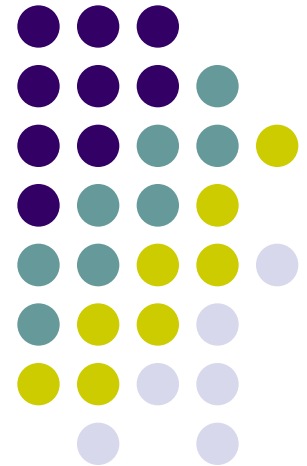
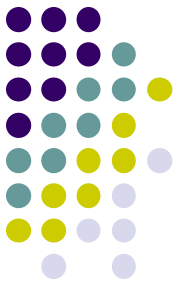


Pieper Challenge Grant and Match Program 2022 Annual Report



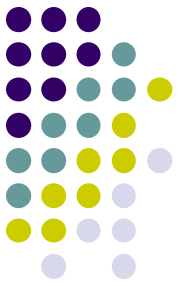
Prepared by Marquette University – College of Business Administration

Table of Contents



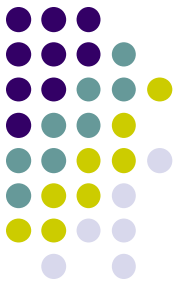
		<u>Page</u>
• Challenge Summary Comments	3	
• Performance Summary Comments		4-6
• Description of Evaluation Method		7
• Grantee Fund Performance Summary Table		8-9
• Grantee Fund Performance Rankings	10-11	
• General Market Overview	12	
• Performance Disclaimer	13	

Challenge Summary

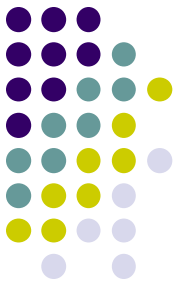


- The Pieper Family Foundation has created the Challenge Grant and Match program to stimulate the trustees of not-for-profits to sharpen their investment policy and oversight. The objective of these grants is growth of capital and the expectation is that investment results will fall within the upper quartile of diversified growth-oriented funds' returns over time.
- Pieper Fund returns are provided by each Grantee. The Grantees also provide a description of how their Pieper Fund is invested and the current investment policy. Morningstar data is used to evaluate performance. The Challenge Grant and Match program completed the transition from Lipper data in 2014. Morningstar is widely accepted in the investment industry.
- In addition to comparing performance to large groups of peers, results are compared to the Greater Milwaukee Foundation – Investment Pool, the in-house managed pool for a large local foundation.
- Ten Grantees reported on their Pieper Challenge & Match results for 2022. Grantees reported results in a range of -11.3% to -20.3% compared with -19.5% for the Vanguard Total Stock Market Index.
- During the last 10 years, six Grantees earned returns that met or exceeded the return of the Greater Milwaukee Foundation – Investment Pool.
- Over the decade, all of the Grantees have sharpened their investment policy focus and oversight. Like most investors, over half of the Grantees have experienced missteps during their participation in the Pieper Challenge (primarily early on in their tenure). Corrections by the Grantees have produced fruit, in the form of higher and more stable returns.

Performance Summary



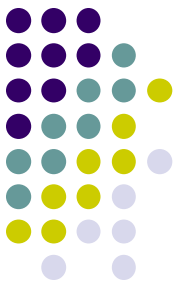
- All Grantee funds experienced double digit losses in 2022. The Vanguard Total Stock Market Index Fund lost 19.5% for the year. Seven of the ten Grantees performed better than the Vanguard Total Stock Market Index.
- The best performance in 2022 was -11.3%, achieved by Grantee Seven. The lowest return for 2022 was -20.3% (Grantee Ten).
- Two Grantees' five-year performance was in the top quartile versus the Morningstar Aggressive Allocation comparison group. Grantee Nine had the highest five-year average return (+8.7%/year). Grantee Two (+8.4%/year) also had a first quartile ranking over the five-year period.
- Grantee performance since inception is summarized on the next page. We are interested in Grantees' change in relative performance over time. In other words, have Grantees learned lessons from participating in the Challenge Grant Program that they have implemented to improve performance over time?



Grantee Fund Performance Since Inception

Grantee	Return /year since inception	Vanguard Total Mkt	Inception	Quartile/ Inception	Progress
Grantee One	5.3%	7.1%	1999	2	Consistent
Grantee Two	9.3%	8.5%	1997	1	Consistent
Grantee Three	3.4%	7.1%	1999	4	Consistent
Grantee Four	5.2%	7.1%	1999	2	Worsened
Grantee Five	4.5%	7.1%	1999	3	Improved
Grantee Six	3.5%	7.3%	2000	4	Consistent
Grantee Seven	5.9%	7.7%	2000	2	Consistent
Grantee Eight	4.7%	8.3%	2002	4	Consistent
Grantee Nine	8.7%	8.9%	2003	1	Improved
Grantee Ten	5.1%	9.9%	2002	4	Improved

- The inception year has a significant impact on annualized return. Note that inception dates range from 1997 to 2003. This was a very volatile period for the stock market. For example, the late 1990s were very strong years for the stock market, while the early 2000s included a powerful bear market. So each grantee’s annualized return must be understood within the context of the respective inception year. For long-term performance comparison, the most helpful figure is the quartile the grantee’s performance falls. This compares the grantee to the peer group over the respective investment time frame.
- Endnotes:
 - Grantee One – performance in 1999 and 2000 is a simple average of two managers during a transition in management.
 - Grantee Four – inception date is 3/31/1999.
 - Grantee Six – inception date is 11/20/2000.
 - Grantee Seven – inception date is 9/1/2000.
 - Grantee Eight – inception date is 1/1/2002.
 - Grantee Nine – inception date is 11/1/2003.
 - Grantee Ten – inception date is 9/31/2002.



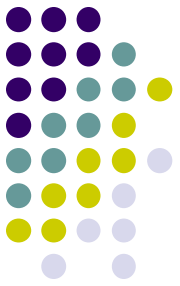
Value creation over time

- The Pieper Challenge Grant and Match program allows for half of the annual gain to be withdrawn for spending by the Grantee and half to be added back to the principal of the portfolio.
- A summary of what \$1 at inception has grown to for each Grantee:

Grantee	Inception	Available for spending	Currently in portfolio	Total
Grantee One	1999	\$1.10	\$1.68	\$2.78
Grantee Two	1997	\$2.09	\$2.88	\$4.97
Grantee Three	1999	\$0.70	\$1.25	\$1.95
Grantee Four	1999	\$1.03	\$1.80	\$2.83
Grantee Five	1999	\$0.93	\$1.47	\$2.40
Grantee Six	2000	\$0.77	\$1.35	\$2.12
Grantee Seven	2000	\$1.12	\$1.49	\$2.61
Grantee Eight	2002	\$0.85	\$1.39	\$2.24
Grantee Nine	2003	\$1.56	\$2.00	\$3.56
Grantee Ten	2002	\$0.90	\$1.45	\$2.35

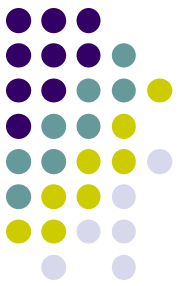
- Dollar amounts are a function of 1) investment performance and 2) amount of time Grantees have been in the Pieper Challenge Grant and Match program.

Evaluation Method



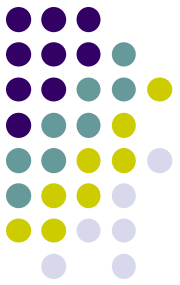
- Performance of each total Pieper Challenge and Match Fund is compared:
 - among the Grantees
 - versus the Vanguard Total US Stock Market Index Fund, as a tool for evaluation against all publicly traded U.S. stocks
 - against the Consumer Price Index +5% to consider growth of purchasing power plus a market risk premium.
 - against the Morningstar Aggressive Allocation composite, a widely-used benchmark for diversified, growth-oriented portfolios.
 - against the Greater Milwaukee Foundation – Investment Pool, the in-house portfolio for a large, local foundation
- Each individual fund is compared with its respective industry peer group. Up through 2012, this peer group was calculated by Lipper. Starting in 2013, we use the Morningstar peer group.
- In recent years, some grantees have introduced allocations to “alternative investments” – asset classes that cannot be easily classified as “stocks” or “bonds.” This includes real estate, commodities, hedge funds, and private equity. For purposes of this project, all asset classes other than bonds are combined in “equity.”

Grantee	2022 Return	Investment Policy	
	(%)	Equity (%)	Bonds (%)
Grantee One	-16.4	80	20
Grantee Two	-12.9	100	0
Grantee Three	-20.2	99	1
Grantee Four	-12.8	77	23
Grantee Five	-18.1	100	0
Grantee Six	-14.5	80	20
Grantee Seven	-11.3	86	14
Grantee Eight	-17.4	100	0
Grantee Nine	-19.8	100	0
Grantee Ten	-20.3	100	0
Vanguard Total Stock Mkt Index	-19.6		
CPI + 5%	12.0		
Morningstar Aggressive Allocation	-18.2		
Greater Milwaukee Fdn – Inv Pool	-16.1		



Grantee Fund Performance Summary Table

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Grantee One	24.4	6.8	-1.4	10.1	18.1	-8.3	24.5	15.4	17.0	-16.4
Grantee Two	28.8	5.9	-1.7	12.1	21.2	-7.8	34.4	11.6	24.5	-12.9
Grantee Three	8.5	5.5	-1.5	4.3	13.0	-10.0	26.4	14.0	18.5	-20.2
Grantee Four	16.7	7.1	-0.4	7.1	14.1	-6.1	19.7	10.7	14.9	-12.8
Grantee Five	12.5	11.4	-5.6	10.7	22.0	-7.3	26.4	19.5	17.4	-18.1
Grantee Six	15.2	5.5	-0.8	3.6	15.2	-7.2	18.4	11.0	15.8	-14.5
Grantee Seven	13.6	5.5	-2.7	4.0	12.4	-3.7	14.1	9.7	27.3	-11.3
Grantee Eight	14.9	5.5	-3.5	8.1	18.1	-12.0	23.4	12.3	17.6	-17.4
Grantee Nine	33.5	12.5	0.3	12.7	21.2	-5.2	30.7	21.3	25.9	-19.8
Grantee Ten	21.6	3.3	-2.3	7.1	17.1	-6.6	27.2	13.0	17.9	-20.3
Vanguard Total Stock Mkt Index Fund	33.5	12.5	0.3	12.7	21.2	-5.2	30.9	21.3	25.9	-19.5
Consumer Price Index +5%	6.5	5.8	5.7	7.1	7.1	6.9	7.3	6.4	12.0	12.0
Morningstar Aggressive Allocation	21.3	5.7	-2.8	7.9	15.8	-8.2	25.9	13.3	17.6	-18.2
Greater Milwaukee Foundation - Investment Pool	16.7	4.4	-1.2	8.1	16.7	-4.5	17.0	15.0	15.8	-16.1



Grantee Fund Performance Summary Table

	Annualized		
	5-year	10-year	15-year
Grantee One	5.2%	8.2%	5.9%
Grantee Two	8.4%	10.6%	7.1%
Grantee Three	4.2%	5.0%	5.0%
Grantee Four	4.5%	6.6%	6.4%
Grantee Five	6.1%	8.0%	4.2%
Grantee Six	3.8%	5.7%	4.6%
Grantee Seven	6.4%	6.4%	4.5%
Grantee Eight	3.4%	6.5%	4.0%
Grantee Nine	8.7%	12.1%	8.2%
Grantee Ten	4.8%	6.9%	5.3%
Vanguard Total Stock Mkt Index Fund	8.8%	12.1%	8.7%
Consumer Price Index +5%	8.9%	7.7%	7.8%
Morningstar Aggressive Allocation	4.7%	7.0%	5.0%
Greater Milwaukee Foundation - Investment Pool	4.5%	6.6%	5.6%

Annualized return rankings



5-year annualized returns

Grantee	Return
<i>Vanguard Total Mkt</i>	8.8%
Grantee Nine	8.7%
Grantee Two	8.4%
Grantee Seven	6.4%
Grantee Five	6.1%
Grantee One	5.0%
Grantee Ten	4.8%
<i>Morningstar Aggres Alloc</i>	4.7%
<i>Greater Milw Fnd – Inv Pool</i>	4.5%
Grantee Four	4.5%
Grantee Three	4.2%
Grantee Six	3.8%
Grantee Eight	3.4%

10-year annualized returns

Grantee	Return
<i>Vanguard Total Mkt</i>	12.1%
Grantee Nine	12.1%
Grantee Two	10.6%
Grantee One	8.0%
Grantee Five	8.0%
<i>Morningstar Aggres Alloc</i>	7.0%
Grantee Ten	6.9%
Grantee Four	6.6%
<i>Greater Milw Fnd – Inv Pool</i>	6.6%
Grantee Eight	6.5%
Grantee Seven	6.4%
Grantee Six	5.7%
Grantee Three	5.0%

15-year annualized returns

Grantee	Return
<i>Vanguard Total Mkt</i>	8.7%
Grantee Nine	8.2%
Grantee Two	7.1%
Grantee Four	6.4%
Grantee One	5.9%
<i>Greater Milw Fnd – Inv Pool</i>	5.6%
Grantee Ten	5.3%
Grantee Three	5.0%
<i>Morningstar Aggres Alloc</i>	5.0%
Grantee Six	4.6%
Grantee Seven	4.5%
Grantee Five	4.2%
Grantee Eight	4.0%

Sharpe ratio rankings



Sharpe ratio is a measure of risk-adjusted return. It measures excess return (i.e. risk premium – the return achieved above the Treasury bond’s return, for example) per unit of risk. Higher Sharpe ratios imply better risk-adjusted performance.

5-year Sharpe ratio

Grantee	Ratio
Grantee Two	0.38
Grantee Seven	0.37
<i>Vanguard Total Mkt</i>	<i>0.37</i>
Grantee Nine	0.36
Grantee Five	0.28
Grantee Four	0.26
<i>Greater Milw Fnd – Inv Pool</i>	<i>0.25</i>
Grantee One	0.25
<i>Morningstar Aggres Alloc</i>	<i>0.21</i>
Grantee Six	0.21
Grantee Ten	0.21
Grantee Three	0.17
Grantee Eight	0.15

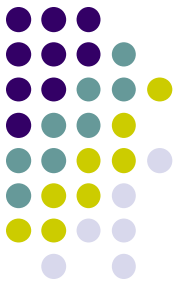
10-year Sharpe ratio

Grantee	Ratio
<i>Vanguard Total Mkt</i>	<i>0.68</i>
Grantee Nine	0.67
Grantee Two	0.63
Grantee Four	0.58
Grantee One	0.54
Grantee Seven	0.52
<i>Greater Milw Fnd – Inv Pool</i>	<i>0.52</i>
Grantee Five	0.51
Grantee Six	0.46
<i>Morningstar Aggres Alloc</i>	<i>0.45</i>
Grantee Ten	0.43
Grantee Eight	0.38
Grantee Three	0.32

15-year Sharpe ratio

Grantee	Ratio
Grantee Four	0.37
<i>Vanguard Total Mkt</i>	<i>0.37</i>
Grantee Nine	0.34
<i>Greater Milw Fnd – Inv Pool</i>	<i>0.30</i>
Grantee Three	0.29
Grantee Two	0.27
Grantee One	0.24
Grantee Seven	0.21
<i>Morningstar Aggres Alloc</i>	<i>0.21</i>
Grantee Ten	0.21
Grantee Six	0.18
Grantee Eight	0.14
Grantee Five	0.14

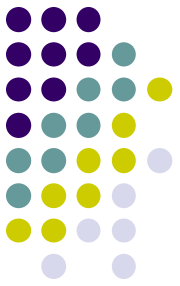
General Market Performance Overview



Index	Description	2022
S&P 500	Large-Cap US Equity	-18.1%
Dow	Large-Cap US Equity	-6.9%
Russell 2000	Small-Cap US Equity	-20.4%
MSCI EAFE	International – Developed Markets	-14.5%
MSCI EM	International – Emerging Markets	-20.1%
Bloomberg Barclays T-Bill	Cash	1.4%
Bloomberg Barclays Agg	Fixed Income	-13.0%

Total return = Price change + income

Performance disclaimer



- This report has been prepared by undergraduate students in Marquette University's College of Business Administration. Every effort has been made to calculate and report accurate information.
- The information contained in this summary is prepared from records which Marquette University considers reliable. However it is not intended to and should not be used as a substitute for periodic statements that you receive on a regular basis from your investment advisor and custodian. Please compare the data on this document carefully with your monthly statements to verify its accuracy.
- If you discover an error in this report, please report it to Dan Geigler, Adjunct Instructor, daniel.geigler@mu.edu.