund Name	Vintage	Asset Class	Commitment (\$)	Paid In Capital (\$)	Distributions (\$)	Valuation (\$)	Fund IRR (%)	Quartile	Index IRR (%)	Fund Multiple
Hamilton Lane Infrastructure Opportunities 2019 LP		Real Assets - Core Infrastructure	25,000,000	10,822,903	0	11,783,759	N/M	N/A	N/M	1.09
			25,000,000	10,822,903	0	11,783,759				1.09

Certain valuations (marked with a **) are preliminary estimates of valuation as of the date of reporting and reflect the estimated impact of subsequent net cash contributions/distributions. These figures may be used in calculations contained in this report. Index IRR represents the dollar-weighted returns calculated using the MSCI World Real Estate Index (USD) (Net) assuming an index investment with the same cash flow timing. IRRs are shown only for investments with one year or more of cash flows and for which an accurate IRR could be calculated. Applicable IRRs are marked with 'N/M' for not material. Fund IRR is the annualized since-inception net internal rate for the indicated fund or composite. Fund Multiple is the since inception sum of distributions and valuation divided by paid in capital. Quartile data is based on information provided by Preqin.



Performance Related Comments

- Manager inception dates shown represent the first full month following initial funding.
- RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Prior historical data was provided by North Dakota Board of University and School Lands.
- Real Estate composite, manager, and index performance are available on a quarterly basis. Market values are as of the most recent quarter-end and adjusted for subsequent cash flows. Interim period performance assumes a 0.00% return.
- Indices show N/A for since inception returns when the fund contains more history than the corresponding benchmark.
- As of 07/2014, composite and manager performance is provided and calculated by RVK.
- Net performance for FLP bank loans represent Fees Payable.
- During 03/2021 JPM FI Intermediate Bond transitioned from intermediate duration to full duration core mandate.
- During 08/2021 Schroders Securitized Credit transitioned into Schroders Flexible Secured Income.
- RVK cautions that the interpretation of time-weighted returns on non-marketable investments such as Private Equity, Private Real Estate, and Private Credit is imperfect at best, and can potentially be misleading.

Index Comments

- The Target Allocation Index (Net) is a static custom index that is calculated monthly and consists of:
 - From 07/2022 through present: 15% Russell 3000 Index, 15% MSCI ACWI Ex USA IMI, 5% Barclays US Universal Index, 20% CS Leveraged Loans Index +1.5%, 5% Global 60/40 (60% MSCI All Country World IMI, 40% Barclays US Aggregate Bond Index), 10% HFRI RV Multi-Strategy Index, 15% NCREIF ODCE Index, 8% Cambridge US Private Equity Index, and 7% MSCI World Infrastructure Index.
 - From 05/2020 through present: 19% Russell 3000 Index, 19% MSCI ACW Ex US Index (USD) (Net), 22% Global Fixed Income Custom Index, 15% NCREIF ODCE Index (AWA) (Net), 15% Absolute Return Index, 5% Cambridge US Private Equity Index, and 5% MSCI World Infrastructure Index.
 - From 07/2019 through 04/2020: 18.5% Russell 3000 Index, 18.5% MSCI ACW Ex US Index (USD) (Net), 23% Global Fixed Income Custom Index, 15% NCREIF ODCE Index (AWA) (Net), 15% Absolute Return Custom Index, and 10% DIS Custom Index.
 - From 02/2018 through 06/2019: 17% Russell 3000 Index, 17% MSCI ACW Ex US Index (USD) (Net), 21% Global Fixed Income Custom Index, 15% NCREIF ODCE Index (AWA) (Net), 20% Absolute Return Custom Index, and 10% DIS Custom Index.
 - From 07/2016 through 01/2018: 17% Russell 3000 Index, 15% MSCI ACW Ex US Index (USD) (Net), 23% Global Fixed Income Custom Index, 15% NCREIF ODCE Index (AWA) (Net), 20% Absolute Return Custom Index, and 10% DIS Custom Index.
 - From 04/2016 through 06/2016: 17.6% Russell 3000 Index, 15.5% MSCI ACW Ex US Index (USD) (Net), 23.8% Global Fixed Income Custom Index, 12% NCREIF ODCE Index (AWA) (Net), 20.7% Absolute Return Custom Index, and 10.4% DIS Custom Index.
 - From 01/2016 through 03/2016: 17.7% Russell 3000 Index, 15.6% MSCI ACW Ex US Index (USD) (Net), 25.3% Global Fixed Income Custom Index, 10% NCREIF ODCE Index (AWA) (Net), 21% Absolute Return Custom Index, and 10.4% DIS Custom Index.
 - From 10/2015 through 12/2015: 17.9% Russell 3000 Index, 15.9% MSCI ACW Ex US Index (USD) (Net), 25.5% Global Fixed Income Custom Index, 9% NCREIF ODCE Index (AWA) (Net), 21.1% Absolute Return Custom Index, and 10.6% DIS Custom Index.
 - From 07/2015 through 09/2015: 19.5% Russell 3000 Index, 17.4% MSCI ACW Ex US Index (USD) (Net), 26.2% Global Fixed Income Custom Index, 4.1% NCREIF ODCE Index (AWA) (Net), 22% Absolute Return Custom Index, and 10.8% DIS Custom Index.
 - From 07/2014 through 06/2015: The index was calculated monthly using beginning of month asset class weights applied to each corresponding primary benchmark return.
 - From 01/2013 through 06/2014: 18.7% Russell 1000 Index, 12.4% Russell 2500 Index, 7.5% FTSE EPRA/NAREIT US Index, 12.4% MSCI EAFE Index (USD) (Net), 33.3% Bloomberg US Agg Bond Index, 0.70% CS Lvg'd Loan Index, 10% Bloomberg US Corp Hi Yld Index, and 5% Bloomberg Gbl Agg Ex USD Index (Hedged).
 - From 07/2009 through 12/2012: 15% Russell 1000 Index, 10% Russell 2500 Index, 6% FTSE EPRA/NAREIT US Index, 10% MSCI EAFE Index (USD) (Net), 32.3% Bloomberg US Agg Bond Index, 1.70% CS Lvg'd Loan Index, 10% Bloomberg US Corp Hi Yld Index, 5% Bloomberg Gbl Agg Ex USD Index (Hedged), and 10% ICE BofAML Cnvt Bonds Index (All Qual).
- The Global Fixed Income Custom Index is calculated monthly using beginning of month weights applied to each corresponding primary benchmark return. From 04/2019 through 06/2022, the index consisted of the Bloomberg US Unv Bond Index. Prior to 03/2019, the index consisted of 75% Bloomberg US Unv Bond Index and 25% Bloomberg Multi-Universe Index.

Cont.

- The Absolute Return Custom Index is calculated monthly using beginning of month weights applied to each corresponding primary benchmark return. Prior to 07/2022, the index consisted of 60% MSCI ACW IM Index (USD) (Net) and 40% Bloomberg US Agg Bond Index.

The All Asset Custom Index (EqI Wtd) is an equal-weighted hybrid created independently by RVK specifically for PIMCO's All Asset strategies, and it consists of the following benchmarks:

1. Short Term Strategies: ICE BofAML 1 Yr T-Bill Index
2. US Core and Long Maturity Bond Strategies: Bloomberg US Agg Bond Index
3. EM and Gbl Bond Strategies: PIMCO GLADI Index*
4. Crdt Strategies: ICE BofAML US Hi Yld Master II Index
5. Inflation Related Strategies: Bloomberg US Trsy US TIPS Index
6. US Equity Strategies: Russell 3000 Index
7. Global Equity Strategies: MSCI ACW Index (USD) (Net)
8. Alternative Strategies: ICE BofAML 3 Mo US T-Bill Index + 3%

*Performance for the PIMCO Gbl Advantage Bond Index (London Close) prior to 01/01/2004 consists of the JPM EMBI Gbl Dvf'd Index (TR).

The asset class market performance is represented by the respective indices:

- US Large Cap Equity = S&P 500 Index (Cap weighted)
- US Small Cap Equity = Russell 2000 Index
- Developed International Equity = MSCI EAFE Index (USD) (Net)
- Developed International Small Cap Equity = MSCI EAFE Small Cap Index (USD) (Net)
- Emerging Markets Equity = MSCI Emerging Markets Index (USD) (Net)
- US Aggregate Bond = Bloomberg US Aggregate Bond Index
- 3 Month US Treasury Bill = ICE BofAML 3 Month US T-Bill Index
- US Real Estate = NCREIF ODCE Index (AWA) (Gross)
- Real Estate Investment Trust (REITs) = FTSE NAREIT Equity REITs Index (TR)
- Commodities = Bloomberg Commodities Index (TR)

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