

#### **Investment Performance**

December 31, 2023

#### CHICAGO

150 North Wacker Drive Suite 2500 Chicago, Illinois 60606 312.212.4000

#### ST.LOUIS

231 South Bemiston Ave

Clayton, Missouri 63105

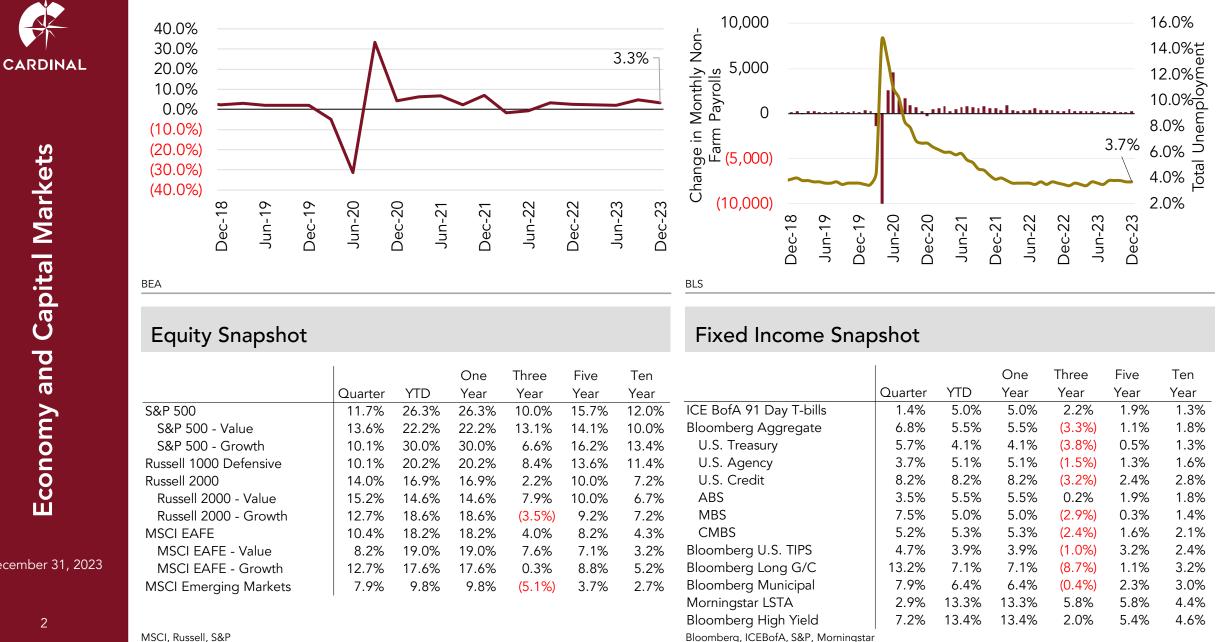
314.726.9911

Suite 200

cia-llc.com

info@cia-llc.com





**US Employment Situation** 

Quarter over Quarter % Change in GDP

**Capital Markets** Economy and

December 3<u>1, 2023</u>

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#### **Executive Summary**

#### • For the quarter:

Portfolio update:

• The total balance for the portfolio was nearly \$1.3 billion.

Capital Markets:

- In line with market participants' expectations, the Federal Open Market Committee (FOMC) elected to keep the Federal Funds target rate
  range unchanged at the level of 5.25% 5.50% in the December meeting. The decision to leave the target range unchanged was a
  deviation from FOMC members' projections at the September meeting, which showed members anticipated raising the target range
  0.25% before year-end in response to expectations of higher inflation.
- Equity markets grew through the fourth quarter after posting negative results for the prior quarter. Reversing a trend observed during 2023, small cap stocks outperformed relative to large cap stocks during the fourth quarter as the S&P 500 rose 11.7% and the Russell 2000 increased 14.0%. Within the S&P 500, value stocks led growth stocks, increasing 13.6% compared to 10.1% for growth stocks. International stock indices posted positive results during the quarter with developed markets outperforming emerging markets. In fixed income, the Bloomberg Aggregate Fixed Income index increased 6.8% during the fourth quarter as the High Yield Bond index grew 7.2%.

#### Performance:

- The PCF's overall portfolio outperformed the benchmark by 4 bps.
- Core Fixed Income and Risky Debt lagged, while Equity and Private Real Estate outperformed.

#### • For the past year:

Capital Markets:

- For investment grade fixed income markets, both Morningstar LSTA and Bloomberg High Yield came in at 13.3% and 13.4%.
- For equities, all asset classes had positive returns. S&P Growth came in at 30.0% which was the best performing.

Performance:

- The PCF's overall portfolio outperformed its relative benchmark, by 83 bps.
- Total Equity composite outperformed by 95 bps, returning 15.3% vs. 14.3% for the benchmark.

#### • For the past five years:

Capital Markets:

- For fixed income, Morningstar LSTA came in at 5.8%, followed by High Yield, 5.4%.
- The top equity asset performer was S&P 500 Growth at 16.2% followed by S&P 500 at 15.7%.

Performance:

• The PCF's overall portfolio performance came in at 3.4%

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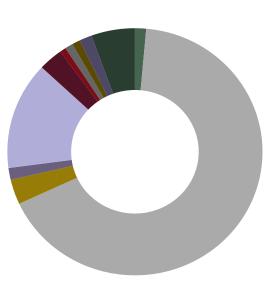
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#### Allocation by Asset Class (\$000s)

			Ta	rget
	Value	Percent	Percent	Range
Cash	\$ 18,846	1.4%	2.0%	1.0%-3.0%
Core Fixed Income				
Investment Grade	\$ 886,150	66.7%	66.5%	60%-73%
Risky Debt Income				
High Yield Bank Loans	\$ 43,431	3.3%	3.0%	2.5%-3.5%
High Yield Bonds	\$ 40,944	3.1%	3.0%	2.5%-3.5%
Emerging Market Debt	\$ 40,991	3.1%	3.0%	2.5%-3.5%
Equity				
Domestic Equity	\$ 82,724	6.2%	6.0%	4.5%-7.5%
International Equity	\$ 54,207	4.1%	4.0%	3.0%-5.0%
Global Minimum Volatilty	\$ 66,969	5.0%	5.0%	4.0%-6.0%
Private Real Estate				
Private Real Estate	\$ 94,826	7.1%	7.5%	6.0%-9.0%
Total	\$ 1,329,088	100.0%	100.0%	

#### Allocation by Manager (\$000s)



■ Cash \$18,846

■ NEAM \$886,150

Barings \$43,431

■ Federated \$20,437

Vanguard \$187,002

■ PGIM \$40,991

■ Virtus \$10,412

■ City of London \$13,533

EuroPacific \$13,460

■Invesco \$21,255

■ AEW \$73,570

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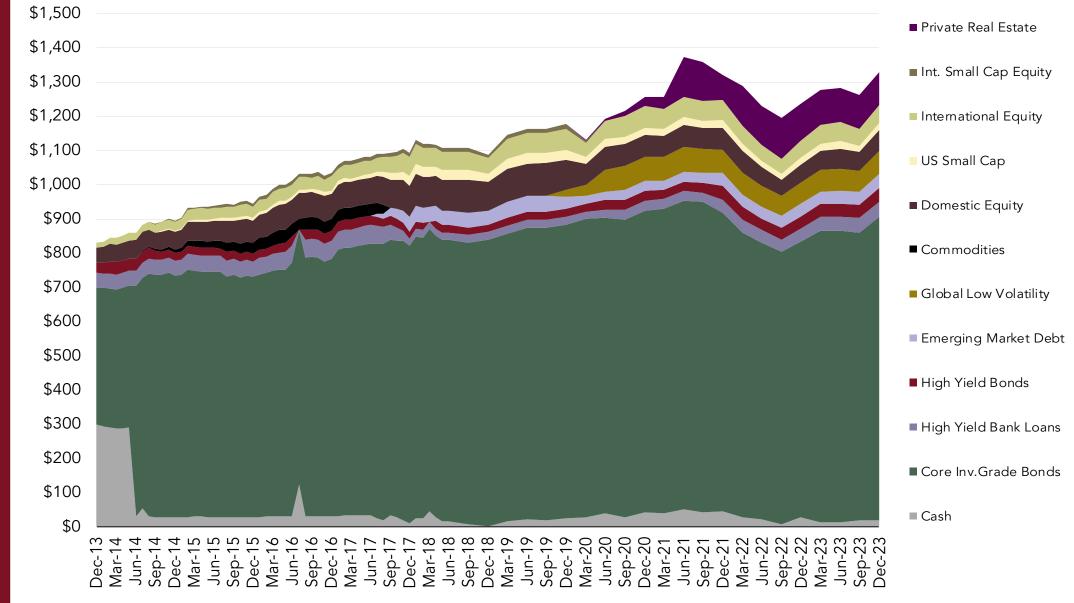
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Principal, Cardinal



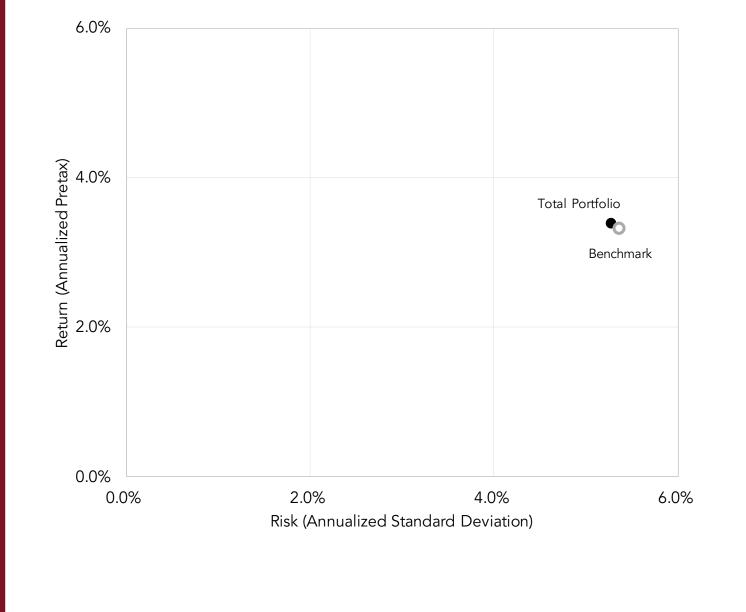
**Asset Allocation** 

#### Total Company Allocation (\$MM)





#### Five Year Risk/Return Performance



- This chart shows the risk and return for the actual portfolio and the overall benchmark for the past five years.
- Over the past five years, LAPCF has outperformed its benchmark on an annualized basis by 0.06%

December 31, 2023

Performance

Principal, State of Louisiana, Cardinal

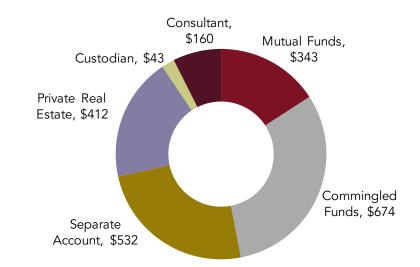


# Investment Fees by Vehicle

December 31, 2023

	12/31/2023	Estimated	Expense
	Market Value (\$MM)	Annual Fee (\$k)	Ratio
Mutual Funds	\$221	\$343	0.16%
Commingled Funds	\$108	\$674	0.62%
Separate Account	\$886	\$532	0.06%
Private Real Estate	\$95	\$412	0.43%
Cash	\$19	N/A	N/A
Custodian	N/A	\$43	0.00%
Consultant	N/A	\$160	0.01%
Total	\$1,329	\$2,163 <b>Avg.</b>	0.16%

#### Distribution of Fees (\$k)



Principal, Cardinal

**Estimated Annual Fees** 

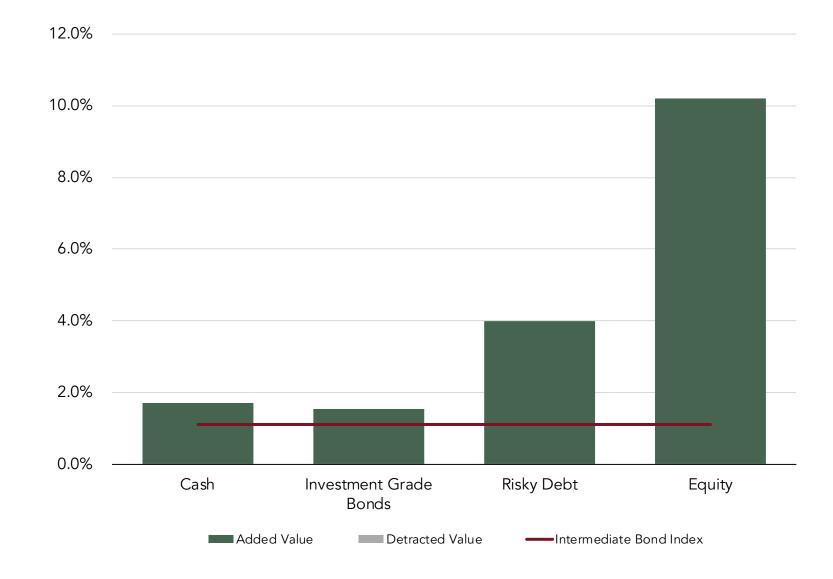
Principal, Cardinal

- The annual fee amounts were calculated using the most recent available market values and expense ratios for each fund.
- The annual fee amounts presented are estimated due to fluctuating market values of each holding from quarter to quarter.



# Performance

Five Year Asset Class Returns vs. Intermediate Bond Index





#### Total Composites

#### Net of Fees

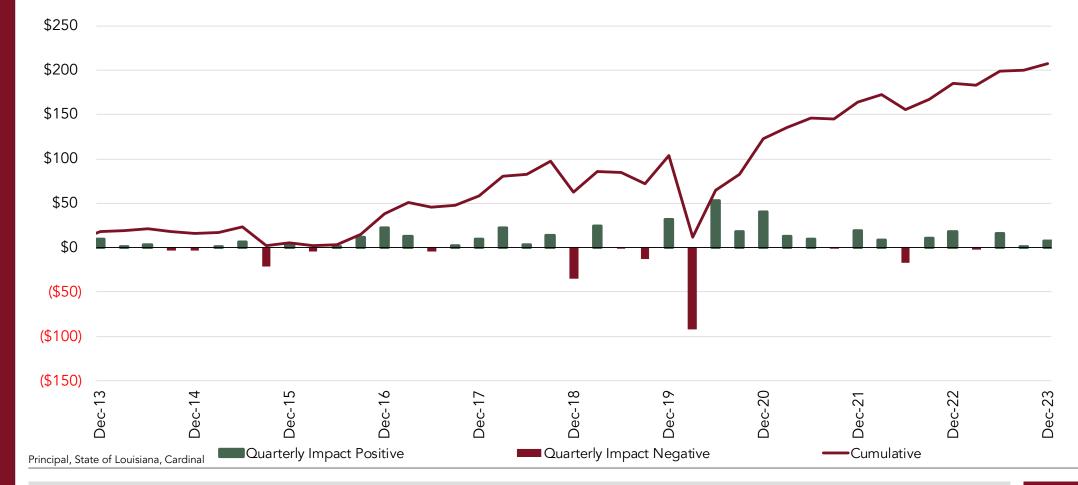
Composite	Market Value (\$000s)	% Weight	Quarter	YTD	One Year	Three Years	Five Years	Ten Years	Since Inception	Inception Date
PCF Composite										
Pretax Performance	\$1,329,089	100.0%	5.35%	6.68%	6.68%	0.28%	3.40%	2.90%	2.54%	Jan-12
Blended Benchmark <sup>1</sup>			<u>5.31%</u>	<u>5.86%</u>	<u>5.86%</u>	<u>(0.23%)</u>	<u>3.33%</u>	<u>2.81%</u>	<u>2.96%</u>	
Relative Performance			0.04%	0.83%	0.83%	0.51%	0.06%	0.09%	(0.42%)	
Cash										
WF Advantage Fund	\$18,846	1.4%	1.33%	4.99%	4.99%	2.26%	1.71%	-	1.17%	Jan-15
ICE BofA 91 Day T-Bill			<u>1.35%</u>	<u>4.93%</u>	<u>4.93%</u>	<u>2.06%</u>	<u>1.79%</u>	-	<u>1.30%</u>	
Relative Performance			(0.02%)	0.06%	0.06%	0.20%	(0.09%)	-	(0.13%)	
Core Fixed Income Composite	\$886,150	66.7%	5.29%	6.23%	6.23%	(1.43%)	1.55%	2.10%	1.73%	Jan-12
Blended Benchmark <sup>2</sup>			<u>5.49%</u>	<u>5.15%</u>	5.15%	<u>(2.09%)</u>	<u>1.11%</u>	1.71%	<u>1.60%</u>	
Relative Performance			(0.20%)	1.08%	1.08%	0.66%	0.44%	0.39%	0.13%	
Risky Debt Composite	\$125,366	9.4%	6.17%	12.10%	12.10%	1.01%	3.98%	3.02%	3.18%	Apr-13
Blended Benchmark <sup>2</sup>			6.17%	<u>12.33%</u>	<u>12.33%</u>	1.18%	<u>4.10%</u>	3.33%	<u>3.43%</u>	I
Relative Performance			0.00%	(0.23%)	(0.23%)	(0.17%)	(0.12%)	(0.32%)	(0.25%)	
Total Equity Composite	\$203,901	15.3%	9.79%	15.29%	15.29%	5.23%	10.21%	7.36%	9.47%	Nov-12
Blended Benchmark <sup>2</sup>			<u>9.48%</u>	14.28%	<u>14.28%</u>	4.23%	<u>9.32%</u>	6.94%	<u>9.08%</u>	
Relative Performance			0.31%	1.00%	1.00%	1.00%	0.88%	0.42%	0.39%	
Private Real Estate Composite	\$94,826	7.1%	(2.76%)	(9.92%)	(9.92%)	6.61%	-	-	5.16%	Jan-20
Blended Benchmark <sup>2</sup>			<u>(5.01%)</u>	<u>(12.74%)</u>	<u>(12.74%)</u>	4.09%	-	-	<u>3.44%</u>	
Relative Performance Principal, State of Louisiana, Cardinal			2.25%	2.82%	2.82%	2.52%	-	-	1.72%	

Performance



## Performance

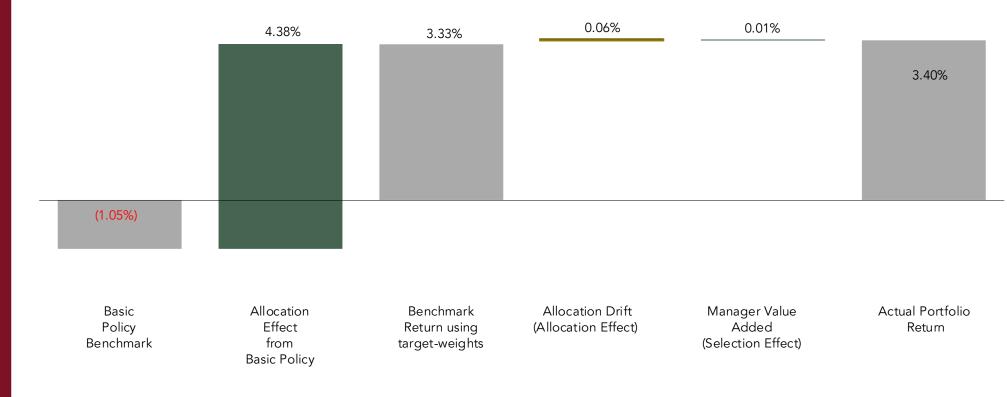
Value added or (detracted) by the Diversified Portfolio



- Since inception, the diversified portfolio has added approximately \$200 MM above what the prior portfolio structure likely would have earned.
- The Legacy allocation consisted of 50% Treasury and 50% Agency.

#### Five-Year Performance Attribution: Overall





#### Principal, Cardinal

- Drift, or the Allocation effect was 0.06% for the last five years.
- The PCF's investment managers have added 0.01% in value overall on an annualized basis.
- The Basic Policy Benchmark consisted of 50% Treasury and 50% Agency.

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Attribution

### CARDINAL

## Attribution

#### Allocation Effect

Overall		0.06%	Overall		0.01%
			Wells Fargo Money Market	(0.01%)	
Cash		0.01%	Fixed Income - State of LA		0.00%
			NEAM		0.06%
Core Fixed Income	(0.00%)		Lord Abbett		0.00%
	-		Federated Inst. High Yield	(0.04%)	
High Yield Bonds		0.00%	Vanguard High Yield Corporate		0.02%
-			Barings Capital Floating Rate	(0.04%)	
High Yield Bank Loans		0.00%	PGIM Emerging Markets Debt	(0.02%)	
			Emerging Markets	(0.01%)	
Commodity		0.00%	Goldman Sachs Emerging	(0.01%)	
-			Vanguard Global Minimum		0.01%
Emerging Market Debt	(0.02%)		Vanguard Russell 1000 Value	(0.00%)	
			Vanguard Total Stock Market	(0.01%)	
Global Minimum Volatilty		0.04%	DFA US Small Cap		
			Vanguard Small-Cap S&P 600		0.01%
Domestic Equity		0.	09% Virtus KAR Small-Cap Core		0.02%
			EuroPacific Growth Fund		0.01%
U.S. Small Cap		0.00%	Harbor International		0.00%
			PIMCO International StockPLUS		0.00%
International Equity		0.02%	City of London		0.01%
			Vanguard Total International	(0.01%)	
International Small Cap	(0.04%)		DFA International Small Cap	(0.02%)	
			Oppenheimer International		0.01%
Private Real Estate	(0.04%)		Invesco US Income Fund LP		0.02%
		1	AEW Core Property Trust		0.01%

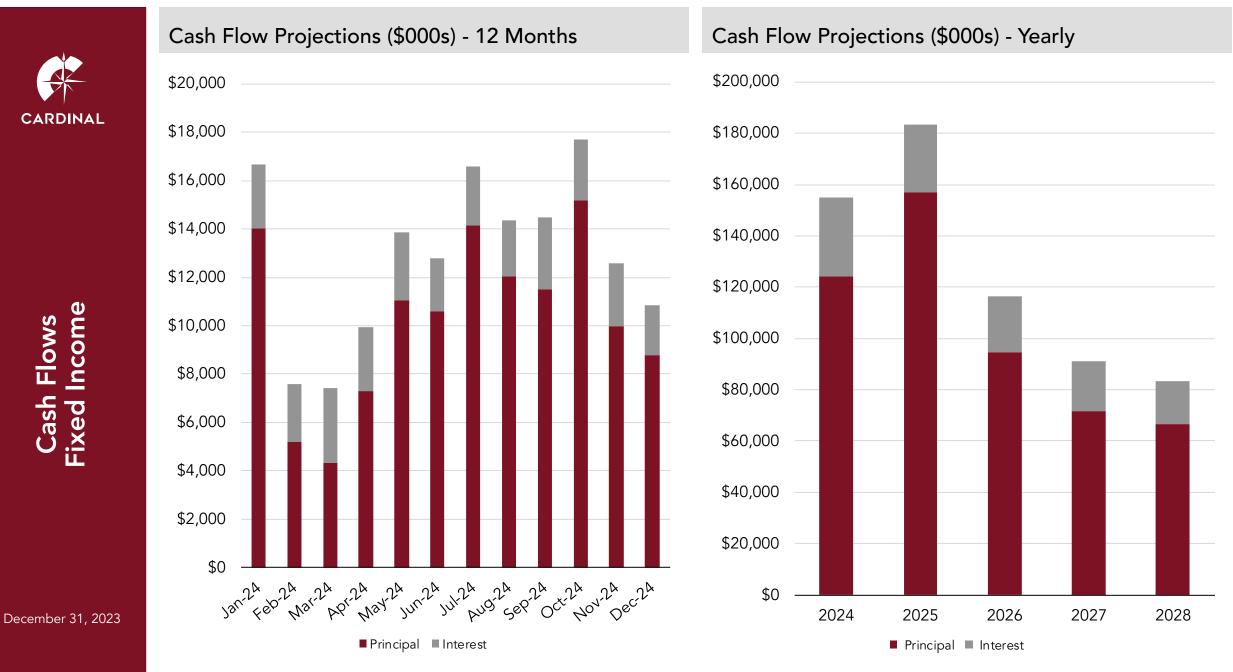
Principal, Cardinal

• NEAM has had a significantly positive impact on the overall portfolio (+0.06%) annualized over the past five years.

Principal, Cardinal

Manager Value Added

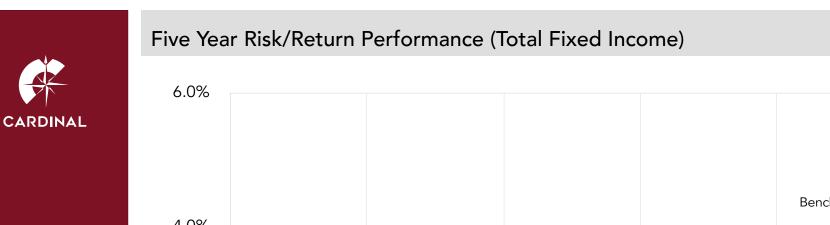
• Domestic Equity had the highest Allocation Effect (+0.09%) annualized over the past five years.



Principal, State of Louisiana, NEAM, Cardinal

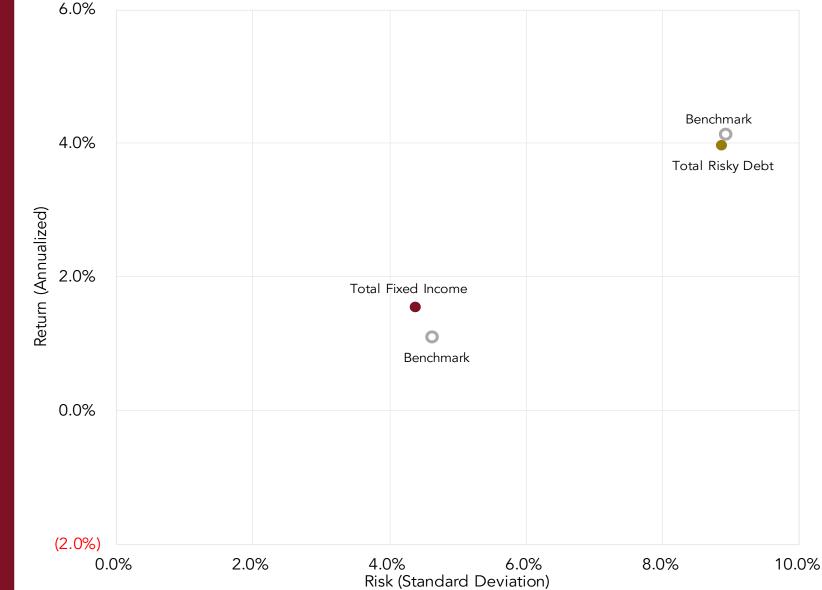
Principal, State of Louisiana, NEAM, Cardinal

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Performance

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- Over the past five years, Fixed Income has outperformed against its benchmark by 0.44% with nearly the same risk.
- For the Total Risky Debt composite it has underperformed by 0.12% over the five year period.

Principal, State of Louisiana, Cardinal

### CARDINAL

#### Fixed Income

Composite Core Fixed Income Composite Blended Benchmark <sup>2</sup>	Market Value (\$000s) \$886,150	% Weight 66.7%	Quarter 5.29% <u>5.49%</u>	YTD 6.23% <u>5.15%</u>	One Year 6.23% <u>5.15%</u>	Three Years (1.43%) <u>(2.09%)</u>	Five Years 1.55% <u>1.11%</u>	Ten Years 2.10% <u>1.71%</u>	Since Inception 1.73% <u>1.60%</u>	Inception Date Jan-12
Relative Performance			(0.20%)	1.08%	1.08%	0.66%	0.44%	0.39%	0.13%	
<b>NEAM</b> Bloomberg Int. Aggregate Index Relative Performance	\$886,150	66.7%	5.29% <u>5.49%</u> (0.20%)	6.23% <u>5.15%</u> 1.08%	6.23% <u>5.15%</u> 1.08%	(1.43%) <u>(2.09%)</u> 0.66%	1.55% <u>1.11%</u> 0.44%	- - -	1.79% <u>1.35%</u> 0.45%	Jun-14

I.

#### Principal, State of Louisiana, NEAM, Cardinal

- NEAM has outperformed by 66 bps over the past three years. It currently has a 50 basis point yield advantage compared to the index, so this bodes well for future performance.
- The Core Fixed Income Composite includes, in chronological order:
  - State of Louisiana fixed income,
  - Various mutual funds used transitionally,
  - JP Morgan, and NEAM.



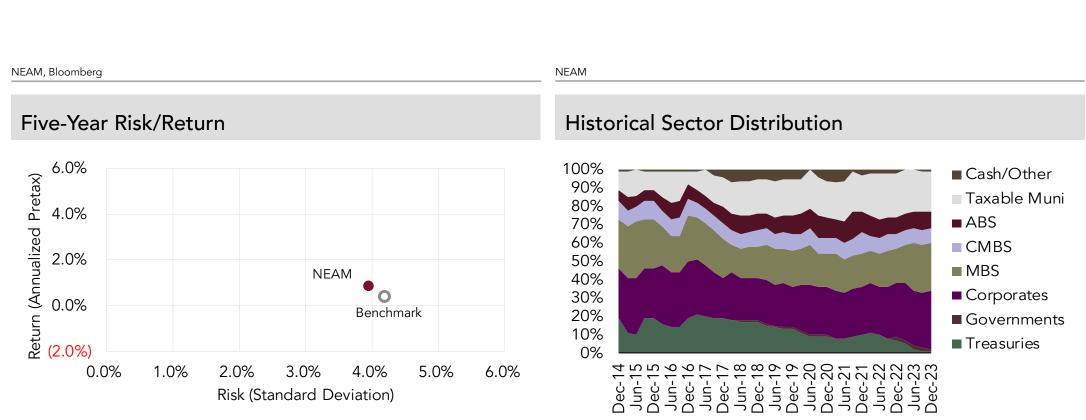
#### Characteristics

			BB Int.
	NE	AM	Aggregate
Characteristic	9/30/23	12/31/23	12/31/23
Effective Duration	4.3 years	4.2 years	4.5 years
Average Maturity	5.9 years	5.8 years	5.3 years
Yield to Maturity	5.8%	5.0%	4.5%
Average Quality	AA	AA	AA

#### Mandate and Objective

- Actively managed fixed income separate account
- Inception: June 2014
- Objective: Exceed total return of the Bloomberg Int. Aggregate Index
- Annual Fee = 0.075% on the first \$400M and 0.045% on the remaining

Characteristics NEAM





# Characteristics NEAM

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Tracking Error **Relative Returns & Risk** 8.0% 10.0% 8.0% 4.0% 6.0% 0.0% 4.0% (4.0%) 2.0% (8.0%) 0.0% Dec-18 Jun-20 Dec-20 Dec-19 Jun-21 Dec-22 Dec-23 Jun-19 Dec-21 Jun-22 Jun-23 Dec-18 Jun-19 Jun-20 Jun-23 Dec-19 Dec-20 Jun-21 Dec-21 Jun-22 Dec-22 -----Rolling 3-Year Relative Returns -----Rolling 3-Year Relative SD Tracking Error NEAM NEAM Sharpe Ratio Beta 4.0 2.0 3.0 2.0 1.5 1.0 0.0 1.0 (1.0)(2.0) 0.5 Jun-19 Dec-19 Jun-20 Dec-20 Jun-23 Dec-18 Jun-19 Dec-19 Jun-20 Dec-20 Dec-23 Dec-18 Jun-22 Dec-22 Dec-21 Jun-22 Dec-22 Jun-23 Jun-21 Dec-21 Jun-21 December 31, 2023 ■Negative difference Positive difference ----Rolling 3-year beta -NEAM Barclays Int. Agg NEAM NEAM

Dec-23

Dec-23



#### High Yield Bank Loan

Composite <b>High Yield Bank Loan Composite</b> Morningstar LSTA Index	Market Value (\$000s) \$43,431	% Weight 3.3%	Quarter 3.01% 2.71%	YTD 12.87% 12.61%	One Year 12.87% 12.61%	Three Years 5.11% 5.09%	Five Years 4.92% 5.12%	Ten Years 3.65% <u>3.86%</u>	Since Inception 3.73% <u>3.87%</u>	Inception Date Apr-13
Relative Performance			<u>2.71%</u> 0.30%	0.26%	0.26%	<u>3.07%</u> 0.03%	<u>3.12 %</u> (0.19%)	<u>3.00 //</u> (0.22%)	<u>3.87 %</u> (0.14%)	
<b>Barings U.S. Loan Fund</b> Morningstar LSTA Index Relative Performance	\$43,431	3.3%	3.01% <u>2.71%</u> 0.30%	12.87% <u>12.61%</u> 0.26%	12.87% <u>12.61%</u> 0.26%	5.11% <u>5.09%</u> 0.03%	4.92% <u>5.12%</u> (0.19%)		4.39% <u>4.37%</u> 0.03%	Aug-16

#### Principal, Barings, Cardinal

- High Yield Bank Loan Composite underperformed for longer time periods but outperformed for the five, ten and since inception,
- Since inception Barings has outperformed the benchmark by 3 bps.



#### Characteristics

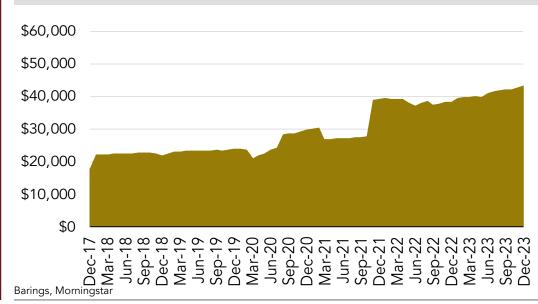
			Morningstar
	Baring	S&P LSTA	
Characteristic	9/30/23	12/31/23	12/31/23
Number of Issues	259	242	1,632
Average Coupon	9.1%	9.1%	NA
Average Spread	359 bps	358 bps	398 bps
Avg Credit Quality	B+	B+	В

#### Mandate and Objective

- Actively managed High Yield Bank Loan Fund.
- Inception: August 2016
- Objective: Exceed total return of the Morningstar S&P LSTA index
- Annual fee 0.475%

#### Barings, Morningstar

#### Asset Growth (\$000s)



#### Barings, Morningstar

#### Top Ten Holdings

Holding	Weight
Asurion	1.7%
Medline	1.3%
Athenahealth, Inc	1.2%
Scientific Games Lottery	1.1%
LifePoint Health	1.0%
Altice USA, Inc	0.9%
Sedgwick CMS	0.9%
Restaurant Brands Int	0.9%
Inspire Brands	0.9%
Elanco Animal Health	0.9%
Total	10.7%
Barings, Morningstar	1

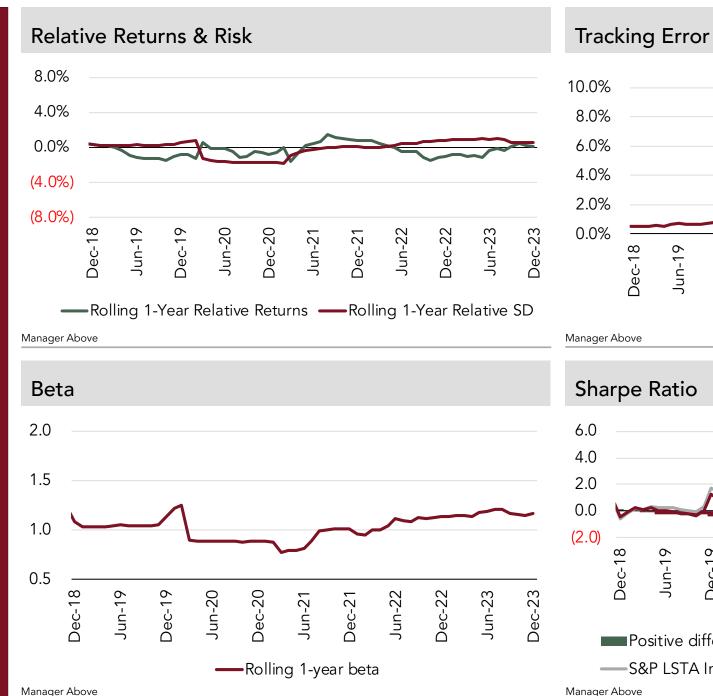
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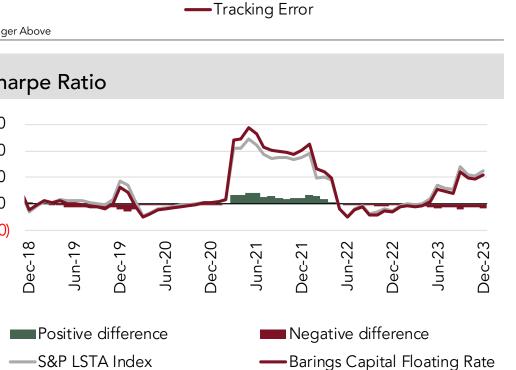
Characteristics Barings



### **Characteristics** Barings

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Jun-20

Dec-20

Jun-21

Dec-21

Dec-19

Manager Above

Jun-23

Dec-23

Jun-22

Dec-22



#### High Yield Bond

Composite <b>High Yield Bond Composite</b> Blended Benchmark <sup>2</sup>	Market Value (\$000s) \$40,944	% Weight 3.1%	Quarter 7.05% <u>7.05%</u>	YTD 12.42% <u>13.25%</u>	One Year 12.42% <u>13.25%</u>	Three Years 1.73% <u>1.87%</u>	Five Years 5.14% <u>5.08%</u>	Ten Years 3.97% <u>4.19%</u>	Since Inception 3.91% <u>4.16%</u>	Inception Date May-13
Relative Performance			0.01%	(0.83%)	(0.83%)	(0.14%)	0.07%	(0.22%)	(0.25%)	
<b>Federated Institutional High Yield Bond</b> BofA U.S. High Yield Cash Pay Index Relative Performance	\$20,437	1.5%	6.83% <u>7.05%</u> (0.22%)	13.11% <u>13.25%</u> (0.14%)	13.11% <u>13.25%</u> (0.14%)	1.65% <u>1.87%</u> (0.22%)	5.07% <u>5.08%</u> (0.01%)	- - -	4.10% <u>4.14%</u> (0.04%)	Apr-18
<b>Vanguard High Yield Corporate Fund</b> BofA U.S. High Yield Cash Pay Index Relative Performance	\$20,507	1.5%	7.28% <u>7.05%</u> 0.23%	11.75% <u>13.25%</u> (1.50%)	11.75% <u>13.25%</u> (1.50%)	1.82% <u>1.87%</u> (0.05%)	5.22% <u>5.08%</u> 0.14%	- - -	4.26% <u>4.14%</u> 0.12%	Apr-18

Principal, Federated, Vanguard, Cardinal

- The High Yield Bond Composite underperformed the benchmark for all reporting time periods except the quarter and five year period.
- Federated underperformed for all time periods, while Vanguard lagged for all time periods except the current quarter, five year period and since inception.

Performance



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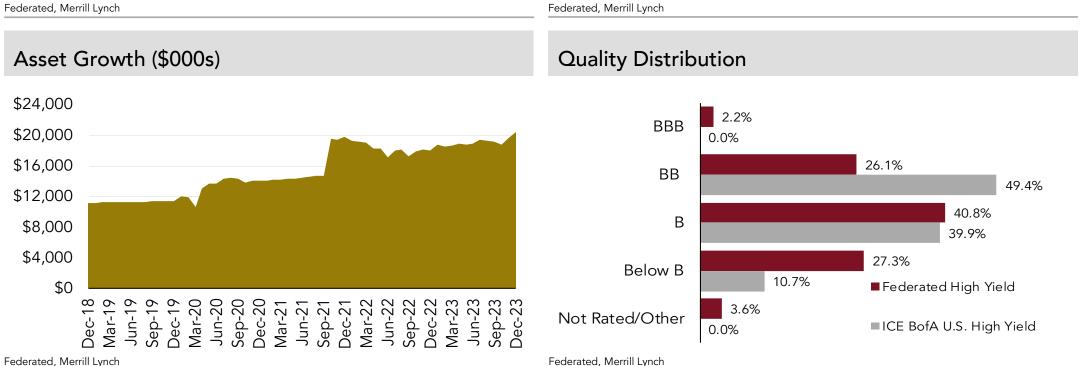
# Characteristics Federated High Yield Bond

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	Fed	erated	High Yield
Characteristic	9/30/23	12/31/23	12/31/23
No. of Holdings	560	547	879
Average Duration	3.5 years	3.4 years	3.6 years
Average Credit Quality	В	В	B+
Average Maturity	4.6%	4.1%	5.5%
Average Coupon	6.0%	6.0%	6.1%

#### Mandate and Objective

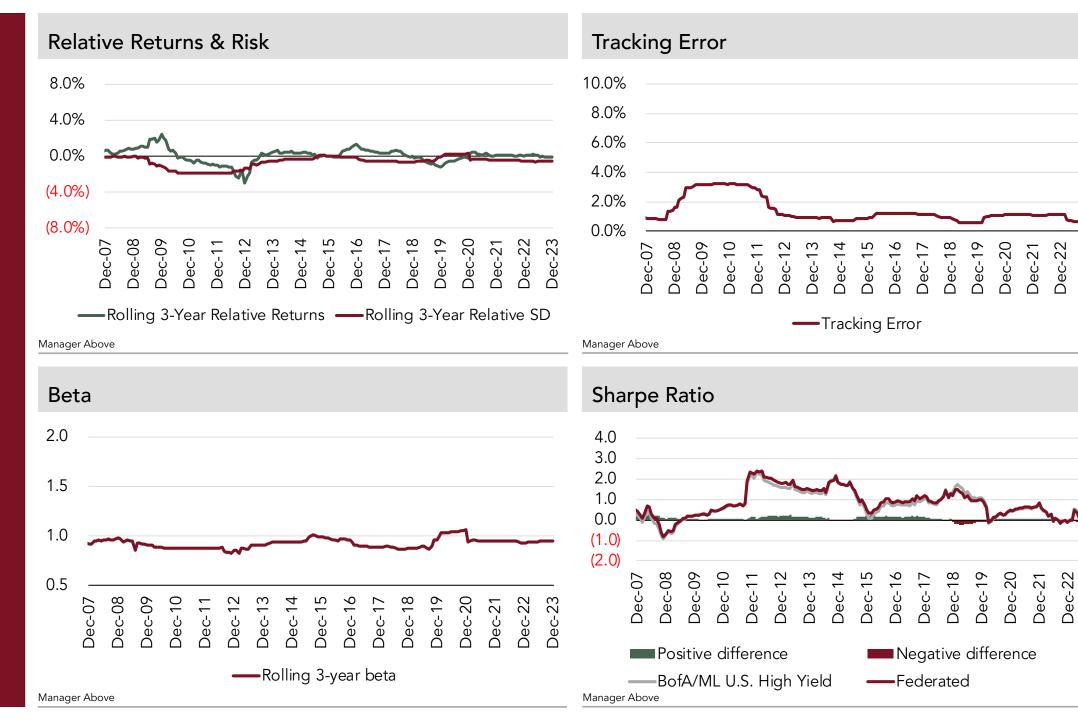
- Mutual Fund (FIHBX)
- Actively Managed High Yield Bond Fund
- Inception: April 2018
- Objective: Exceed total return of the ICE BofA U.S. High Yield Cash Pay
- Annual Fee 0.500%





# Characteristics Federated High Yield Bond

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Dec-23

Dec-23

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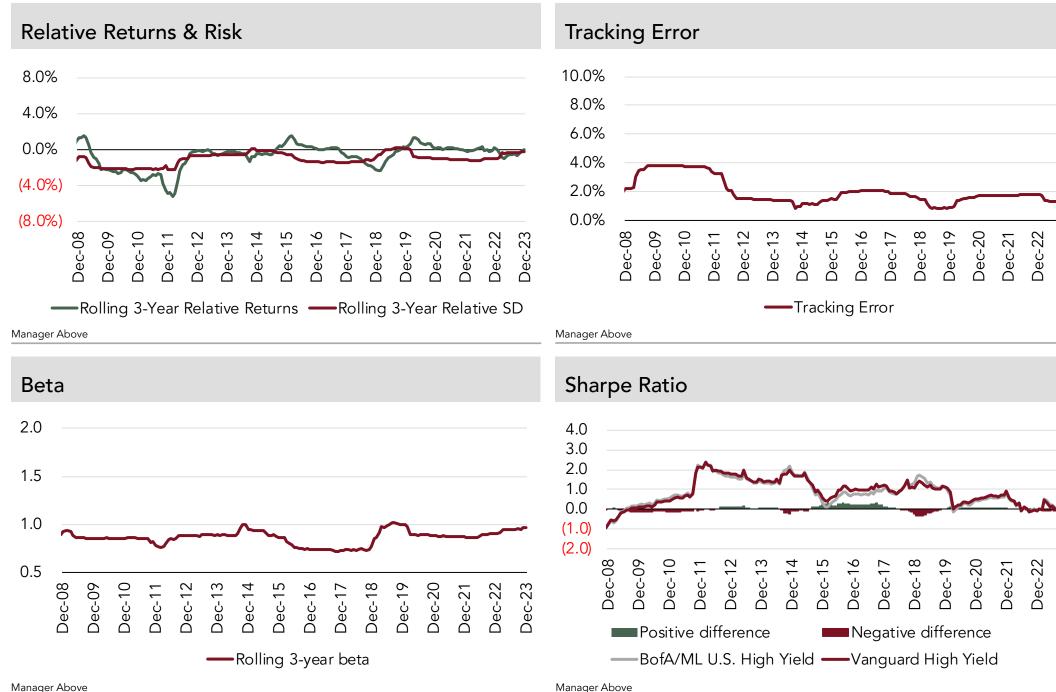
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	Characteristics	Mandate
CARDINAL	Vanguard HYICE BofA U.Vanguard HYHigh YieldCharacteristic9/30/2312/31/2312/31/23No. of Holdings828835879Average Duration3.7 years3.2 years3.6 yearsAverage Credit QualityBBBBB+Average Yield to Maturity4.8%4.4%5.5%Average Coupon6.5%5.4%6.1%	
cteristics igh Yield	Vanguard, ICE BofA Asset Growth (\$000s)	Vanguard, ICE BofA Quality Distribution
Characteristics Vanguard High Yield	\$24,000 \$20,000 \$16,000 \$12,000 \$8,000 \$4,000	AAA 0.0% AA 1.8% 0.0% A 0.1% 0.0% BBB 5.1% BB BB 48.9% 49.4% B 48.9% 49.4%
December 31, 2023	\$0 \$0 \$0	Below B 3.3% 10.7%
24	Avadian Vice Poecenter Mar-20 Jun-20 Sep-20 Mar-21 Jun-21 Jun-21 Sep-22 Sep-22 Sep-22 Jun-22 Sep-22 Sep-22 Sep-22 Sep-23	Not Rated/Other 0.4% 0.0% Vanguard, ICE BofA



# Characteristics Vanguard High Yield Bond

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Dec-23

Dec-23



#### Emerging Market Debt

Composite	Market Value (\$000s)	% Weight	Quarter	YTD	One Year	Three Years	Five Years	Ten Years	Since Inception	Inception Date
Emerging Market Debt Composite EMBI Global Diversified	\$40,991	3.1%		10.92% 11.09%	10.92% 11.09%	(3.95%) (3.56%)	1.70% 1.67%	-	0.81% <u>1.07%</u>	Aug-17
Relative Performance			(0.37%)	(0.17%)	(0.17%)	(0.39%)	0.04%	-	(0.26%)	
<b>PGIM Emerging Market Debt</b> EMBI Global Diversified Relative Performance	\$40,991	3.1%	8.80% <u>9.11%</u> (0.31%)	10.92% <u>10.86%</u> 0.06%	10.92% <u>10.86%</u> 0.06%	(3.72%) <u>(3.76%)</u> 0.04%	- - -	- - -	(0.25%) <u>(1.05%)</u> 0.80%	Jul-20

Т

Principal, Goldman Sachs, Prudential, Cardinal

- Emerging Market Debt has underperformed for all reporting time periods except the five year period.
- Prudential outperformed since inception by 80 bps.

.1.	Characteristics		Mandate	
<b>Jarkets</b>	Prudential Emerging MarketCharacteristic9/30/2312/31/23No. of Holdings705684Effective Duration6.8 years6.9 yearsAverage Maturity10.7 years10.6 yearsAvg. Credit QualityBBBBYield8.4%7.5%	EMBI Global Diversified 12/31/23 924 6.7 years 11.5 years BBB 6.6%	<ul> <li>Fund (PDHQX)</li> <li>Inception: July 2020</li> <li>Objective: Exceed total return of EMBI Global E</li> <li>Annual fee 0.65%</li> </ul>	Diversified
Characteristics tial Emerging Markets Fund	Prudential Three-Year Risk/Return		Prudential Quality Distribution	
Char Prudential E	15.0% 10.0% 5.0% 0.0% (5.0%) Benchmark Pruden (10.0%) (15.0%)	tial	AAA 1.7% 0.0% AA 4.5% A 5.7% 15.6% BBB BB 21.1%	36.0% 33.3% 24.9%
ecember 31, 2023 27	(15.0%) (15.0%) 0.0% 5.0% 10.0% Risk (Standard Deviati	15.0% 20.0% on)	B 16.9% 17.0% Below B 5.6% Cash/Other 2.5% 0.2%	<ul> <li>PGIM Emerging Market</li> <li>EMBI Global Diversified</li> </ul>
	Prudential		Prudential	

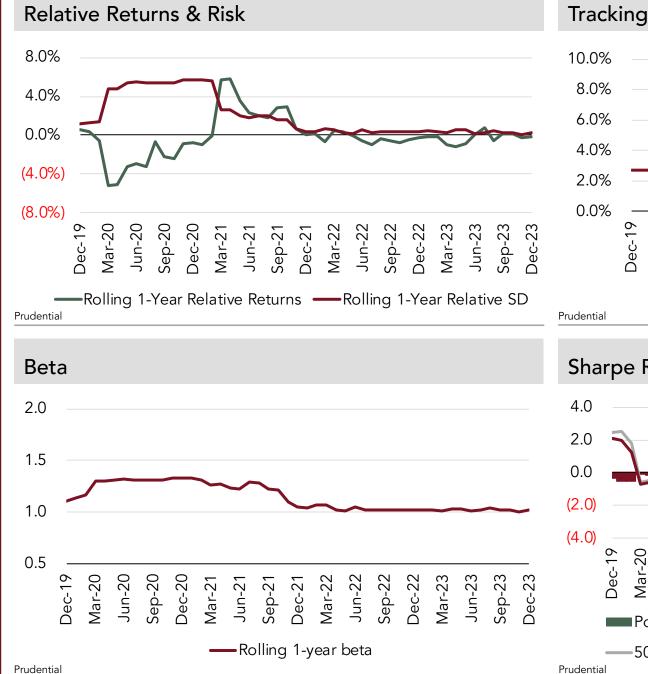
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Prudential Emerging Markets Fund **Characteristics** 

December 31, 2023

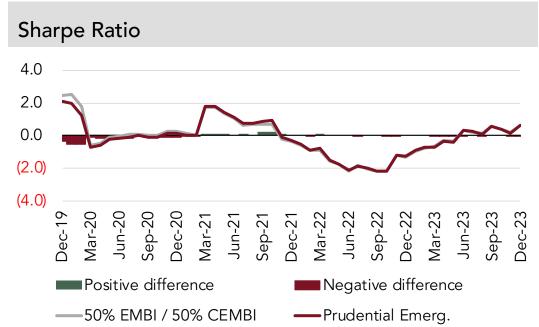
28



#### **Tracking Error**



-Tracking Error





#### Equity and Global Low Volatility

Composite Total Equity Composite	Market Value (\$000s) \$203,901	% Weight 15.3%	Quarter 9.79%	YTD 15.29%	One Year 15.29%	Three Years 5.23%	Five Years 10.21%	Ten Years 7.36%	Since Inception 9.47%	Inception Date Nov-12
Blended Benchmark <sup>2</sup>	\$203,701	13.370	9.48%	14.28%	14.28%	4.23%	9.32%	6.94%	9.08%	INOV-12
Relative Performance			0.31%	1.00%	1.00%	1.00%	0.88%	0.42%	0.39%	
<b>Domestic Equity Composite</b> Blended Benchmark <sup>2</sup> Relative Performance	\$82,724	6.2%	12.14% <u>11.93%</u> 0.22%	21.84% <u>19.71%</u> 2.13%	21.84% <u>19.71%</u> 2.13%	9.00% <u>7.03%</u> 1.98%	14.31% <u>12.97%</u> 1.35%	10.57% <u>9.88%</u> 0.69%	12.48% <u>11.85%</u> 0.62%	Nov-12
<b>International Equity Composite</b> Blended Benchmark <sup>2</sup> Relative Performance	\$54,207	4.1%	10.15% <u>9.75%</u> 0.40%	15.32% <u>15.69%</u> (0.38%)	15.32% <u>15.69%</u> (0.38%)	0.29% <u>1.79%</u> (1.50%)	7.85% <u>7.29%</u> 0.56%	4.07% <u>3.96%</u> 0.11%	4.55% <u>4.44%</u> 0.11%	May-13
<b>Vanguard Global Minimum Volatility</b> MSCI World Minimum Volatility Relative Performance	\$66,969	5.0%	6.74% <u>6.44%</u> 0.30%	7.97% <u>7.12%</u> 0.85%	7.97% <u>7.12%</u> 0.85%	4.94% <u>2.96%</u> 1.98%	- - -	- - -	2.97% <u>3.25%</u> (0.29%)	Dec-19

#### Principal, Cardinal

The Equity composite outperformed for all time periods.

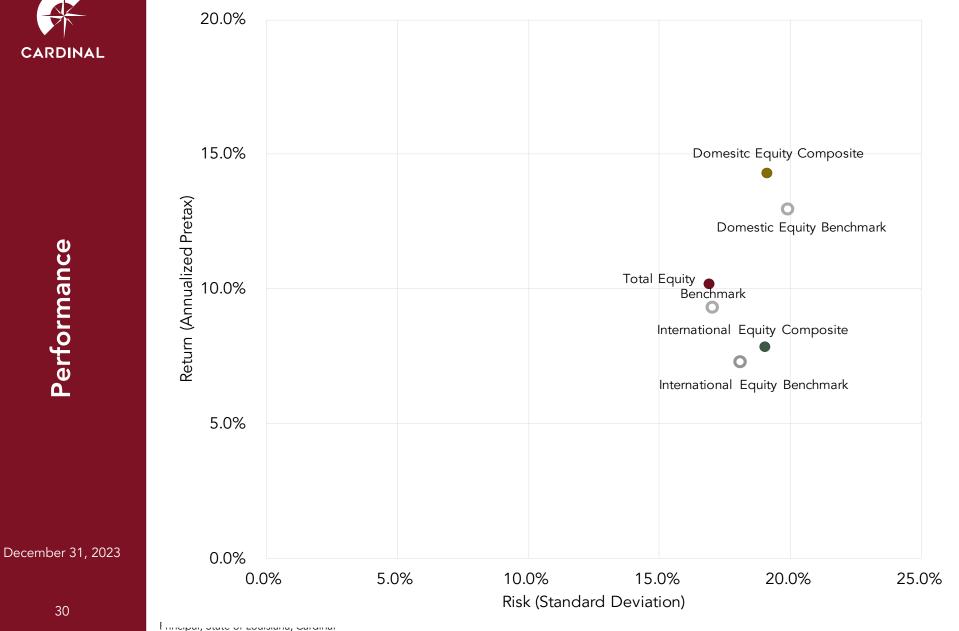
- Over the past five years:
  - The equity portfolio earned 10.21%.
  - US equities did well, earning 14.31%.
  - International equities earned 7.85%.

Performance

### CARDINAL

Performance

#### Five Year Risk/Return Performance (Total Equity)



- Over the past five years, Total Equity has outperformed its benchmark by 0.88%.
- Domestic Equity has outperformed its benchmark by 1.35%
- International has also outperformed its relative benchmark by 0.56% for the five year period.

CARDINAL

#### Domestic Equity

#### Net of Fees

Composite	Market Value (\$000s)	% Weight	Quarter	YTD	One Year	Three Years	Five Years	Ten Years	Since Inception	Inception Date
Domestic Equity Composite	\$82,724	6.2%		21.84%	21.84%	9.00%	14.31%	10.57%	12.48%	Nov-12
Blended Benchmark <sup>2</sup>			11.93%	19.71%	19.71%	7.03%	12.97%	9.88%	11.85%	
Relative Performance			0.22%	2.13%	2.13%	1.98%	1.35%	0.69%	0.62%	
Vanguard Total Stock Market Fund	\$41,517	3.1%	12.17%	26.02%	26.02%	8.44%	15.09%	11.45%	13.28%	Nov-12
Russell 3000 Index			<u>12.05%</u>	<u>25.89%</u>	<u>25.89%</u>	<u>8.49%</u>	<u>15.12%</u>	<u>11.44%</u>	<u>13.28%</u>	
Relative Performance			0.12%	0.13%	0.13%	(0.05%)	(0.03%)	0.01%	0.00%	
Vanguard Russell 1000 Value Fund	\$20,313	1.5%	9.48%	11.42%	11.42%	8.78%	10.86%		8.19%	$M \sim 14$
Russell 1000 Value Index	\$20,313	1.3 ⁄0			11.37%	8.77%	<u>10.81%</u>	-		May-14
Relative Performance			<u>9.48%</u> 0.00%	<u>11.37%</u> 0.05%	0.05%	<u>0.77%</u> 0.02%	0.05%	-	<u>8.17%</u> 0.02%	
Relative r enormance			0.00 %	0.05 %	0.05%	0.02 /o	0.05 %	-	0.02 %	
US Small Cap Equity Composite	\$20,893	1.6%	14 79%	24.62%	24 62%	9.88%	15.29%	_	11.18%	Mar-18
Blended Benchmark <sup>2</sup>	\$20,070	1.070	14.02%	16.84%	16.84%	2.14%	9.88%	-	5.77%	
Relative Performance			0.78%	7.77%	7.77%	<u>2.14%</u> 7.74%	<u>7.00%</u> 5.40%	_	<u>5.41%</u>	
Vanguard Small Cap S&P 600	\$10,481	0.8%	15.10%	15.99%	15.99%	7.21%	11.00%	-	7.28%	Mar-18
Russell 2000 Index			<u>14.02%</u>	<u>16.84%</u>	<u>16.84%</u>	<u>2.14%</u>	<u>9.88%</u>	-	<u>5.77%</u>	
Relative Performance			1.08%	(0.86%)	(0.86%)	5.07%	1.12%	-	1.51%	
Virtus KAR Small Cap Core	\$10,412	0.8%	14.49%	32.38%	32.38%	11.96%	19.02%	_	14.63%	Mar-18
Russell 2000 Index			14.02%	16.84%	16.84%	<u>2.14%</u>	9.88%	-	<u>5.77%</u>	
Relative Performance			0.47%	15.54%	15.54%	9.82%	9.14%	-	8.87%	



Total Stock Market

Index Fund

<u>Characteristics</u>

#### **Characteristics**

	Vanguar Marl	Russell 3000	
Characteristic	9/30/23	12/31/23	12/31/23
No. of Holdings	3,824	3,750	3,000
P/E Ratio	20.7x	22.9x	22.8x
Price/Book Ratio	3.5x	3.9x	3.9x
Avg Mkt Cap (\$B)	\$127.8	\$149.3	\$149.3
Return on Equity	22.3%	22.3%	22.3%
% in Top 10 Holdings	26.1%	26.4%	26.4%

#### Mandate and Objective

- Passively managed equity index fund (VITSX)
- Inception: November 2012
- Objective: Match performance of the Russell 3000 Index
- Annual Fee = 0.030%

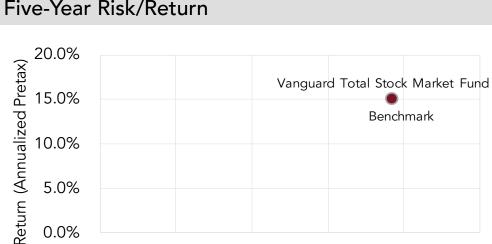
Vanguard

Vanguard, Russell

0.0%

Vanguard, Russell

0.0%



5.0%

10.0%

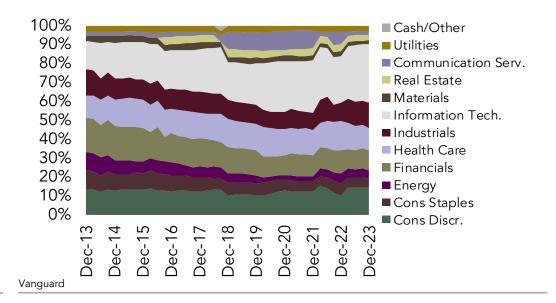
15.0%

Risk (Standard Deviation)

20.0%

25.0%

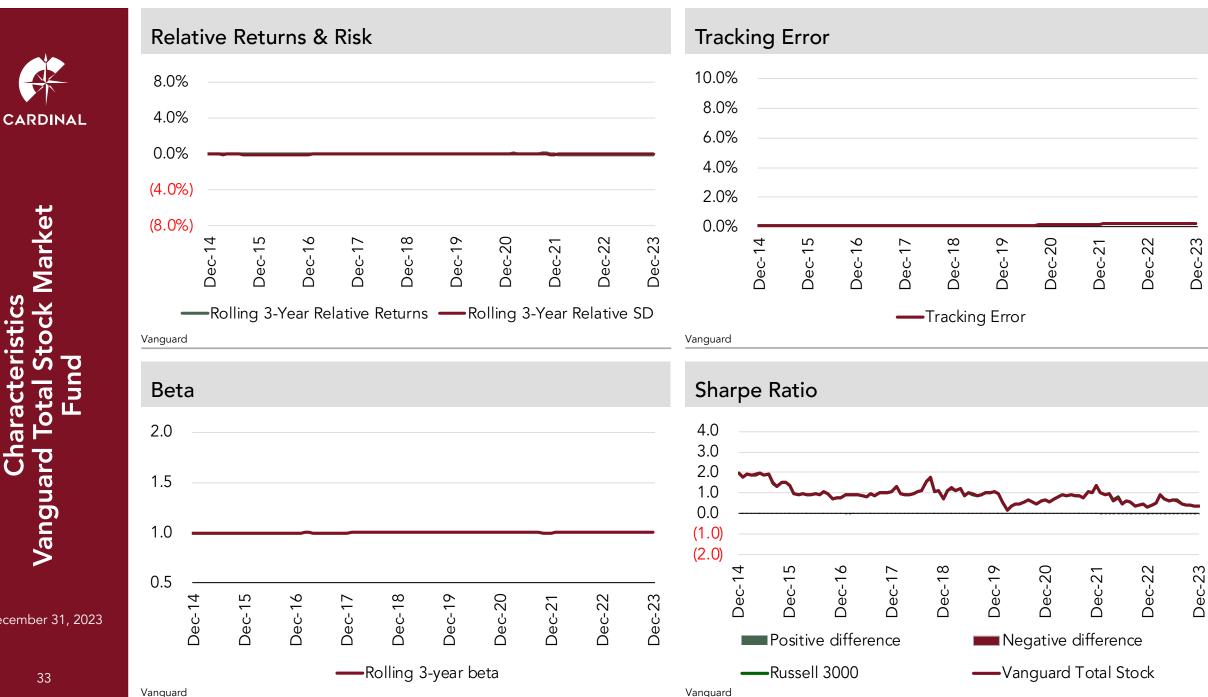
#### Historical Sector Distribution



#### Five-Year Risk/Return

December 31, 2023

Vanguard



**Total Stock Market** Characteristics Vanguard



### 1000 Value Characteristics Vanguard Russell Fund

Vanguard Russell 1000 Value Russell 1000 Fund Value Index Characteristic 9/30/23 12/31/23 12/31/23 No. of Holdings 845 850 848 P/E Ratio 15.3x 16.7x 16.7x Price/Book Ratio 2.1x 2.3x 2.3x Avg Mkt Cap (\$B) \$74.7 \$74.1 \$74.1 Return on Equity 13.2% 13.2% 13.2% % in Top 10 Holdings 17.9% 16.6% 16.6%

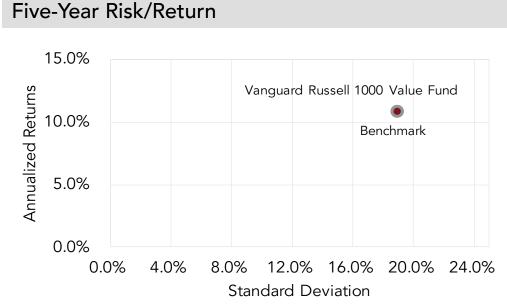
#### Mandate and Objective

- Passively managed equity index fund (VRVIX)
- Inception: May 2014
- Objective: Match performance of the Russell 1000 Value Index
- Annual Fee = 0.07%

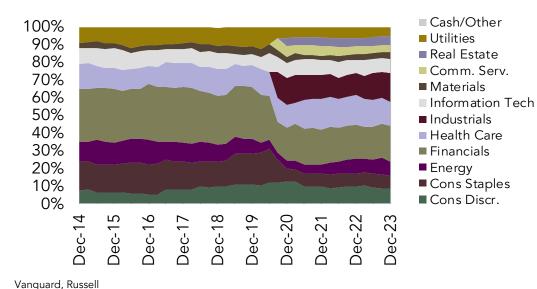
Vanguard, Russell

Vanguard, Russell

**Characteristics** 



#### **Historical Sector Distribution**

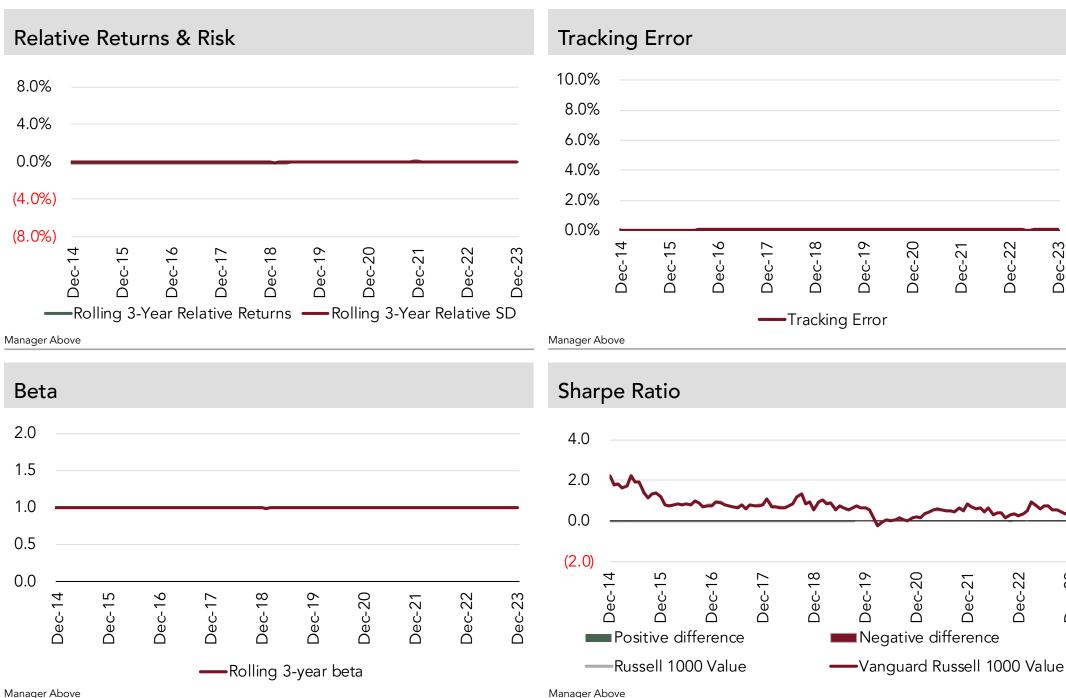


#### Vanguard, Russell



### Value 1000 Characteristics Russell Fund Vanguard

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Dec-22

Dec-22

Dec-21

Dec-23

Dec-21

Dec-23

Manager Above

35



### Small Cap S&P 600 Fund **Characteristics** Vanguard

December 31, 2023

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Characteristics

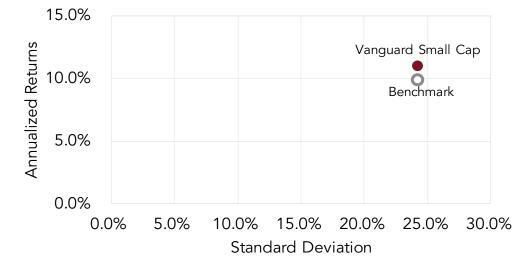
	Vanguard	Russell 2000	
Characteristic	9/30/23	12/31/23	12/31/23
No. of Securities	601	605	2,000
P/E Ratio	12.7x	15.1x	15.8x
Price/Book Ratio	1.6x	1.8x	2.1x
Avg Mkt Cap (\$B)	\$2.5	\$2.8	\$3.2
% in Top 10 Holdings	5.7%	5.7%	3.2%

#### Mandate

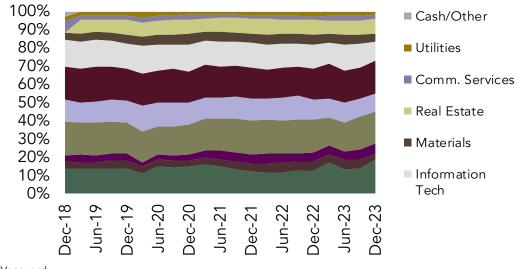
- Passively managed equity index fund (VSMSX)
- Inception: March 2018
- Objective: Exceed performance of the Russell 2000 Index
- Annual Fee = 0.08%

Vanguard, Russell

Five-Year Risk/Return

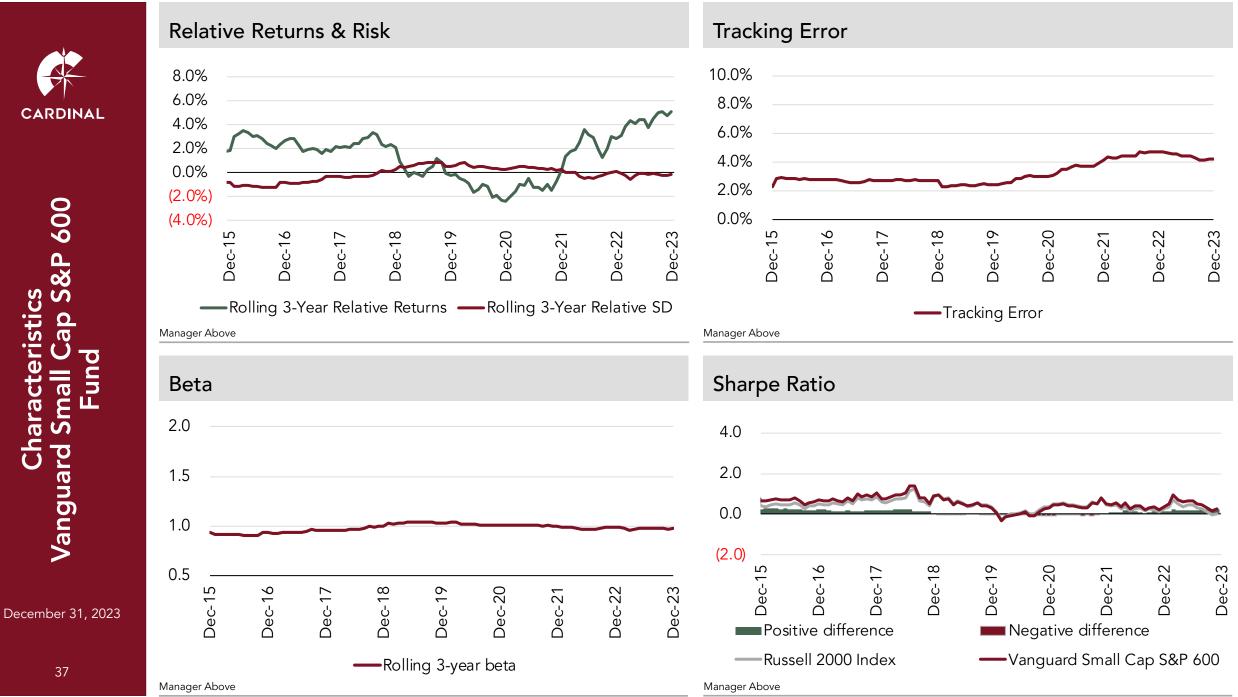


#### **Historical Sector Distribution**



#### Vanguard, Russell

Vanguard

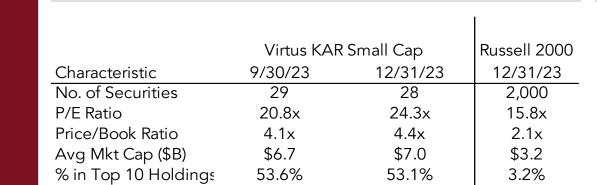


Characteristics



# Characteristics Virtus KAR Small Cap Fund

38



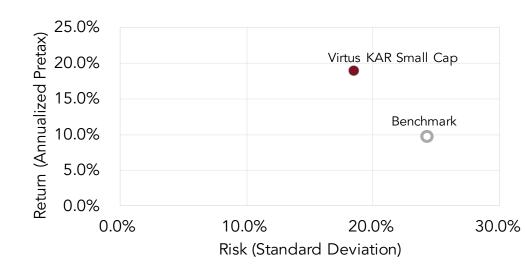
## Mandate and Objective

- Actively managed equity index fund (PKSFX)
- Inception: March 2018
- Objective: Exceed performance of the Russell 2000 index.
- Annual Fee = 1.02%

Vanguard, Russell

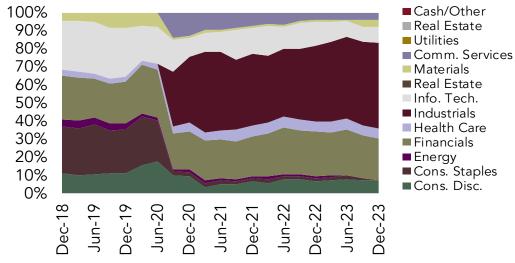
**Characteristics** 

## Five-Year Risk/Return

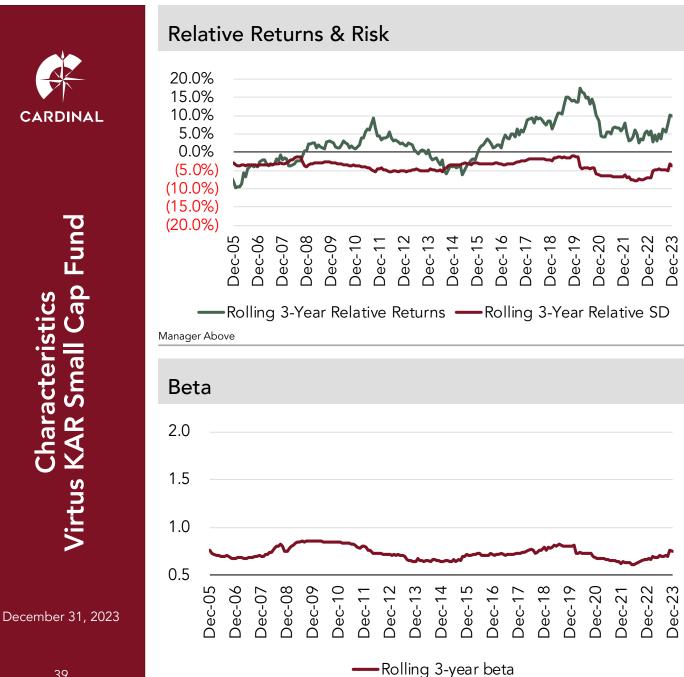


## **Historical Sector Distribution**

Vanguard, Russell



## Vanguard, Russell

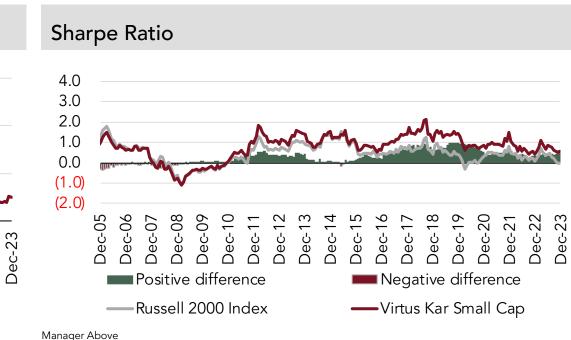


## Tracking Error



—Tracking Error

Manager Above



Manager Above

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## International Equity

## Net of Fees

	Market Value	%			One	Three	Five	Ten	Since	Inception
Composite	(\$000s)	Weight	Quarter	YTD	Year	Years	Years	Years	Inception	Date
International Equity Composite	\$54,207	4.1%	10.15%	15.32%	15.32%	0.29%	7.85%	4.07%	4.55%	May-13
Blended Benchmark <sup>2</sup>			<u>9.75%</u>	<u>15.69%</u>	<u>15.69%</u>	<u>1.79%</u>	<u>7.29%</u>	<u>3.96%</u>	<u>4.44%</u>	
Relative Performance			0.40%	(0.38%)	(0.38%)	(1.50%)	0.56%	0.11%	0.11%	
Vanguard Total International Stock Fd	\$27,214	2.0%	9.97%	15.51%	15.51%	1.79%	7.38%	4.12%	4.62%	May-13
FTSE Global All Cap ex US Index			<u>9.75%</u>	<u>15.70%</u>	<u>15.70%</u>	<u>1.79%</u>	<u>7.36%</u>	<u>4.10%</u>	<u>4.58%</u>	
Relative Performance			0.22%	(0.19%)	(0.19%)	0.00%	0.01%	0.03%	0.04%	
City of London	\$13,533	1.0%	10.26%	14.24%	14.24%	(0.36%)	8.03%	_	4.31%	Aug-18
FTSE Global All Cap ex US Index			<u>9.75%</u>	<u>15.68%</u>	<u>15.68%</u>	<u>1.78%</u>	<u>7.35%</u>	-	<u>3.99%</u>	
Relative Performance			0.51%	(1.44%)	(1.44%)	(2.14%)	0.67%	-	0.32%	
EuroPacific Growth Fund	\$13,460	1.0%	10.38%	16.06%	16.06%	(2.66%)	8.07%	-	4.55%	Jul-18
FTSE Global All Cap ex US Index			<u>9.75%</u>	<u>15.68%</u>	<u>15.68%</u>	1.78%	7.35%	-	<u>4.34%</u>	
Relative Performance			0.64%	0.38%	0.38%	(4.43%)	0.71%	-	0.21%	

Performance

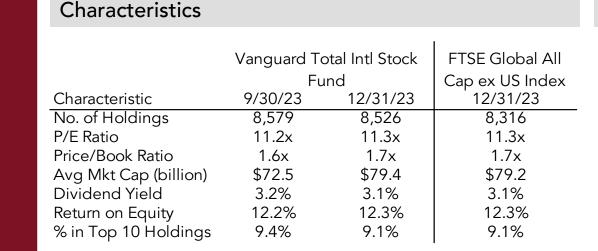
December 31, 2023

Principal, Vanguard, City of London, American Funds, Cardinal



## Characteristics Vanguard Total International Stock Fund

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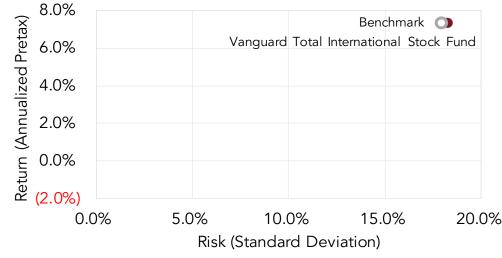
## Mandate and Objective

- Passively managed equity index fund (VTSNX)
- Inception: May 2013
- Objective: Match performance of the FTSE Global All Cap ex U.S. Index
- Annual Fee = 0.08%

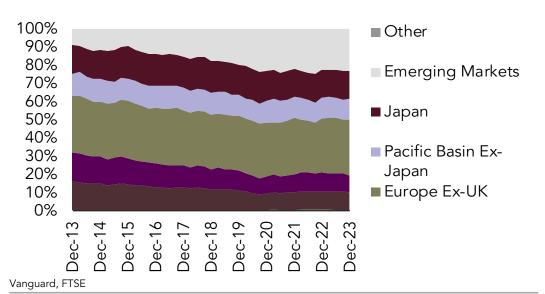
Vanguard, FTSE

## Five-Year Risk/Return

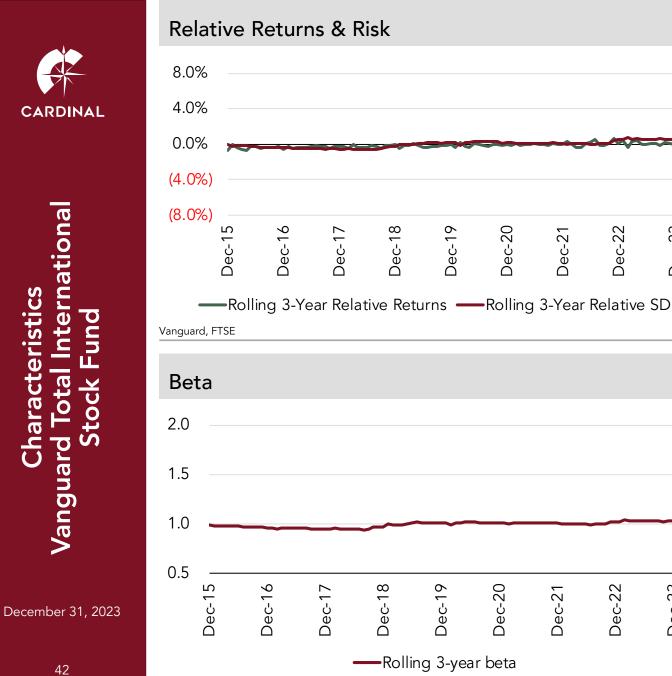
Vanguard, FTSE

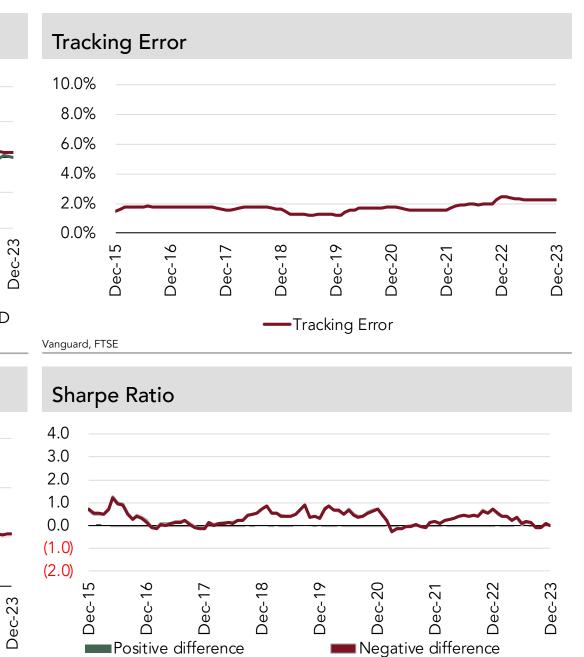


## **Historical Regions Distribution**



Vanguard, FTSE





-Van. Total Intl Fund

-----FTSE Global All Cap ex US

Vanguard, FTSE

Vanguard, FTSE



## Characteristics

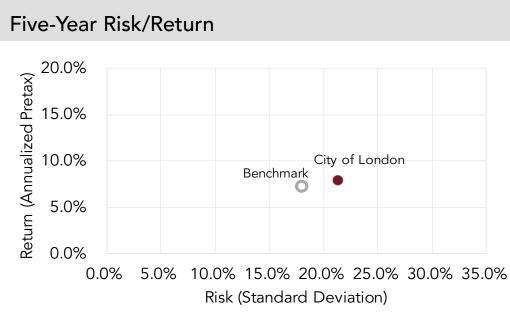
Characteristic	City of 9/30/23	London 12/31/23	FTSE Global All Cap ex-US Index 12/31/23
No. of Holdings	54	55	8,316
3	-		,
P/E Ratio	14.3x	14.7x	11.3x
Price/Book Ratio	1.7x	1.7x	1.7x
Avg Mkt Cap (\$B)	\$16.5	\$17.8	\$79.2
Dividend Yield	2.7%	2.7%	3.1%
Return on Equity	11.7%	11.7%	12.3%
% in Top 10 Holdings	37.8%	37.1%	9.1%

## Mandate and Objective

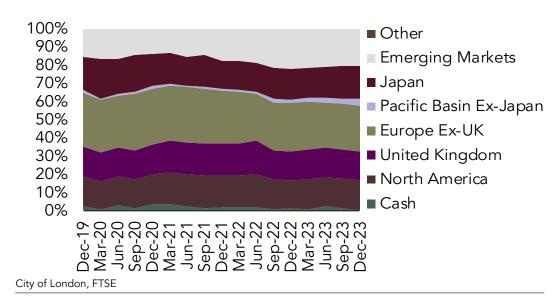
- Actively managed International Equity Commingled Fund
- Inception: August 2018
- Objective: Exceed total return of the FTSE Global All Cap ex U.S.
- Annual Fee = 0.70%

City of London, FTSE

City of London, FTSE



## Historical Regions Distribution



## Characteristics City of London

December 31, 2023



## **Relative Returns & Risk** Tracking Error 10.0% 8.0% 8.0% 4.0% 6.0% 0.0% 4.0% (4.0%) 2.0% (8.0%) 0.0% Dec-15 Dec-20 Dec-23 Dec-16 Dec-19 Dec-22 Dec-17 Dec-18 Dec-21 Dec-15 -Rolling 3-Year Relative Returns -Rolling 3-Year Relative SD City of London City of London Beta 2.0 0.0% 1.5 (5.0%) (10.0%) 1.0 (15.0%) 0.5 Dec-15 Dec-16 Dec-18 Dec-19 Dec-20 Dec-22 Dec-23 Dec-17 Dec-21 (20.0%) -Rolling 3-year beta

## Dec-16 Dec-20 Dec-23 Dec-17 Dec-19 Dec-21 Dec-22 Dec-18 -Tracking Error Discount to NAV Jun-20 Sep-20 Dec-20 Mar-21 Dec-18 Mar-19 Jun-19 Sep-19 Dec-19 Mar-20 Sep-22 Dec-22 Mar-22 Jun-22 Mar-23 Jun-23 Sep-23 . Dec-23 Sep-21 Dec-21 Jun-21 City of London

## Characteristics City of London

December 31, 2023

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City of London

CARDINAL

## Characteristics EuroPacific Growth Fund

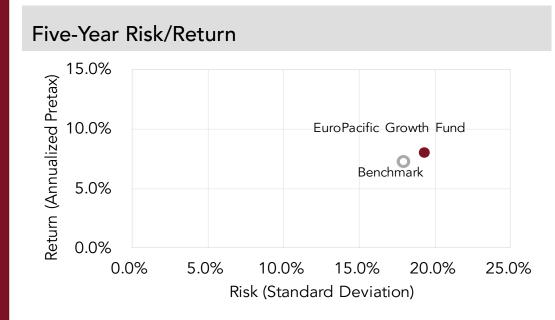
## Characteristics

Characteristic	EuroPacific 9/30/23	Growth Fund 12/31/23	FTSE Global All Cap ex US Index 12/31/23
No. of Holdings	330	320	8,316
P/E Ratio	16.0x	16.0x	11.3x
Price/Book Ratio	2.6x	2.6x	1.7x
Avg Mkt Cap (\$B)	\$126.5	\$135.8	\$79.2
Dividend Yield	1.8%	1.7%	3.1%
Return on Equity	16.4%	17.4%	12.3%
% in Top 10 Holdings	22.0%	23.8%	9.1%

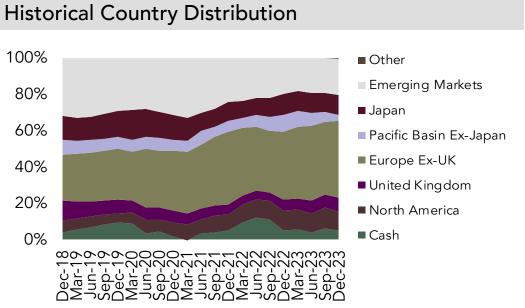
## Mandate and Objective

- Actively managed International equity fund (FEUPX)
- Inception: July 2018
- Objective: Exceed total return of the FTSE Global All Cap ex US
  Index
- Annual Fee = 0.47%





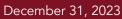
American Funds, FTSE

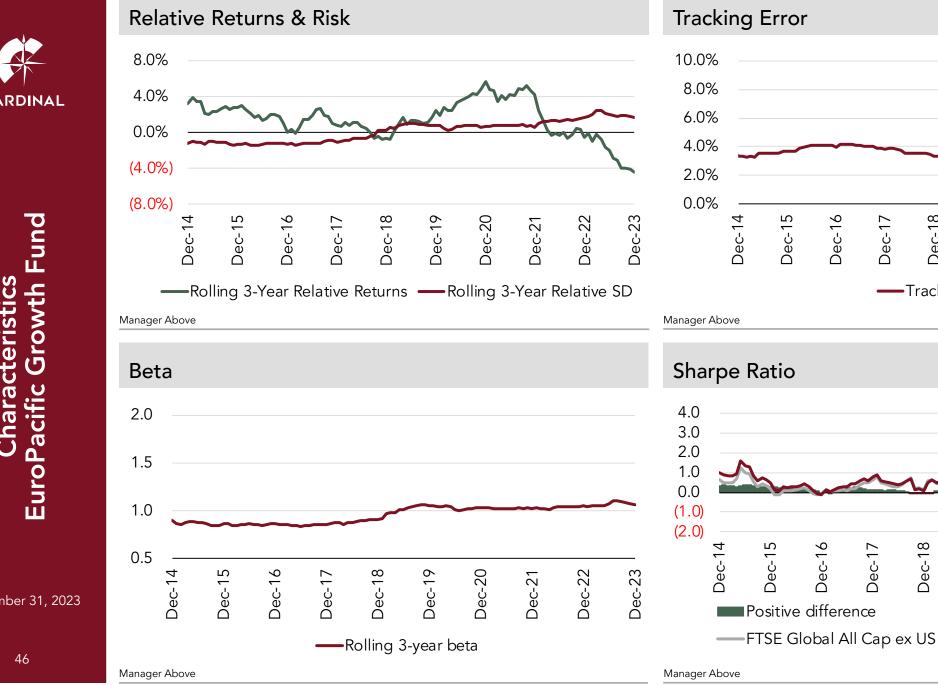


American Funds, FTSE



# **Characteristics**





Dec-15

Dec-15

Dec-16

Dec-17

Dec-18

Dec-19

Dec-20

Negative difference

Dec-16

Dec-18

-Tracking Error

Dec-17

Dec-19

Dec-20

Dec-22

Dec-22

Dec-21

Dec-23

Dec-21

Dec-23

## Low Volatility



	Market Value	%			One	Three	Five	Ten	Since	Inception
Portfolio	(\$000s)	Weight	Quarter	YTD	Year	Years	Years	Years	Inception	Date
Vanguard Global Minimum Volatility	\$66,969	5.0%	6.74%	7.97%	7.97%	4.94%	-	-	2.97%	Dec-19
MSCI World Minimum Volatility			<u>6.44%</u>	<u>7.12%</u>	<u>7.12%</u>	<u>2.96%</u>	-	-	<u>3.25%</u>	
Relative Performance			0.30%	0.85%	0.85%	1.98%	-	-	(0.29%)	

Principal, Vanguard, Cardinal

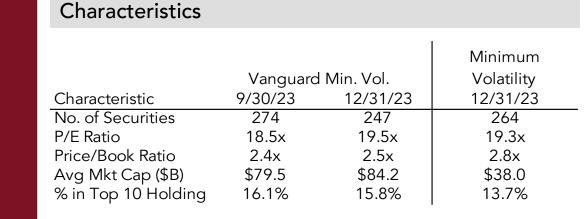
• The Vanguard Global Minimum has outperformed for all reporting time periods except since inception.

December 31, 2023



## Characteristics Vanguard Minimum Volatility

December 31, 2023



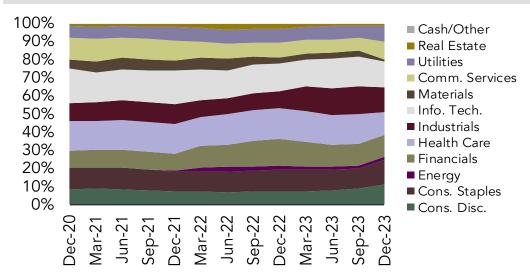
## Mandate and Objective

- Passively managed equity index fund (VMNVX)
- Inception: November 2019
- Objective: Exceed total return of the MSCI World Minimum Volatility
- Annual Fee = 0.14%



## Three-Year Risk/Return 20.0% (Annualized Pretax) 15.0% 10.0% Vanguard Global Minimum Volatility 5.0% Return Benchmark 0.0% 0.0% 5.0% 10.0% 15.0% 20.0% 25.0% Risk (Standard Deviation)

## **Historical Sector Distribution**



## Vanguard, FTSE

Vanguard, FTSE

## Vanguard, FTSE

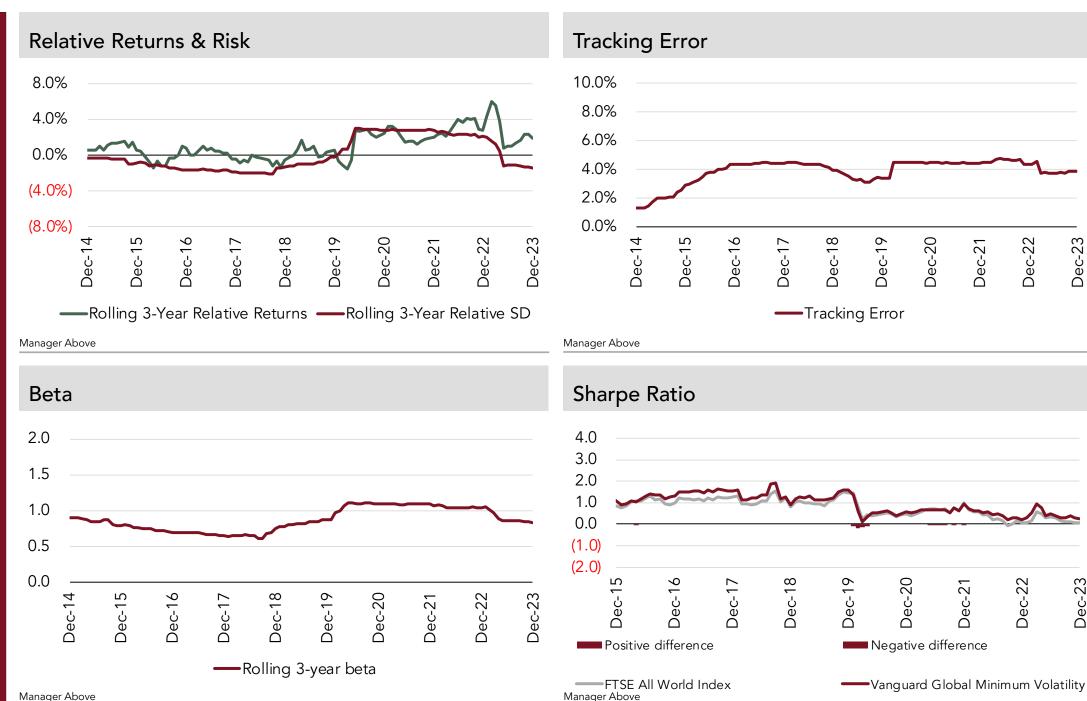
Vanguard, FTSE



# Characteristics Vanguard Minimum Volatility

December 31, 2023

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Dec-23

Dec-23



## Private Real Estate – Modified Dietz

Portfolio	Market Value (\$000s)	% Weigh	Quarter	YTD	One Year	Three Years	Five Years	Ten Years	Since Inception	Inception Date
Private Real Estate Composite	\$94,826	7.1%	(2.76%)	(9.92%)	(9.92%)	6.61%	-	-	5.16%	Jan-20
Blended Benchmark <sup>2</sup>			<u>(5.01%)</u>	<u>(12.74%)</u>	<u>(12.74%)</u>	<u>4.09%</u>	-	-	<u>3.44%</u>	
Relative Performance			2.25%	2.82%	2.82%	2.52%	-	-	1.72%	
<b>Invesco US Income Fund LP</b> NCREIF Open End Diversified Core Relative Performance	\$21,255	1.6%	(5.48%) <u>(5.01%)</u> (0.47%)	(10.19%) <u>(12.74%)</u> 2.55%	(10.19%) <u>(12.74%)</u> 2.55%	8.32% <u>4.09%</u> 4.23%	- - -	- -	6.95% <u>3.44%</u> 3.52%	Jan-20
<b>AEW Core Property Trust</b> NCREIF Open End Diversified Core Relative Performance	\$73,570	5.5%	(1.94%) <u>(5.01%)</u> 3.07%	(9.84%) <u>(12.74%)</u> 2.90%	(9.84%) <u>(12.74%)</u> 2.90%	5.67% <u>4.09%</u> 1.58%	- -	- - -	5.39% <u>3.90%</u> 1.49%	Jul-20

Principal, AEW, Invesco, Cardinal

• Private Real Estate Composite outperformed for all reporting time periods. Since inception Invesco outperformed the relative benchmark by 352 bps, while AEW outperformed by 149 bps.

December 31, 2023

Performance



## Characteristics Invesco U.S. Income Fund

## December 31, 2023

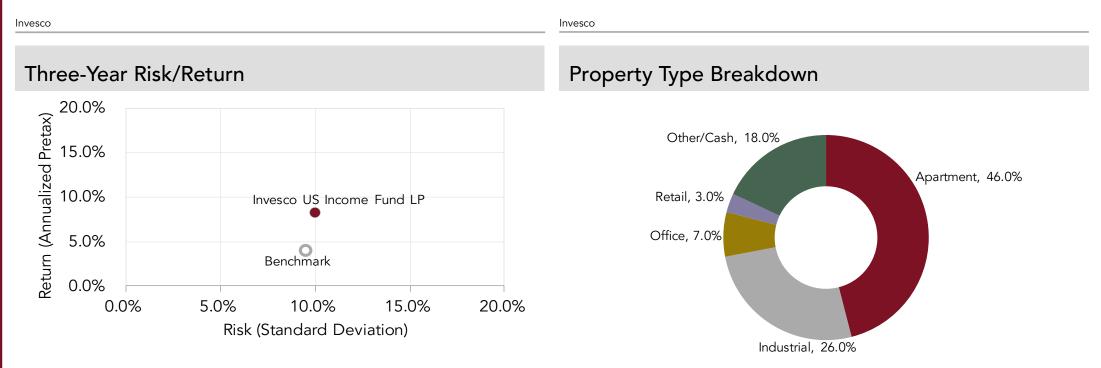
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	Invesco U.S.	Income Fund
Characteristic	9/30/23	12/31/23
Investors	40	39
Gross Asset Value	\$4.7M	\$4.5M
Portfolio Leased	94.4%	94.3%
Contributions	\$55.8	\$11.7
Trailing 4Q Gross Dist. Yield	4.5%	4.5%

## Mandate

- Actively managed private real estate fund
- Inception: January 2020
- Objective: Exceed total return of the NCREIF Open End Diversified Core
- Annual Fee = 1.20% on the first \$50M, 1.10% from \$50M-100M, 1.00% for the remaining.



Invesco

Characteristics

	Characteristics	Mandate
rty Trust	AEW Core Trust FundChracteristic9/30/2312/31/23Investors377377Gross Asset Value\$9.9M\$9.5MPortfolio Leased96.0%95.0%Contributions\$1.0\$0.0Weighted Avg Int. Rate4.6%4.8%	<ul> <li>Actively managed private real estate fund</li> <li>Inception: July 2020</li> <li>Objective: Exceed total return of the NCREIF Open End Diversified Core</li> <li>Annual Fee = 1.10% on the first \$10M, and 1.10% from \$10M-25M and then 0.85% from \$25-\$50M, 0.80% from \$50M-\$100M, and 0.75 over \$100M</li> </ul>
cteris <sup>.</sup> Prope	Three-Year Risk/Return	Property Type Breakdown
AEW Core Property Trust	20.0% 15.0% 10.0% 5.0% 0.0% AEW Core Property Trust Benchmark	Other/Cash, 2.0% Retail, 13.0% Office, 16.0%
December 31, 2023	0.0% 5.0% 10.0% 15.0% 20.0% Risk (Standard Deviation)	Industrial, 48.0%

AEW



## Endnotes

<sup>1</sup>The blended benchmark consists of a target-weighted blend of the underlying portfolio benchmarks. <sup>2</sup>The blended benchmark consists of a market-weighted blend of the underlying portfolio benchmarks.

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