THE COUNTY OF CHESTER

COMMISSIONERS
Marian D. Moskowitz
Josh Maxwell
Michelle Kichline

OFFICE OF THE COMMISSIONERS
313 W. Market Street, Suite 6202
P.O. Box 2748
West Chester, PA 19380-0991
(610) 344-6100

AGENDA
RETIREMENT BOARD

June 23, 2022

1. **CALL MEETING TO ORDER**
2. **MINUTES OF PREVIOUS MEETING**
   - March 31, 2022
3. **PUBLIC COMMENT ON AGENDA**
4. **ADOPTION OF AGENDA**
5. **PERFORMANCE UPDATE REPORT**
   a. **Rebalancing**
6. **PUBLIC COMMENT**
7. **ADJOURNMENT**

THE COUNTY OF CHESTER

COMMISSIONERS
Marian D. Moskowitz
Josh Maxwell
Michelle Kichline

OFFICE OF THE COMMISSIONERS
313 W. Market Street, Suite 6202
P.O. Box 2748
West Chester, PA 19380-0991
(610) 344-6100

RETIREMET BOARD MEETING MINUTES

March 31, 2022

1. CALL MEETING TO ORDER — **CALL TO ORDER**

Chair Marian Moskowitz called to order the Retirement Board Meeting on Thursday, March 31, 2022 at 2:01 PM in the Commissioners' Boardroom. In addition to Chair Moskowitz, Vice-Chair Josh Maxwell, Commissioner Michelle Kichline, Controller Margaret Reif, and Treasurer Patricia Maisano were also present.

2. MINUTES OF PREVIOUS MEETING — **MINUTES APPROVED**

Commissioner Maxwell made a motion to approve the Retirement Board Meeting minutes from the last meeting on December 16, 2021. Commissioner Kichline seconded the motion. Motion carried to approve the minutes from the December 16, 2021 Retirement Board Meeting.

3. PUBLIC COMMENT ON AGENDA ITEMS — **PUBLIC COMMENT**

There was no public comment on agenda items.

4. ADOPTION OF AGENDA — **ADOPTION OF AGENDA**

Controller Reif made a motion to adopt the agenda. Treasurer Maisano seconded the motion. Motion carried to adopt the March 31, 2022 Retirement Board Meeting agenda.

5. PERFORMANCE UPDATE REPORT — **PERFORMANCE UPDATE REPORT**

Bill Dahab and Steve Roth of Dahab Associates provided a fourth quarter performance report for the Chester County Employees' Retirement Fund. It was noted that at the end of the fourth quarter, the fund was approximately $591,500,000. Mr. Dahab and Mr. Roth also noted that most funds increased in value despite the current volatility in the market.

Mr. Dahab noted that the federal unemployment rate remains at 3.8%, as compared to 3.9% at the end of 2021. He warned the Board to expect inflation over the coming year - and expressed that the portfolio is well suited to weather the volatility that the market is experiencing.

a. Real Estate Investment — **Real Estate Investment**

Mr. Roth reviewed Dahab Associates' real estate investment findings. Dahab Associates recommended investing 5% of the portfolio into Prudential Real Estate and an additional 5% of the portfolio into TA Real Estate, for a total of 10% of the portfolio invested into real estate. Treasurer Maisano made a motion to approve the recommended investment, which was seconded by Commissioner Maxwell. All were in favor; motion carried to invest 5% of the portfolio into Prudential Real Estate, and an additional 5% into TA Real Estate.

b. Preliminary Performance **Preliminary Performance**

Bill Dahab reported results through the end of February 2022. The portfolio totaled about $546,000,000 at the end of February, but also made back about $10,000,000 through the end of March 2022. He advised that the portfolio is well-positioned at this time.

6. VENTURE CHESCO **VENTURE CHESCO**

There were no items.

7. SECURITIES LITIGATION **SECURITIES LITIGATION**

There were no items.

8. INVESTMENT MANAGERS **INVESTMENT MANAGERS**

There were no items.

9. PUBLIC COMMENT **PUBLIC COMMENT**

Michael Heaberg expressed his thoughts on the proposed real estate investments.

Jena Cavanagh, an employee with the County, referenced a letter given to Controller Reif and the Board, and asked that the Board consider her written request regarding a personal situation with her retirement.

There was no further public comment.

10. ADJOURNMENT **ADJOURNMENT**

Controller Reif made a motion to adjourn, which was seconded by Treasurer Maisano. Meeting adjourned at 2:35 PM.

Taken by Taylor Pettit
On behalf of Chief Clerk Robert J. Kagel

Chester County Employees Retirement System

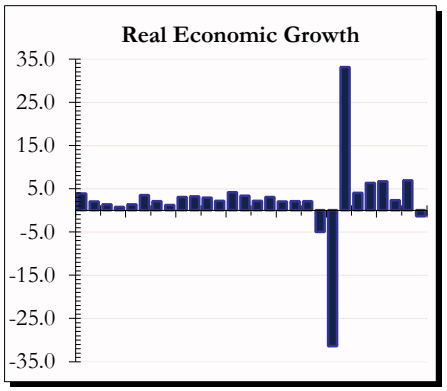
Performance Review
March 2022

DAHAB ASSOCIATES
New York Massachusetts Pennsylvania Florida Texas

ECONOMIC ENVIRONMENT

Under Pressure

The first quarter was marked by losses across most public asset classes as market participants focused on inflation and geopolitical tensions. This was seen most broadly in equities, represented by the MSCI World Index, which lost 5.7%.



The invasion of Ukraine by Russian forces was the catalyst for a swift change in the global economic outlook. Prior to the incursion, economists broadly had lukewarm to positive feelings about the economic landscape, barring the inflation outlook. Positivity was short-lived as cost pressures mounted. Advance estimates of Q1 2022 GDP from the U.S. Bureau of Economic Analysis decreased at an annual rate of 1.4%

The inflationary pressures being felt at the tail end of last year have been exacerbated. The Federal Reserve which had recently changed its language on inflation from “transitory” to “elevated”, is now at risk of falling behind. It now must walk the tightrope of raising interest rates to fight inflation, while also trying to avoid a severe economic slowdown. The overarching problem of inflation may be largely out of their control, however.

The unprecedented financial sanctions put on Russia and the resulting distress in one of the most commodity-rich regions globally has thrown global supply chains (still recovering from COVID-related pains) into disarray. With this as the backdrop, the number of projected interest rate hikes has decreased by nearly half.

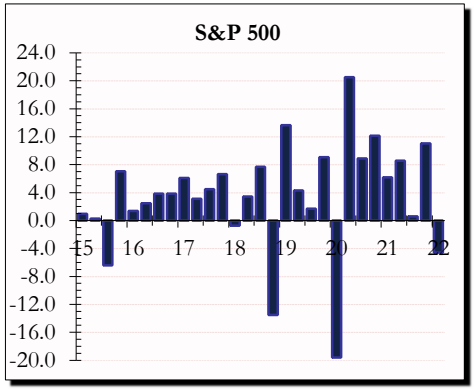
Russia is a top-ten global producer of many commodities which include: palladium, gold, silver, nickel, iron, tin, copper, zinc, uranium, and, most importantly, oil. Russia is the third-largest producer of oil worldwide and provides roughly 10% of the global supply. The other metals are used as key materials in goods ranging from automobiles to consumer electronics. Increases in the price of these base metals are being fed through the market as higher costs to the consumer.

Cost pressures did ease near the end of the quarter, boosting equity markets from their year-to-date lows.

DOMESTIC EQUITIES

Slamming Brakes

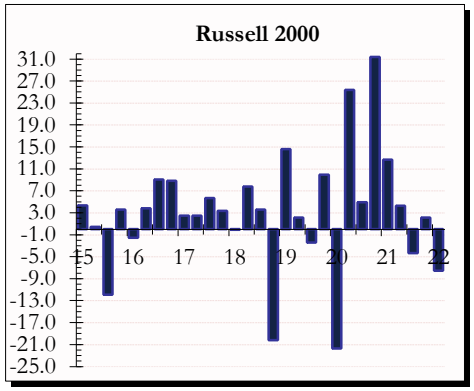
U.S. equities, as measured by the Russell 3000, lost 5.3% in the first quarter. Using the S&P 500 as a proxy, large capitalization companies lost 4.6%. These losses were sustained broadly. Out of the eleven market sectors, only Energy and Utilities had positive returns. Energy stocks were buoyed by rising oil prices and increased visibility into capital return policies. Utilities were seen



as a risk-off sector in a more challenging market environment. Information Technology, which had previously led the market, was the second worst performing sector, down 8.4%.

These same dynamics were seen in the outperformance in the Value style, relative to Growth, across all market capitalizations. Value-styled benchmarks have a higher allocation to Energy and lower allocation to Information Technology. The relative outperformance was between 8% and 10%.

Large capitalization companies were more broadly insulated from the downturn then their smaller counterparts. Using Russell indices as a proxy: small-capitalization companies lost 7.5%, relative to the 5.1% loss sustained by their larger counterparts.



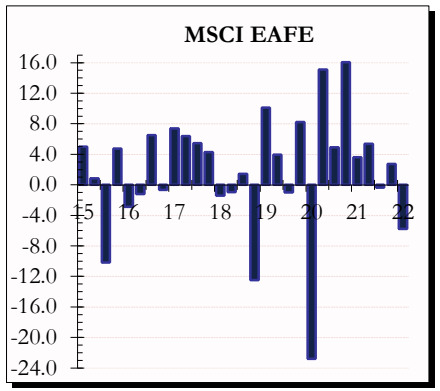
Quality and dividends seemed to be the only factors that held up companies in the first quarter. The S&P 500 Low Volatility and Dow Jones U.S. Select Dividend indices both gained 5.3%.

INTERNATIONAL EQUITIES

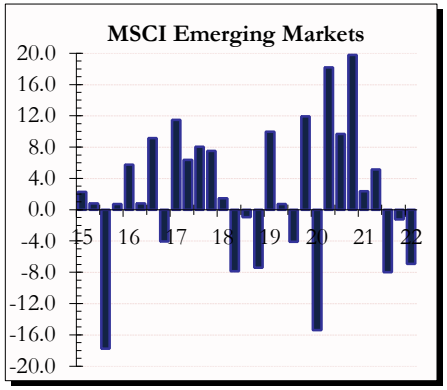
War Impacts

International markets broadly fell in the first quarter. The MSCI All Country World ex. US index, which broadly tracks the global market excluding the United States, lost 5.3%. Sentiment turned sharply lower as investors weighed the economic and human implications of Russia's invasion of Ukraine.

In developed markets, the MSCI EAFE lost 5.8%. Of the 21 constituent countries in the index, 17 had negative returns. Four of the five largest countries by weighting: Japan, France, and Switzerland, and Germany each lost more than 7.1%. These countries represent more than 50% of the index. One bright spot was seen in the United Kingdom, the second largest country by weighting. Equities in the United Kingdom rose slightly (+0.7%) acting as a bulwark to further index losses.



Emerging markets lost 6.9% in the quarter. This poor performance masked broad country strength within the index. Of the 25

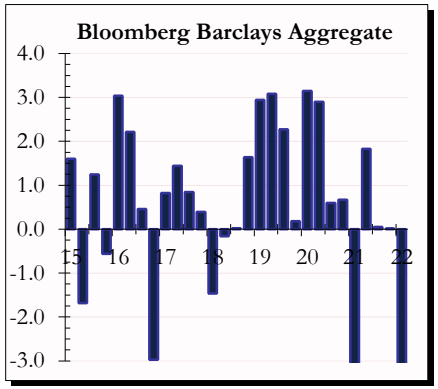


countries that were in the index at the start of the quarter only seven ended with negative returns. On March 2nd, MSCI removed Russian equities from its indices citing suitability and investability concerns. Russian equities were broadly marked to zero. The other negative returns were seen in China, India, South Korea, Taiwan, Egypt, Poland, and Hungary. These countries account for nearly 80% of total index assets.

BOND MARKET

Worst Quarterly Return

Fixed income markets performed poorly in the first quarter as interest rates rose globally. Bonds performed well at the beginning of the quarter as market participants rotated to safety.



By the end of the quarter the focus was on inflation that is high and still rising. Out of the 49 fixed income indices that we track, all were negative.

The Bloomberg U.S. Aggregate Index, an index that tracks the broad investable US fixed income market, lost 5.9%. This was the worst quarterly return since record keeping began in 1973.

Global bonds, using the Bloomberg Global Aggregate as a proxy, performed worse than their U.S. counterparts, losing 6.2%.

Floating bonds and inflation linked securities were the best performers, though they also sustained losses.

Shorter term bonds performed better than their longer-term counterparts. This was most stark within Gov/Credit benchmarks. 1-3 Gov Credit lost 3.5%, while Long Gov/Credit lost 11.0%.

The return outlook for fixed income, especially on a real basis, remains low.

CASH EQUIVALENTS

Low and Lower

The three-month T-Bill returned -0.08% for the first quarter. This is the 57th quarter in a row that return has been less than 75 basis points and the fourth where the return was negative.

Return expectations for cash continue to be low. Cash equivalents are unlikely to provide positive real returns in the foreseeable future.

Economic Statistics

	Current Quarter	Previous Quarter
GDP (Annual Rate)	-1.4%	6.9%
Unemployment	3.6%	3.9%
CPI All Items Year/Year	8.5%	7.9%
Fed Funds Rate	0.3%	0.1%
Industrial Capacity	77.6%	76.5%
U.S. Dollars per Euro	1.11	1.14

Major Index Returns

Index	Quarter	12 Months
Russell 3000	-5.3	11.9
S&P 500	-4.6	15.6
Russell Midcap	-5.7	6.9
Russell 2000	-7.5	-5.8
MSCI EAFE	-5.8	1.6
MSCI Emg Markets	-6.9	-11.1
NCREIF ODCE	7.4	28.4
U.S. Aggregate	-5.9	-4.2
90 Day T-bills	-0.1	-0.2

Domestic Equity Return Distributions

Quarter

	VAL	COR	GRO
LC	-0.7	-5.1	-9.0
MC	-1.8	-5.7	-12.6
SC	-2.4	-7.5	-12.6

Trailing Year

	VAL	COR	GRO
LC	11.7	13.3	15.0
MC	11.5	6.9	-0.9
SC	3.3	-5.8	-14.3

Market Summary

- Equities fell globally
- Value outperformed Growth
- Fixed Income markets sustained losses
- Real assets continue to see gains
- Inflation concerns rise

INVESTMENT RETURN

On March 31st, 2022, the Chester County Employees Retirement System was valued at $549,513,018, a decrease of $41,867,217 from the December ending value of $591,380,235. Last quarter, the account recorded total net withdrawals of $5,325,294 in addition to $36,541,923 in net investment losses. The fund's net investment loss was a result of income receipts totaling $2,101,285 and realized and unrealized capital losses totaling $38,643,208.

RELATIVE PERFORMANCE

Total Fund

During the first quarter, the total portfolio lost 6.2%, which was 2.0% less than the Chester County Policy Index's return of -4.2% and ranked in the 95th percentile of the Public Fund universe. Over the trailing year, the portfolio returned 5.2%, which was 3.7% less than the benchmark's 8.9% performance, and ranked in the 48th percentile. Since March 1995, the account returned 7.7% per annum. For comparison, the Chester County Policy Index returned an annualized 8.2% over the same time frame.

Diversified Assets

The diversified assets segment lost 6.5% last quarter, 1.0% below the 60 ACWI / 40 AGG's return of -5.5% and ranked in the 83rd percentile of the Balanced Fund universe. Over the trailing twelve months, the diversified assets portfolio returned -1.3%, 4.3% less than the benchmark's 3.0% performance, and ranked in the 97th percentile.

Domestic Equity

Last quarter, the domestic equity segment returned -6.3%, which was 1.0% less than the Russell 3000 Index's return of -5.3% and ranked in the 57th percentile of the Domestic Equity universe. Over the trailing twelve months, this segment returned 11.6%, which was 0.3% less than the benchmark's 11.9% return, ranking in the 37th percentile.

International Equity

The international equity segment returned -10.3% last quarter, 4.5% below the MSCI EAFE Index's return of -5.8% and ranked in the 68th percentile of the International Equity universe. Over the trailing year, this segment returned -1.1%, 2.7% less than the benchmark's 1.6% performance, and ranked in the 41st percentile.

Emerging Markets Equity

The emerging markets equity segment lost 6.2% in the first quarter, 0.7% below the FTSE All Cap EM China A Inclusion's return of -5.5% and ranked in the 44th percentile of the Emerging Markets universe.

Private Equity

Current quarter performance for some of the private equity portfolio and the Cambridge Private Equity Index was not available at the time of this report.

During the first quarter, the private equity portion of the portfolio gained 3.0%. Over the trailing twelve-month period, this component returned 31.8%, which was 3.8% greater than the benchmark's 28.0% performance.

Fixed Income

For the first quarter, the fixed income portion of the portfolio returned -4.0%, which was 1.2% greater than the 50% Aggregate / 50% Int. Gov. Cred.'s return of -5.2% and ranked in the 38th percentile of the Broad Market Fixed Income universe. Over the trailing year, this component returned -2.7%, which was 1.4% greater than the benchmark's -4.1% performance, and ranked in the 44th percentile.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / YTD	1 Year	3 Year	5 Year	10 Year	Since 03/95
Total Portfolio - Gross	-6.2	5.2	10.9	9.5	8.8	7.7
PUBLIC FUND RANK	(95)	(48)	(39)	(36)	(34)	----
Total Portfolio - Net	-6.3	4.8	10.5	9.1	8.4	----
Policy Index	-4.2	8.9	13.3	11.0	9.6	8.2
Diversified Assets - Gross	-6.5	-1.3	10.6	8.0	----	----
BALANCED FUND RANK	(83)	(97)	(76)	(79)	----	----
60 ACWI/40 AGG	-5.5	3.0	9.5	8.4	7.4	7.2
Domestic Equity - Gross	-6.3	11.6	17.4	14.3	----	----
DOMESTIC EQUITY RANK	(57)	(37)	(38)	(45)	----	----
Russell 3000	-5.3	11.9	18.2	15.4	14.3	10.6
S&P 500	-4.6	15.6	18.9	16.0	14.6	10.6
International Equity - Gross	-10.3	-1.1	8.0	7.8	----	----
INTERNATIONAL EQUITY RANK	(68)	(41)	(54)	(47)	----	----
MSCI EAFE	-5.8	1.6	8.3	7.2	6.8	5.6
Emerging Markets Equity - Gross	-6.2	----	----	----	----	----
EMERGING MARKETS RANK	(44)	----	----	----	----	----
FTSE AC EM	-5.5	-7.0	6.2	6.2	3.9	----
MSCI Emg Mkts	-6.9	-11.1	5.3	6.4	3.7	6.4
Private Equity - Gross	3.0	31.8	26.3	----	----	----
Cambridge PE	0.0	28.0	23.6	19.9	16.2	15.4
Fixed Income - Gross	-4.0	-2.7	3.0	2.9	----	----
BROAD MARKET FIXED RANK	(38)	(44)	(41)	(47)	----	----
Aggregate/IntGC	-5.2	-4.1	1.6	2.0	2.0	4.7
Aggregate Index	-5.9	-4.2	1.7	2.1	2.2	4.9
Int Gov/Credit	-4.5	-4.1	1.5	1.8	1.8	4.4

ASSET ALLOCATION

Diversified	3.2%	$ 17,841,862
Domestic Equity	54.2%	297,995,802
Int'l Equity	14.0%	76,898,959
Emerging Markets	4.9%	26,752,478
Private Equity	1.4%	7,544,126
Fixed Income	22.3%	122,314,964
Cash	0.0%	164,827
Total Portfolio	100.0%	$ 549,513,018

INVESTMENT RETURN

Market Value 12/2021	$ 591,380,235
Contribs / Withdrawals	- 5,325,294
Income	2,101,285
Capital Gains / Losses	- 38,643,208
Market Value 3/2022	$ 549,513,018

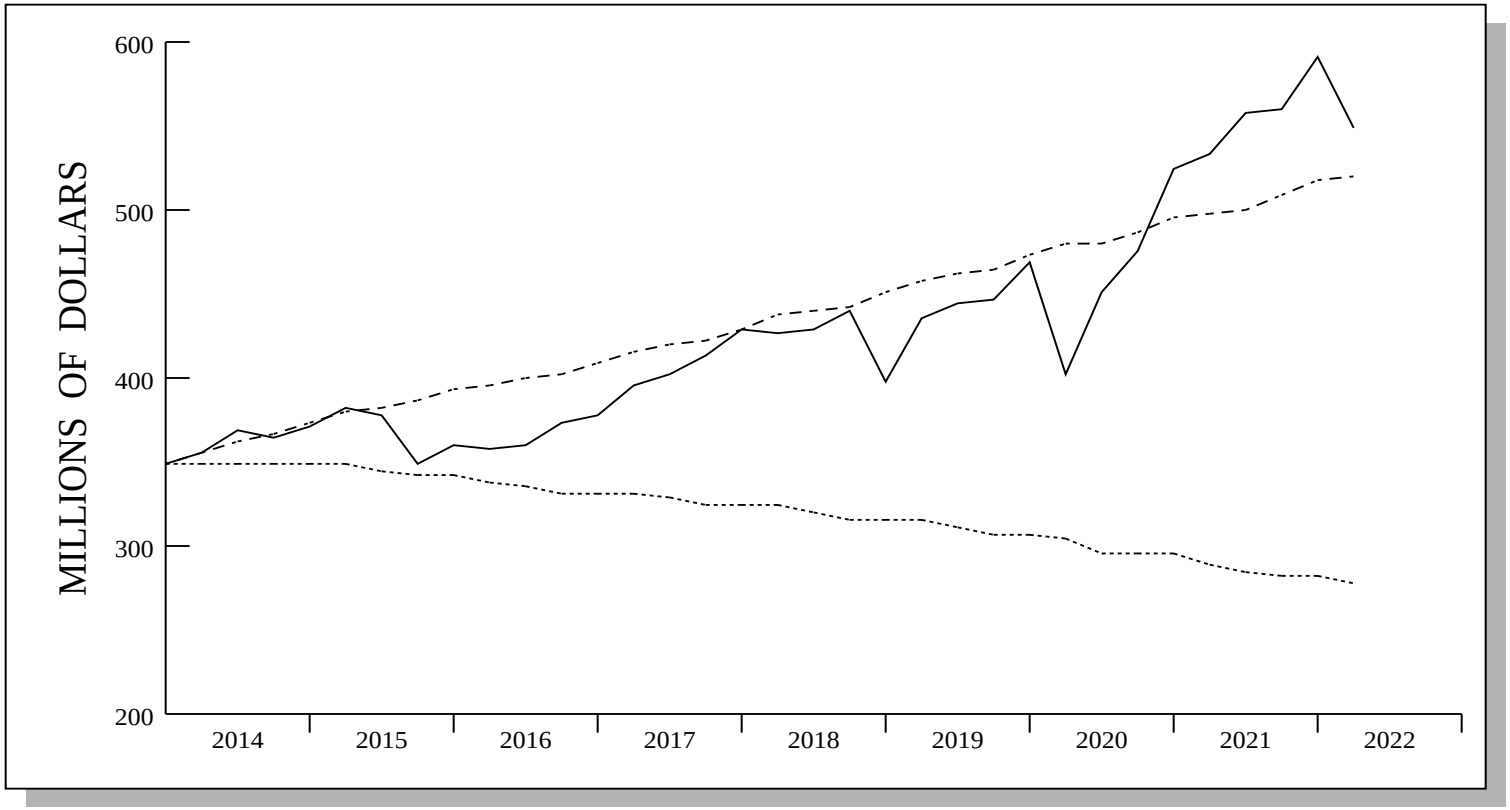
Chester County Employees Retirement System
Gross of Fees Manager Performance Summary as of March 31, 2022

Portfolio	Universe	QTR		YTD		1 Year		3 Year		5 Year		10 Year		Inception		
Total Portfolio	**(Public Fund)**	**-6.2**	**(95)**	**-6.2**	**(95)**	**5.2**	**(48)**	**10.9**	**(39)**	**9.5**	**(36)**	**8.8**	**(34)**	**7.7**	**----**	**03/95**
Chester County Policy Index		***-4.2***		***-4.2***		***8.9***		***13.3***		***11.0***		***9.6***		***8.2***		
Blackrock Global Allocation	(Balanced)	-6.5	(83)	-6.5	(83)	-1.3	(97)	10.6	(76)	8.3	(78)	7.2	(89)	6.7	----	03/11
60 ACWI / 40 AGG		***-5.5***		***-5.5***		***3.0***		***9.5***		***8.4***		***7.4***		***7.0***		
Vanguard 500	(LC Core)	-4.6	(53)	-4.6	(53)	15.7	(24)	----	----	----	----	----	----	19.0	(17)	06/19
S&P 500		***-4.6***		***-4.6***		***15.6***		***18.9***		***16.0***		***14.6***		***19.0***		
Vesper	(LC Core)	-11.6	(99)	-11.6	(99)	8.8	(90)	----	----	----	----	----	----	15.8	(45)	12/19
S&P 500		***-4.6***		***-4.6***		***15.6***		***18.9***		***16.0***		***14.6***		***18.1***		
Vanguard R1000G	(LC Growth)	-9.0	(40)	-9.0	(40)	15.0	(17)	24.1	(11)	21.3	(18)	----	----	20.3	(19)	03/16
Russell 1000 Growth		***-9.0***		***-9.0***		***15.0***		***23.6***		***20.9***		***17.0***		***20.0***		
Allspring	(LC Value)	-3.2	(75)	-3.2	(75)	9.6	(83)	13.7	(77)	12.3	(44)	12.1	(67)	12.6	----	09/10
Russell 1000 Value		***-0.7***		***-0.7***		***11.7***		***13.0***		***10.3***		***11.7***		***12.1***		
Champlain	(MC Core)	-10.7	(87)	-10.7	(87)	7.9	(35)	----	----	----	----	----	----	9.7	(71)	12/20
Russell Mid Cap		***-5.7***		***-5.7***		***6.9***		***14.9***		***12.6***		***12.8***		***12.3***		
Vanguard Mid Cap	(MC Core)	-6.3	(47)	-6.3	(47)	----	----	----	----	----	----	----	----	-6.3	(47)	12/21
CRSP US Mid Cap Index		***-6.3***		***-6.3***		***8.9***		***15.7***		***13.0***		***13.0***		***-6.3***		
Macquarie	(Intl Eq)	-7.6	(52)	-7.6	(52)	-1.6	(45)	5.1	(85)	4.5	(90)	----	----	5.5	(63)	12/12
MSCI EAFE		***-5.8***		***-5.8***		***1.6***		***8.3***		***7.2***		***6.8***		***6.6***		
Walter Scott	(Intl Eq)	-11.7	(74)	-11.7	(74)	0.0	(35)	10.8	(27)	11.0	(15)	----	----	8.1	(21)	12/12
MSCI All Country World ex US		***-5.3***		***-5.3***		***-1.0***		***8.0***		***7.3***		***6.0***		***5.9***		
Vanguard Emerging Markets	(Emerging Mkt)	-6.2	(44)	-6.2	(44)	----	----	----	----	----	----	----	----	-6.2	(44)	12/21
FTSE All Cap EM China A Inclusi		***-5.5***		***-5.5***		***-7.0***		***6.2***		***6.2***		***3.9***		***-5.5***		
Banner Ridge		0.0	----	0.0	----	75.7	----	----	----	----	----	----	----	75.7	----	03/21
Cambridge US Private Equity		***0.0***		***0.0***		***28.0***		***23.6***		***19.9***		***16.2***		***28.0***		
Ben Franklin		-0.8	----	-0.8	----	-9.9	----	-18.1	----	----	----	----	----	-15.7	----	09/18
Cambridge US Private Equity		***0.0***		***0.0***		***28.0***		***23.6***		***19.9***		***16.2***		***20.9***		
Siguler Guff		6.6	----	6.6	----	30.5	----	----	----	----	----	----	----	32.5	----	12/19
Cambridge US Private Equity		***0.0***		***0.0***		***28.0***		***23.6***		***19.9***		***16.2***		***27.9***		
Taurus		0.0	----	0.0	----	21.6	----	----	----	----	----	----	----	14.1	----	06/20
Cambridge US Private Equity		***0.0***		***0.0***		***28.0***		***23.6***		***19.9***		***16.2***		***38.4***		
Brandes	(Core Fixed)	-4.6	(7)	-4.6	(7)	-3.2	(13)	1.5	(98)	----	----	----	----	2.0	(99)	03/18
Bloomberg Aggregate Index		***-5.9***		***-5.9***		***-4.2***		***1.7***		***2.1***		***2.2***		***2.4***		
Birch Run	(Int Fixed)	-3.6	(12)	-3.6	(12)	-3.5	(30)	2.3	(20)	----	----	----	----	2.2	(13)	06/17
Intermediate Gov/Credit		***-4.5***		***-4.5***		***-4.1***		***1.5***		***1.8***		***1.8***		***1.7***		
Vanguard Short-Term Corporate	(ST Fixed)	-3.7	(99)	-3.7	(99)	-3.5	(94)	1.6	(27)	----	----	----	----	1.9	(14)	12/17
ML/BoA 1-5 Year Treasury		***-3.2***		***-3.2***		***-3.7***		***0.9***		***1.1***		***1.0***		***1.3***		
PGIM Short-Term Corporate	(ST Fixed)	-3.8	(99)	-3.8	(99)	-3.3	(92)	2.2	(10)	----	----	----	----	2.4	(6)	12/17
ML/BoA 1-5 Year Treasury		***-3.2***		***-3.2***		***-3.7***		***0.9***		***1.1***		***1.0***		***1.3***		

Chester County Employees Retirement System
Net of Fees Manager Performance Summary as of March 31, 2022

Portfolio	QTR	YTD	1 Year	3 Year	5 Year	10 Year	Inception	
Total Portfolio	**-6.3**	**-6.3**	**4.8**	**10.5**	**9.1**	**8.4**	**----**	**03/95**
Chester County Policy Index	***-4.2***	***-4.2***	***8.9***	***13.3***	***11.0***	***9.6***	***8.2***	
Blackrock Global Allocation	-6.7	-6.7	-2.2	9.7	7.4	6.3	5.8	03/11
60 ACWI / 40 AGG	***-5.5***	***-5.5***	***3.0***	***9.5***	***8.4***	***7.4***	***7.0***	
Vanguard 500	-4.6	-4.6	15.6	----	----	----	19.0	06/19
S&P 500	***-4.6***	***-4.6***	***15.6***	***18.9***	***16.0***	***14.6***	***19.0***	
Vesper	-11.8	-11.8	8.0	----	----	----	14.9	12/19
S&P 500	***-4.6***	***-4.6***	***15.6***	***18.9***	***16.0***	***14.6***	***18.1***	
Vanguard R1000G	-9.0	-9.0	14.9	24.0	21.2	----	20.2	03/16
Russell 1000 Growth	***-9.0***	***-9.0***	***15.0***	***23.6***	***20.9***	***17.0***	***20.0***	
Allspring	-3.2	-3.2	9.1	13.1	11.8	11.5	12.0	09/10
Russell 1000 Value	***-0.7***	***-0.7***	***11.7***	***13.0***	***10.3***	***11.7***	***12.1***	
Champlain	-10.9	-10.9	7.0	----	----	----	8.7	12/20
Russell Mid Cap	***-5.7***	***-5.7***	***6.9***	***14.9***	***12.6***	***12.8***	***12.3***	
Vanguard Mid Cap	-6.3	-6.3	----	----	----	----	-6.3	12/21
CRSP US Mid Cap Index	***-6.3***	***-6.3***	***8.9***	***15.7***	***13.0***	***13.0***	***-6.3***	
Macquarie	-7.7	-7.7	-2.3	4.3	3.8	----	4.8	12/12
MSCI EAFE	***-5.8***	***-5.8***	***1.6***	***8.3***	***7.2***	***6.8***	***6.6***	
Walter Scott	-11.9	-11.9	-0.8	9.9	10.1	----	7.1	12/12
MSCI All Country World ex US	***-5.3***	***-5.3***	***-1.0***	***8.0***	***7.3***	***6.0***	***5.9***	
Vanguard Emerging Markets	-6.2	-6.2	----	----	----	----	-6.2	12/21
FTSE All Cap EM China A Inclusion	***-5.5***	***-5.5***	***-7.0***	***6.2***	***6.2***	***3.9***	***-5.5***	
Banner Ridge	0.0	0.0	64.2	----	----	----	64.2	03/21
Cambridge US Private Equity	***0.0***	***0.0***	***28.0***	***23.6***	***19.9***	***16.2***	***28.0***	
Ben Franklin	-1.7	-1.7	-13.6	-21.3	----	----	-19.2	09/18
Cambridge US Private Equity	***0.0***	***0.0***	***28.0***	***23.6***	***19.9***	***16.2***	***20.9***	
Siguler Guff	6.6	6.6	26.7	----	----	----	24.2	12/19
Cambridge US Private Equity	***0.0***	***0.0***	***28.0***	***23.6***	***19.9***	***16.2***	***27.9***	
Taurus	0.0	0.0	20.7	----	----	----	13.0	06/20
Cambridge US Private Equity	***0.0***	***0.0***	***28.0***	***23.6***	***19.9***	***16.2***	***38.4***	
Brandes	-4.7	-4.7	-3.4	1.3	----	----	1.7	03/18
Bloomberg Aggregate Index	***-5.9***	***-5.9***	***-4.2***	***1.7***	***2.1***	***2.2***	***2.4***	
Birch Run	-3.7	-3.7	-3.7	2.1	----	----	2.0	06/17
Intermediate Gov/Credit	***-4.5***	***-4.5***	***-4.1***	***1.5***	***1.8***	***1.8***	***1.7***	
Vanguard Short-Term Corporate	-3.7	-3.7	-3.5	1.6	----	----	1.9	12/17
ML/BoA 1-5 Year Treasury	***-3.2***	***-3.2***	***-3.7***	***0.9***	***1.1***	***1.0***	***1.3***	
PGIM Short-Term Corporate	-3.9	-3.9	-3.7	1.8	----	----	2.0	12/17
ML/BoA 1-5 Year Treasury	***-3.2***	***-3.2***	***-3.7***	***0.9***	***1.1***	***1.0***	***1.3***	

INVESTMENT GROWTH



ACTUAL RETURN
7.0%
0.0%

VALUE ASSUMING
7.0% RETURN $ 521,242,703

	LAST QUARTER	PERIOD 12/13 - 3/22
BEGINNING VALUE	$ 591,380,235	$ 351,060,091
NET CONTRIBUTIONS	- 5,325,294	- 72,520,599
INVESTMENT RETURN	- 36,541,923	270,973,526
ENDING VALUE	$ 549,513,018	$ 549,513,018
INCOME	2,101,285	28,096,519
CAPITAL GAINS (LOSSES)	- 38,643,208	242,877,007
INVESTMENT RETURN	- 36,541,923	270,973,526

Chester County Employees Retirement System
Investment Return Summary as of March 31, 2022

Portfolio	Prior Quarter Market Value		Net Cash Flow	Net Investment Return	Current Quarter Market Value	
Total Portfolio	**$591,380,235**	**100%**	**($5,325,294)**	**($36,541,923)**	**$549,513,018**	**100%**
Blackrock Global Allocation	$24,442,250	4.1%	($5,000,000)	($1,600,388)	$17,841,862	3.2%
Vanguard 500	$79,198,816	13.4%	$0	($3,646,347)	$75,552,469	13.7%
Vesper	$2,531,658	0.4%	$621,995	($335,519)	$2,818,134	0.5%
Vanguard R1000G	$79,928,109	13.5%	($33,500,000)	($5,405,896)	$41,022,213	7.5%
Allspring	$82,384,620	13.9%	($37,749,810)	($2,395,299)	$42,239,511	7.7%
Champlain	$53,554,766	9.1%	($111,369)	($5,712,852)	$47,730,545	8.7%
Vanguard Mid Cap	$10,607,527	1.8%	$24,000,000	$295,695	$34,903,222	6.4%
Eagle	$34,798,277	5.9%	($30,897,277)	($3,901,000)	$0	0.0%
Vanguard Small-Cap	$0	0.0%	$53,030,000	$697,536	$53,727,536	9.8%
Macquarie	$25,629,066	4.3%	$12,500,000	($2,738,960)	$35,390,106	6.4%
Walter Scott	$34,157,656	5.8%	$12,436,618	($5,085,421)	$41,508,853	7.6%
Vanguard Emerging Markets	$28,534,365	4.8%	$0	($1,781,887)	$26,752,478	4.9%
Banner Ridge	$2,253,000	0.4%	$0	$0	$2,253,000	0.4%
Ben Franklin	$644,653	0.1%	$280,000	($6,588)	$918,065	0.2%
Siguler Guff	$3,211,549	0.5%	$398,566	$220,683	$3,830,798	0.7%
Taurus	$542,263	0.1%	$0	$0	$542,263	0.1%
Brandes	$45,955,552	7.8%	($22,802)	($2,129,619)	$43,803,131	8.0%
Birch Run	$41,607,205	7.0%	($20,717)	($1,514,783)	$40,071,705	7.3%
Vanguard Short-Term Corporate	$18,429,754	3.1%	($347,848)	($680,073)	$17,401,833	3.2%
PGIM Short-Term Corporate	$21,899,606	3.7%	$0	($861,311)	$21,038,295	3.8%
PGIM High Yield	$0	0.0%	($38,729)	$38,729	$0	0.0%
Cash	$1,069,543	0.2%	($903,921)	$1,377	$166,999	0.0%

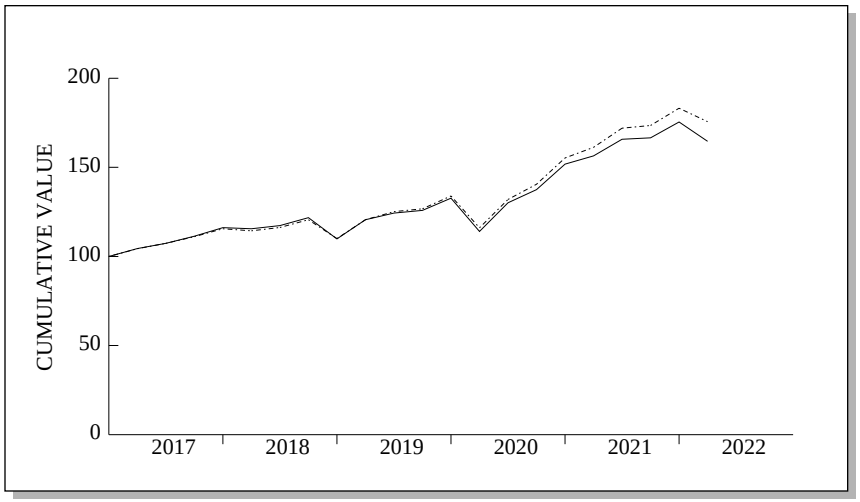
**Income was received and settled during the first quarter for PGIM High Yield, which was sold in December.*

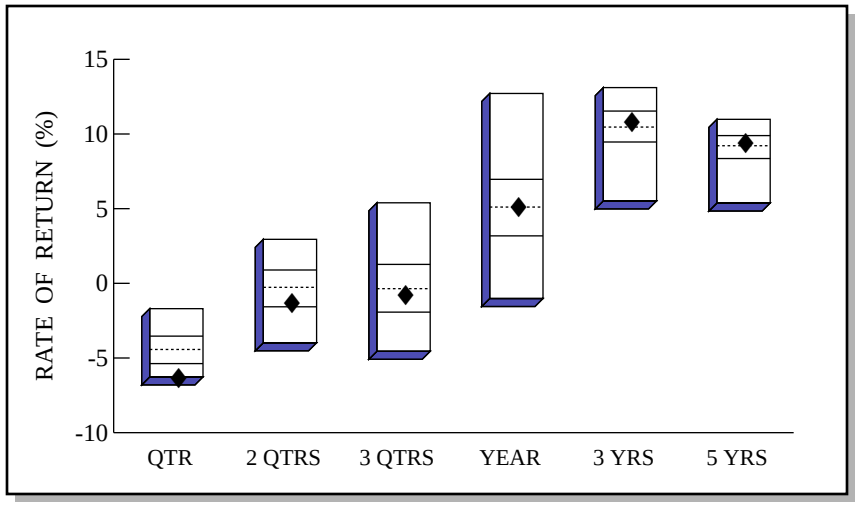
Chester County Employees Retirement System
Allocation and Targets as of March 31, 2022

Asset Class	Market Value	%	Target	Min	Max
Diversified Assets	$ 17,841,862	3.2%	0%	---	---
Large Cap Equity	$ 161,632,327	29.4%	20%	15%	25%
Mid Cap Equity	$ 82,633,767	15.0%	15%	10%	20%
Small Cap Equity	$ 53,729,708	9.8%	10%	5%	15%
International Equity	$ 76,898,959	14.0%	15%	10%	20%
Emerging Markets	$ 26,752,478	4.9%	5%	0%	10%
Private Equity	$ 7,544,126	1.4%	5%	0%	10%
Real Estate	$ -	0.0%	10%	5%	15%
Fixed Income	$ 122,314,964	22.3%	20%	15%	25%
Cash	$ 164,827	0.0%	0%	0%	10%

The Small Cap category includes unmanaged stocks in the cash account in the amount of $2,172.

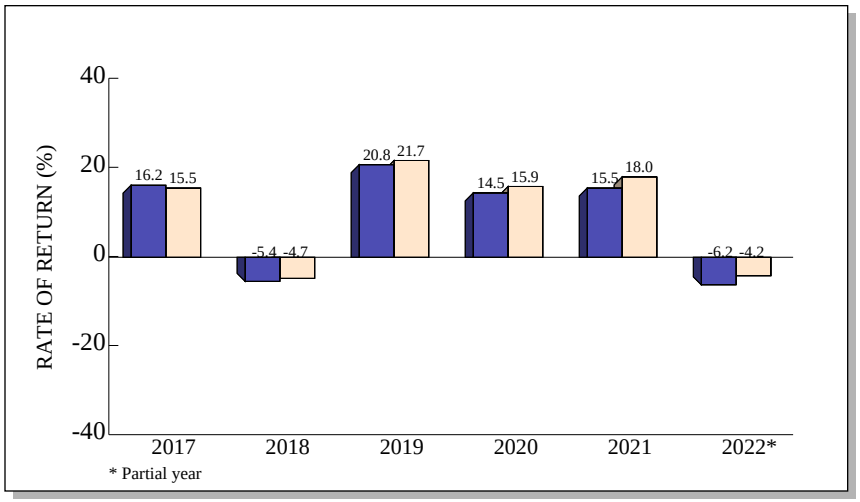
TOTAL RETURN COMPARISONS





Public Fund Universe

PORTFOLIO
POLICY INDEX



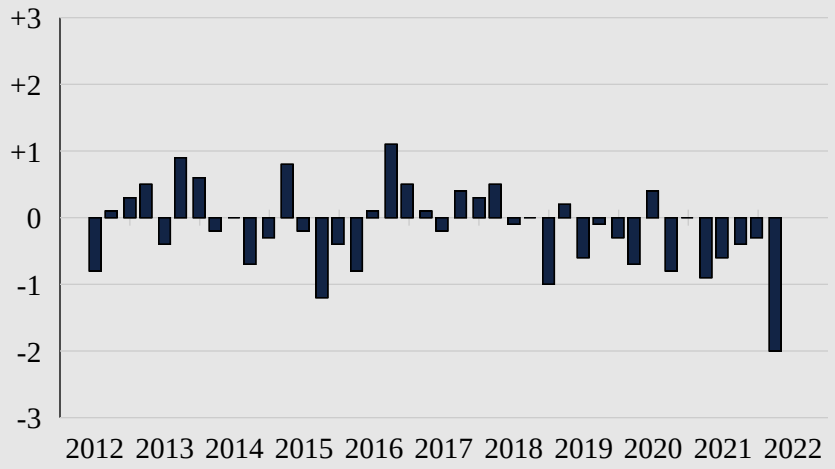
					------ANNUALIZED------	
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
RETURN	-6.2	-1.2	-0.7	5.2	10.9	9.5
(RANK)	(95)	(66)	(56)	(48)	(39)	(36)
5TH %ILE	-1.7	3.0	5.4	12.7	13.1	11.0
25TH %ILE	-3.5	0.9	1.3	7.0	11.5	9.9
MEDIAN	-4.4	-0.3	-0.4	5.1	10.5	9.2
75TH %ILE	-5.4	-1.6	-1.9	3.2	9.5	8.4
95TH %ILE	-6.3	-4.0	-4.6	-1.0	5.5	5.4
Policy	***-4.2***	***1.2***	***2.1***	***8.9***	***13.3***	***11.0***

Public Fund Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY - 10 YEARS

COMPARATIVE BENCHMARK: CHESTER COUNTY POLICY INDEX

VARIATION FROM BENCHMARK

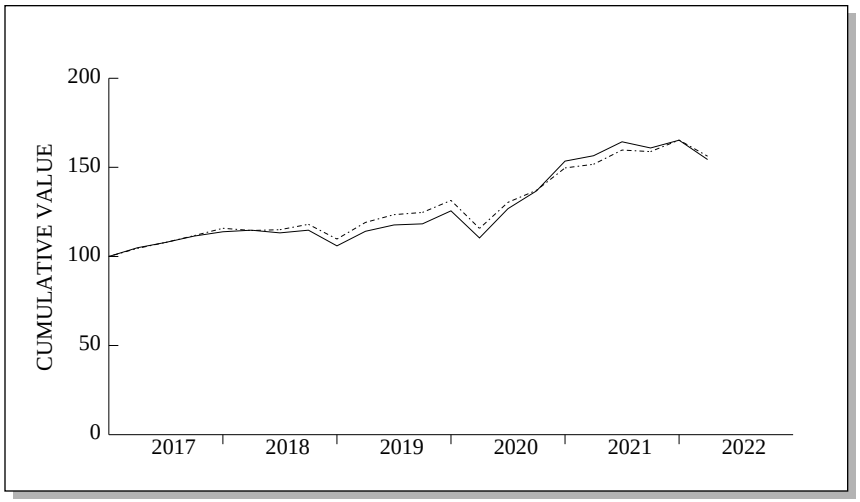


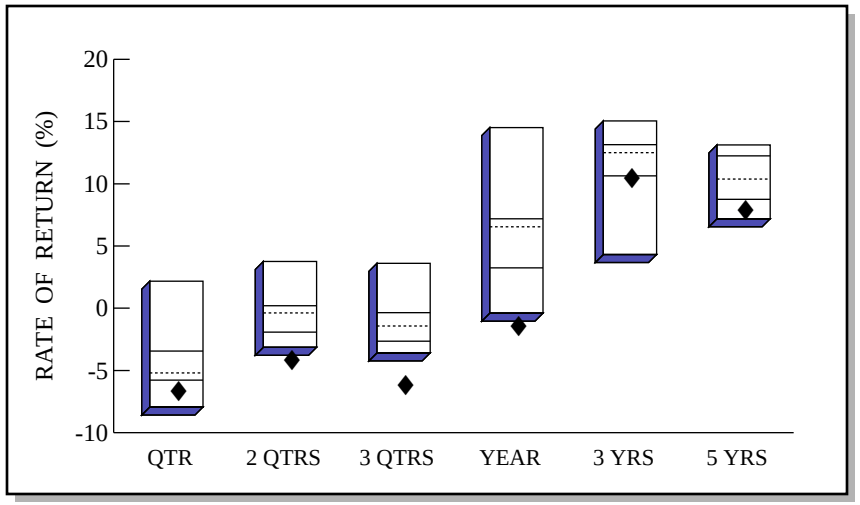
Total Quarters Observed	**40**
Quarters At or Above the Benchmark	**18**
Quarters Below the Benchmark	**22**
Batting Average	**.450**

RATES OF RETURN

Date	Portfolio	Benchmark	Difference
6/12	-2.8	-2.0	-0.8
9/12	4.9	4.8	0.1
12/12	1.5	1.2	0.3
3/13	6.7	6.2	0.5
6/13	-0.1	0.3	-0.4
9/13	6.0	5.1	0.9
12/13	6.4	5.8	0.6
3/14	1.6	1.8	-0.2
6/14	3.8	3.8	0.0
9/14	-1.5	-0.8	-0.7
12/14	2.3	2.6	-0.3
3/15	3.0	2.2	0.8
6/15	-0.6	-0.4	-0.2
9/15	-6.9	-5.7	-1.2
12/15	3.3	3.7	-0.4
3/16	0.4	1.2	-0.8
6/16	2.0	1.9	0.1
9/16	4.5	3.4	1.1
12/16	1.5	1.0	0.5
3/17	4.4	4.3	0.1
6/17	2.8	3.0	-0.2
9/17	3.8	3.4	0.4
12/17	4.3	4.0	0.3
3/18	-0.5	-1.0	0.5
6/18	1.5	1.6	-0.1
9/18	3.8	3.8	0.0
12/18	-9.8	-8.8	-1.0
3/19	9.8	9.6	0.2
6/19	3.2	3.8	-0.6
9/19	1.2	1.3	-0.1
12/19	5.4	5.7	-0.3
3/20	-14.1	-13.4	-0.7
6/20	14.2	13.8	0.4
9/20	5.6	6.4	-0.8
12/20	10.5	10.5	0.0
3/21	3.0	3.9	-0.9
6/21	6.0	6.6	-0.6
9/21	0.5	0.9	-0.4
12/21	5.3	5.6	-0.3
3/22	-6.2	-4.2	-2.0

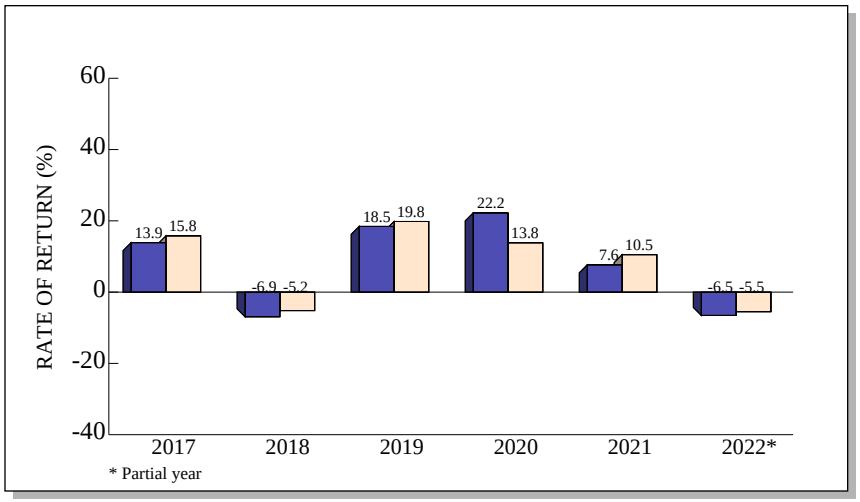
DIVERSIFIED ASSETS RETURN COMPARISONS





Balanced Fund Universe

PORTFOLIO
60 ACWI/40 AGG



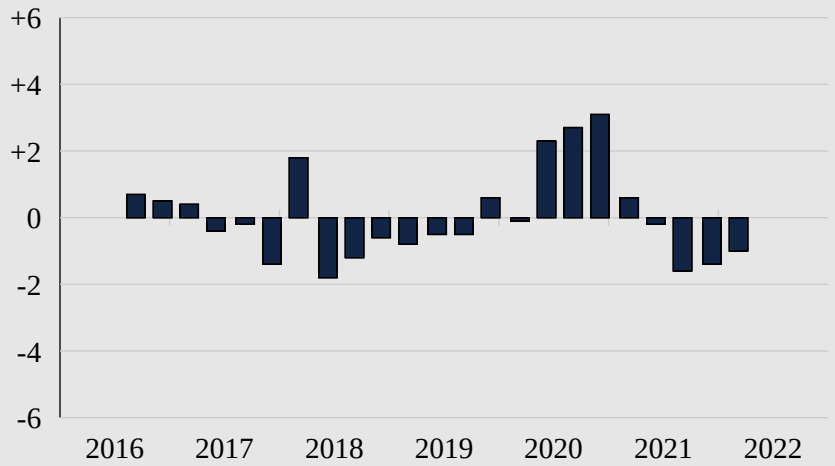
					------ANNUALIZED------	
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
RETURN	-6.5	-4.0	-6.0	-1.3	10.6	8.0
(RANK)	(83)	(98)	(99)	(97)	(76)	(79)
5TH %ILE	2.2	3.8	3.6	14.5	15.1	13.1
25TH %ILE	-3.5	0.2	-0.4	7.2	13.1	12.2
MEDIAN	-5.2	-0.4	-1.4	6.6	12.5	10.4
75TH %ILE	-5.8	-1.9	-2.7	3.3	10.6	8.8
95TH %ILE	-8.0	-3.1	-3.6	-0.4	4.3	7.2
Blended Ix	***-5.5***	***-1.6***	***-2.2***	***3.0***	***9.5***	***8.4***

Balanced Fund Universe

DIVERSIFIED ASSETS QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: 60 ACWI / 40 AGG

VARIATION FROM BENCHMARK

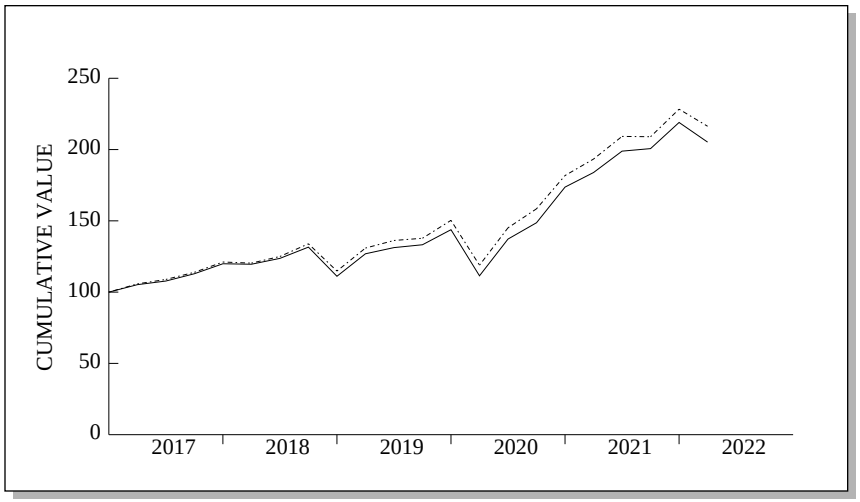


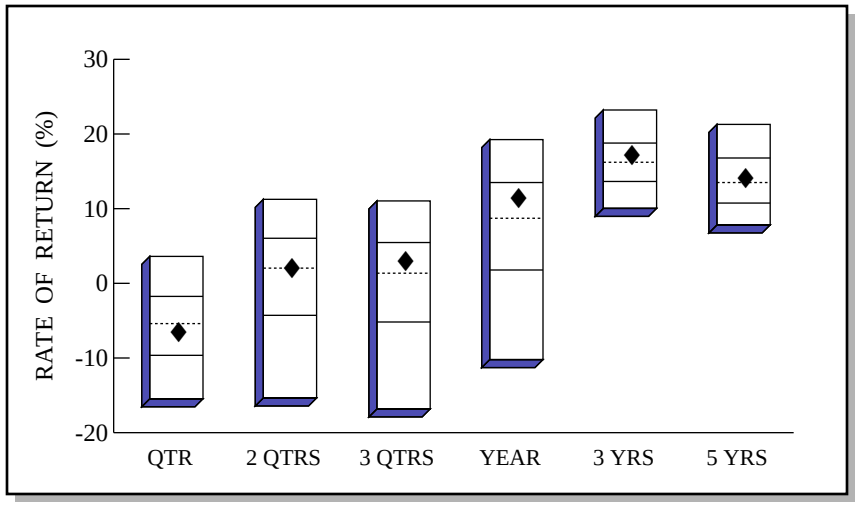
Total Quarters Observed	**23**
Quarters At or Above the Benchmark	**9**
Quarters Below the Benchmark	**14**
Batting Average	**.391**

RATES OF RETURN

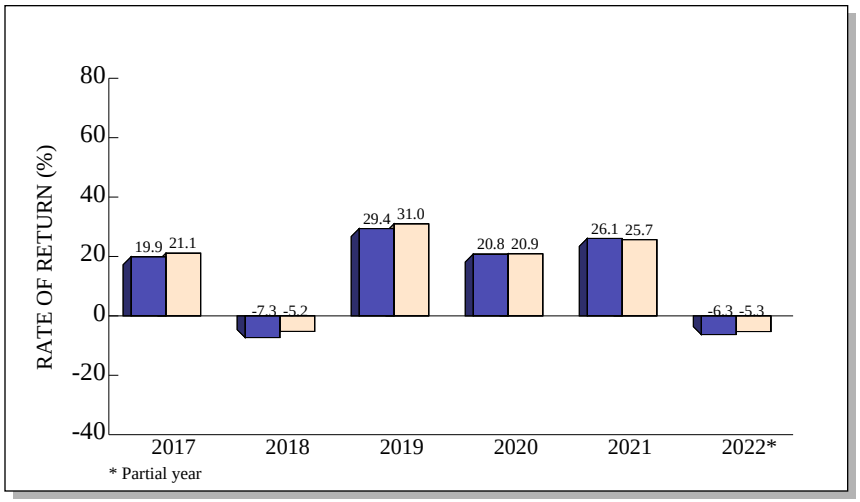
Date	Portfolio	Benchmark	Difference
9/16	4.1	3.4	0.7
12/16	0.1	-0.4	0.5
3/17	4.9	4.5	0.4
6/17	2.8	3.2	-0.4
9/17	3.3	3.5	-0.2
12/17	2.2	3.6	-1.4
3/18	0.8	-1.0	1.8
6/18	-1.4	0.4	-1.8
9/18	1.4	2.6	-1.2
12/18	-7.6	-7.0	-0.6
3/19	7.7	8.5	-0.8
6/19	3.1	3.6	-0.5
9/19	0.5	1.0	-0.5
12/19	6.1	5.5	0.6
3/20	-12.1	-12.0	-0.1
6/20	14.9	12.6	2.3
9/20	7.9	5.2	2.7
12/20	12.2	9.1	3.1
3/21	2.0	1.4	0.6
6/21	5.0	5.2	-0.2
9/21	-2.1	-0.5	-1.6
12/21	2.7	4.1	-1.4
3/22	-6.5	-5.5	-1.0

DOMESTIC EQUITY RETURN COMPARISONS





Domestic Equity Universe



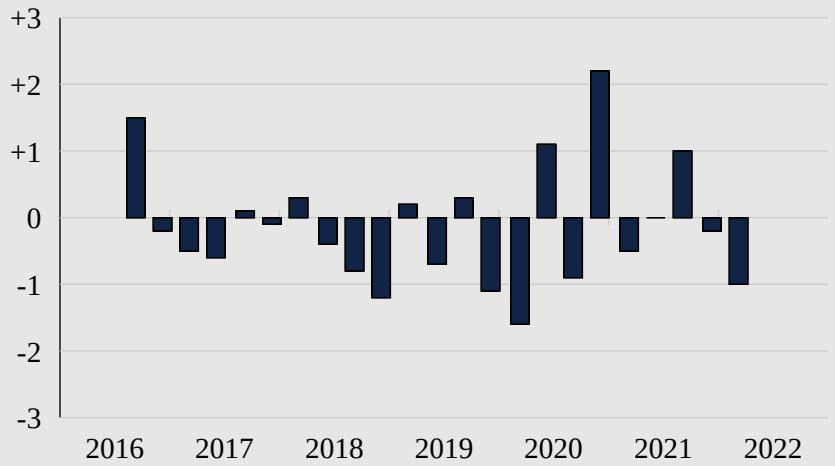
					------ANNUALIZED------	
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
RETURN	-6.3	2.2	3.2	11.6	17.4	14.3
(RANK)	(57)	(50)	(40)	(37)	(38)	(45)
5TH %ILE	3.6	11.3	11.0	19.3	23.2	21.3
25TH %ILE	-1.8	6.0	5.5	13.5	18.8	16.8
MEDIAN	-5.4	2.0	1.4	8.7	16.2	13.5
75TH %ILE	-9.7	-4.3	-5.2	1.8	13.7	10.8
95TH %ILE	-15.5	-15.4	-16.8	-10.2	10.0	7.8
Russ 3000	***-5.3***	***3.5***	***3.4***	***11.9***	***18.2***	***15.4***

Domestic Equity Universe

DOMESTIC EQUITY QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: RUSSELL 3000

VARIATION FROM BENCHMARK

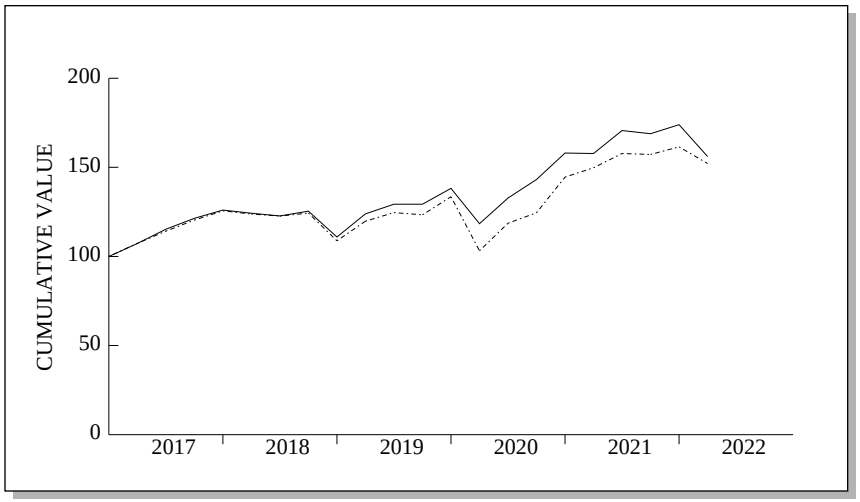


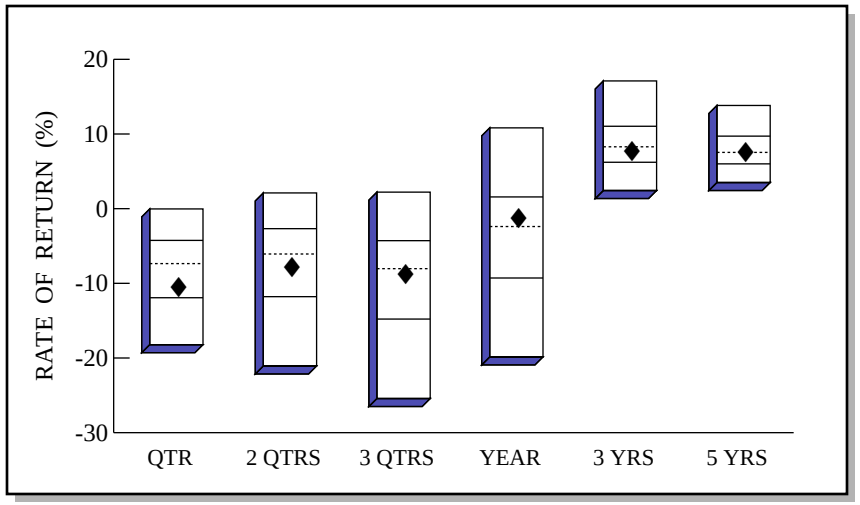
Total Quarters Observed	**23**
Quarters At or Above the Benchmark	**9**
Quarters Below the Benchmark	**14**
Batting Average	**.391**

RATES OF RETURN

Date	Portfolio	Benchmark	Difference
9/16	5.9	4.4	1.5
12/16	4.0	4.2	-0.2
3/17	5.2	5.7	-0.5
6/17	2.4	3.0	-0.6
9/17	4.7	4.6	0.1
12/17	6.2	6.3	-0.1
3/18	-0.3	-0.6	0.3
6/18	3.5	3.9	-0.4
9/18	6.3	7.1	-0.8
12/18	-15.5	-14.3	-1.2
3/19	14.2	14.0	0.2
6/19	3.4	4.1	-0.7
9/19	1.5	1.2	0.3
12/19	8.0	9.1	-1.1
3/20	-22.5	-20.9	-1.6
6/20	23.1	22.0	1.1
9/20	8.3	9.2	-0.9
12/20	16.9	14.7	2.2
3/21	5.8	6.3	-0.5
6/21	8.2	8.2	0.0
9/21	0.9	-0.1	1.0
12/21	9.1	9.3	-0.2
3/22	-6.3	-5.3	-1.0

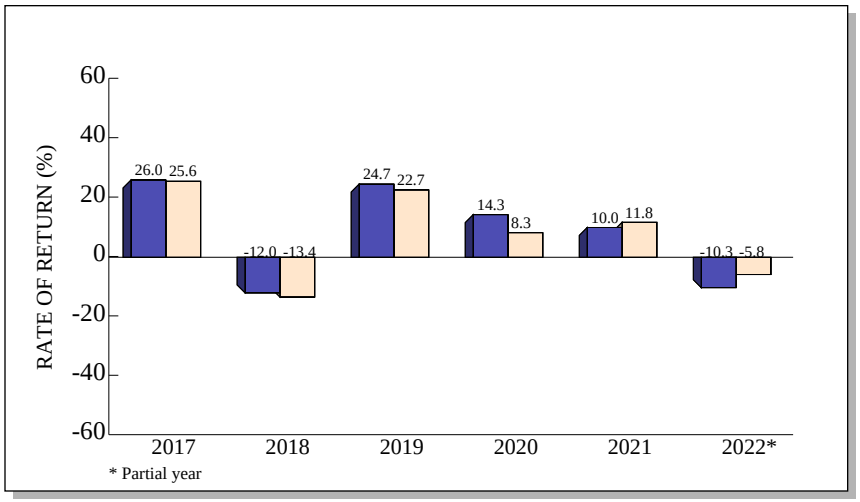
INTERNATIONAL EQUITY RETURN COMPARISONS





International Equity Universe

PORTFOLIO
MSCI EAFE



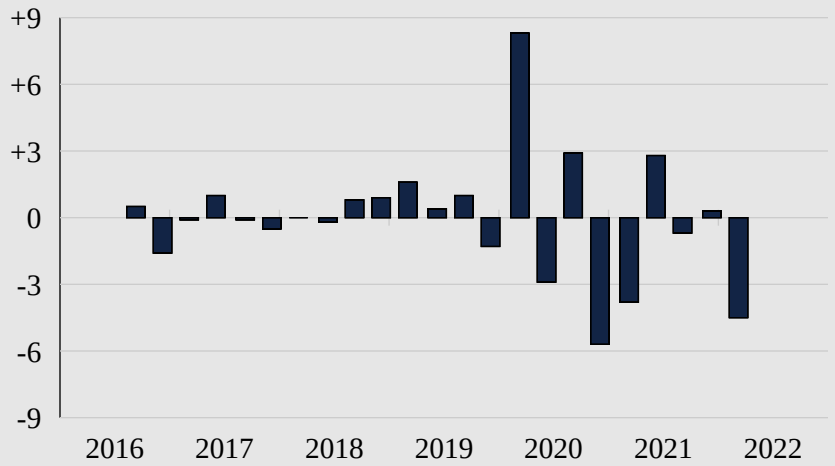
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
					------ANNUALIZED------	
RETURN	-10.3	-7.6	-8.6	-1.1	8.0	7.8
(RANK)	(68)	(58)	(54)	(41)	(54)	(47)
5TH %ILE	0.0	2.1	2.2	10.8	17.1	13.8
25TH %ILE	-4.3	-2.7	-4.3	1.6	11.1	9.7
MEDIAN	-7.4	-6.1	-8.1	-2.4	8.3	7.5
75TH %ILE	-11.9	-11.8	-14.8	-9.3	6.2	6.0
95TH %ILE	-18.2	-21.1	-25.4	-19.9	2.4	3.5
MSCI EAFE	***-5.8***	***-3.2***	***-3.5***	***1.6***	***8.3***	***7.2***

International Equity Universe

INTERNATIONAL EQUITY QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: MSCI EAFE

VARIATION FROM BENCHMARK

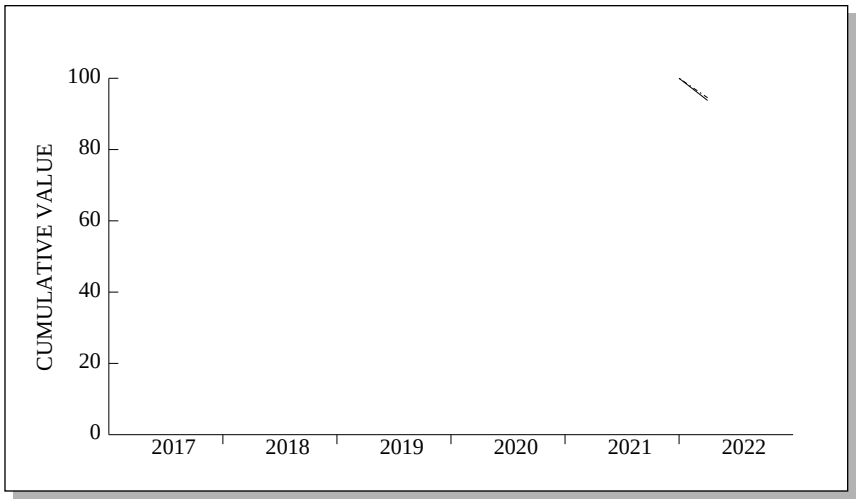


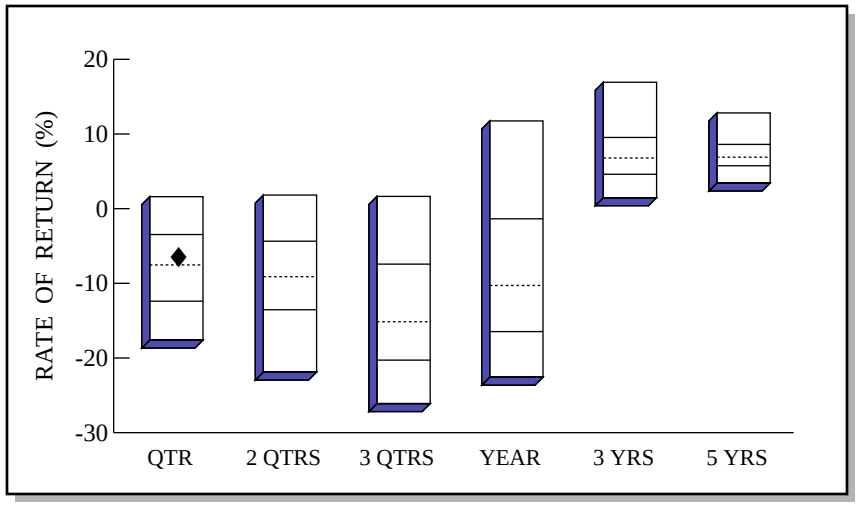
Total Quarters Observed	**23**
Quarters At or Above the Benchmark	**12**
Quarters Below the Benchmark	**11**
Batting Average	**.522**

RATES OF RETURN

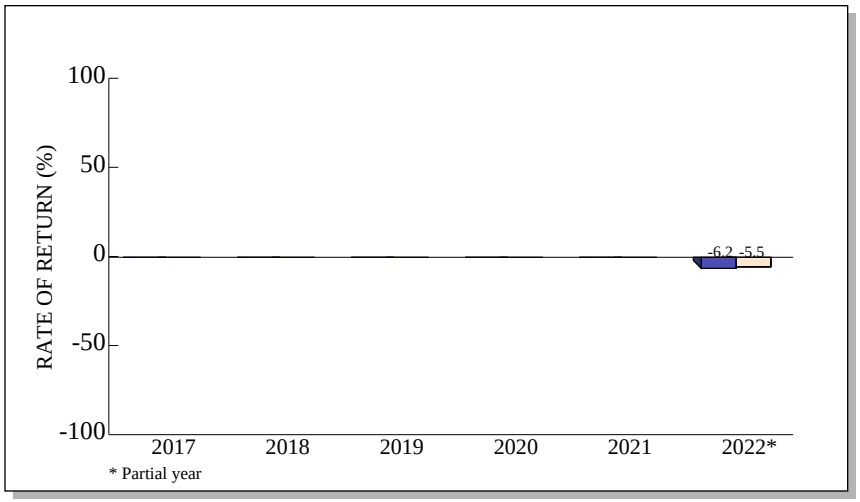
Date	Portfolio	Benchmark	Difference
9/16	7.0	6.5	0.5
12/16	-2.3	-0.7	-1.6
3/17	7.3	7.4	-0.1
6/17	7.4	6.4	1.0
9/17	5.4	5.5	-0.1
12/17	3.8	4.3	-0.5
3/18	-1.4	-1.4	0.0
6/18	-1.2	-1.0	-0.2
9/18	2.2	1.4	0.8
12/18	-11.6	-12.5	0.9
3/19	11.7	10.1	1.6
6/19	4.4	4.0	0.4
9/19	0.0	-1.0	1.0
12/19	6.9	8.2	-1.3
3/20	-14.4	-22.7	8.3
6/20	12.2	15.1	-2.9
9/20	7.8	4.9	2.9
12/20	10.4	16.1	-5.7
3/21	-0.2	3.6	-3.8
6/21	8.2	5.4	2.8
9/21	-1.1	-0.4	-0.7
12/21	3.0	2.7	0.3
3/22	-10.3	-5.8	-4.5

EMERGING MARKETS EQUITY RETURN COMPARISONS





Emerging Markets Universe



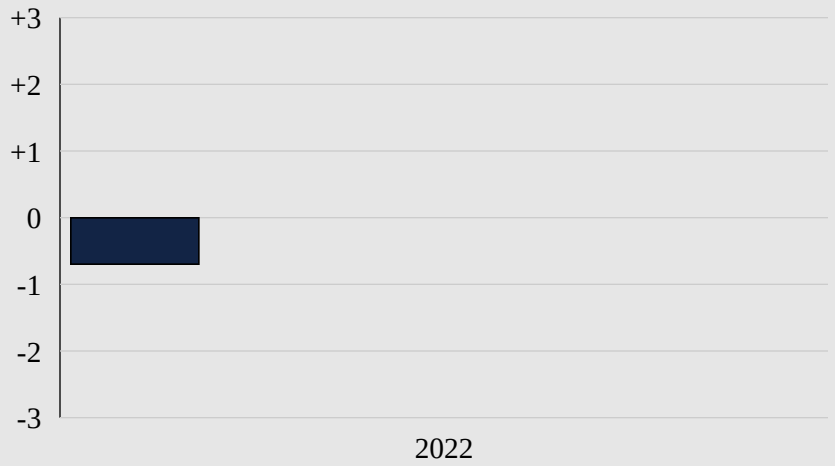
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
					------ANNUALIZED------	
RETURN	-6.2	----	----	----	----	----
(RANK)	(44)	----	----	----	----	----
5TH %ILE	1.6	1.8	1.6	11.8	16.9	12.8
25TH %ILE	-3.5	-4.3	-7.4	-1.4	9.5	8.6
MEDIAN	-7.5	-9.1	-15.2	-10.3	6.8	6.9
75TH %ILE	-12.4	-13.5	-20.3	-16.5	4.6	5.7
95TH %ILE	-17.6	-21.9	-26.1	-22.6	1.5	3.4
FTSE AC EM	***-5.5***	***-5.9***	***-12.0***	***-7.0***	***6.2***	***6.2***

Emerging Markets Universe

EMERGING MARKETS EQUITY QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: FTSE ALL CAP EM CHINA A INCLUSION

VARIATION FROM BENCHMARK



Total Quarters Observed	**1**
Quarters At or Above the Benchmark	**0**
Quarters Below the Benchmark	**1**
Batting Average	**.000**

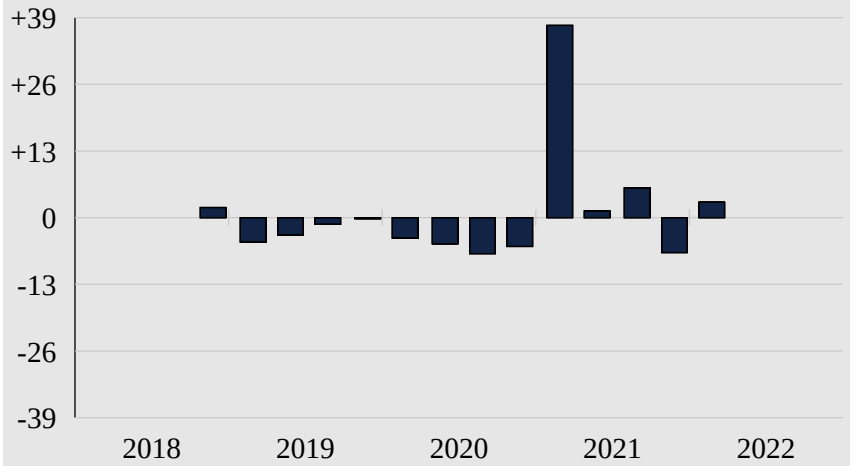
RATES OF RETURN

Date	Portfolio	Benchmark	Difference
3/22	-6.2	-5.5	-0.7

PRIVATE EQUITY QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: CAMBRIDGE US PRIVATE EQUITY

VARIATION FROM BENCHMARK

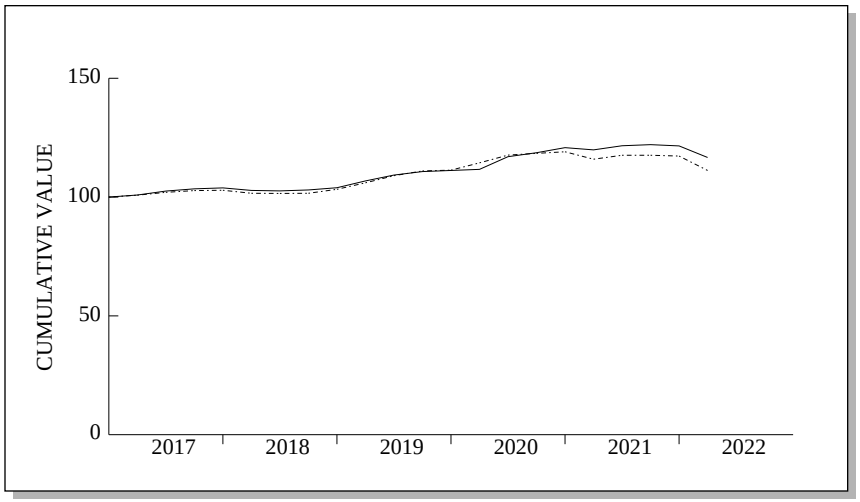


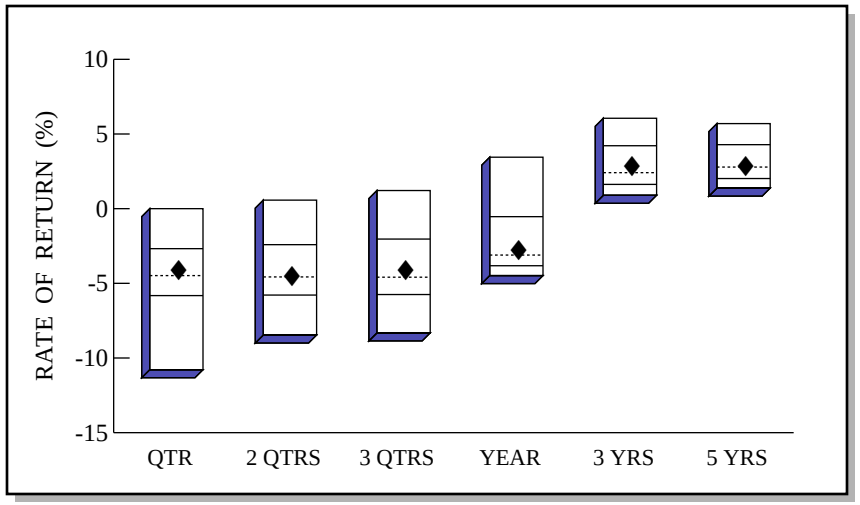
Total Quarters Observed	**14**
Quarters At or Above the Benchmark	**5**
Quarters Below the Benchmark	**9**
Batting Average	**.357**

RATES OF RETURN

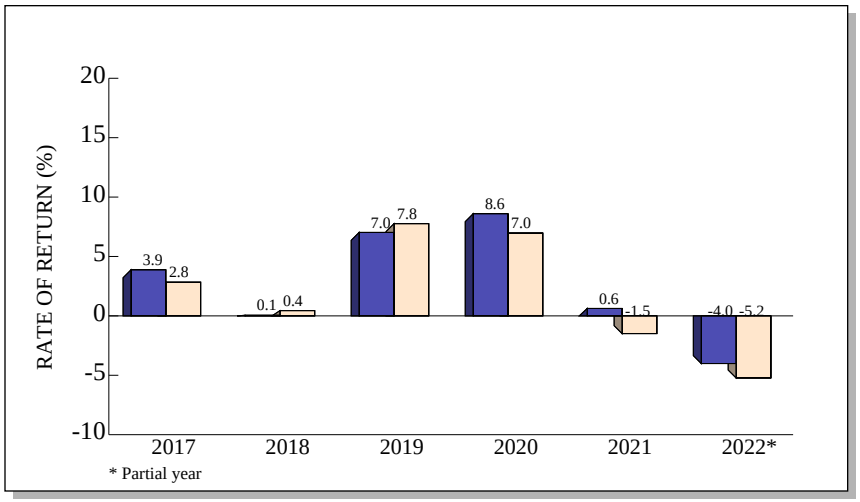
Date	Portfolio	Benchmark	Difference
12/18	0.0	-2.0	2.0
3/19	0.0	4.8	-4.8
6/19	0.0	3.4	-3.4
9/19	0.0	1.3	-1.3
12/19	3.6	3.8	-0.2
3/20	-14.1	-10.1	-4.0
6/20	4.3	9.4	-5.1
9/20	4.8	11.8	-7.0
12/20	6.6	12.2	-5.6
3/21	47.5	10.0	37.5
6/21	16.1	14.8	1.3
9/21	11.8	6.0	5.8
12/21	-1.5	5.3	-6.8
3/22	3.0	0.0	3.0

FIXED INCOME RETURN COMPARISONS





Broad Market Fixed Universe



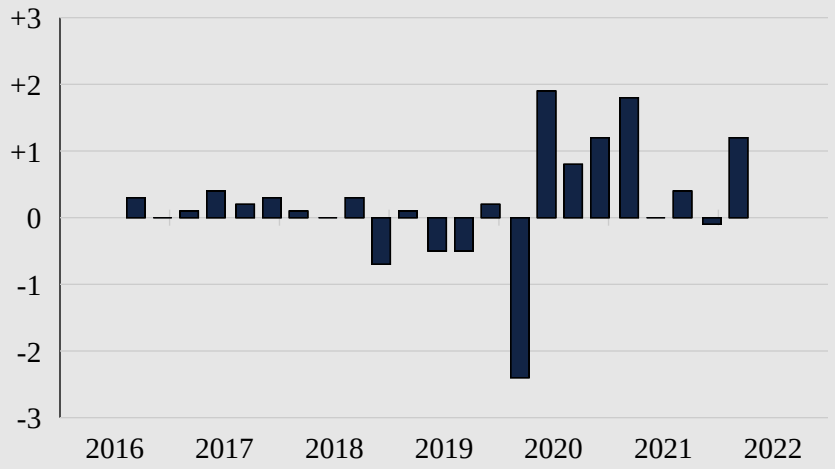
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
					------ANNUALIZED------	
RETURN	-4.0	-4.4	-4.0	-2.7	3.0	2.9
(RANK)	(38)	(48)	(44)	(44)	(41)	(47)
5TH %ILE	0.0	0.6	1.2	3.4	6.1	5.7
25TH %ILE	-2.7	-2.4	-2.0	-0.5	4.2	4.3
MEDIAN	-4.5	-4.6	-4.6	-3.1	2.4	2.8
75TH %ILE	-5.8	-5.8	-5.8	-3.8	1.6	2.0
95TH %ILE	-10.8	-8.5	-8.3	-4.5	0.9	1.4
Agg/Int GC	***-5.2***	***-5.5***	***-5.5***	***-4.1***	***1.6***	***2.0***

Broad Market Fixed Universe

FIXED INCOME QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: 50% AGGREGATE / 50% INT. GOV. CRED.

VARIATION FROM BENCHMARK

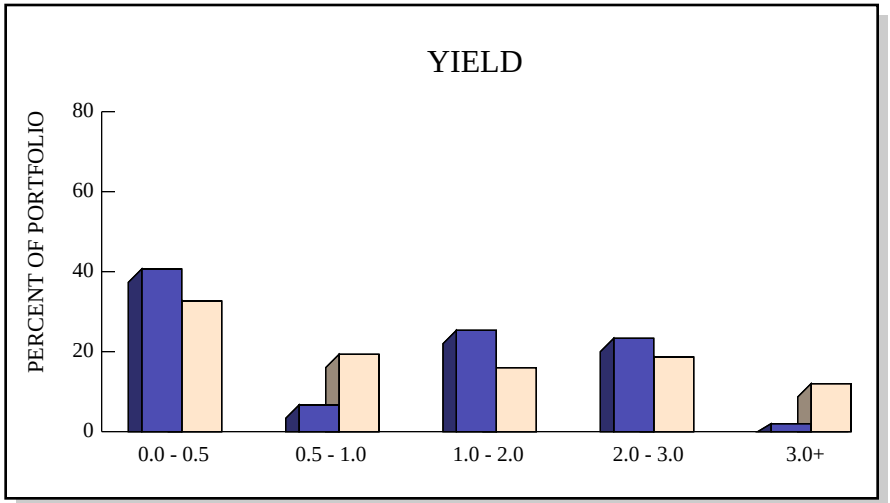


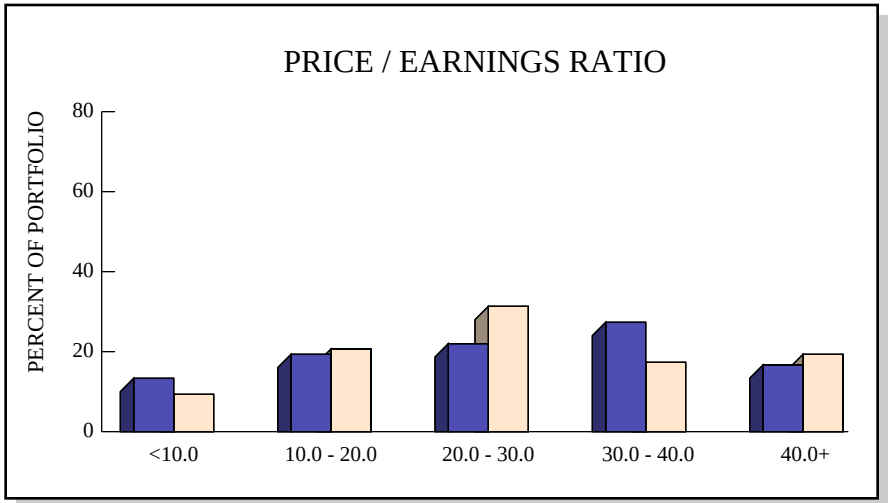
Total Quarters Observed	**23**
Quarters At or Above the Benchmark	**18**
Quarters Below the Benchmark	**5**
Batting Average	**.783**

RATES OF RETURN

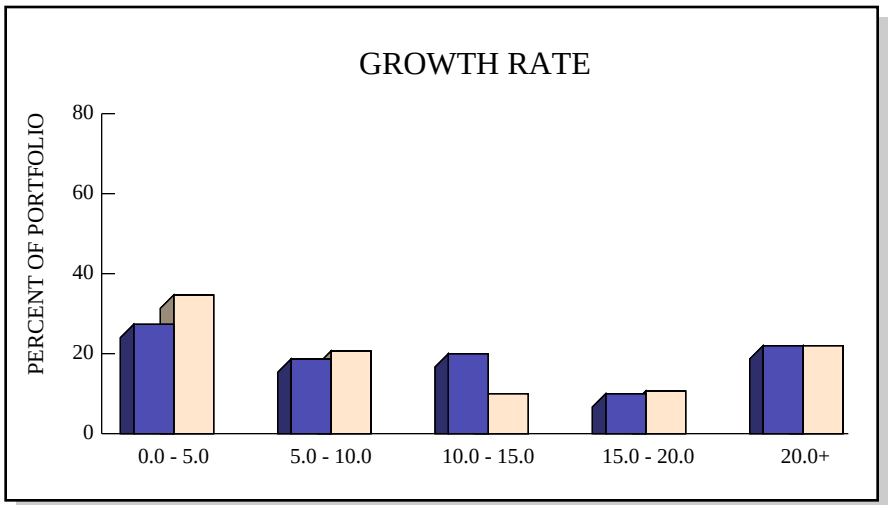
Date	Portfolio	Benchmark	Difference
9/16	0.6	0.3	0.3
12/16	-2.5	-2.5	0.0
3/17	0.9	0.8	0.1
6/17	1.6	1.2	0.4
9/17	0.9	0.7	0.2
12/17	0.4	0.1	0.3
3/18	-1.1	-1.2	0.1
6/18	-0.1	-0.1	0.0
9/18	0.4	0.1	0.3
12/18	0.9	1.6	-0.7
3/19	2.7	2.6	0.1
6/19	2.3	2.8	-0.5
9/19	1.3	1.8	-0.5
12/19	0.5	0.3	0.2
3/20	0.4	2.8	-2.4
6/20	4.8	2.9	1.9
9/20	1.4	0.6	0.8
12/20	1.8	0.6	1.2
3/21	-0.8	-2.6	1.8
6/21	1.4	1.4	0.0
9/21	0.4	0.0	0.4
12/21	-0.4	-0.3	-0.1
3/22	-4.0	-5.2	1.2

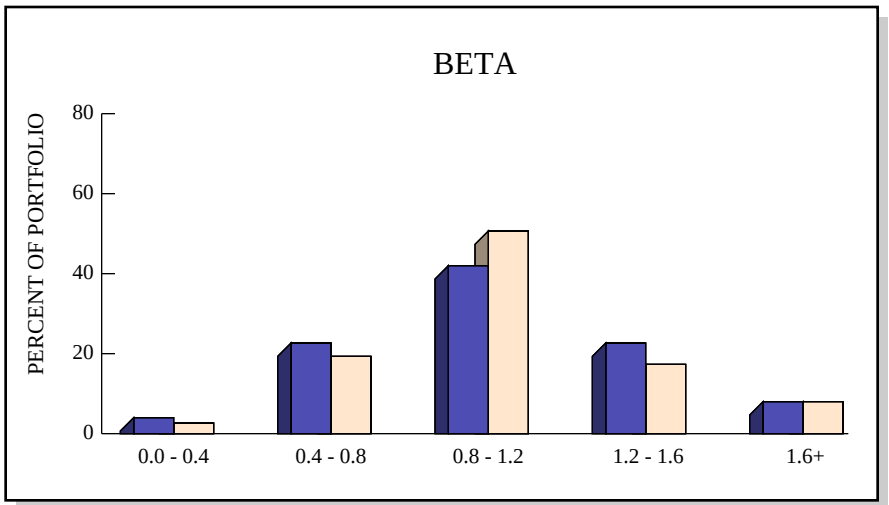
STOCK CHARACTERISTICS



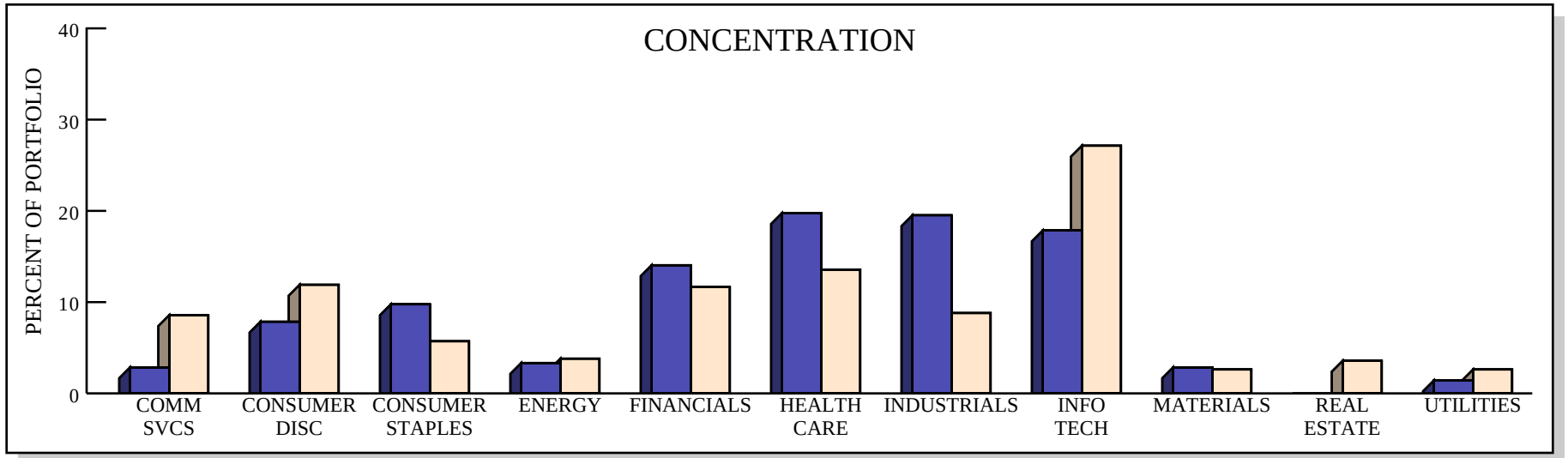


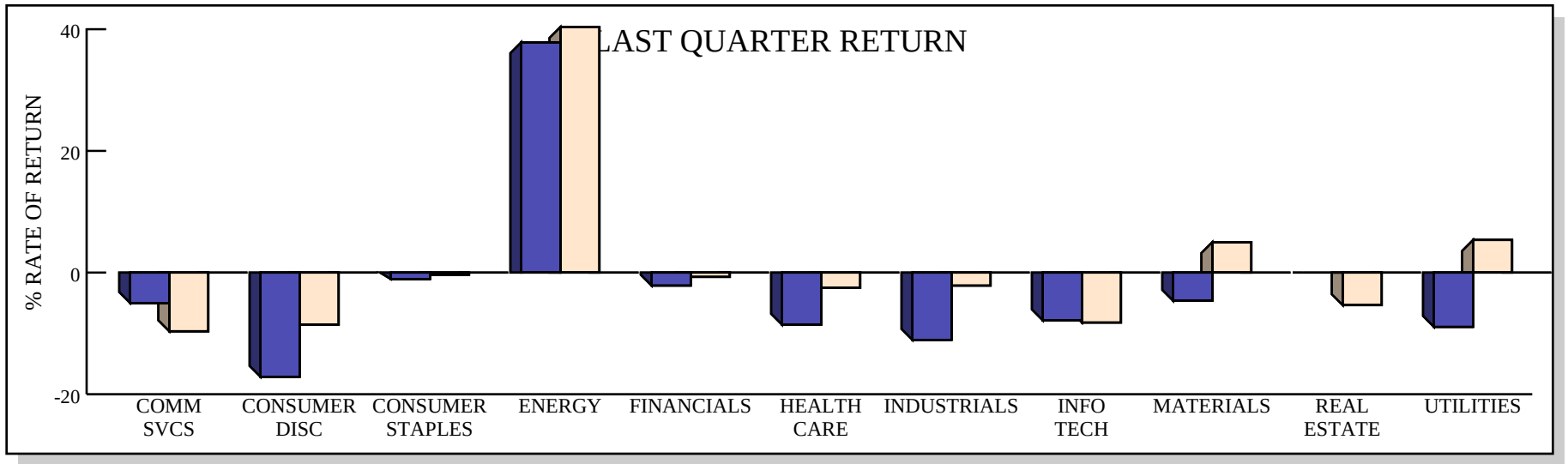
	# HOLDINGS	YIELD	GROWTH	P/E	BETA
PORTFOLIO	100	1.1%	12.1%	29.3	1.03
RUSSELL 3000	3,041	1.3%	11.6%	29.1	1.07



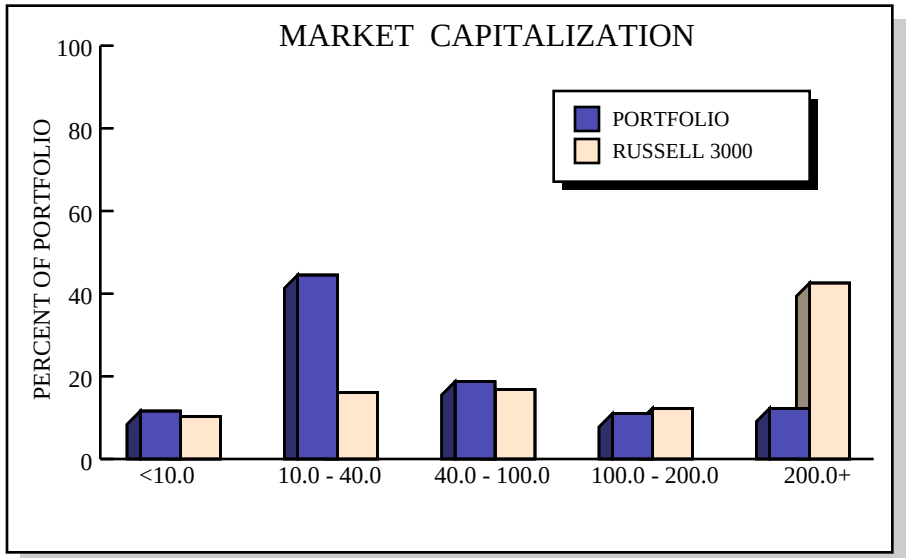


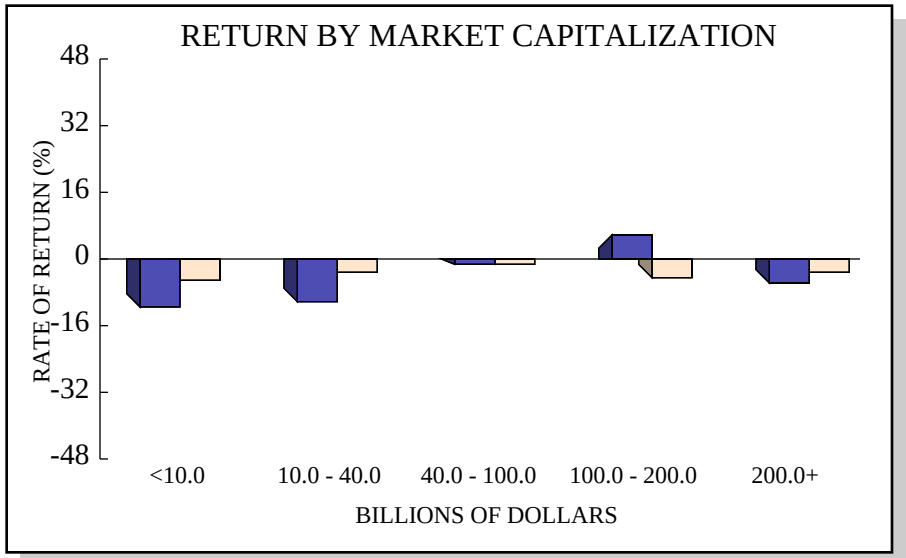
STOCK INDUSTRY ANALYSIS





TOP TEN HOLDINGS

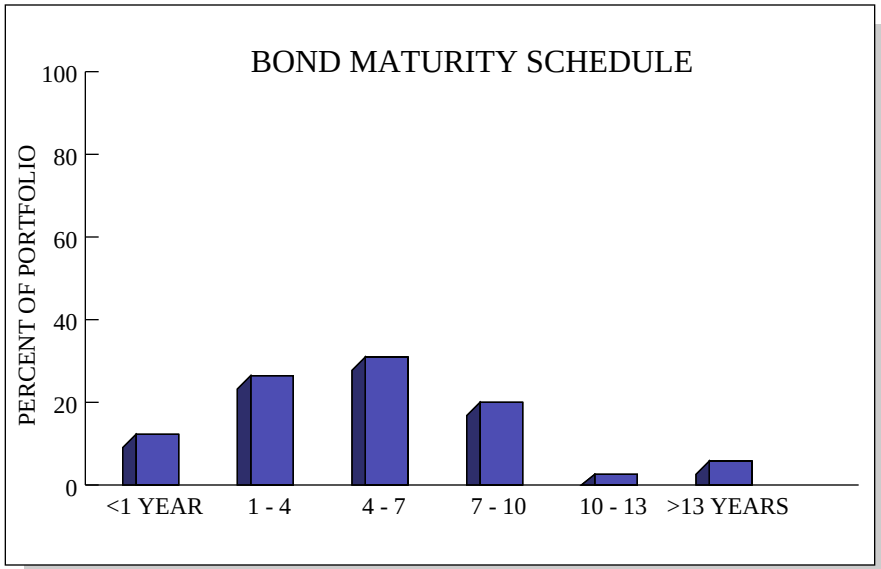


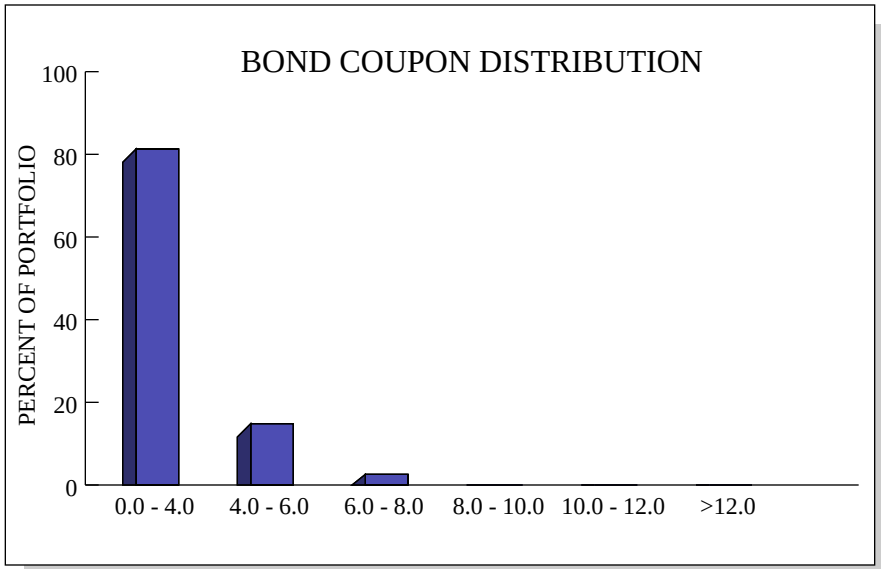


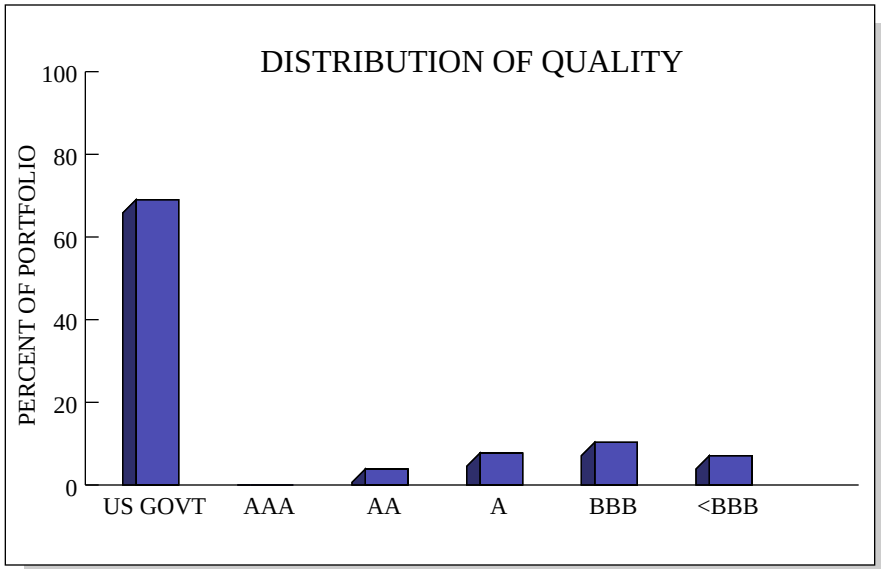
TOP TEN EQUITY HOLDINGS

RANK	NAME	VALUE	% EQUITY	RETURN	INDUSTRY SECTOR	MKT CAP
1	CATERPILLAR INC	$ 1,724,850	.58%	8.3%	Industrials	$ 119.4 B
2	GENERAL MOTORS CO	1,717,451	.58%	-25.4%	Consumer Discretionary	63.6 B
3	AMERICAN INTERNATIONAL GROUP	1,691,338	.57%	11.0%	Financials	50.6 B
4	AKAMAI TECHNOLOGIES INC	1,653,910	.56%	2.0%	Information Technology	19.2 B
5	WALMART INC	1,634,099	.55%	3.3%	Consumer Staples	409.8 B
6	CONOCOPHILLIPS	1,616,100	.54%	39.6%	Energy	129.6 B
7	EOG RESOURCES INC	1,468,914	.49%	36.4%	Energy	69.8 B
8	AMETEK INC	1,443,671	.48%	-9.3%	Industrials	30.8 B
9	EVEREST RE GROUP LTD	1,404,431	.47%	10.6%	Financials	11.8 B
10	GOLDMAN SACHS GROUP INC	1,391,702	.47%	-13.2%	Financials	111.5 B

BOND CHARACTERISTICS







	PORTFOLIO	AGGREGATE INDEX
No. of Securities	119	12,538
Duration	4.50	6.58
YTM	2.91	2.92
Average Coupon	2.53	2.44
Avg Maturity / WAL	5.26	8.77
Average Quality	AAA	AA

Chester County Employees Retirement System
Manager Fee Schedules

Manager	Annual Fee Schedule
Blackrock Global Allocation	0.85% on all assets
Vanguard 500	0.035% on all assets
Vesper	0.75% on all assets
Vanguard R1000G	0.07% on all assets
Allspring	Base fee: 0.25%. Incentive fee: 0.01% increase in annual fee for 0.05% excess return over benchmark on rolling 3-year basis. Minimum annual fee: $20,000
Champlain	0.85% on first $50 million, 0.75% on next $50 million, 0.65% on remainder
Vanguard Mid Cap	0.04% on all assets
Vanguard Small Cap	0.04% on all assets
Maquarie	0.7% on all assets
Walter Scott	0.75% on first $100 million
Vanguard Emerging Markets	0.1% on all assets
Banner Ridge	1% on committed capital, declining by 10% per annum. 5% carried interest with 8% preferred return, 7.5% carried interest with 10% preferred return
Ben Franklin	3% on cost basis of all companies, including those for which capital has not yet been called
Siguler Guff	0.945% through commitment period, followed by 20% reduction per annum thereafter. 5% carry interest allocation after 8% preferred return.
Taurus	0.8% on committed capital in years 1-4, 0.6% on invested capital in years 5-7, 0.3% on invested capital thereafter. 5% carry interest allocation after 8% preferred return.
Brandes	0.2% on all assets
Birch Run	0.2% on all assets
Vanguard Short-Term Corporate	0.05% on all assets
PGIM Short-Term Corporate	0.38% on all assets

APPENDIX - MAJOR MARKET INDEX RETURNS

Economic Data	Style	QTR	YTD	1 Year	3 Years	5 Years	10 Years
Consumer Price Index	Economic Data	3.1	3.1	8.5	4.2	3.4	2.3
Domestic Equity	**Style**	**QTR**	**YTD**	**1 Year**	**3 Years**	**5 Years**	**10 Years**
Russell 3000	Broad Equity	-5.3	-5.3	11.9	18.2	15.4	14.3
S&P 500	Large Cap Core	-4.6	-4.6	15.6	18.9	16.0	14.6
Russell 1000	Large Cap	-5.1	-5.1	13.3	18.7	15.8	14.5
Russell 1000 Growth	Large Cap Growth	-9.0	-9.0	15.0	23.6	20.9	17.0
Russell 1000 Value	Large Cap Value	-0.7	-0.7	11.7	13.0	10.3	11.7
Russell Mid Cap	Midcap	-5.7	-5.7	6.9	14.9	12.6	12.8
Russell Mid Cap Growth	Midcap Growth	-12.6	-12.6	-0.9	14.8	15.1	13.5
Russell Mid Cap Value	Midcap Value	-1.8	-1.8	11.5	13.7	10.0	12.0
Russell 2000	Small Cap	-7.5	-7.5	-5.8	11.7	9.7	11.0
Russell 2000 Growth	Small Cap Growth	-12.6	-12.6	-14.3	9.9	10.3	11.2
Russell 2000 Value	Small Cap Value	-2.4	-2.4	3.3	12.7	8.6	10.5
International Equity	**Style**	**QTR**	**YTD**	**1 Year**	**3 Years**	**5 Years**	**10 Years**
MSCI All Country World ex US	Foreign Equity	-5.3	-5.3	-1.0	8.0	7.3	6.0
MSCI EAFE	Developed Markets Equity	-5.8	-5.8	1.6	8.3	7.2	6.8
MSCI EAFE Growth	Developed Markets Growth	-11.9	-11.9	-1.2	10.1	9.3	7.9
MSCI EAFE Value	Developed Markets Value	0.5	0.5	4.2	5.9	4.8	5.5
MSCI Emerging Markets	Emerging Markets Equity	-6.9	-6.9	-11.1	5.3	6.4	3.7
Domestic Fixed Income	**Style**	**QTR**	**YTD**	**1 Year**	**3 Years**	**5 Years**	**10 Years**
Bloomberg Aggregate Index	Core Fixed Income	-5.9	-5.9	-4.2	1.7	2.1	2.2
Bloomberg Capital Gov't Bond	Treasuries	-5.5	-5.5	-1.7	2.1	2.2	1.9
Bloomberg Capital Credit Bond	Corporate Bonds	-7.4	-7.4	-0.8	4.0	3.9	3.8
Intermediate Aggregate	Core Intermediate	-4.7	-4.7	-4.4	1.2	1.7	1.8
ML/BoA 1-3 Year Treasury	Short Term Treasuries	-2.5	-2.5	-3.0	0.8	1.0	0.8
Bloomberg Capital High Yield	High Yield Bonds	-4.8	-4.8	-0.7	4.6	4.7	5.8
Alternative Assets	**Style**	**QTR**	**YTD**	**1 Year**	**3 Years**	**5 Years**	**10 Years**
Bloomberg Global Treasury Ex US	International Treasuries	-6.9	-6.9	-9.1	-0.9	0.8	-0.3
NCREIF NFI-ODCE Index	Real Estate	7.4	7.4	28.4	11.3	9.9	10.9
HFRI FOF Composite	Hedge Funds	-2.8	-2.8	1.1	5.8	4.6	3.9

APPENDIX - DISCLOSURES

* For the period since December 31, 2019 the Policy Index is constructed as follows:
  47% Russell 3000, 13% MSCI EAFE, 10% Cambridge Private Equity, 5% NCREIF NFI-ODCE,
  12.5% Bloomberg Aggregate, 12.5% Bloomberg Intermediate Aggregate
  For periods through December 31, 2019, Policy Index returns were provided by the prior consultant.
* Dahab Associates utilizes data provided by a custodian and other vendors it believes are reliable. However, it cannot assume responsibility for errors and omissions therefrom.
* All returns were calculated on a time-weighted basis, and are gross of fees unless otherwise noted.
* All returns for periods greater than one year are annualized.
* Dahab Associates uses the modified duration measure to present average duration.
* All values are in US dollars.

CHESTER COUNTY EMPLOYEES RETIREMENT SYSTEM
BLACKROCK - GLOBAL ALLOCATION
PERFORMANCE REVIEW
MARCH 2022

DAHAB Associates, Inc.

© 1990, 2022

INVESTMENT RETURN

On March 31st, 2022, the Chester County Employees Retirement System's Blackrock Global Allocation portfolio was valued at $17,841,862, a decrease of $6,600,388 from the December ending value of $24,442,250. Last quarter, the account recorded total net withdrawals of $5,000,000 in addition to $1,600,388 in net investment losses. Because there were no income receipts during the first quarter, the portfolio's net investment losses were entirely made up of capital losses (realized and unrealized).

RELATIVE PERFORMANCE

The ticker for this investment is MALOX.

Total Fund

During the first quarter, the Blackrock Global Allocation portfolio lost 6.5%, which was 1.0% less than the 60 ACWI / 40 AGG's return of -5.5% and ranked in the 83rd percentile of the Balanced Fund universe. Over the trailing twelve-month period, this portfolio returned -1.3%, which was 4.3% below the benchmark's 3.0% return, and ranked in the 97th percentile. Since March 2011, the portfolio returned 6.7% per annum. For comparison, the 60 ACWI / 40 AGG returned an annualized 7.0% over the same period.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / YTD	1 Year	3 Year	5 Year	10 Year	Since 03/11
Total Portfolio - Gross	-6.5	-1.3	10.6	8.3	7.2	6.7
BALANCED FUND RANK	(83)	(97)	(76)	(78)	(89)	----
Total Portfolio - Net	-6.7	-2.2	9.7	7.4	6.3	5.8
60 ACWI/40 AGG	-5.5	3.0	9.5	8.4	7.4	7.0
Diversified Assets - Gross	-6.5	-1.3	10.6	8.3	7.2	6.7
BALANCED FUND RANK	(83)	(97)	(76)	(78)	(89)	----
60 ACWI/40 AGG	-5.5	3.0	9.5	8.4	7.4	7.0

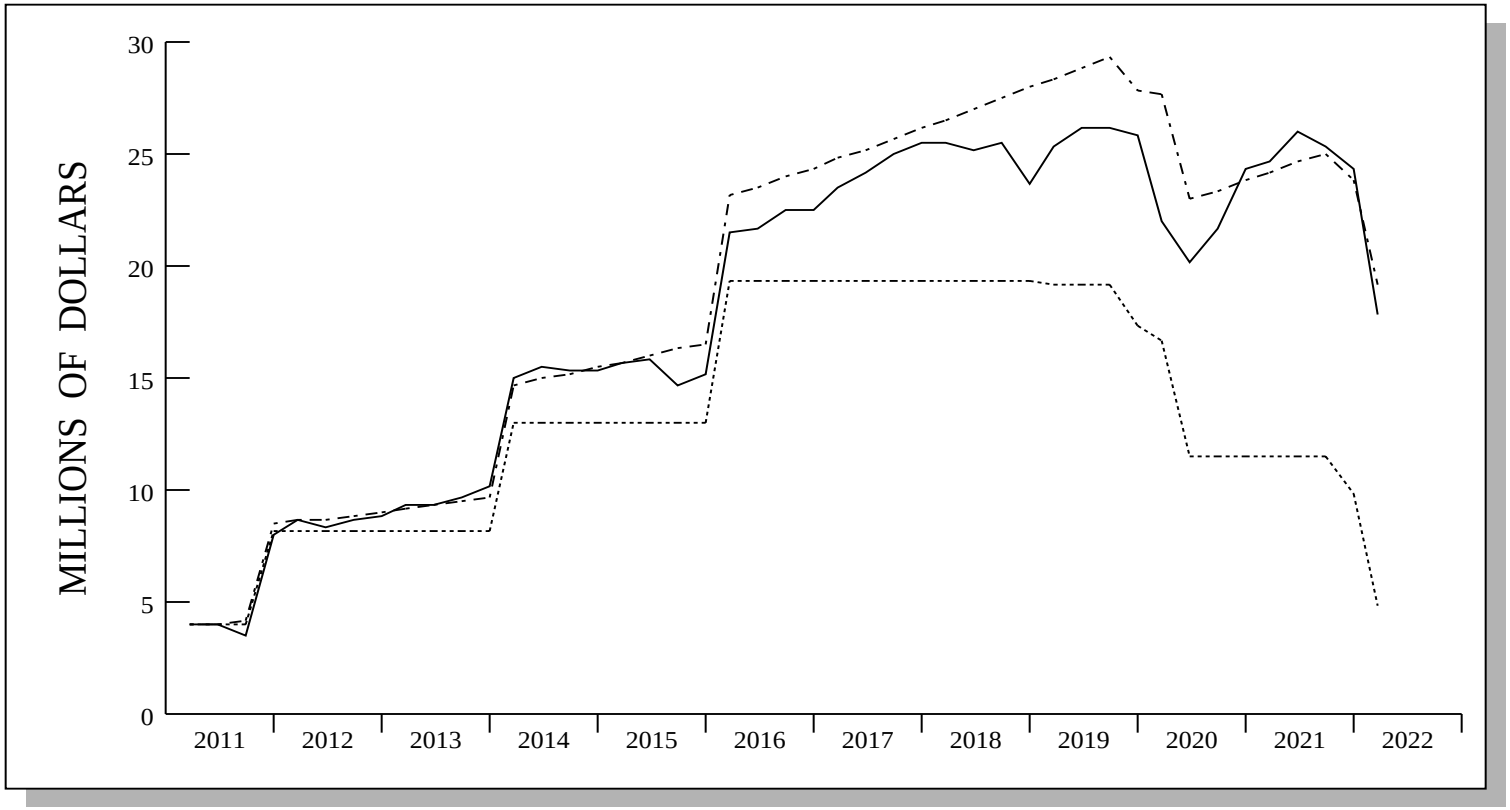
ASSET ALLOCATION

Diversified	100.0%	$ 17,841,862
Total Portfolio	100.0%	$ 17,841,862

INVESTMENT RETURN

Market Value 12/2021	$ 24,442,250
Contribs / Withdrawals	- 5,000,000
Income	0
Capital Gains / Losses	- 1,600,388
Market Value 3/2022	$ 17,841,862

INVESTMENT GROWTH

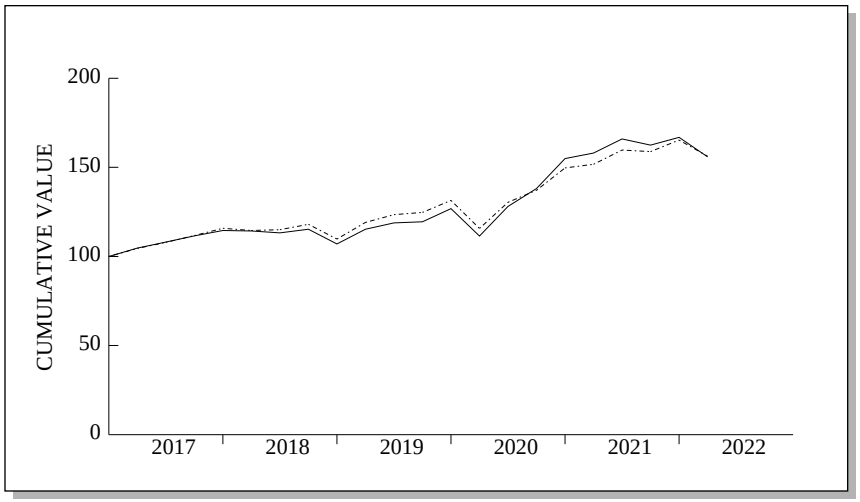


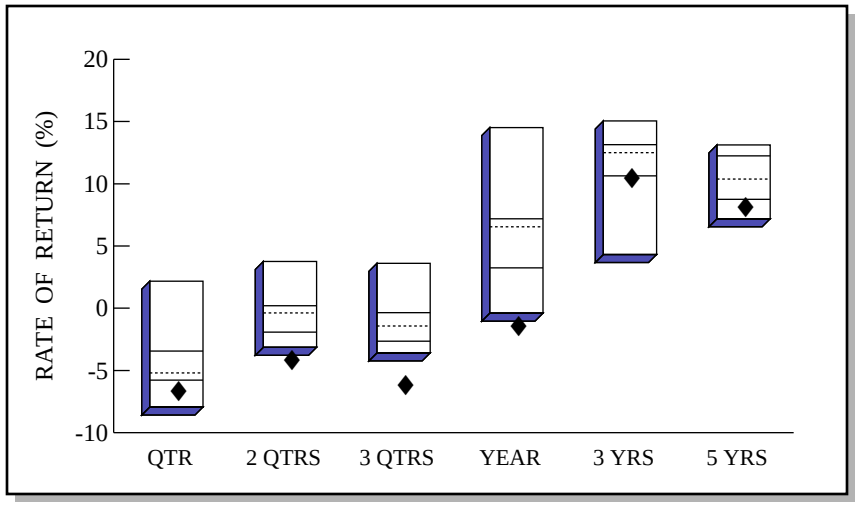
ACTUAL RETURN
7.0%
0.0%

VALUE ASSUMING
7.0% RETURN $ 19,305,295

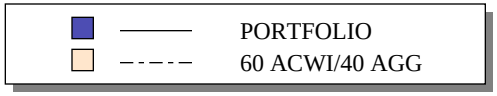
	LAST QUARTER	PERIOD 3/11 - 3/22
BEGINNING VALUE	$ 24,442,250	$ 4,056,253
NET CONTRIBUTIONS	- 5,000,000	943,479
INVESTMENT RETURN	- 1,600,388	12,842,130
ENDING VALUE	$ 17,841,862	$ 17,841,862
INCOME	0	2,469,033
CAPITAL GAINS (LOSSES)	- 1,600,388	10,373,097
INVESTMENT RETURN	- 1,600,388	12,842,130

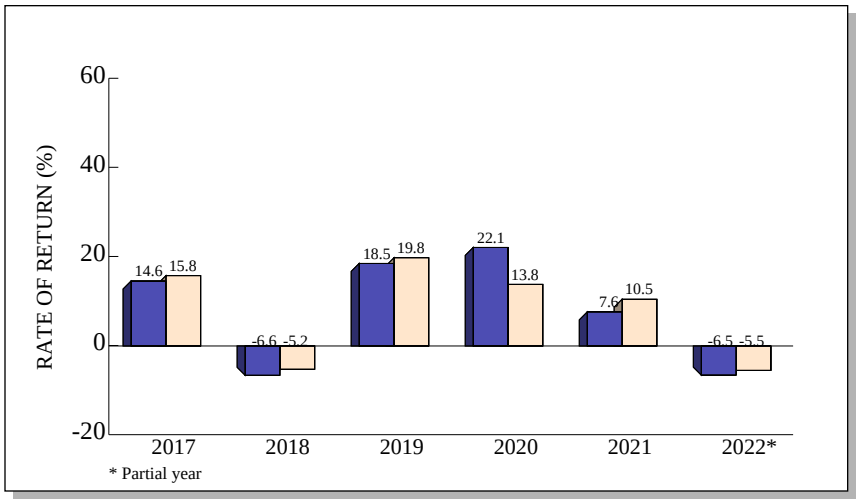
TOTAL RETURN COMPARISONS





Balanced Fund Universe





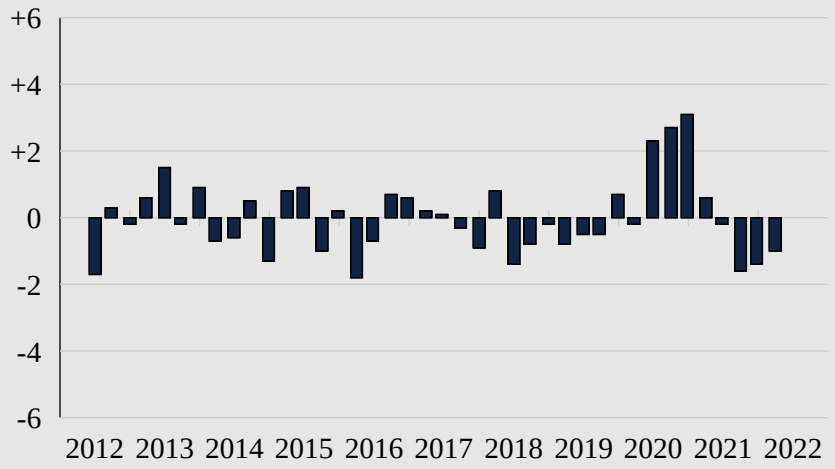
					------ANNUALIZED------	
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
RETURN	-6.5	-4.0	-6.0	-1.3	10.6	8.3
(RANK)	(83)	(98)	(99)	(97)	(76)	(78)
5TH %ILE	2.2	3.8	3.6	14.5	15.1	13.1
25TH %ILE	-3.5	0.2	-0.4	7.2	13.1	12.2
MEDIAN	-5.2	-0.4	-1.4	6.6	12.5	10.4
75TH %ILE	-5.8	-1.9	-2.7	3.3	10.6	8.8
95TH %ILE	-8.0	-3.1	-3.6	-0.4	4.3	7.2
Blended Ix	***-5.5***	***-1.6***	***-2.2***	***3.0***	***9.5***	***8.4***

Balanced Fund Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY - 10 YEARS

COMPARATIVE BENCHMARK: 60 ACWI / 40 AGG

VARIATION FROM BENCHMARK



Total Quarters Observed	**40**
Quarters At or Above the Benchmark	**18**
Quarters Below the Benchmark	**22**
Batting Average	**.450**

RATES OF RETURN

Date	Portfolio	Benchmark	Difference
6/12	-4.0	-2.3	-1.7
9/12	5.1	4.8	0.3
12/12	1.7	1.9	-0.2
3/13	4.5	3.9	0.6
6/13	0.4	-1.1	1.5
9/13	4.8	5.0	-0.2
12/13	5.3	4.4	0.9
3/14	0.8	1.5	-0.7
6/14	3.3	3.9	-0.6
9/14	-0.7	-1.2	0.5
12/14	-0.3	1.0	-1.3
3/15	3.0	2.2	0.8
6/15	0.5	-0.4	0.9
9/15	-6.2	-5.2	-1.0
12/15	3.1	2.9	0.2
3/16	-0.2	1.6	-1.8
6/16	0.9	1.6	-0.7
9/16	4.1	3.4	0.7
12/16	0.2	-0.4	0.6
3/17	4.7	4.5	0.2
6/17	3.3	3.2	0.1
9/17	3.2	3.5	-0.3
12/17	2.7	3.6	-0.9
3/18	-0.2	-1.0	0.8
6/18	-1.0	0.4	-1.4
9/18	1.8	2.6	-0.8
12/18	-7.2	-7.0	-0.2
3/19	7.7	8.5	-0.8
6/19	3.1	3.6	-0.5
9/19	0.5	1.0	-0.5
12/19	6.2	5.5	0.7
3/20	-12.2	-12.0	-0.2
6/20	14.9	12.6	2.3
9/20	7.9	5.2	2.7
12/20	12.2	9.1	3.1
3/21	2.0	1.4	0.6
6/21	5.0	5.2	-0.2
9/21	-2.1	-0.5	-1.6
12/21	2.7	4.1	-1.4
3/22	-6.5	-5.5	-1.0

CHESTER COUNTY EMPLOYEES RETIREMENT SYSTEM
VANGUARD - INSTITUTIONAL INDEX
PERFORMANCE REVIEW
MARCH 2022

DAHAB Associates, Inc.

© 1990, 2022

INVESTMENT RETURN

On March 31st, 2022, the Chester County Employees Retirement System's Vanguard Institutional Index portfolio was valued at $75,552,469, a decrease of $3,646,347 from the December ending value of $79,198,816. Last quarter, the account recorded no net contributions or withdrawals, while recording a net investment loss for the quarter of $3,646,347. Net investment loss was composed of income receipts totaling $648,420 and $4,294,767 in net realized and unrealized capital losses.

RELATIVE PERFORMANCE

The ticker for this investment is VINIX.

Total Fund

For the first quarter, the Vanguard Institutional Index portfolio returned -4.6%, which was equal to the S&P 500 Index's return of -4.6% and ranked in the 53rd percentile of the Large Cap Core universe. Over the trailing year, this portfolio returned 15.7%, which was 0.1% greater than the benchmark's 15.6% return, ranking in the 24th percentile. Since June 2019, the account returned 19.0% on an annualized basis and ranked in the 17th percentile. The S&P 500 returned an annualized 19.0% over the same time frame.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / YTD	1 Year	3 Year	5 Year	Since 06/19
Total Portfolio - Gross	-4.6	15.7	----	----	19.0
LARGE CAP CORE RANK	(53)	(24)	----	----	(17)
Total Portfolio - Net	-4.6	15.6	----	----	19.0
S&P 500	-4.6	15.6	18.9	16.0	19.0
Domestic Equity - Gross	-4.6	15.7	----	----	19.0
LARGE CAP CORE RANK	(53)	(24)	----	----	(17)
S&P 500	-4.6	15.6	18.9	16.0	19.0

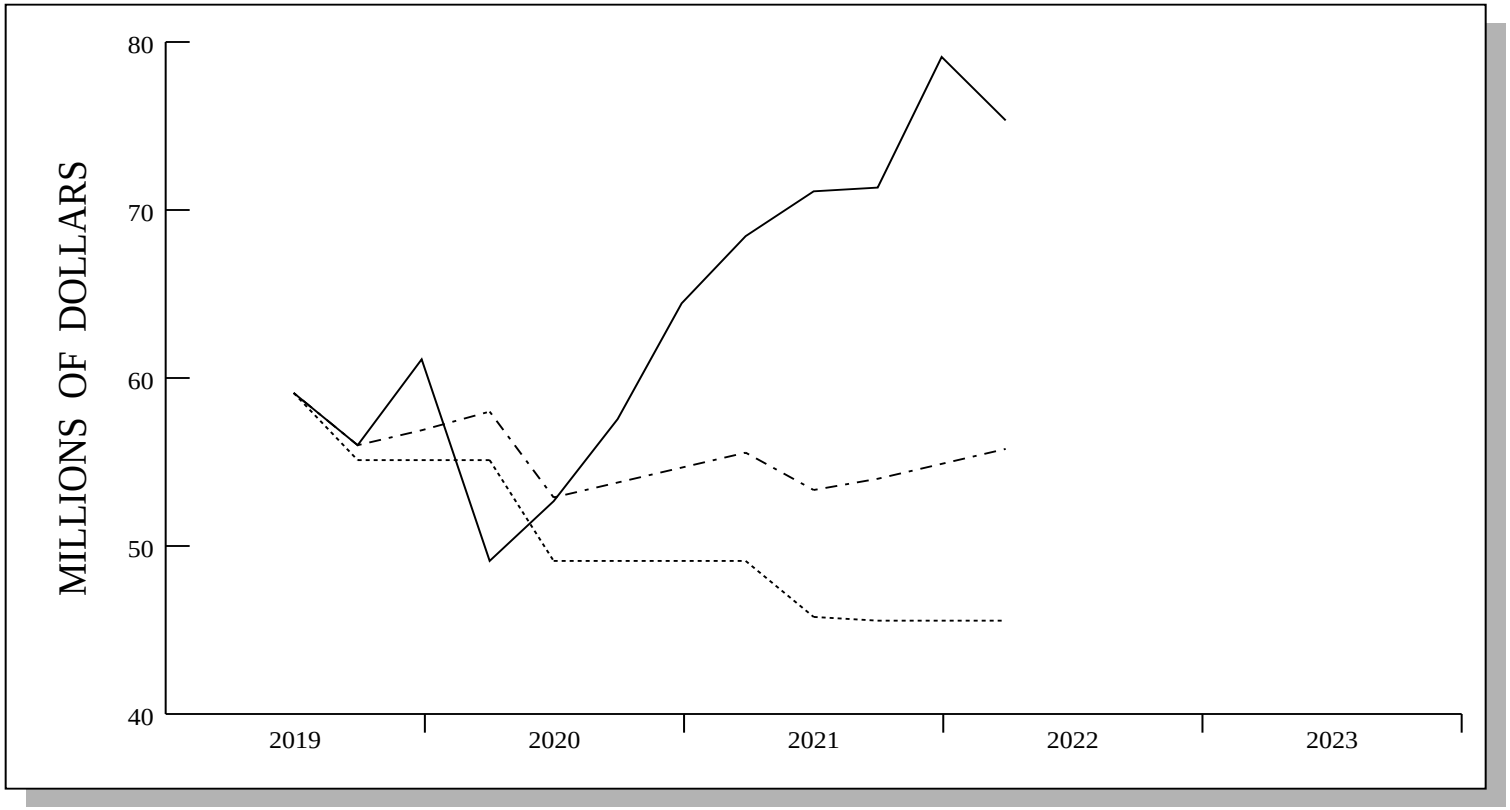
ASSET ALLOCATION

Domestic Equity	100.0%	$ 75,552,469
Total Portfolio	100.0%	$ 75,552,469

INVESTMENT RETURN

Market Value 12/2021	$ 79,198,816
Contribs / Withdrawals	0
Income	648,420
Capital Gains / Losses	- 4,294,767
Market Value 3/2022	$ 75,552,469

INVESTMENT GROWTH

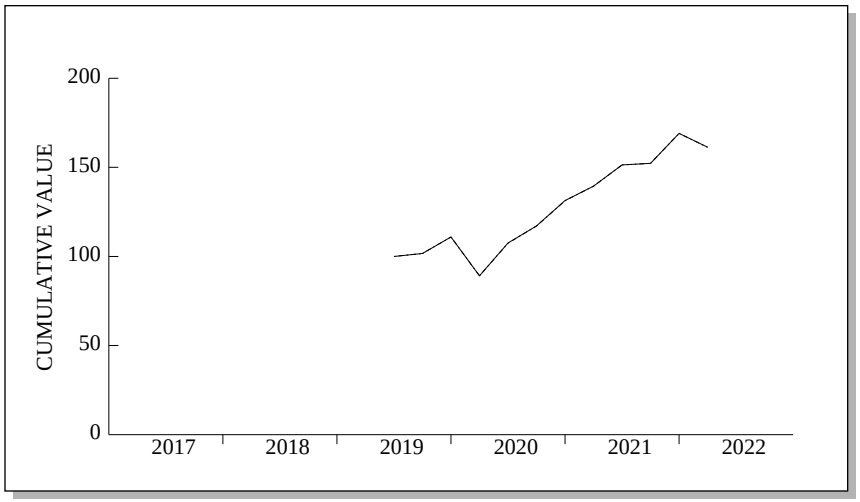


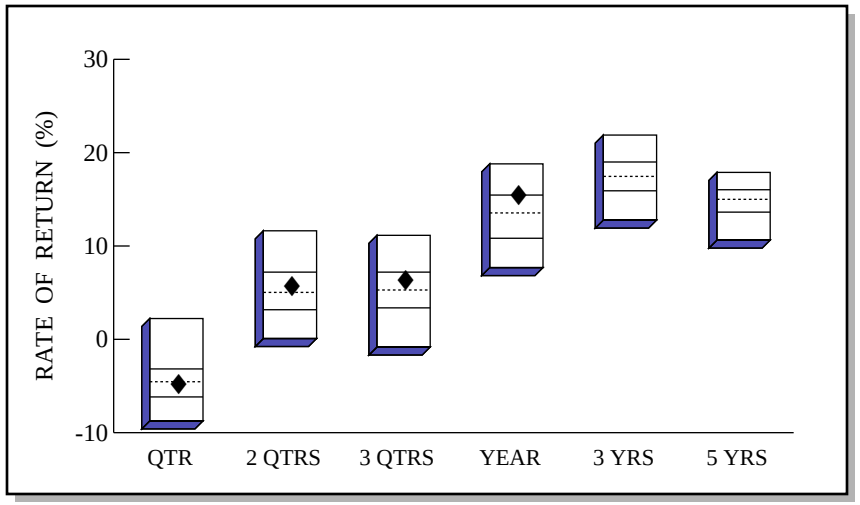
ACTUAL RETURN
7.0%
0.0%

VALUE ASSUMING
7.0% RETURN $ 55,963,000

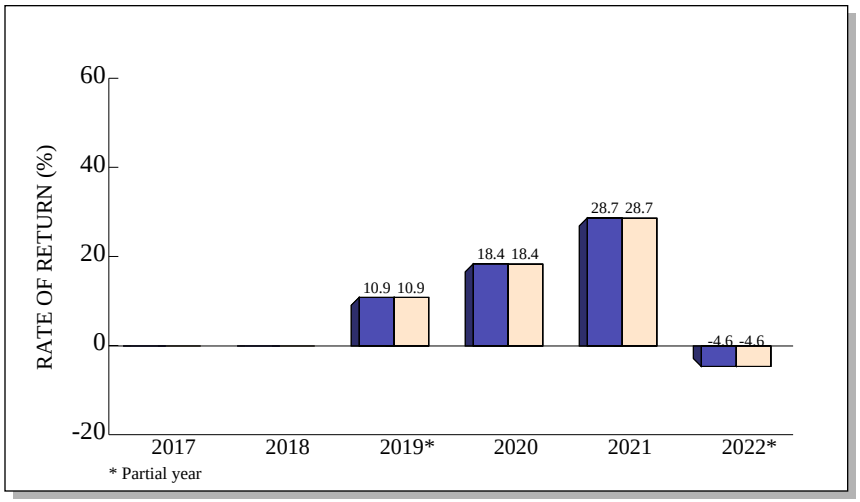
	LAST QUARTER	PERIOD 6/19 - 3/22
BEGINNING VALUE	$ 79,198,816	$ 59,166,405
NET CONTRIBUTIONS	0	- 13,458,545
INVESTMENT RETURN	- 3,646,347	29,844,609
ENDING VALUE	$ 75,552,469	$ 75,552,469
INCOME	648,420	5,302,836
CAPITAL GAINS (LOSSES)	- 4,294,767	24,541,773
INVESTMENT RETURN	- 3,646,347	29,844,609

TOTAL RETURN COMPARISONS





Large Cap Core Universe



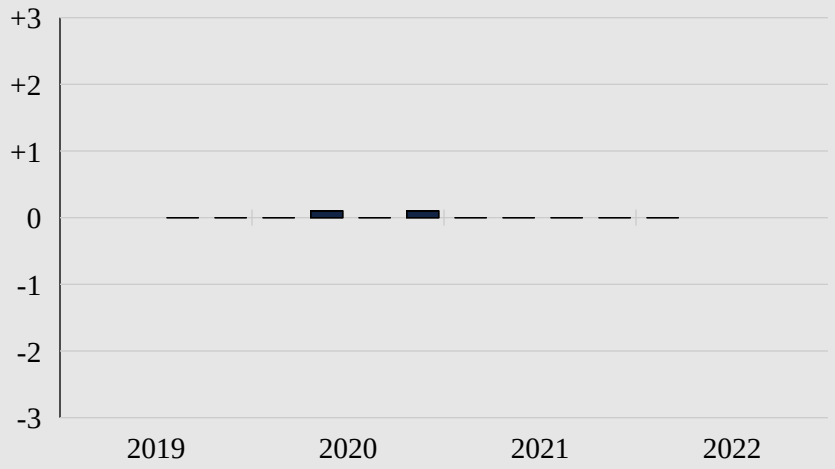
					------ANNUALIZED------	
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
RETURN	-4.6	5.9	6.6	15.7	----	----
(RANK)	(53)	(40)	(34)	(24)	----	----
5TH %ILE	2.2	11.6	11.2	18.8	21.9	17.9
25TH %ILE	-3.2	7.2	7.2	15.5	19.0	16.0
MEDIAN	-4.6	5.0	5.3	13.5	17.5	15.0
75TH %ILE	-6.2	3.2	3.4	10.8	15.9	13.6
95TH %ILE	-8.7	0.1	-0.8	7.7	12.8	10.6
S&P 500	***-4.6***	***5.9***	***6.5***	***15.6***	***18.9***	***16.0***

Large Cap Core Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: S&P 500

VARIATION FROM BENCHMARK



Total Quarters Observed	**11**
Quarters At or Above the Benchmark	**11**
Quarters Below the Benchmark	**0**
Batting Average	**1.000**

RATES OF RETURN

Date	Portfolio	Benchmark	Difference
9/19	1.7	1.7	0.0
12/19	9.1	9.1	0.0
3/20	-19.6	-19.6	0.0
6/20	20.6	20.5	0.1
9/20	8.9	8.9	0.0
12/20	12.2	12.1	0.1
3/21	6.2	6.2	0.0
6/21	8.5	8.5	0.0
9/21	0.6	0.6	0.0
12/21	11.0	11.0	0.0
3/22	-4.6	-4.6	0.0

CHESTER COUNTY EMPLOYEES RETIREMENT SYSTEM
VESPER - LARGE CAP SHORT-TERM REVERSAL
PERFORMANCE REVIEW
MARCH 2022

DAHAB Associates, Inc.

© 1990, 2022

INVESTMENT RETURN

On March 31st, 2022, the Chester County Employees Retirement System's Vesper Large Cap Short-Term Reversal portfolio was valued at $2,818,134, representing an increase of $286,476 from the December quarter's ending value of $2,531,658. Last quarter, the Fund posted net contributions totaling $621,995, which overshadowed the account's $335,519 net investment loss that was sustained during the quarter. Because there were no income receipts during the first quarter, the portfolio's net investment losses were entirely made up of capital losses (realized and unrealized).

RELATIVE PERFORMANCE

The ticker for this investment is UTRN.

Total Fund

During the first quarter, the Vesper Large Cap Short-Term Reversal portfolio lost 11.6%, which was 7.0% less than the S&P 500 Index's return of -4.6% and ranked in the 99th percentile of the Large Cap Core universe. Over the trailing twelve-month period, this portfolio returned 8.8%, which was 6.8% below the benchmark's 15.6% return, and ranked in the 90th percentile. Since December 2019, the portfolio returned 15.8% per annum and ranked in the 45th percentile. For comparison, the S&P 500 returned an annualized 18.1% over the same period.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / YTD	1 Year	3 Year	5 Year	Since 12/19
Total Portfolio - Gross	-11.6	8.8	----	----	15.8
LARGE CAP CORE RANK	(99)	(90)	----	----	(45)
Total Portfolio - Net	-11.8	8.0	----	----	14.9
S&P 500	-4.6	15.6	18.9	16.0	18.1
Domestic Equity - Gross	-11.6	8.8	----	----	15.8
LARGE CAP CORE RANK	(99)	(90)	----	----	(45)
S&P 500	-4.6	15.6	18.9	16.0	18.1

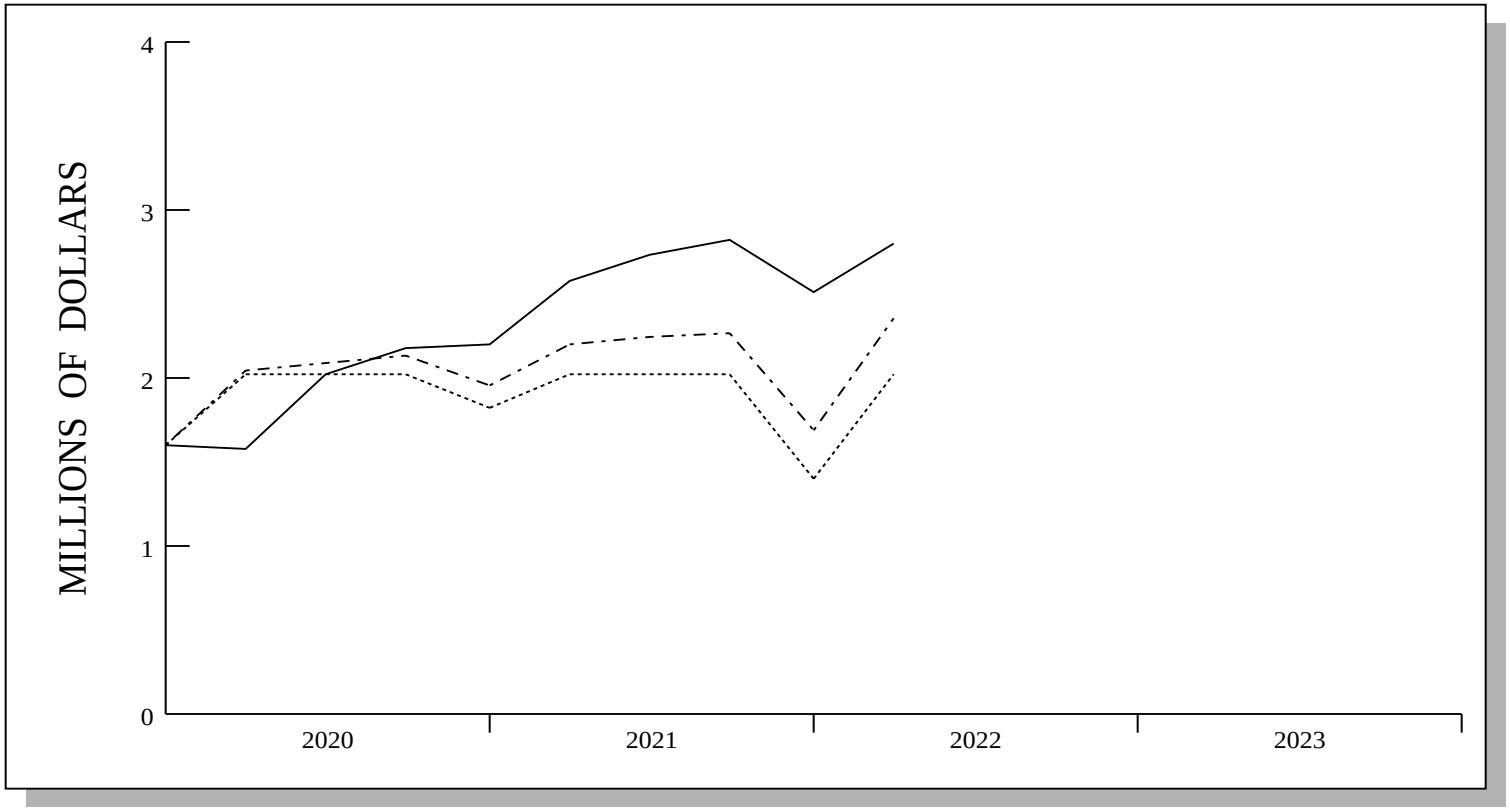
ASSET ALLOCATION

Domestic Equity	100.0%	$ 2,818,134
Total Portfolio	100.0%	$ 2,818,134

INVESTMENT RETURN

Market Value 12/2021	$ 2,531,658
Contribs / Withdrawals	621,995
Income	0
Capital Gains / Losses	-335,519
Market Value 3/2022	$ 2,818,134

INVESTMENT GROWTH

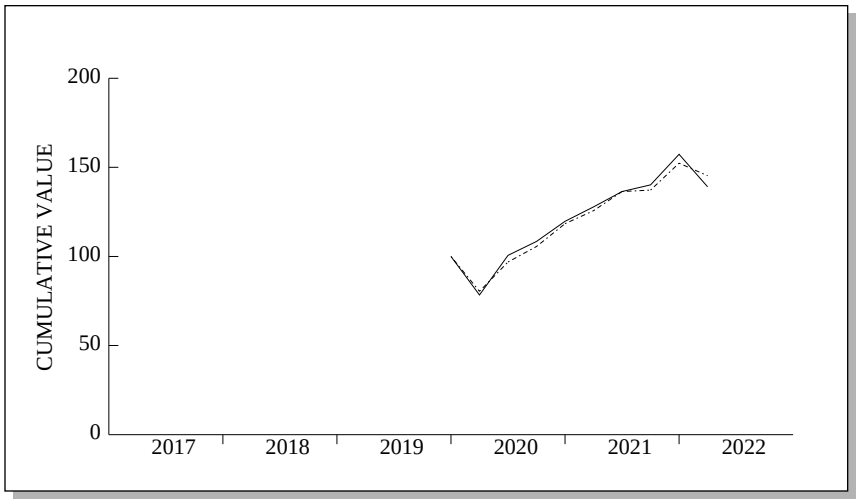


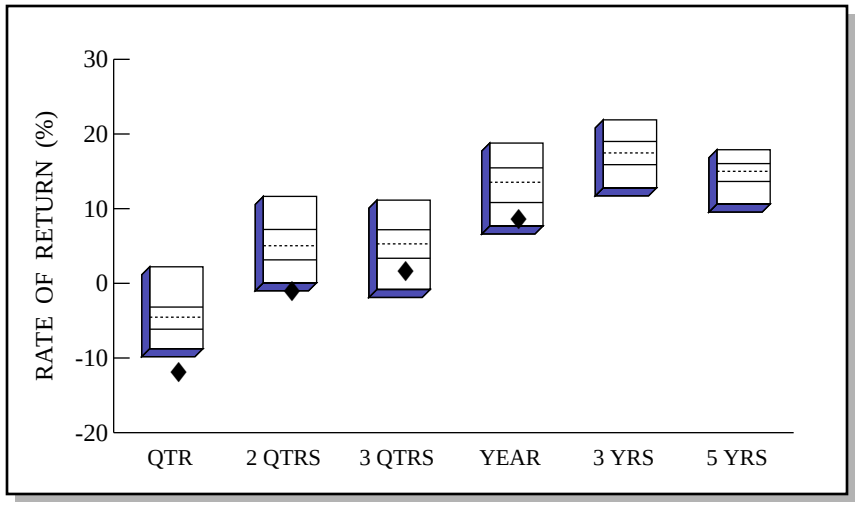
ACTUAL RETURN
7.0%
0.0%

VALUE ASSUMING
7.0% RETURN $ 2,363,046

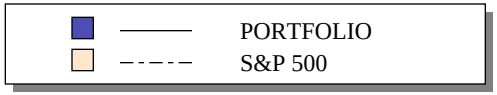
	LAST QUARTER	PERIOD 12/19 - 3/22
BEGINNING VALUE	$ 2,531,658	$ 1,621,800
NET CONTRIBUTIONS	621,995	413,054
INVESTMENT RETURN	-335,519	783,280
ENDING VALUE	$ 2,818,134	$ 2,818,134
INCOME	0	644,621
CAPITAL GAINS (LOSSES)	-335,519	138,659
INVESTMENT RETURN	-335,519	783,280

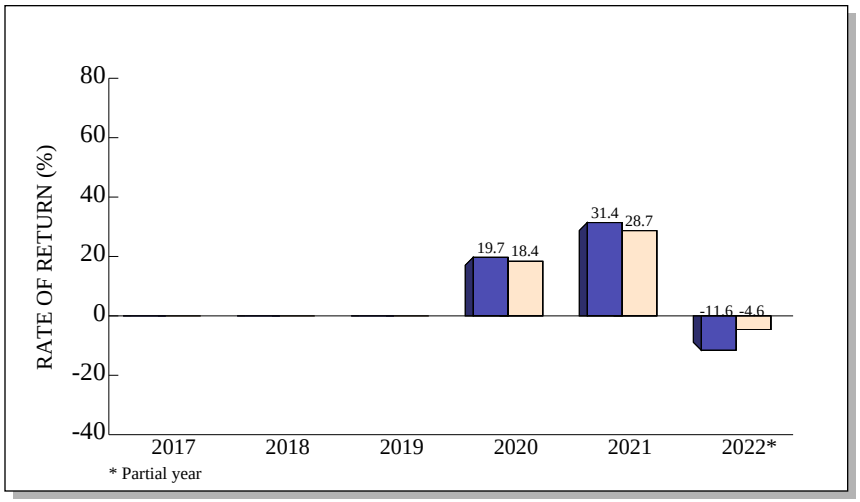
TOTAL RETURN COMPARISONS





Large Cap Core Universe





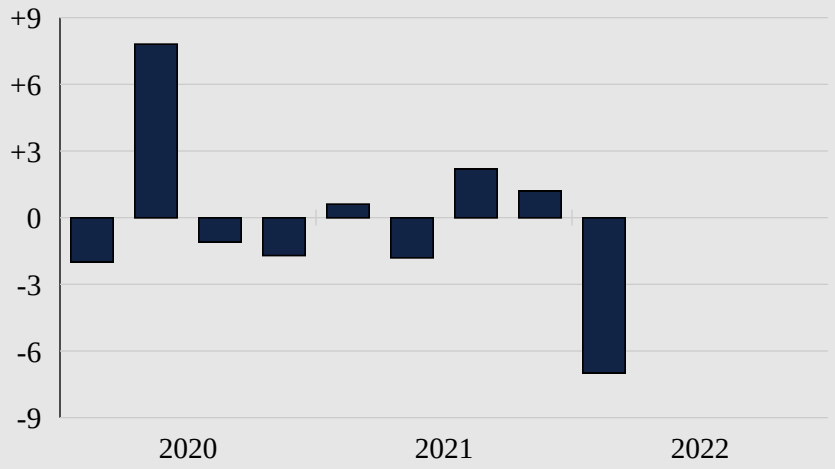
					------ANNUALIZED------	
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
RETURN	-11.6	-0.8	1.9	8.8	----	----
(RANK)	(99)	(97)	(85)	(90)	----	----
5TH %ILE	2.2	11.6	11.2	18.8	21.9	17.9
25TH %ILE	-3.2	7.2	7.2	15.5	19.0	16.0
MEDIAN	-4.6	5.0	5.3	13.5	17.5	15.0
75TH %ILE	-6.2	3.2	3.4	10.8	15.9	13.6
95TH %ILE	-8.7	0.1	-0.8	7.7	12.8	10.6
S&P 500	***-4.6***	***5.9***	***6.5***	***15.6***	***18.9***	***16.0***

Large Cap Core Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: S&P 500

VARIATION FROM BENCHMARK



Total Quarters Observed	**9**
Quarters At or Above the Benchmark	**4**
Quarters Below the Benchmark	**5**
Batting Average	**.444**

RATES OF RETURN

Date	Portfolio	Benchmark	Difference
3/20	-21.6	-19.6	-2.0
6/20	28.3	20.5	7.8
9/20	7.8	8.9	-1.1
12/20	10.4	12.1	-1.7
3/21	6.8	6.2	0.6
6/21	6.7	8.5	-1.8
9/21	2.8	0.6	2.2
12/21	12.2	11.0	1.2
3/22	-11.6	-4.6	-7.0

CHESTER COUNTY EMPLOYEES RETIREMENT SYSTEM
VANGUARD - RUSSELL 1000 GROWTH
PERFORMANCE REVIEW
MARCH 2022

DAHAB Associates, Inc.

© 1990, 2022

INVESTMENT RETURN

On March 31st, 2022, the Chester County Employees Retirement System's Vanguard Russell 1000 Growth portfolio was valued at $41,022,213, a decrease of $38,905,896 from the December ending value of $79,928,109. Last quarter, the account recorded total net withdrawals of $33,500,000 in addition to $5,405,896 in net investment losses. The fund's net investment loss was a result of income receipts totaling $66,907 and realized and unrealized capital losses totaling $5,472,803.

RELATIVE PERFORMANCE

In December 2020, the Vanguard Russell 1000 Growth ETF (VONG) was sold and proceeds were used to purchase the Vanguard Russell 1000 Growth mutual fund (VRGWX). Performance shown here links the history of these two investments.

Total Fund

During the first quarter, the Vanguard Russell 1000 Growth portfolio lost 9.0%, which was equal to the Russell 1000 Growth Index's return of -9.0% and ranked in the 40th percentile of the Large Cap Growth universe. Over the trailing year, the portfolio returned 15.0%, which was equal to the benchmark's 15.0% performance, and ranked in the 17th percentile. Since March 2016, the account returned 20.3% per annum and ranked in the 19th percentile. For comparison, the Russell 1000 Growth returned an annualized 20.0% over the same time frame.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / YTD	1 Year	3 Year	5 Year	Since 03/16
Total Portfolio - Gross	-9.0	15.0	24.1	21.3	20.3
LARGE CAP GROWTH RANK	(40)	(17)	(11)	(18)	(19)
Total Portfolio - Net	-9.0	14.9	24.0	21.2	20.2
Russell 1000G	-9.0	15.0	23.6	20.9	20.0
Domestic Equity - Gross	-9.0	15.0	24.1	21.3	20.3
LARGE CAP GROWTH RANK	(40)	(17)	(11)	(18)	(19)
Russell 1000G	-9.0	15.0	23.6	20.9	20.0

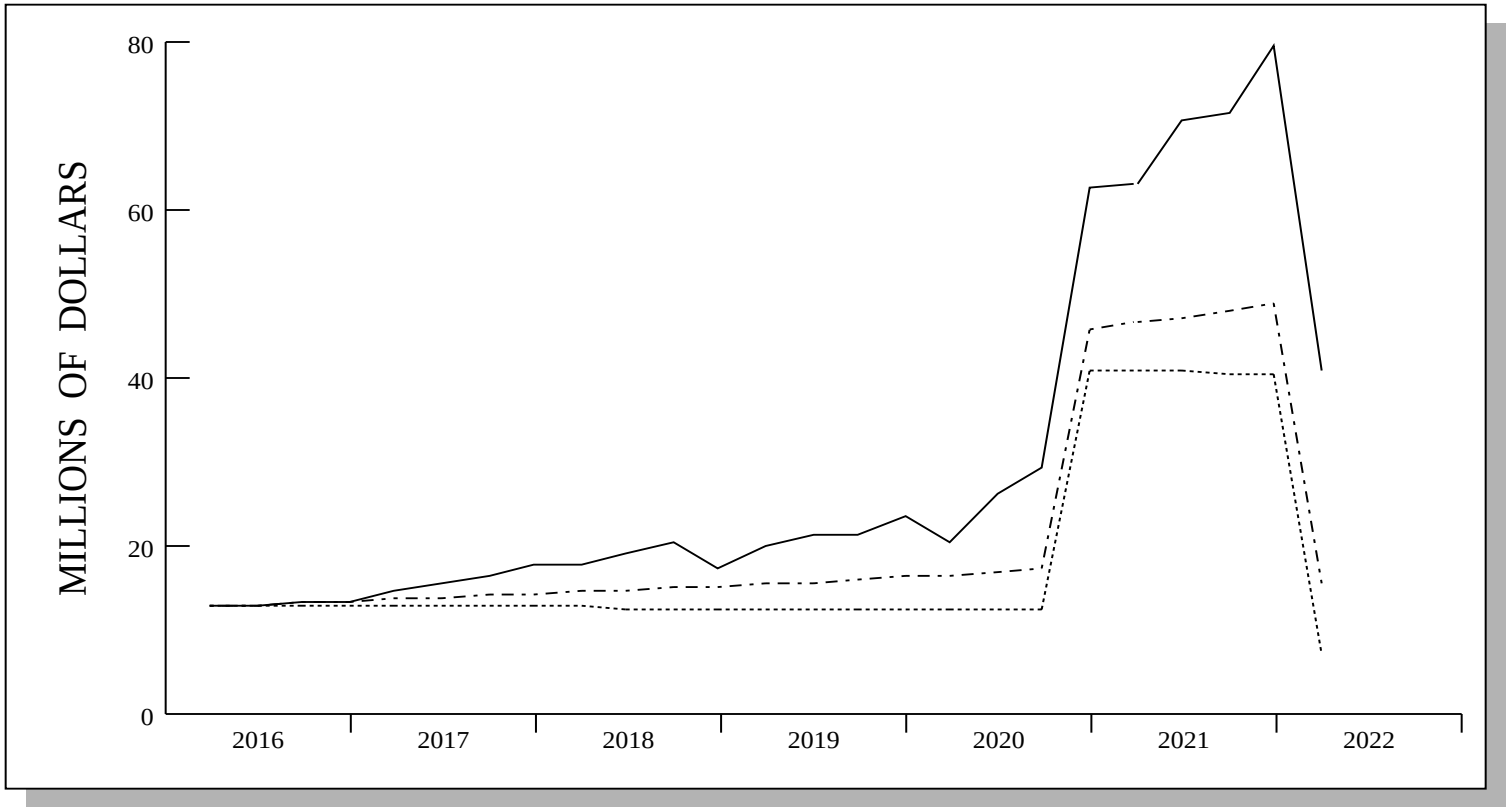
ASSET ALLOCATION

Domestic Equity	100.0%	$ 41,022,213
Total Portfolio	100.0%	$ 41,022,213

INVESTMENT RETURN

Market Value 12/2021	$ 79,928,109
Contribs / Withdrawals	- 33,500,000
Income	66,907
Capital Gains / Losses	- 5,472,803
Market Value 3/2022	$ 41,022,213

INVESTMENT GROWTH

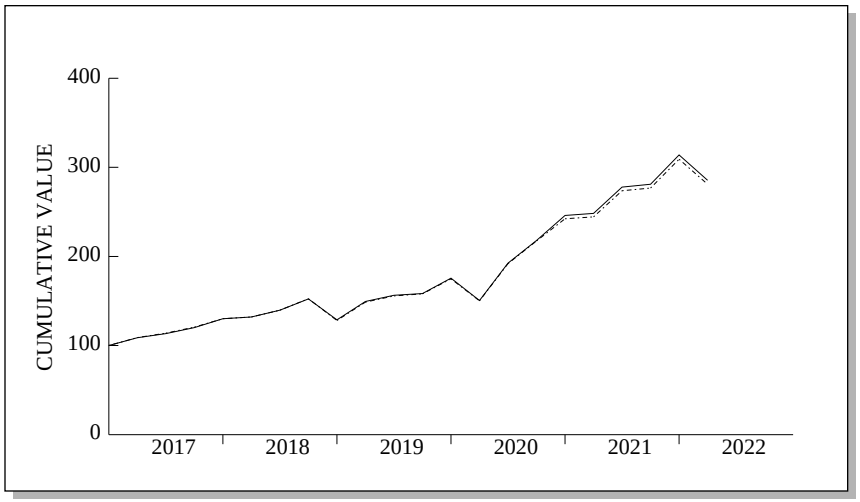


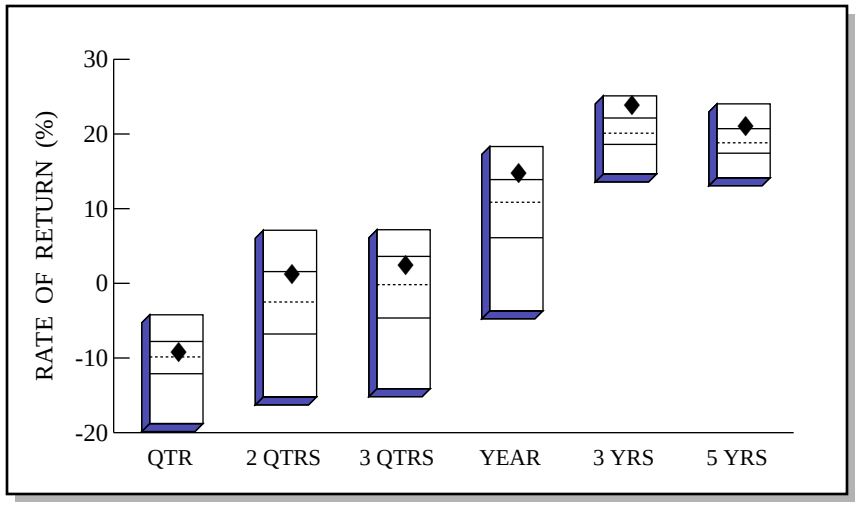
ACTUAL RETURN
7.0%
0.0%

VALUE ASSUMING
7.0% RETURN $ 15,818,871

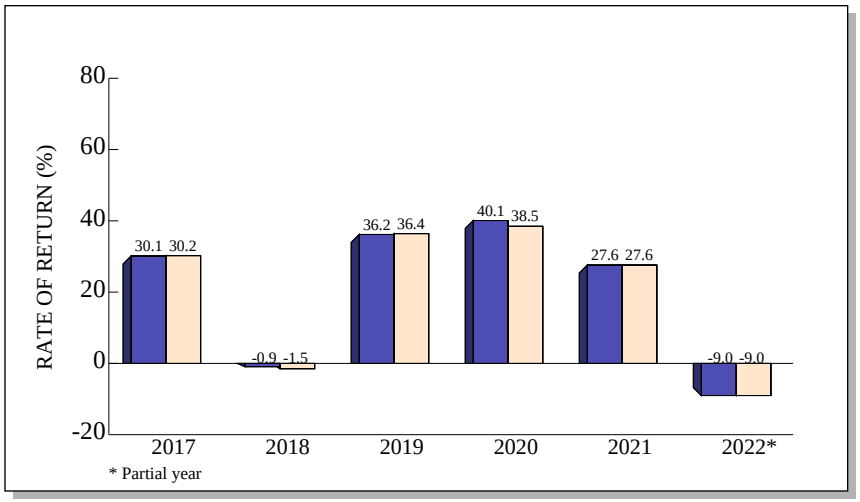
	LAST QUARTER	PERIOD 3/16 - 3/22
BEGINNING VALUE	$ 79,928,109	$ 12,939,603
NET CONTRIBUTIONS	- 33,500,000	- 5,668,510
INVESTMENT RETURN	- 5,405,896	33,751,120
ENDING VALUE	$ 41,022,213	$ 41,022,213
INCOME	66,907	1,733,851
CAPITAL GAINS (LOSSES)	- 5,472,803	32,017,269
INVESTMENT RETURN	- 5,405,896	33,751,120

TOTAL RETURN COMPARISONS





Large Cap Growth Universe



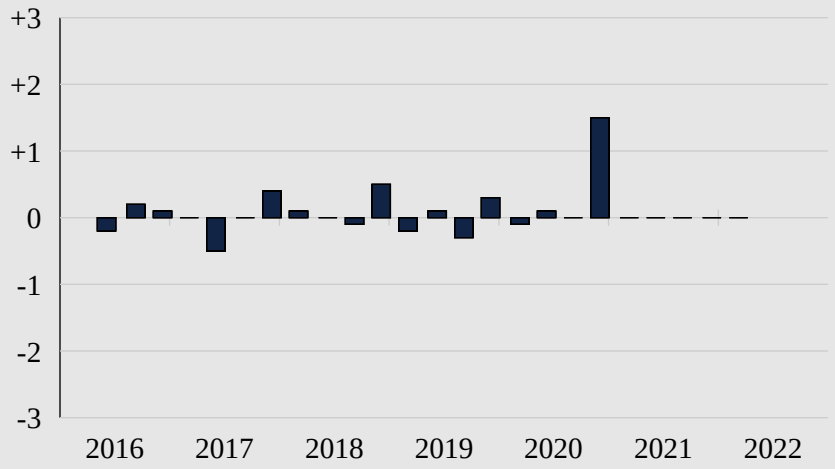
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
					------ANNUALIZED------	
RETURN	-9.0	1.5	2.7	15.0	24.1	21.3
(RANK)	(40)	(26)	(34)	(17)	(11)	(18)
5TH %ILE	-4.2	7.1	7.2	18.3	25.1	24.0
25TH %ILE	-7.8	1.6	3.6	13.9	22.1	20.7
MEDIAN	-9.9	-2.5	-0.2	10.9	20.1	18.8
75TH %ILE	-12.1	-6.8	-4.7	6.1	18.6	17.4
95TH %ILE	-18.8	-15.2	-14.1	-3.7	14.6	14.1
Russ 1000G	***-9.0***	***1.5***	***2.7***	***15.0***	***23.6***	***20.9***

Large Cap Growth Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: RUSSELL 1000 GROWTH

VARIATION FROM BENCHMARK



Total Quarters Observed	**24**
Quarters At or Above the Benchmark	**18**
Quarters Below the Benchmark	**6**
Batting Average	**.750**

RATES OF RETURN

Date	Portfolio	Benchmark	Difference
6/16	0.4	0.6	-0.2
9/16	4.8	4.6	0.2
12/16	1.1	1.0	0.1
3/17	8.9	8.9	0.0
6/17	4.2	4.7	-0.5
9/17	5.9	5.9	0.0
12/17	8.3	7.9	0.4
3/18	1.5	1.4	0.1
6/18	5.8	5.8	0.0
9/18	9.1	9.2	-0.1
12/18	-15.4	-15.9	0.5
3/19	15.9	16.1	-0.2
6/19	4.7	4.6	0.1
9/19	1.2	1.5	-0.3
12/19	10.9	10.6	0.3
3/20	-14.2	-14.1	-0.1
6/20	27.9	27.8	0.1
9/20	13.2	13.2	0.0
12/20	12.9	11.4	1.5
3/21	0.9	0.9	0.0
6/21	11.9	11.9	0.0
9/21	1.2	1.2	0.0
12/21	11.6	11.6	0.0
3/22	-9.0	-9.0	0.0

CHESTER COUNTY EMPLOYEES RETIREMENT SYSTEM
ALLSPRING GLOBAL INVESTMENTS - LARGE CAP VALUE
PERFORMANCE REVIEW
MARCH 2022

DAHAB Associates, Inc.

© 1990, 2022

INVESTMENT RETURN

This portfolio was formerly known as the Metropolitan West portfolio.

On March 31st, 2022, the Chester County Employees Retirement System's Allspring Global Investments Large Cap Value portfolio was valued at $42,239,511, a decrease of $40,145,109 from the December ending value of $82,384,620. Last quarter, the account recorded total net withdrawals of $37,749,810 in addition to $2,395,299 in net investment losses. The fund's net investment loss was a result of income receipts totaling $220,828 and realized and unrealized capital losses totaling $2,616,127.

RELATIVE PERFORMANCE

Total Fund

During the first quarter, the Allspring Global Investments Large Cap Value portfolio lost 3.2%, which was 2.5% less than the Russell 1000 Value Index's return of -0.7% and ranked in the 75th percentile of the Large Cap Value universe. Over the trailing year, the portfolio returned 9.6%, which was 2.1% less than the benchmark's 11.7% performance, and ranked in the 83rd percentile. Since September 2010, the account returned 12.6% per annum. For comparison, the Russell 1000 Value returned an annualized 12.1% over the same time frame.

ANALYSIS

Last quarter, the Allspring portfolio was invested in ten of the eleven industry sectors in our analysis. Relative to the Russell 1000 Value index, the portfolio had greater representation in the Consumer Discretionary, Industrials, and Information Technology sectors, while the Financials, Health Care, and Utilities sectors were underweighted. The Real Estate sectors was not utilized.

The portfolio underperformed in all but two of the ten invested sectors (Consumer Staples and Health Care). Deeply negative returns in the Consumer Discretionary sector widened the gap between the portfolio and its benchmark.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / YTD	1 Year	3 Year	5 Year	10 Year	Since 09/10
Total Portfolio - Gross	-3.2	9.6	13.7	12.3	12.1	12.6
LARGE CAP VALUE RANK	(75)	(83)	(77)	(44)	(67)	----
Total Portfolio - Net	-3.2	9.1	13.1	11.8	11.5	12.0
Russell 1000V	-0.7	11.7	13.0	10.3	11.7	12.1
Domestic Equity - Gross	-3.2	9.6	13.7	12.3	12.1	12.6
LARGE CAP VALUE RANK	(75)	(83)	(77)	(44)	(67)	----
Russell 1000V	-0.7	11.7	13.0	10.3	11.7	12.1

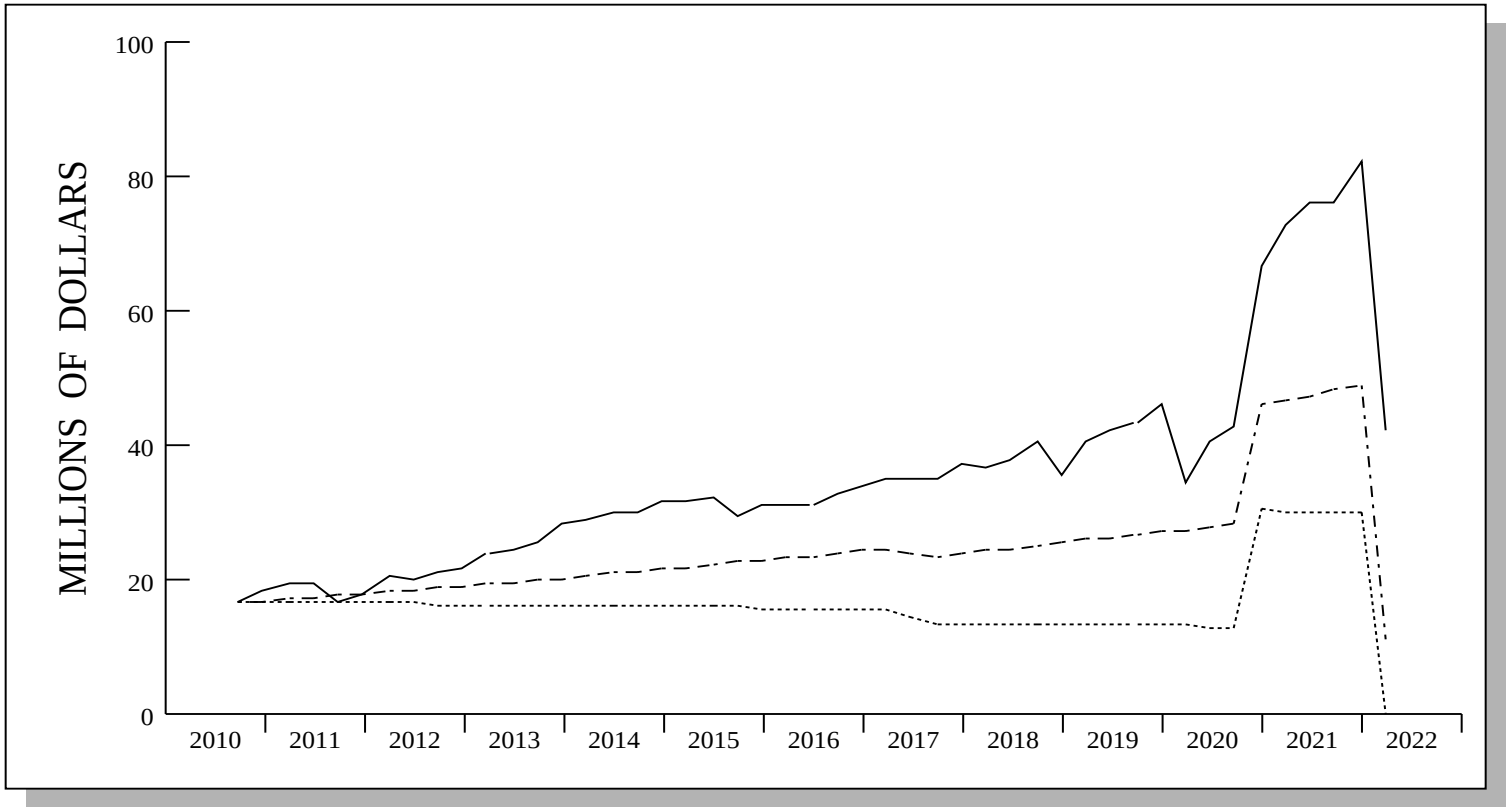
ASSET ALLOCATION

Domestic Equity	100.0%	$ 42,239,511
Total Portfolio	100.0%	$ 42,239,511

INVESTMENT RETURN

Market Value 12/2021	$ 82,384,620
Contribs / Withdrawals	- 37,749,810
Income	220,828
Capital Gains / Losses	- 2,616,127
Market Value 3/2022	$ 42,239,511

INVESTMENT GROWTH

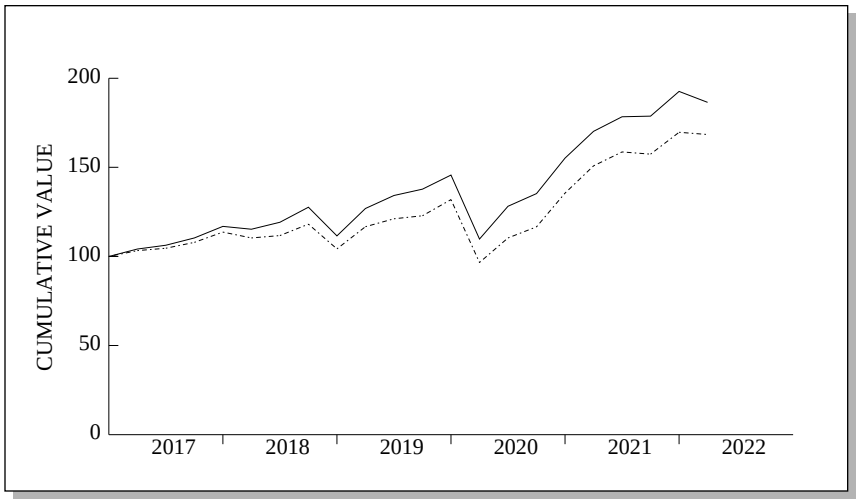


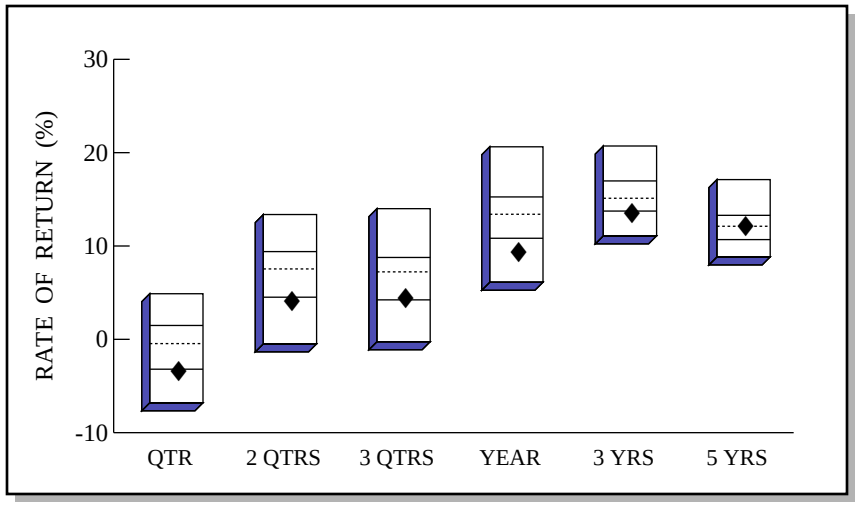
ACTUAL RETURN
7.0%
0.0%

VALUE ASSUMING
7.0% RETURN $ 11,631,239

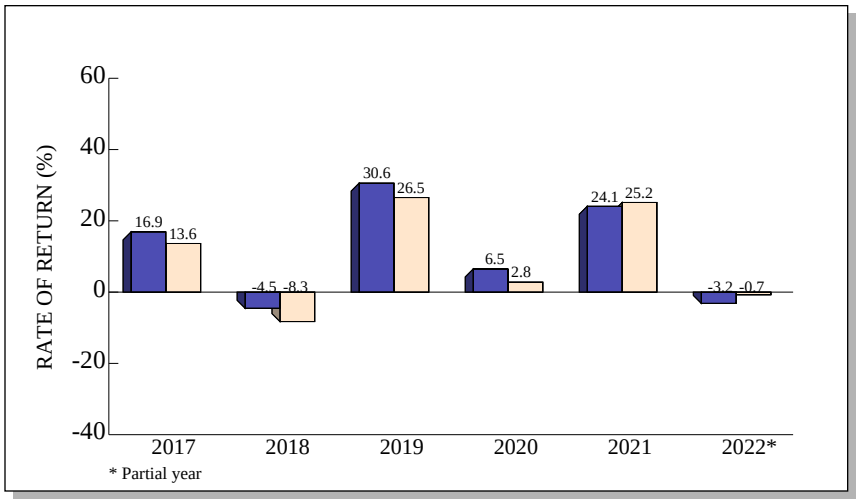
	LAST QUARTER	PERIOD 9/10 - 3/22
BEGINNING VALUE	$ 82,384,620	$ 16,902,597
NET CONTRIBUTIONS	- 37,749,810	- 24,540,161
INVESTMENT RETURN	- 2,395,299	49,877,075
ENDING VALUE	$ 42,239,511	$ 42,239,511
INCOME	220,828	1,431,195
CAPITAL GAINS (LOSSES)	- 2,616,127	48,445,880
INVESTMENT RETURN	- 2,395,299	49,877,075

TOTAL RETURN COMPARISONS





Large Cap Value Universe



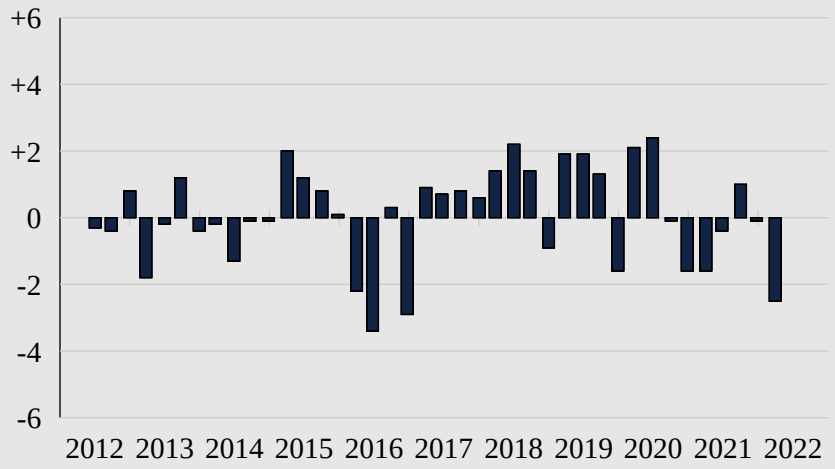
					------ANNUALIZED------	
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
RETURN	-3.2	4.3	4.6	9.6	13.7	12.3
(RANK)	(75)	(77)	(74)	(83)	(77)	(44)
5TH %ILE	4.9	13.4	14.0	20.6	20.7	17.1
25TH %ILE	1.5	9.4	8.8	15.3	17.0	13.3
MEDIAN	-0.5	7.6	7.2	13.4	15.1	12.1
75TH %ILE	-3.2	4.5	4.2	10.8	13.7	10.7
95TH %ILE	-6.8	-0.5	-0.3	6.1	11.1	8.8
Russ 1000V	***-0.7***	***7.0***	***6.1***	***11.7***	***13.0***	***10.3***

Large Cap Value Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY - 10 YEARS

COMPARATIVE BENCHMARK: RUSSELL 1000 VALUE

VARIATION FROM BENCHMARK

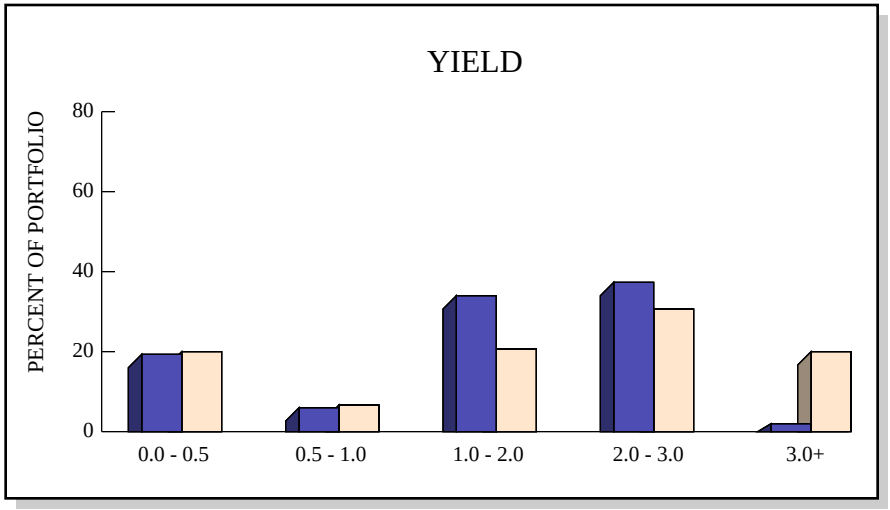


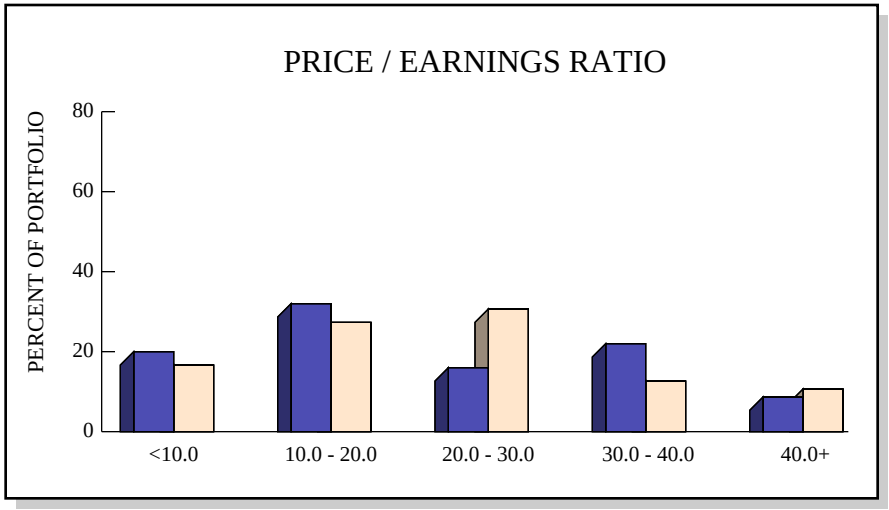
Total Quarters Observed	**40**
Quarters At or Above the Benchmark	**20**
Quarters Below the Benchmark	**20**
Batting Average	**.500**

RATES OF RETURN

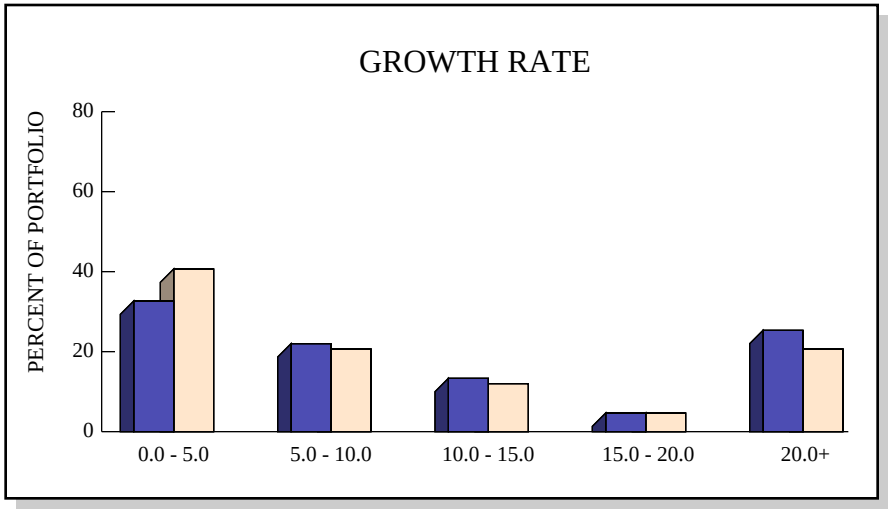
Date	Portfolio	Benchmark	Difference
6/12	-2.5	-2.2	-0.3
9/12	6.1	6.5	-0.4
12/12	2.3	1.5	0.8
3/13	10.5	12.3	-1.8
6/13	3.0	3.2	-0.2
9/13	5.1	3.9	1.2
12/13	9.6	10.0	-0.4
3/14	2.8	3.0	-0.2
6/14	3.8	5.1	-1.3
9/14	-0.3	-0.2	-0.1
12/14	4.9	5.0	-0.1
3/15	1.3	-0.7	2.0
6/15	1.3	0.1	1.2
9/15	-7.6	-8.4	0.8
12/15	5.7	5.6	0.1
3/16	-0.6	1.6	-2.2
6/16	1.2	4.6	-3.4
9/16	3.8	3.5	0.3
12/16	3.8	6.7	-2.9
3/17	4.2	3.3	0.9
6/17	2.0	1.3	0.7
9/17	3.9	3.1	0.8
12/17	5.9	5.3	0.6
3/18	-1.4	-2.8	1.4
6/18	3.4	1.2	2.2
9/18	7.1	5.7	1.4
12/18	-12.6	-11.7	-0.9
3/19	13.8	11.9	1.9
6/19	5.7	3.8	1.9
9/19	2.7	1.4	1.3
12/19	5.8	7.4	-1.6
3/20	-24.6	-26.7	2.1
6/20	16.7	14.3	2.4
9/20	5.5	5.6	-0.1
12/20	14.7	16.3	-1.6
3/21	9.7	11.3	-1.6
6/21	4.8	5.2	-0.4
9/21	0.2	-0.8	1.0
12/21	7.7	7.8	-0.1
3/22	-3.2	-0.7	-2.5

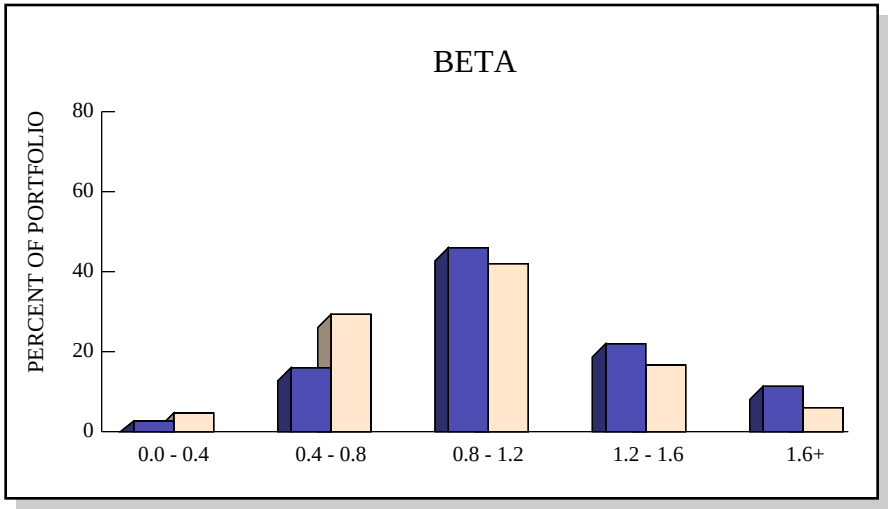
STOCK CHARACTERISTICS



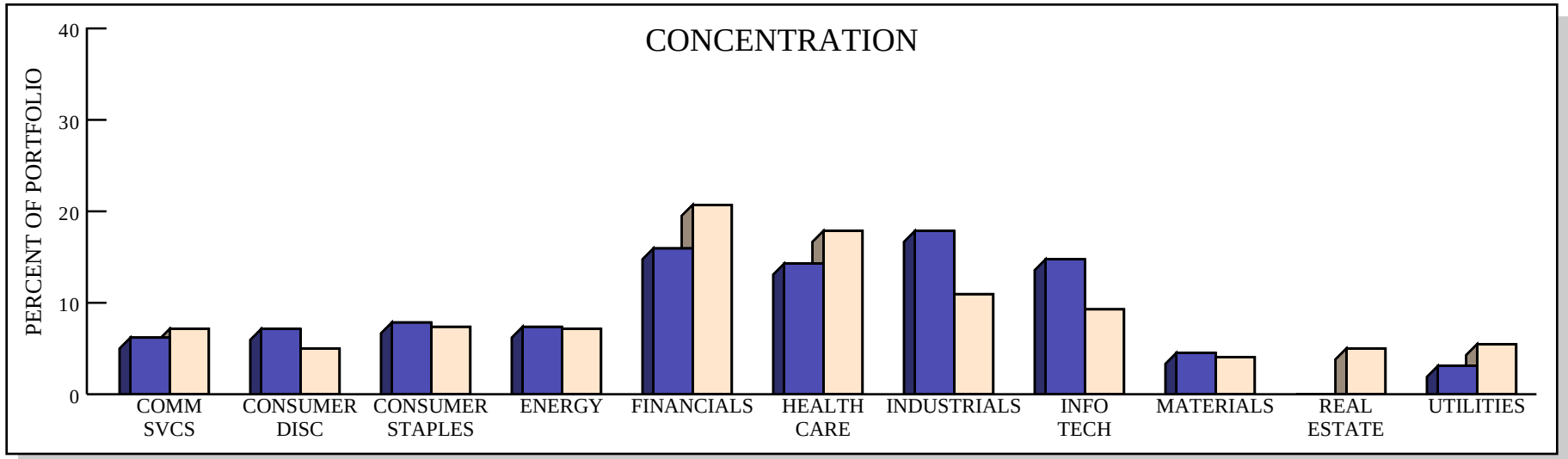


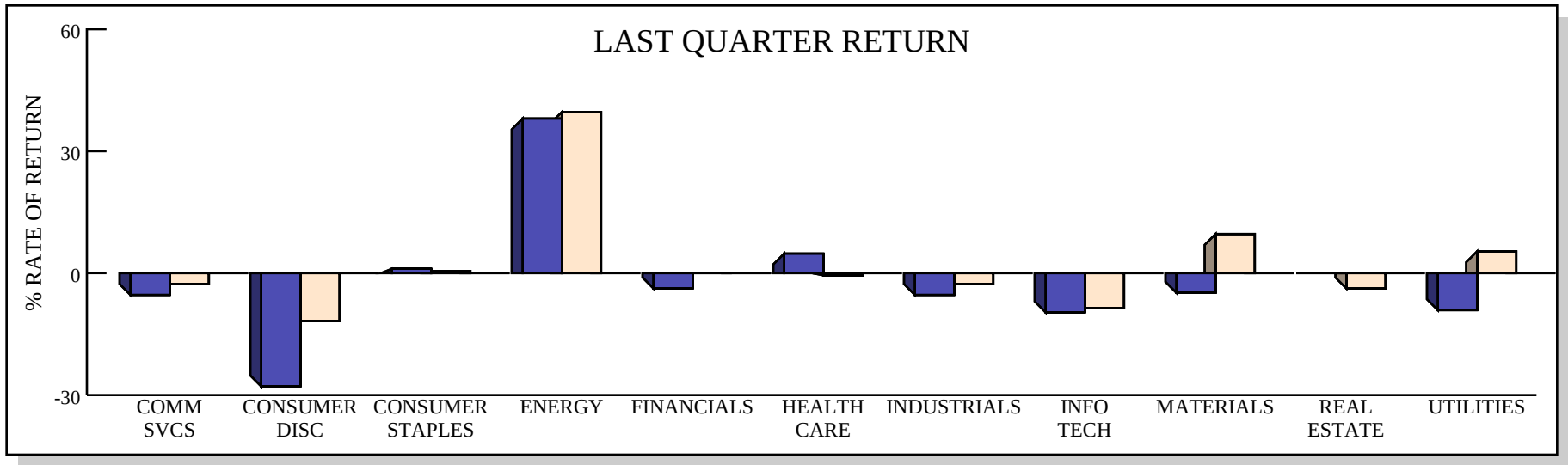
	# HOLDINGS	YIELD	GROWTH	P/E	BETA
PORTFOLIO	38	1.5%	12.5%	22.0	1.09
RUSSELL 1000V	848	2.0%	10.7%	23.6	0.98



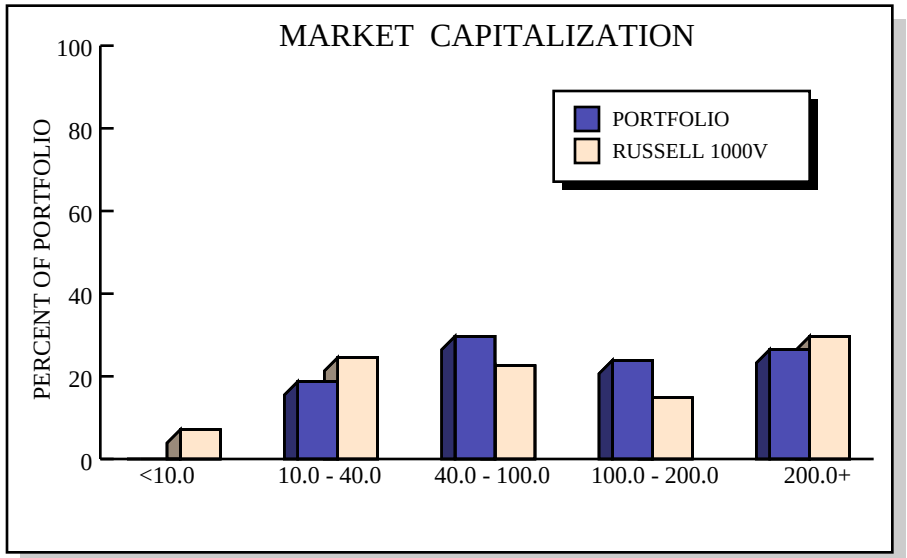


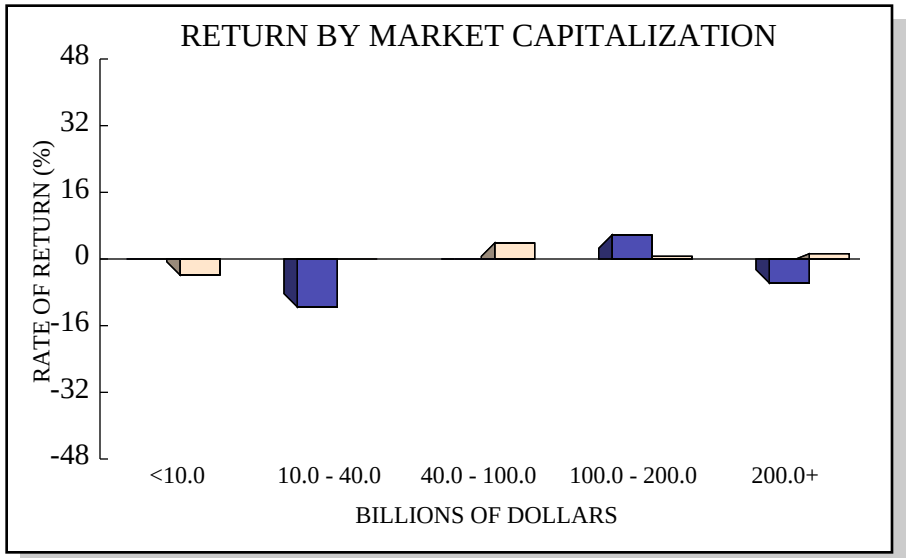
STOCK INDUSTRY ANALYSIS





TOP TEN HOLDINGS





TOP TEN EQUITY HOLDINGS

RANK	NAME	VALUE	% EQUITY	RETURN	INDUSTRY SECTOR	MKT CAP
1	CATERPILLAR INC	$ 1,724,850	4.08%	8.3%	Industrials	$ 119.4 B
2	GENERAL MOTORS CO	1,717,451	4.07%	-25.4%	Consumer Discretionary	63.6 B
3	AMERICAN INTERNATIONAL GROUP	1,691,338	4.00%	11.0%	Financials	50.6 B
4	WALMART INC	1,634,099	3.87%	3.3%	Consumer Staples	409.8 B
5	CONOCOPHILLIPS	1,616,100	3.83%	39.6%	Energy	129.6 B
6	EOG RESOURCES INC	1,468,914	3.48%	36.4%	Energy	69.8 B
7	GOLDMAN SACHS GROUP INC	1,391,702	3.29%	-13.2%	Financials	111.5 B
8	ALPHABET INC	1,321,084	3.13%	-3.5%	Communication Services	881.6 B
9	NEXTERA ENERGY INC	1,288,439	3.05%	-8.8%	Utilities	166.4 B
10	INTERCONTINENTAL EXCHANGE IN	1,281,300	3.03%	-3.1%	Financials	74.0 B

CHESTER COUNTY EMPLOYEES RETIREMENT SYSTEM
CHAMPLAIN - US MID CAP EQUITY
PERFORMANCE REVIEW
MARCH 2022

DAHAB Associates, Inc.

© 1990, 2022

INVESTMENT RETURN

On March 31st, 2022, the Chester County Employees Retirement System's Champlain US Mid Cap Equity portfolio was valued at $47,730,545, a decrease of $5,824,221 from the December ending value of $53,554,766. Last quarter, the account recorded total net withdrawals of $111,369 in addition to $5,712,852 in net investment losses. The fund's net investment loss was a result of income receipts totaling $79,674 and realized and unrealized capital losses totaling $5,792,526.

RELATIVE PERFORMANCE

Total Fund

During the first quarter, the Champlain US Mid Cap Equity portfolio lost 10.7%, which was 5.0% less than the Russell Mid Cap's return of -5.7% and ranked in the 87th percentile of the Mid Cap Core universe. Over the trailing year, the portfolio returned 7.9%, which was 1.0% greater than the benchmark's 6.9% performance, and ranked in the 35th percentile. Since December 2020, the account returned 9.7% per annum and ranked in the 71st percentile. For comparison, the Russell Mid Cap returned an annualized 12.3% over the same time frame.

ANALYSIS

The Champlain portfolio was concentrated in seven of the eleven industry sectors in our analysis last quarter. The Consumer Staples, Health Care, and Industrials sectors were overweight, relative to the Russell Mid Cap Index. The Consumer Discretionary and Materials sectors received lighter allocations, while the Communication Services, Energy, Real Estate, and Utilities sectors were left vacant.

The Champlain portfolio underperformed in four of the seven invested sectors, including Health Care and Industrials, the two heaviest sectors. The Consumer Discretionary, Financials, and Information Technology sectors were only marginally better than their index counterparts.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / YTD	1 Year	3 Year	5 Year	Since 12/20
Total Portfolio - Gross	-10.7	7.9	----	----	9.7
MID CAP CORE RANK	(87)	(35)	----	----	(71)
Total Portfolio - Net	-10.9	7.0	----	----	8.7
Russell Mid	-5.7	6.9	14.9	12.6	12.3
Domestic Equity - Gross	-10.7	7.9	----	----	9.7
MID CAP CORE RANK	(87)	(35)	----	----	(71)
Russell Mid	-5.7	6.9	14.9	12.6	12.3

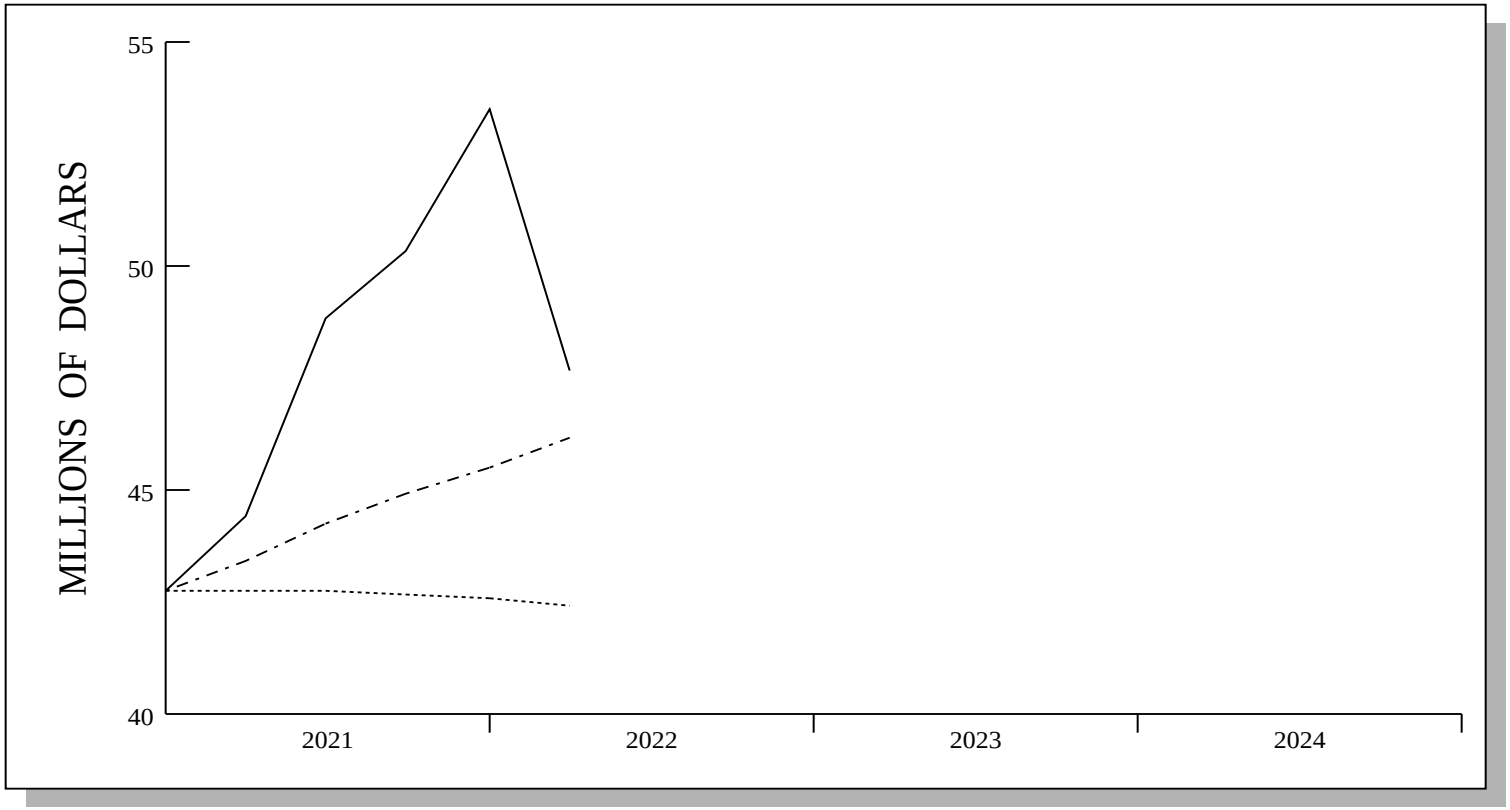
ASSET ALLOCATION

Domestic Equity	100.0%	$ 47,730,545
Total Portfolio	100.0%	$ 47,730,545

INVESTMENT RETURN

Market Value 12/2021	$ 53,554,766
Contribs / Withdrawals	-111,369
Income	79,674
Capital Gains / Losses	- 5,792,526
Market Value 3/2022	$ 47,730,545

INVESTMENT GROWTH

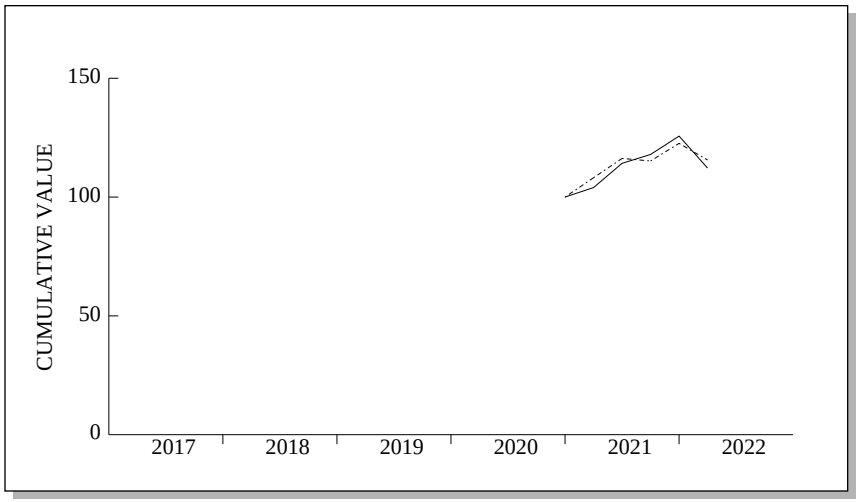


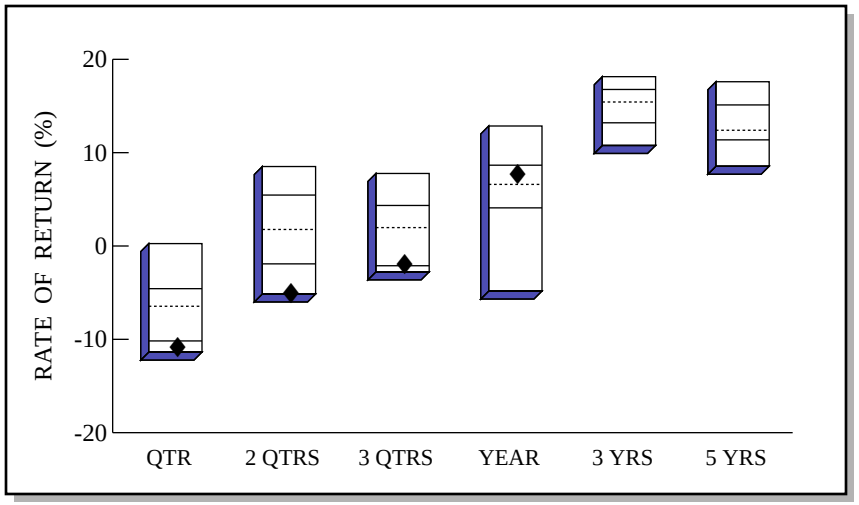
ACTUAL RETURN
7.0%
0.0%

VALUE ASSUMING
7.0% RETURN $ 46,246,610

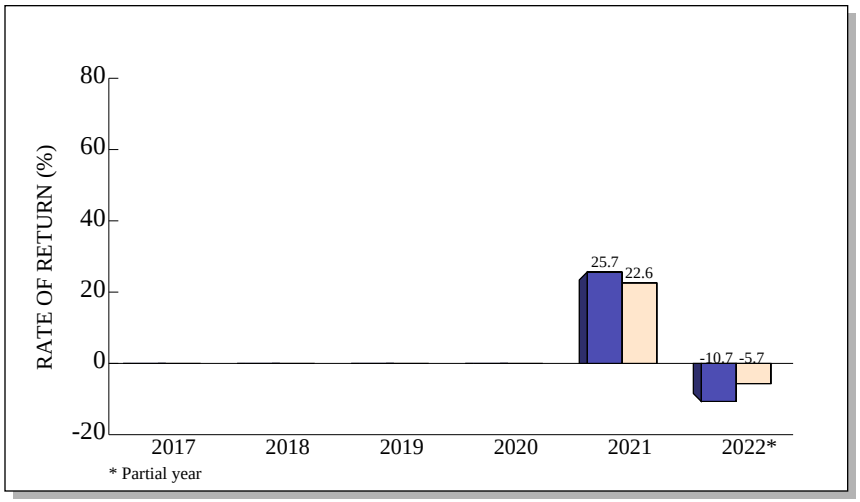
	LAST QUARTER	PERIOD 12/20 - 3/22
BEGINNING VALUE	$ 53,554,766	$ 42,788,499
NET CONTRIBUTIONS	-111,369	-308,963
INVESTMENT RETURN	- 5,712,852	5,251,009
ENDING VALUE	$ 47,730,545	$ 47,730,545
INCOME	79,674	378,852
CAPITAL GAINS (LOSSES)	- 5,792,526	4,872,157
INVESTMENT RETURN	- 5,712,852	5,251,009

TOTAL RETURN COMPARISONS





Mid Cap Core Universe



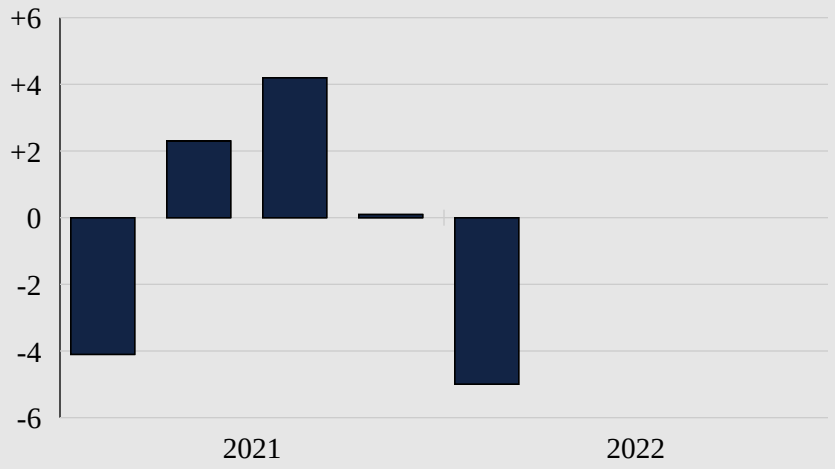
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
					------ANNUALIZED------	
RETURN	-10.7	-4.8	-1.7	7.9	----	----
(RANK)	(87)	(93)	(72)	(35)	----	----
5TH %ILE	0.3	8.5	7.8	12.9	18.1	17.6
25TH %ILE	-4.6	5.5	4.3	8.7	16.8	15.1
MEDIAN	-6.5	1.8	2.0	6.6	15.4	12.4
75TH %ILE	-10.2	-1.9	-2.1	4.1	13.2	11.4
95TH %ILE	-11.4	-5.2	-2.8	-4.8	10.8	8.5
Russ MC	***-5.7***	***0.4***	***-0.5***	***6.9***	***14.9***	***12.6***

Mid Cap Core Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: RUSSELL MID CAP

VARIATION FROM BENCHMARK

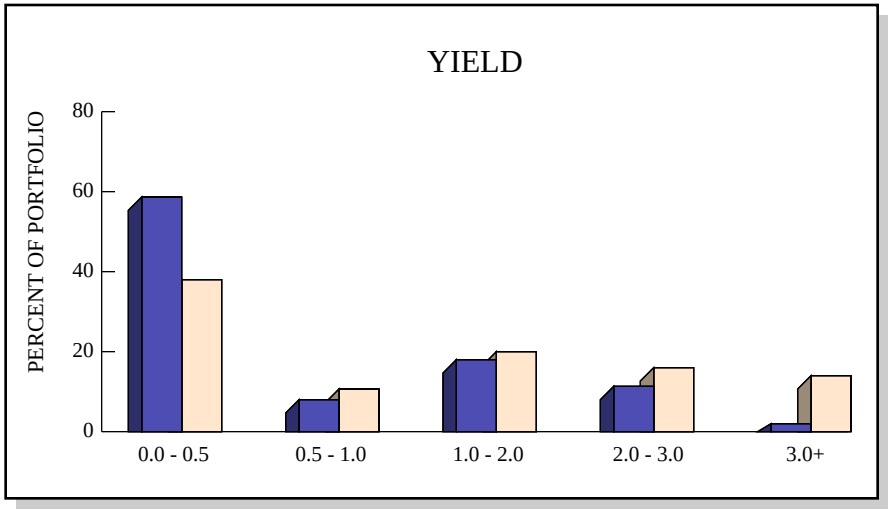


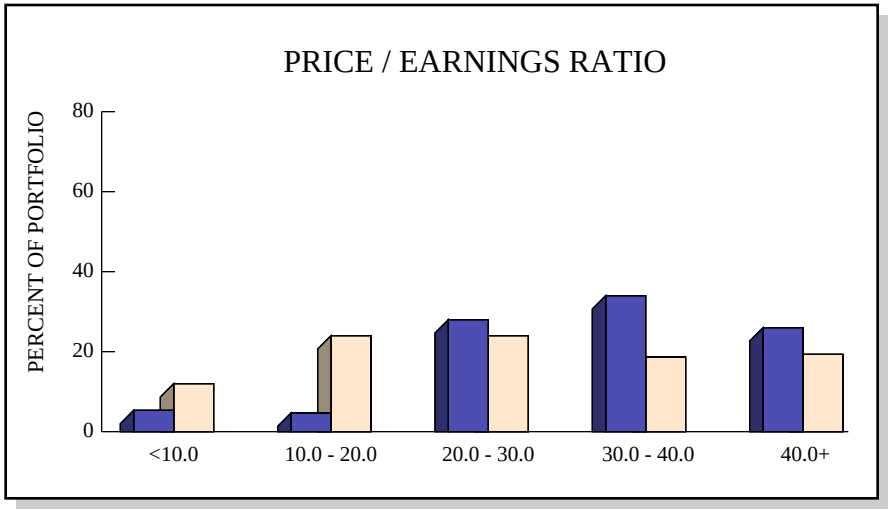
Total Quarters Observed	**5**
Quarters At or Above the Benchmark	**3**
Quarters Below the Benchmark	**2**
Batting Average	**.600**

RATES OF RETURN

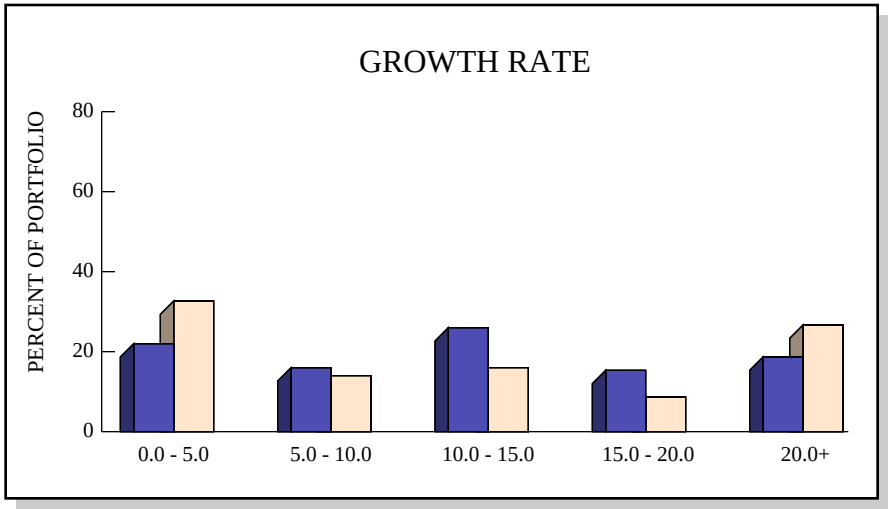
Date	Portfolio	Benchmark	Difference
3/21	4.0	8.1	-4.1
6/21	9.8	7.5	2.3
9/21	3.3	-0.9	4.2
12/21	6.5	6.4	0.1
3/22	-10.7	-5.7	-5.0

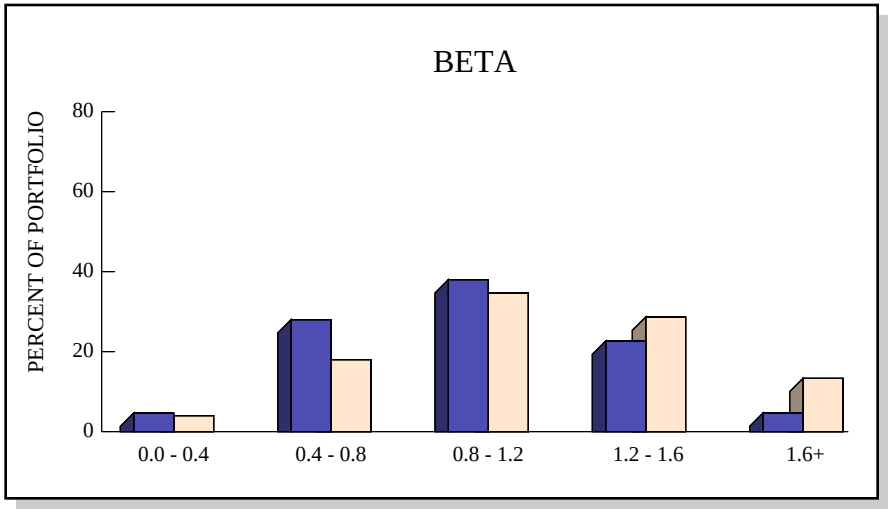
STOCK CHARACTERISTICS



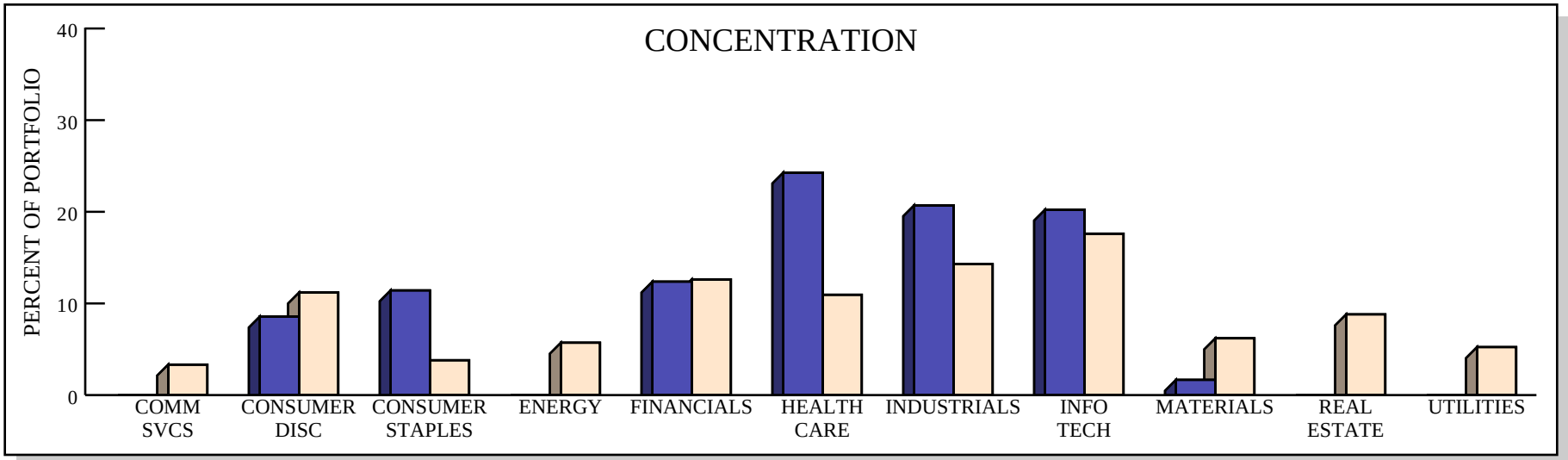


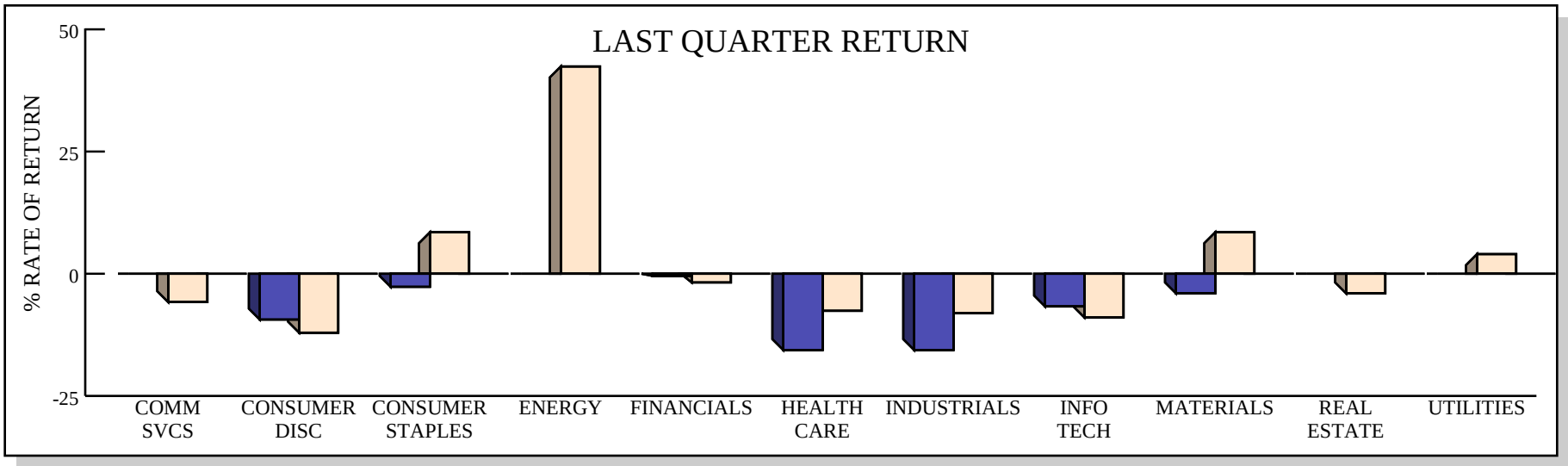
	# HOLDINGS	YIELD	GROWTH	P/E	BETA
PORTFOLIO	61	0.7%	11.7%	37.3	0.99
RUSSELL MID	824	1.4%	13.8%	28.9	1.14



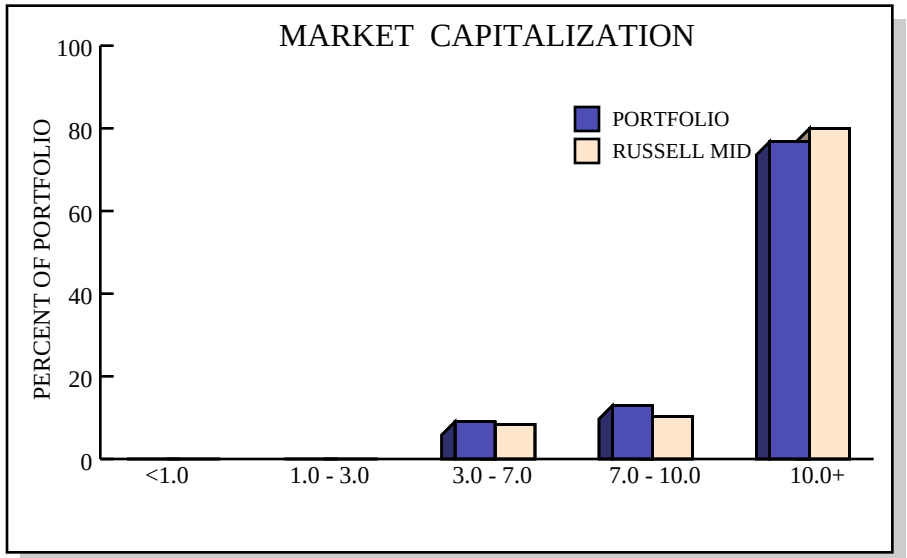


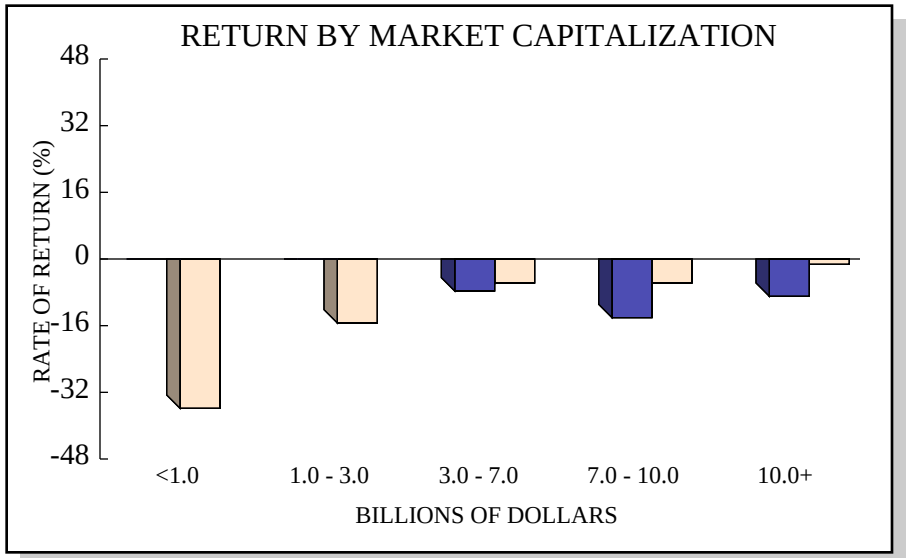
STOCK INDUSTRY ANALYSIS





TOP TEN HOLDINGS





TOP TEN EQUITY HOLDINGS

RANK	NAME	VALUE	% EQUITY	RETURN	INDUSTRY SECTOR	MKT CAP
1	AMETEK INC	$ 1,443,671	3.02%	-9.3%	Industrials	$ 30.8 B
2	EVEREST RE GROUP LTD	1,404,431	2.94%	10.6%	Financials	11.8 B
3	EDWARDS LIFESCIENCES CORP	1,370,261	2.87%	-9.1%	Health Care	73.1 B
4	ARTHUR J GALLAGHER & CO	1,351,404	2.83%	3.2%	Financials	36.4 B
5	FORTIVE CORP	1,320,962	2.77%	-20.1%	Industrials	21.9 B
6	ADVANCE AUTO PARTS INC	1,291,430	2.71%	-13.1%	Consumer Discretionary	12.6 B
7	PALO ALTO NETWORKS INC	1,257,814	2.64%	11.8%	Information Technology	61.3 B
8	WORKDAY INC	1,223,641	2.56%	-12.3%	Information Technology	60.1 B
9	GENERAC HOLDINGS INC	1,215,793	2.55%	-15.5%	Industrials	19.0 B
10	WATERS CORP	1,177,930	2.47%	-16.7%	Health Care	18.8 B

CHESTER COUNTY EMPLOYEES RETIREMENT SYSTEM
VANGUARD - MID CAP INDEX
PERFORMANCE REVIEW
MARCH 2022

DAHAB Associates, Inc.
© 1990, 2022

INVESTMENT RETURN

On March 31st, 2022, the Chester County Employees Retirement System's Vanguard Mid Cap Index portfolio was valued at $34,903,222, representing an increase of $24,295,695 from the December quarter's ending value of $10,607,527. Last quarter, the Fund posted net contributions equaling $24,000,000 plus a net investment gain equaling $295,695. Total net investment return was the result of income receipts, which totaled $109,704 and net realized and unrealized capital gains of $185,991.

RELATIVE PERFORMANCE

The ticker for this investment is VMCIX.

Total Fund

For the first quarter, the Vanguard Mid Cap Index portfolio returned -6.3%, which was equal to the CRSP US Mid Cap Index's return of -6.3% and ranked in the 47th percentile of the Mid Cap Core universe.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / YTD	1 Year	3 Year	5 Year	Since 12/21
Total Portfolio - Gross	-6.3	----	----	----	-6.3
MID CAP CORE RANK	(47)	----	----	----	(47)
Total Portfolio - Net	-6.3	----	----	----	-6.3
CRSP US Mid Cap	-6.3	8.9	15.7	13.0	-6.3
Domestic Equity - Gross	-6.3	----	----	----	-6.3
MID CAP CORE RANK	(47)	----	----	----	(47)
CRSP US Mid Cap	-6.3	8.9	15.7	13.0	-6.3

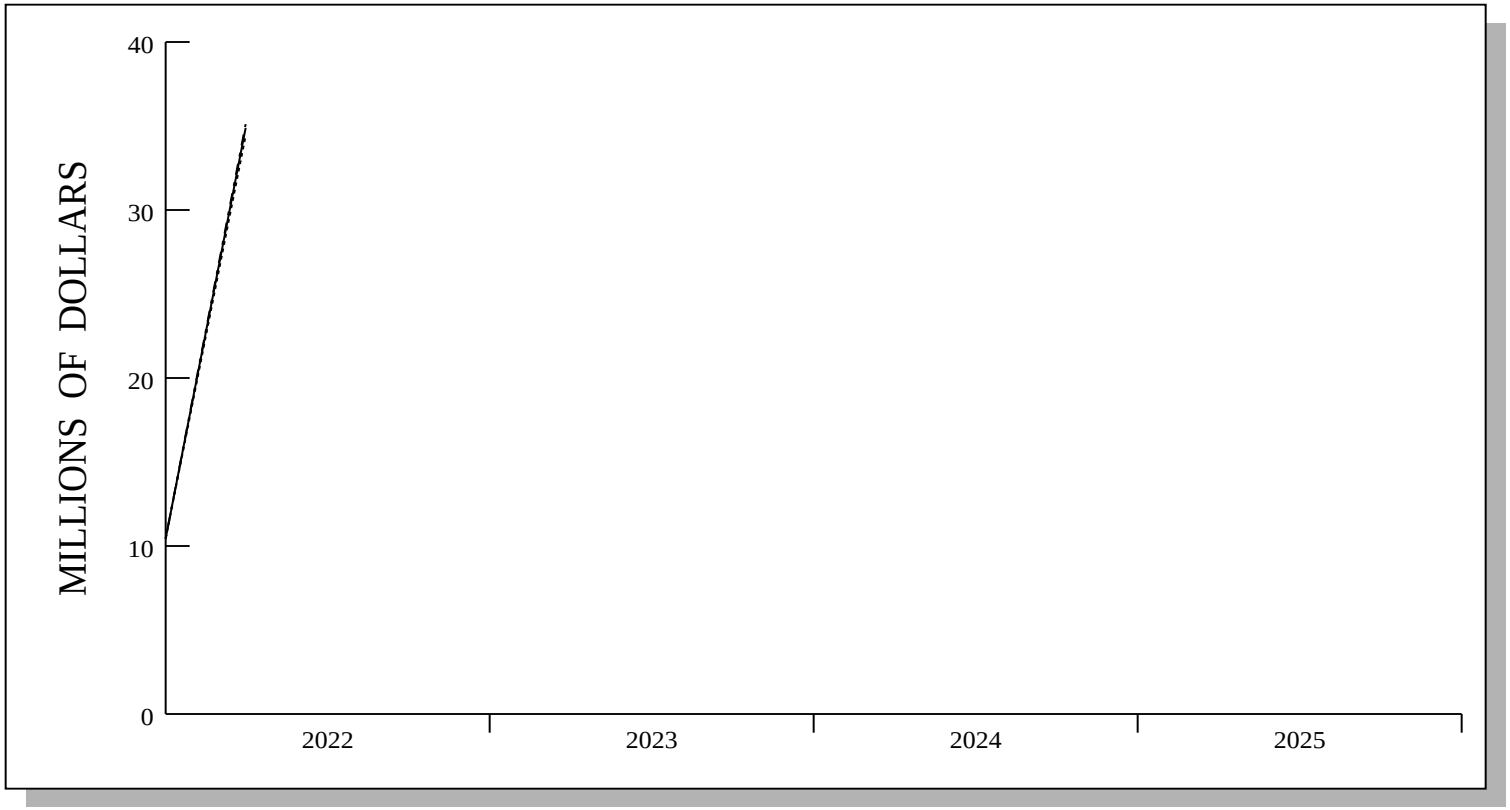
ASSET ALLOCATION

Domestic Equity	100.0%	$ 34,903,222
Total Portfolio	100.0%	$ 34,903,222

INVESTMENT RETURN

Market Value 12/2021	$ 10,607,527
Contribs / Withdrawals	24,000,000
Income	109,704
Capital Gains / Losses	185,991
Market Value 3/2022	$ 34,903,222

INVESTMENT GROWTH

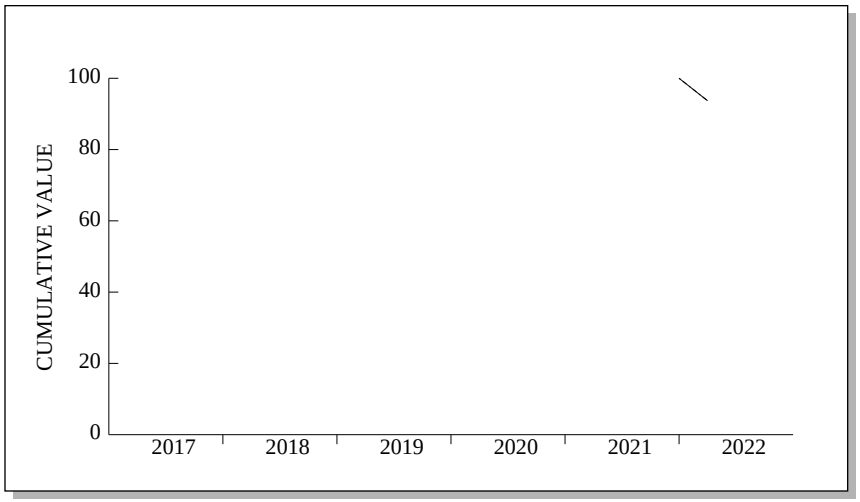


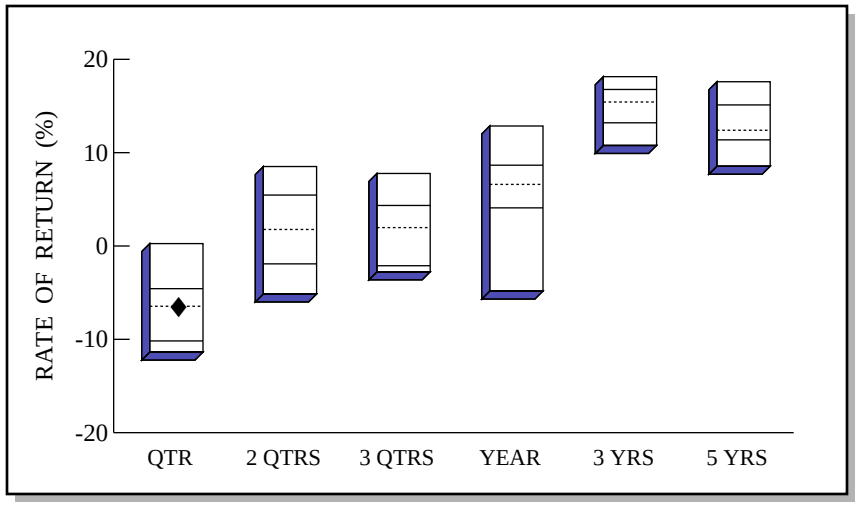
ACTUAL RETURN
7.0%
0.0%

VALUE ASSUMING
7.0% RETURN $ 35,129,261

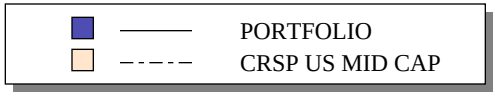
	LAST QUARTER	LAST QUARTER
BEGINNING VALUE	$ 10,607,527	$ 10,607,527
NET CONTRIBUTIONS	24,000,000	24,000,000
INVESTMENT RETURN	295,695	295,695
ENDING VALUE	$ 34,903,222	$ 34,903,222
INCOME	109,704	109,704
CAPITAL GAINS (LOSSES)	185,991	185,991
INVESTMENT RETURN	295,695	295,695

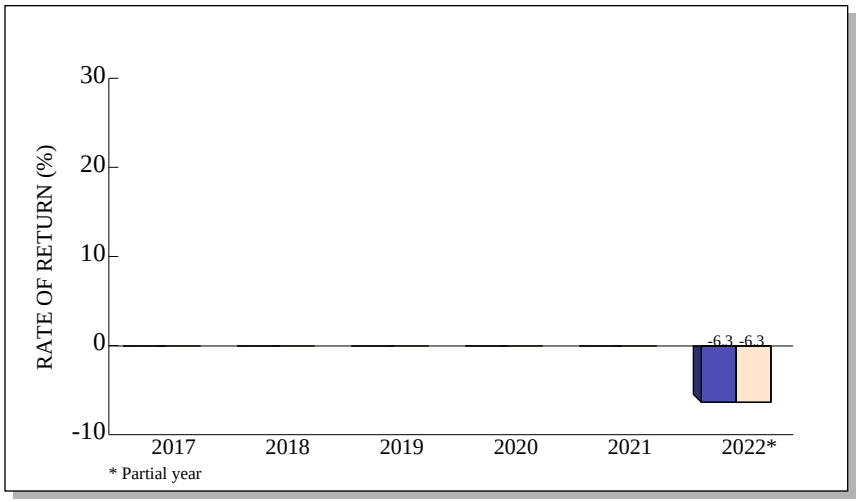
TOTAL RETURN COMPARISONS





Mid Cap Core Universe





	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
					------ANNUALIZED------	
RETURN	-6.3	----	----	----	----	----
(RANK)	(47)	----	----	----	----	----
5TH %ILE	0.3	8.5	7.8	12.9	18.1	17.6
25TH %ILE	-4.6	5.5	4.3	8.7	16.8	15.1
MEDIAN	-6.5	1.8	2.0	6.6	15.4	12.4
75TH %ILE	-10.2	-1.9	-2.1	4.1	13.2	11.4
95TH %ILE	-11.4	-5.2	-2.8	-4.8	10.8	8.5
CRSP US MC	***-6.3***	***1.2***	***1.2***	***8.9***	***15.7***	***13.0***

Mid Cap Core Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: CRSP US MID CAP INDEX

VARIATION FROM BENCHMARK

Total Quarters Observed	**1**
Quarters At or Above the Benchmark	**1**
Quarters Below the Benchmark	**0**
Batting Average	**1.000**

RATES OF RETURN

Date	Portfolio	Benchmark	Difference
3/22	-6.3	-6.3	0.0

CHESTER COUNTY EMPLOYEES RETIREMENT SYSTEM
MACQUARIE - INTERNATIONAL VALUE
PERFORMANCE REVIEW
MARCH 2022

DAHAB Associates, Inc.

© 1990, 2022

INVESTMENT RETURN

On March 31st, 2022, the Chester County Employees Retirement System's Macquarie International Value portfolio was valued at $35,390,106, representing an increase of $9,761,040 from the December quarter's ending value of $25,629,066. Last quarter, the Fund posted net contributions totaling $12,500,000, which overshadowed the account's $2,738,960 net investment loss that was sustained during the quarter. Because there were no income receipts during the first quarter, the portfolio's net investment losses were entirely made up of capital losses (realized and unrealized).

RELATIVE PERFORMANCE

Total Fund

During the first quarter, the Macquarie International Value portfolio lost 7.6%, which was 1.8% less than the MSCI EAFE Index's return of -5.8% and ranked in the 52nd percentile of the International Equity universe. Over the trailing twelve-month period, this portfolio returned -1.6%, which was 3.2% below the benchmark's 1.6% return, and ranked in the 45th percentile. Since December 2012, the portfolio returned 5.5% per annum and ranked in the 63rd percentile. For comparison, the MSCI EAFE Index returned an annualized 6.6% over the same period.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / YTD	1 Year	3 Year	5 Year	Since 12/12
Total Portfolio - Gross	-7.6	-1.6	5.1	4.5	5.5
INTERNATIONAL EQUITY RANK	(52)	(45)	(85)	(90)	(63)
Total Portfolio - Net	-7.7	-2.3	4.3	3.8	4.8
MSCI EAFE	-5.8	1.6	8.3	7.2	6.6
International Equity - Gross	-7.6	-1.6	5.1	4.5	5.5
INTERNATIONAL EQUITY RANK	(52)	(45)	(85)	(90)	(63)
MSCI EAFE	-5.8	1.6	8.3	7.2	6.6

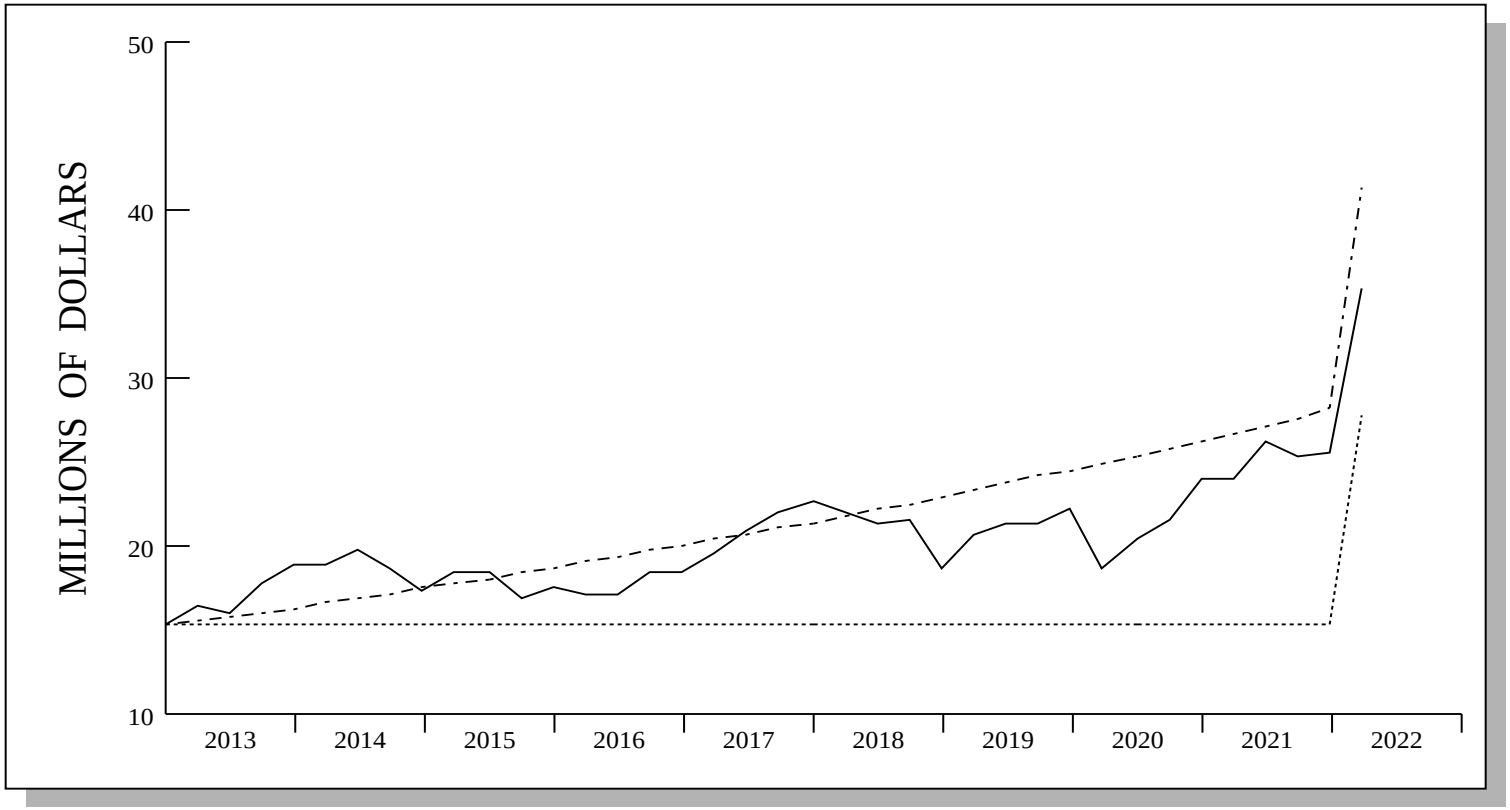
ASSET ALLOCATION

Int'l Equity	100.0%	$ 35,390,106
Total Portfolio	100.0%	$ 35,390,106

INVESTMENT RETURN

Market Value 12/2021	$ 25,629,066
Contribs / Withdrawals	12,500,000
Income	0
Capital Gains / Losses	- 2,738,960
Market Value 3/2022	$ 35,390,106

INVESTMENT GROWTH

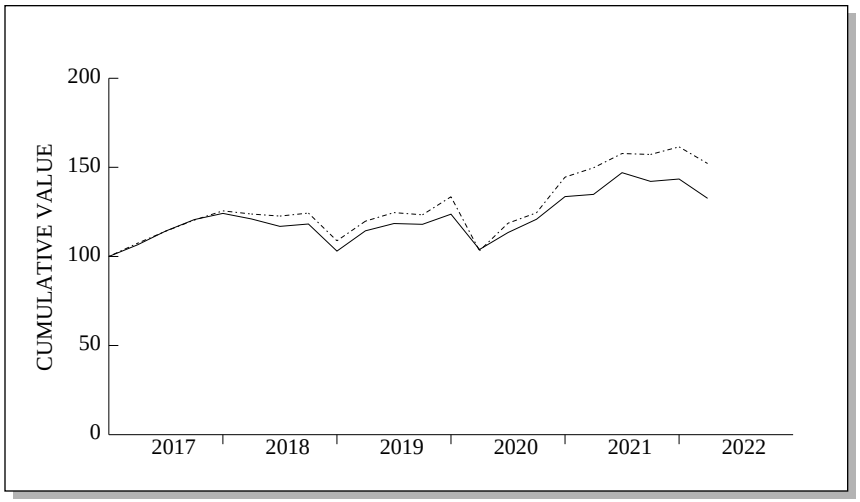


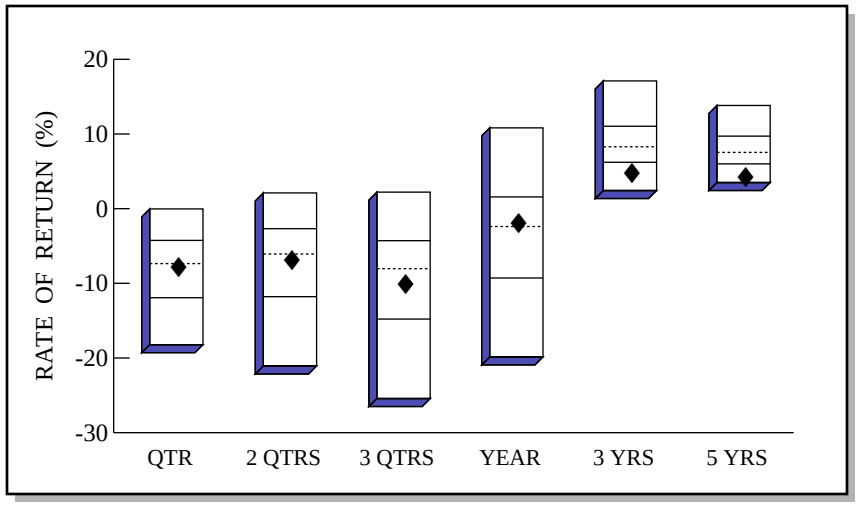
ACTUAL RETURN
7.0%
0.0%

VALUE ASSUMING
7.0% RETURN $ 41,386,122

	LAST QUARTER	PERIOD 12/12 - 3/22
BEGINNING VALUE	$ 25,629,066	$ 15,353,681
NET CONTRIBUTIONS	12,500,000	12,500,000
INVESTMENT RETURN	- 2,738,960	7,536,425
ENDING VALUE	$ 35,390,106	$ 35,390,106
INCOME	0	0
CAPITAL GAINS (LOSSES)	- 2,738,960	7,536,425
INVESTMENT RETURN	- 2,738,960	7,536,425

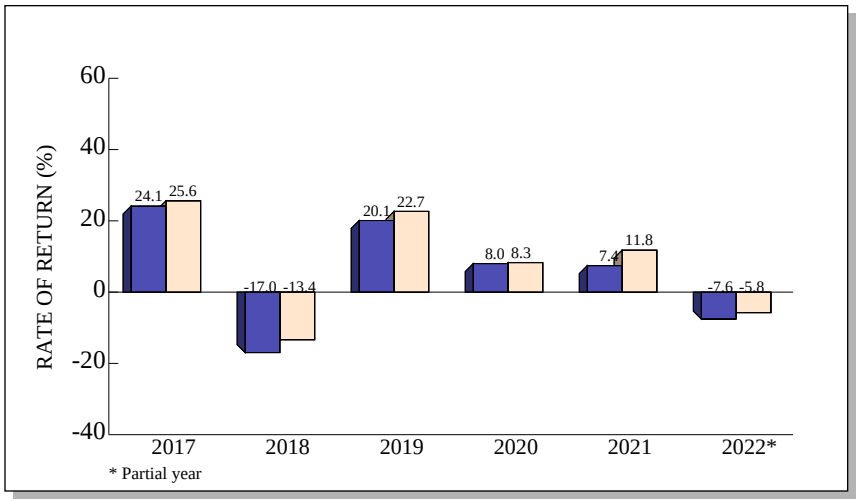
TOTAL RETURN COMPARISONS





International Equity Universe

PORTFOLIO
MSCI EAFE



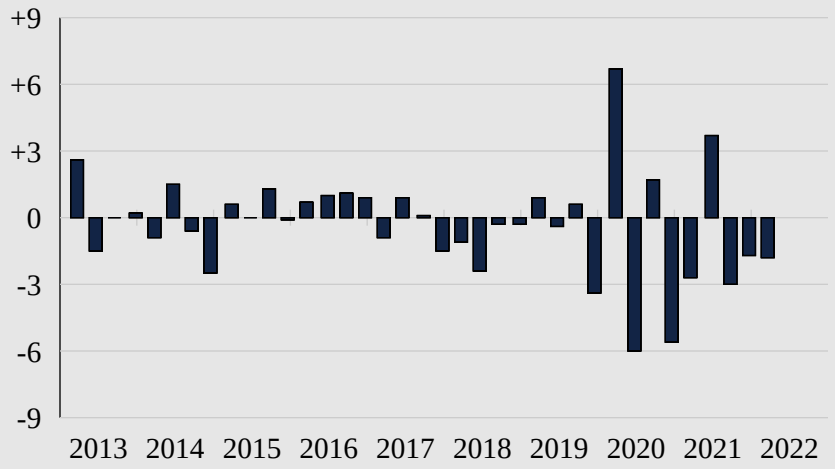
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
					------ANNUALIZED------	
RETURN	-7.6	-6.7	-9.8	-1.6	5.1	4.5
(RANK)	(52)	(55)	(59)	(45)	(85)	(90)
5TH %ILE	0.0	2.1	2.2	10.8	17.1	13.8
25TH %ILE	-4.3	-2.7	-4.3	1.6	11.1	9.7
MEDIAN	-7.4	-6.1	-8.1	-2.4	8.3	7.5
75TH %ILE	-11.9	-11.8	-14.8	-9.3	6.2	6.0
95TH %ILE	-18.2	-21.1	-25.4	-19.9	2.4	3.5
MSCI EAFE	***-5.8***	***-3.2***	***-3.5***	***1.6***	***8.3***	***7.2***

International Equity Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: MSCI EAFE

VARIATION FROM BENCHMARK



Total Quarters Observed	**37**
Quarters At or Above the Benchmark	**18**
Quarters Below the Benchmark	**19**
Batting Average	**.486**

RATES OF RETURN

Date	Portfolio	Benchmark	Difference
3/13	7.8	5.2	2.6
6/13	-2.2	-0.7	-1.5
9/13	11.6	11.6	0.0
12/13	5.9	5.7	0.2
3/14	-0.1	0.8	-0.9
6/14	5.8	4.3	1.5
9/14	-6.4	-5.8	-0.6
12/14	-6.0	-3.5	-2.5
3/15	5.6	5.0	0.6
6/15	0.8	0.8	0.0
9/15	-8.9	-10.2	1.3
12/15	4.6	4.7	-0.1
3/16	-2.2	-2.9	0.7
6/16	-0.2	-1.2	1.0
9/16	7.6	6.5	1.1
12/16	0.2	-0.7	0.9
3/17	6.5	7.4	-0.9
6/17	7.3	6.4	0.9
9/17	5.6	5.5	0.1
12/17	2.8	4.3	-1.5
3/18	-2.5	-1.4	-1.1
6/18	-3.4	-1.0	-2.4
9/18	1.1	1.4	-0.3
12/18	-12.8	-12.5	-0.3
3/19	11.0	10.1	0.9
6/19	3.6	4.0	-0.4
9/19	-0.4	-1.0	0.6
12/19	4.8	8.2	-3.4
3/20	-16.0	-22.7	6.7
6/20	9.1	15.1	-6.0
9/20	6.6	4.9	1.7
12/20	10.5	16.1	-5.6
3/21	0.9	3.6	-2.7
6/21	9.1	5.4	3.7
9/21	-3.4	-0.4	-3.0
12/21	1.0	2.7	-1.7
3/22	-7.6	-5.8	-1.8

CHESTER COUNTY EMPLOYEES RETIREMENT SYSTEM
WALTER SCOTT - NCS GROUP TRUST INTERNATIONAL FUND
PERFORMANCE REVIEW
MARCH 2022

DAHAB Associates, Inc.

© 1990, 2022

INVESTMENT RETURN

This portfolio was previously invested in the BNY Mellon International Stock Mutual Fund (DISRX). In December 2020, this investment was transferred to the NCS Group Trust International Fund.

On March 31st, 2022, the Chester County Employees Retirement System's Walter Scott NCS Group Trust International Fund was valued at $41,508,853, representing an increase of $7,351,197 from the December quarter's ending value of $34,157,656. Last quarter, the Fund posted net contributions totaling $12,436,618, which overshadowed the account's $5,085,421 net investment loss that was sustained during the quarter. Because there were no income receipts during the first quarter, the portfolio's net investment losses were entirely made up of capital losses (realized and unrealized).

RELATIVE PERFORMANCE

Total Fund

During the first quarter, the Walter Scott NCS Group Trust International Fund lost 11.7%, which was 6.4% less than the MSCI All Country World Ex US Index's return of -5.3% and ranked in the 74th percentile of the International Equity universe. Over the trailing twelve-month period, this portfolio returned 0.0%, which was 1.0% above the benchmark's -1.0% return, and ranked in the 35th percentile. Since December 2012, the portfolio returned 8.1% per annum and ranked in the 21st percentile. For comparison, the MSCI All Country World ex US returned an annualized 5.9% over the same period.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / YTD	1 Year	3 Year	5 Year	Since 12/12
Total Portfolio - Gross	-11.7	0.0	10.8	11.0	8.1
INTERNATIONAL EQUITY RANK	(74)	(35)	(27)	(15)	(21)
Total Portfolio - Net	-11.9	-0.8	9.9	10.1	7.1
ACWI ex US	-5.3	-1.0	8.0	7.3	5.9
International Equity - Gross	-11.7	0.0	10.8	11.0	8.1
INTERNATIONAL EQUITY RANK	(74)	(35)	(27)	(15)	(21)
ACWI ex US	-5.3	-1.0	8.0	7.3	5.9

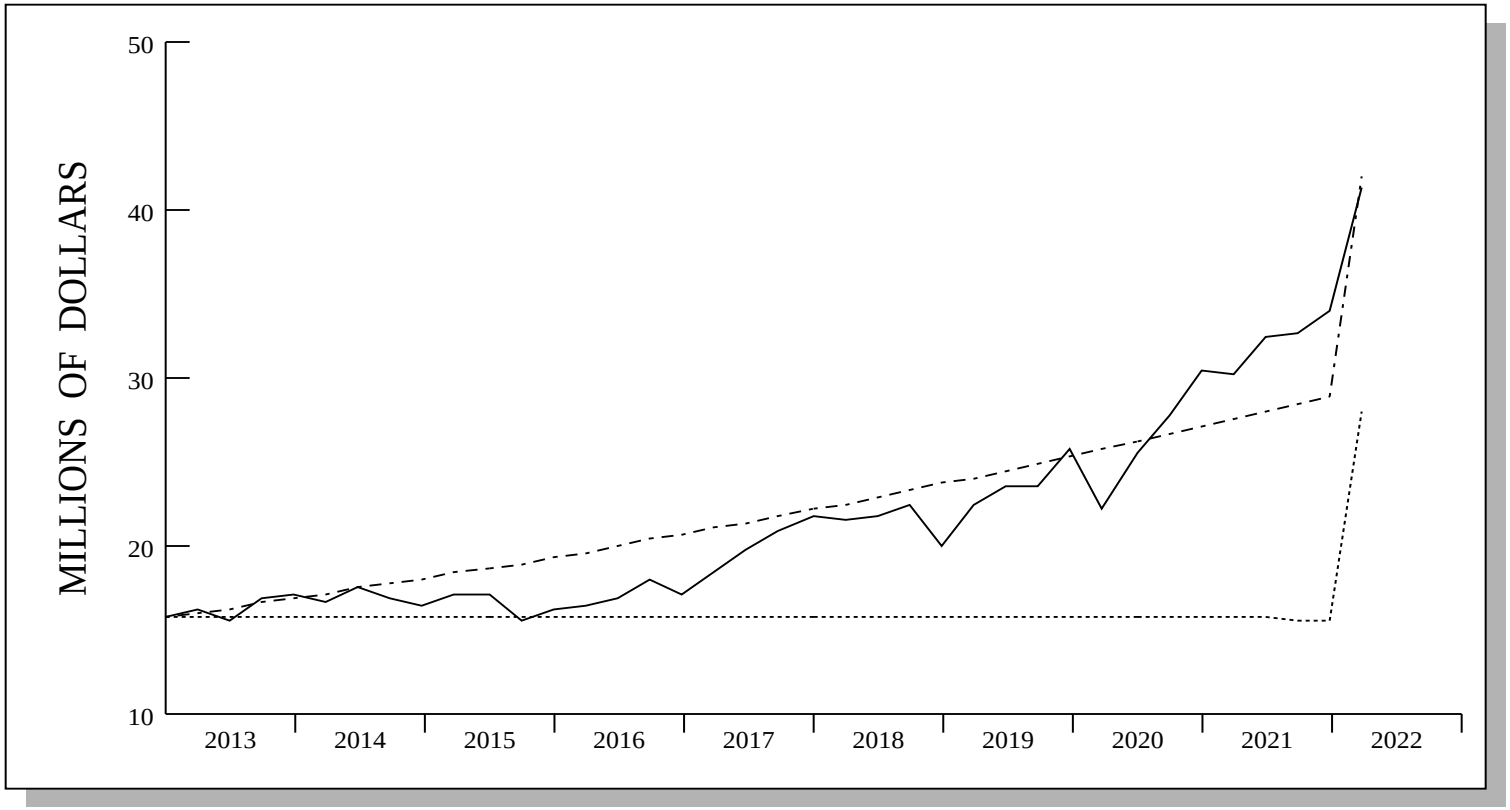
ASSET ALLOCATION

Int'l Equity	100.0%	$ 41,508,853
Total Portfolio	100.0%	$ 41,508,853

INVESTMENT RETURN

Market Value 12/2021	$ 34,157,656
Contribs / Withdrawals	12,436,618
Income	0
Capital Gains / Losses	- 5,085,421
Market Value 3/2022	$ 41,508,853

INVESTMENT GROWTH

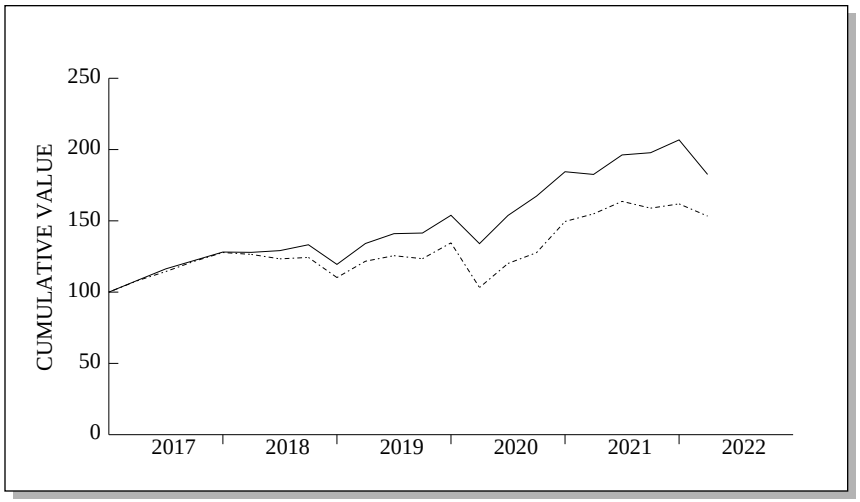


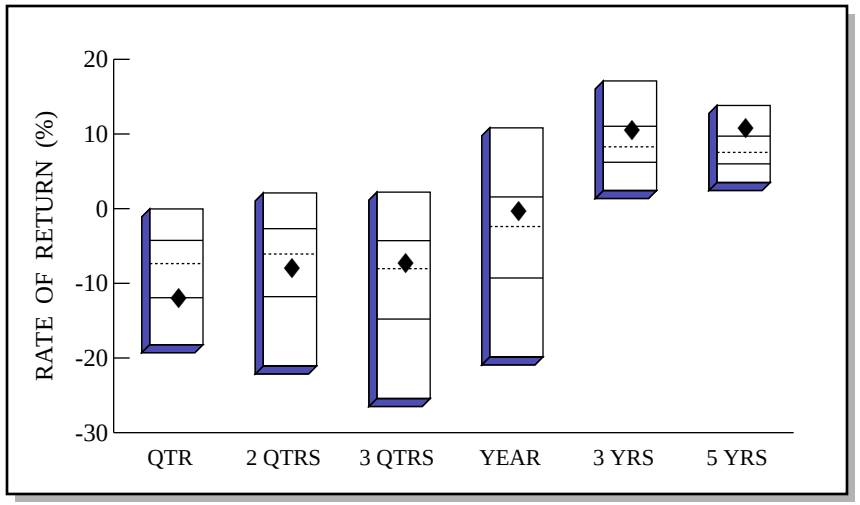
ACTUAL RETURN
7.0%
0.0%

VALUE ASSUMING
7.0% RETURN $ 42,076,566

	LAST QUARTER	PERIOD 12/12 - 3/22
BEGINNING VALUE	$ 34,157,656	$ 15,865,957
NET CONTRIBUTIONS	12,436,618	12,243,330
INVESTMENT RETURN	- 5,085,421	13,399,566
ENDING VALUE	$ 41,508,853	$ 41,508,853
INCOME	0	0
CAPITAL GAINS (LOSSES)	- 5,085,421	13,399,566
INVESTMENT RETURN	- 5,085,421	13,399,566

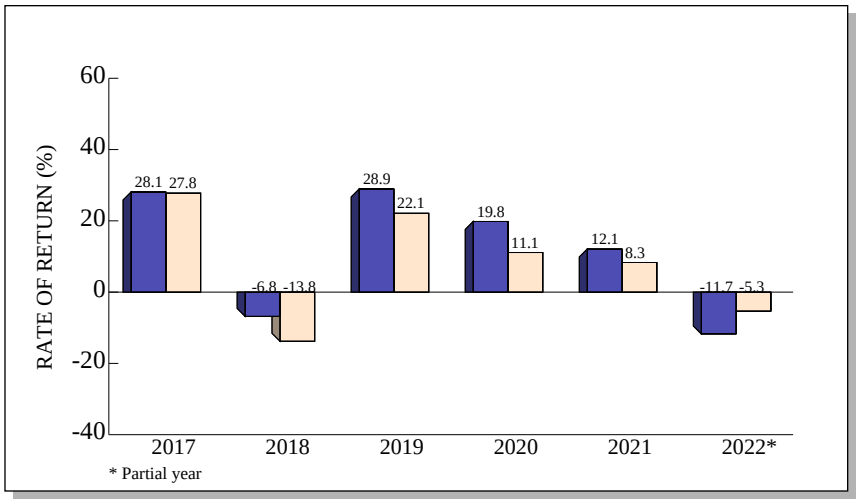
TOTAL RETURN COMPARISONS





International Equity Universe

PORTFOLIO
ACWI EX US



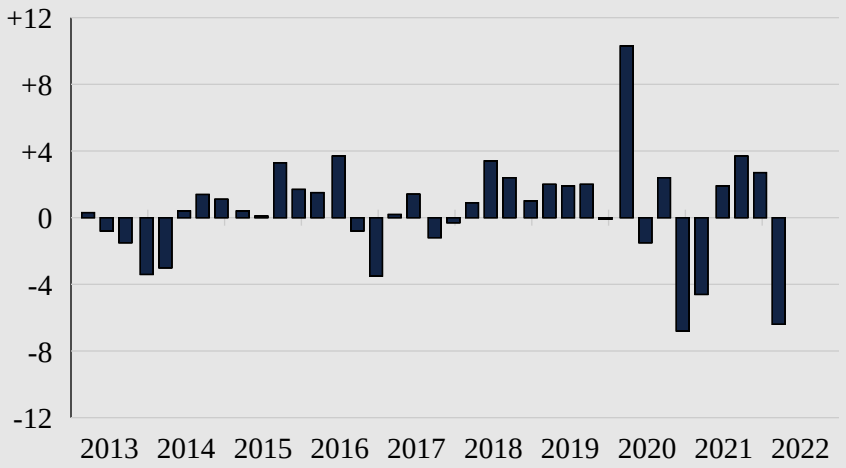
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
					------ANNUALIZED------	
RETURN	-11.7	-7.7	-7.0	0.0	10.8	11.0
(RANK)	(74)	(59)	(43)	(35)	(27)	(15)
5TH %ILE	0.0	2.1	2.2	10.8	17.1	13.8
25TH %ILE	-4.3	-2.7	-4.3	1.6	11.1	9.7
MEDIAN	-7.4	-6.1	-8.1	-2.4	8.3	7.5
75TH %ILE	-11.9	-11.8	-14.8	-9.3	6.2	6.0
95TH %ILE	-18.2	-21.1	-25.4	-19.9	2.4	3.5
ACWI ex US	***-5.3***	***-3.6***	***-6.3***	***-1.0***	***8.0***	***7.3***

International Equity Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: MSCI ALL COUNTRY WORLD EX US

VARIATION FROM BENCHMARK



Total Quarters Observed	**37**
Quarters At or Above the Benchmark	**24**
Quarters Below the Benchmark	**13**
Batting Average	**.649**

RATES OF RETURN

Date	Portfolio	Benchmark	Difference
3/13	3.6	3.3	0.3
6/13	-3.7	-2.9	-0.8
9/13	8.7	10.2	-1.5
12/13	1.4	4.8	-3.4
3/14	-2.4	0.6	-3.0
6/14	5.6	5.2	0.4
9/14	-3.8	-5.2	1.4
12/14	-2.7	-3.8	1.1
3/15	4.0	3.6	0.4
6/15	0.8	0.7	0.1
9/15	-8.8	-12.1	3.3
12/15	5.0	3.3	1.7
3/16	1.2	-0.3	1.5
6/16	3.3	-0.4	3.7
9/16	6.2	7.0	-0.8
12/16	-4.7	-1.2	-3.5
3/17	8.2	8.0	0.2
6/17	7.4	6.0	1.4
9/17	5.1	6.3	-1.2
12/17	4.8	5.1	-0.3
3/18	-0.2	-1.1	0.9
6/18	1.0	-2.4	3.4
9/18	3.2	0.8	2.4
12/18	-10.4	-11.4	1.0
3/19	12.4	10.4	2.0
6/19	5.1	3.2	1.9
9/19	0.3	-1.7	2.0
12/19	8.9	9.0	-0.1
3/20	-13.0	-23.3	10.3
6/20	14.8	16.3	-1.5
9/20	8.8	6.4	2.4
12/20	10.3	17.1	-6.8
3/21	-1.0	3.6	-4.6
6/21	7.5	5.6	1.9
9/21	0.8	-2.9	3.7
12/21	4.6	1.9	2.7
3/22	-11.7	-5.3	-6.4

CHESTER COUNTY EMPLOYEES RETIREMENT SYSTEM
VANGUARD - EMERGING MARKETS INDEX
PERFORMANCE REVIEW
MARCH 2022

DAHAB Associates, Inc.

© 1990, 2022

INVESTMENT RETURN

On March 31st, 2022, the Chester County Employees Retirement System's Vanguard Emerging Markets Index portfolio was valued at $26,752,478, a decrease of $1,781,887 from the December ending value of $28,534,365. Last quarter, the account recorded no net contributions or withdrawals, while recording a net investment loss for the quarter of $1,781,887. Net investment loss was composed of income receipts totaling $76,049 and $1,857,936 in net realized and unrealized capital losses.

RELATIVE PERFORMANCE

The ticker for this investment is VEMIX.

Total Fund

For the first quarter, the Vanguard Emerging Markets Index portfolio returned -6.2%, which was 0.7% below the FTSE All Cap EM China A Inclusion's return of -5.5% and ranked in the 44th percentile of the Emerging Markets universe.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / YTD	1 Year	3 Year	5 Year	Since 12/21
Total Portfolio - Gross	-6.2	----	----	----	-6.2
EMERGING MARKETS RANK	(44)	----	----	----	(44)
Total Portfolio - Net	-6.2	----	----	----	-6.2
FTSE AC EM	-5.5	-7.0	6.2	6.2	-5.5
Emerging Markets Equity - Gross	-6.2	----	----	----	-6.2
EMERGING MARKETS RANK	(44)	----	----	----	(44)
FTSE AC EM	-5.5	-7.0	6.2	6.2	-5.5

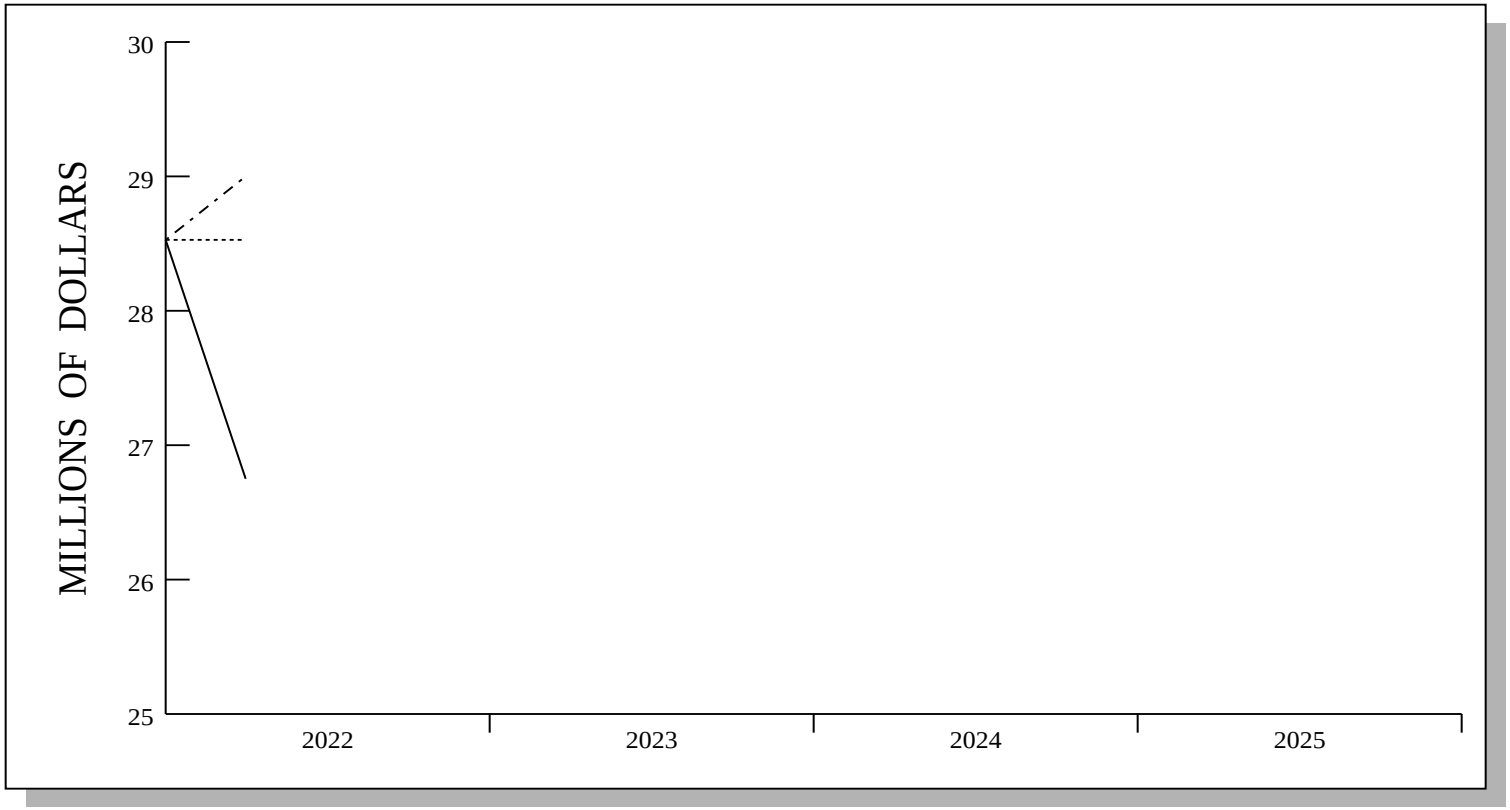
ASSET ALLOCATION

Emerging Markets	100.0%	$ 26,752,478
Total Portfolio	100.0%	$ 26,752,478

INVESTMENT RETURN

Market Value 12/2021	$ 28,534,365
Contribs / Withdrawals	0
Income	76,049
Capital Gains / Losses	- 1,857,936
Market Value 3/2022	$ 26,752,478

INVESTMENT GROWTH

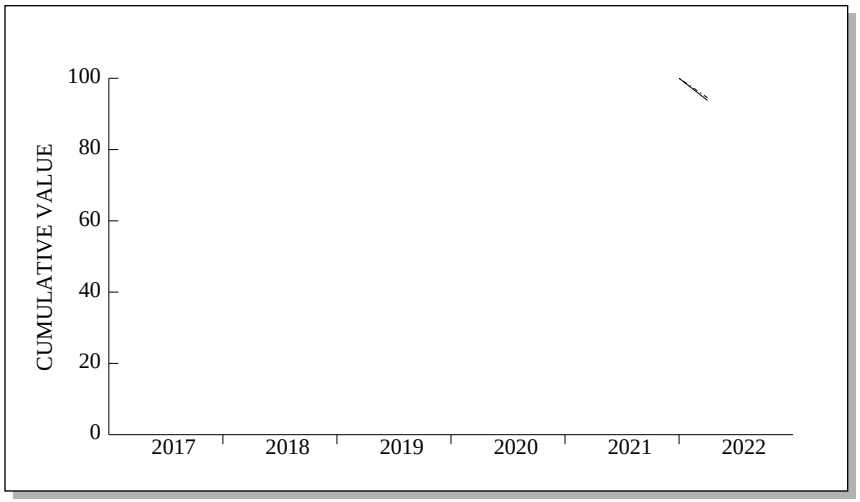


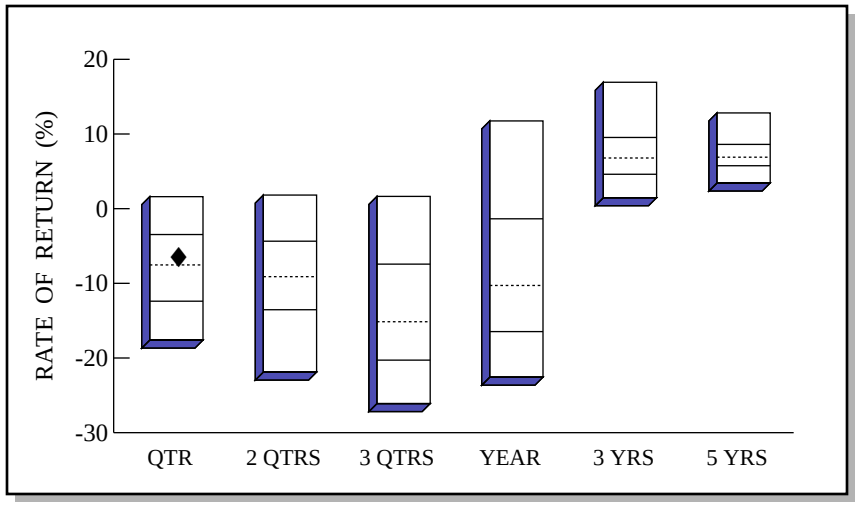
ACTUAL RETURN
7.0%
0.0%

VALUE ASSUMING
7.0% RETURN $ 29,021,119

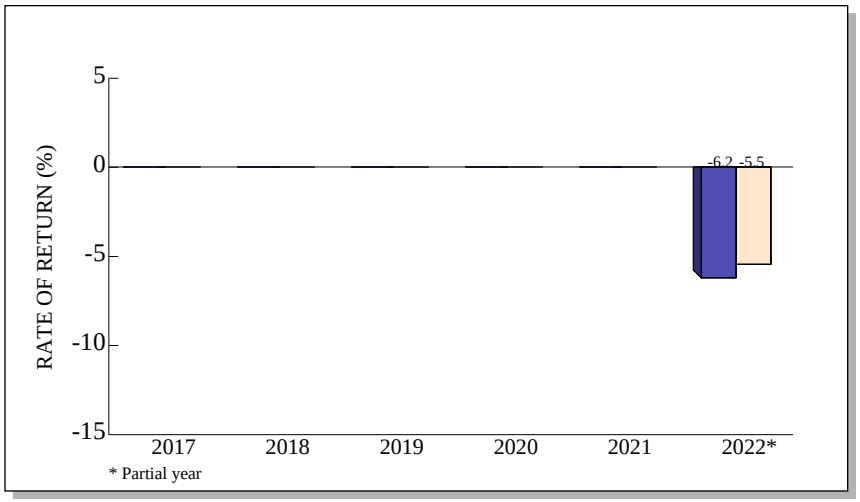
	LAST QUARTER	LAST QUARTER
BEGINNING VALUE	$ 28,534,365	$ 28,534,365
NET CONTRIBUTIONS	0	0
INVESTMENT RETURN	- 1,781,887	- 1,781,887
ENDING VALUE	$ 26,752,478	$ 26,752,478
INCOME	76,049	76,049
CAPITAL GAINS (LOSSES)	- 1,857,936	- 1,857,936
INVESTMENT RETURN	- 1,781,887	- 1,781,887

TOTAL RETURN COMPARISONS





Emerging Markets Universe



	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
					------ANNUALIZED------	
RETURN	-6.2	----	----	----	----	----
(RANK)	(44)	----	----	----	----	----
5TH %ILE	1.6	1.8	1.6	11.8	16.9	12.8
25TH %ILE	-3.5	-4.3	-7.4	-1.4	9.5	8.6
MEDIAN	-7.5	-9.1	-15.2	-10.3	6.8	6.9
75TH %ILE	-12.4	-13.5	-20.3	-16.5	4.6	5.7
95TH %ILE	-17.6	-21.9	-26.1	-22.6	1.5	3.4
FTSE AC EM	***-5.5***	***-5.9***	***-12.0***	***-7.0***	***6.2***	***6.2***

Emerging Markets Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: FTSE ALL CAP EM CHINA A INCLUSION

VARIATION FROM BENCHMARK

Total Quarters Observed	**1**
Quarters At or Above the Benchmark	**0**
Quarters Below the Benchmark	**1**
Batting Average	**.000**

RATES OF RETURN

Date	Portfolio	Benchmark	Difference
3/22	-6.2	-5.5	-0.7

CHESTER COUNTY EMPLOYEES RETIREMENT SYSTEM
BANNER RIDGE - DSCO FUND I OFFSHORE
PERFORMANCE REVIEW
MARCH 2022

DAHAB Associates, Inc.

© 1990, 2022

INVESTMENT RETURN

On March 31st, 2022, the Chester County Employees Retirement System's Banner Ridge DSCO Fund I Offshore portfolio was valued at $2,253,000.

RELATIVE PERFORMANCE

Total Fund

Performance for the Banner Ridge DSCO Fund I Offshore portfolio and its benchmark, the Cambridge Private Equity Index were not available at the time of this report. A flat return of 0.0% was assumed for the quarter.

Over the trailing year, the account returned 75.7%, which was 47.7% greater than the benchmark's 28.0% performance.

Private Equity Investor Report
Banner Ridge DSCO Fund I (Offshore), LP

Net IRR Since Inception:	**48.81%**			
Market Value:	**$ 2,253,000**		Report as of:	3/31/2022
Total Commitment:	$ 10,000,000		Last Statement:	9/30/2021
Committed Capital	$ 3,237,768	32.4%		
Unfunded Commitment:	$ 6,762,232	67.6%		

Date	Credit Deployed	% of Commitment	Capital Contributions	% of Commitment	Distributions
2021-03-31	$ 2,173,000	21.7%	$ -	-	$ -
2021-12-17	$ -	-	$ 1,064,768	10.6%	$ -
Total	**$ 2,173,000**	**21.7%**	**$ 1,064,768**	**10.6%**	**$ -**

This portfolio has been funded through a combination of capital contributions from Chesco and credit deployed by a credit facility. The market value shown here is a liquidating value, net of liabilities to the credit facility.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / YTD	1 Year	3 Year	5 Year
Total Portfolio - Gross	0.0	75.7	----	----
Total Portfolio - Net	0.0	64.2	----	----
Cambridge PE	0.0	28.0	23.6	19.9
Private Equity - Gross	0.0	75.7	----	----
Cambridge PE	0.0	28.0	23.6	19.9

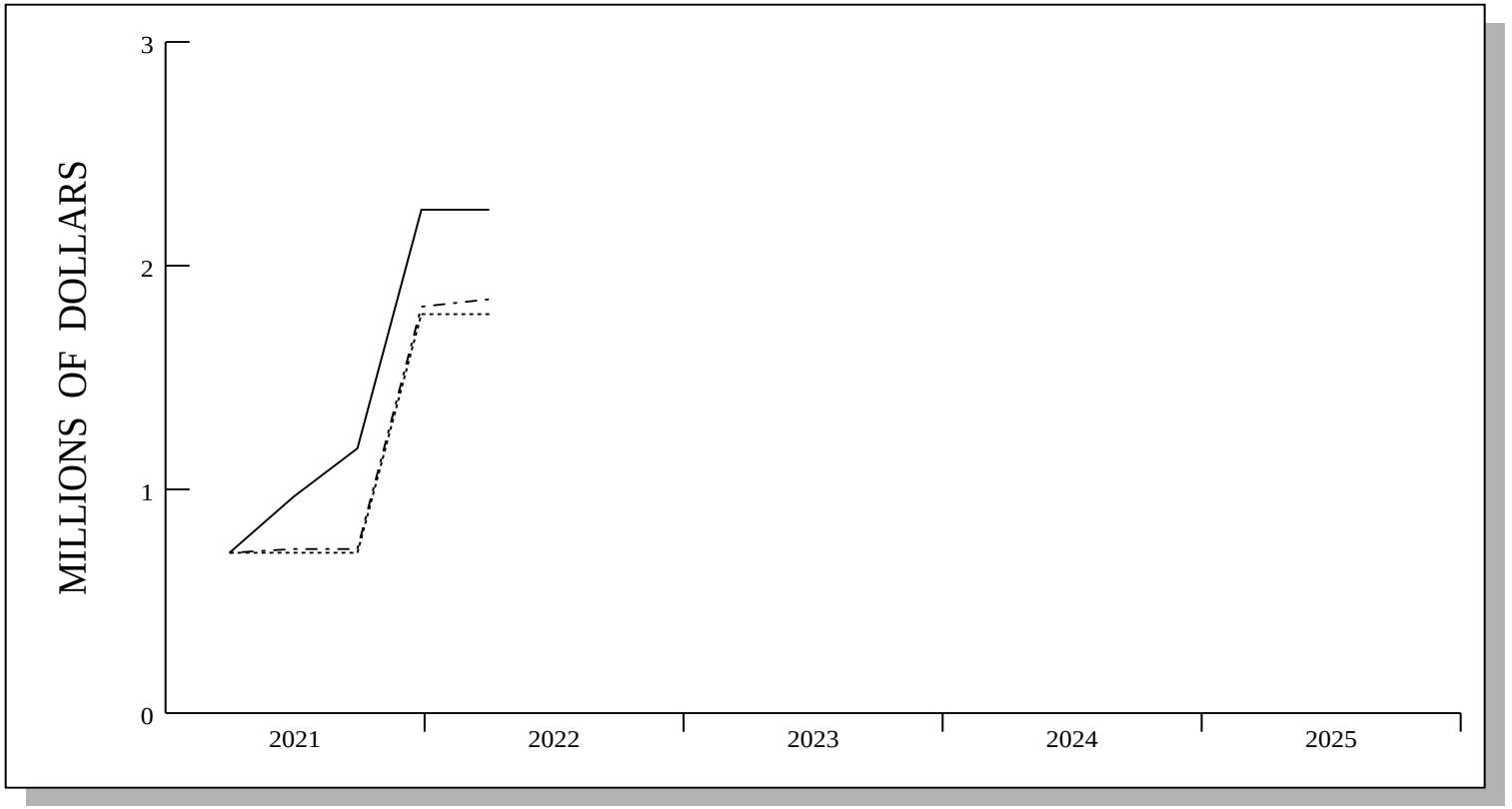
ASSET ALLOCATION

Private Equity	100.0%	$ 2,253,000
Total Portfolio	100.0%	$ 2,253,000

INVESTMENT RETURN

Market Value 12/2021	$ 2,253,000
Contribs / Withdrawals	0
Income	0
Capital Gains / Losses	0
Market Value 3/2022	$ 2,253,000

INVESTMENT GROWTH



ACTUAL RETURN
7.0%
0.0%

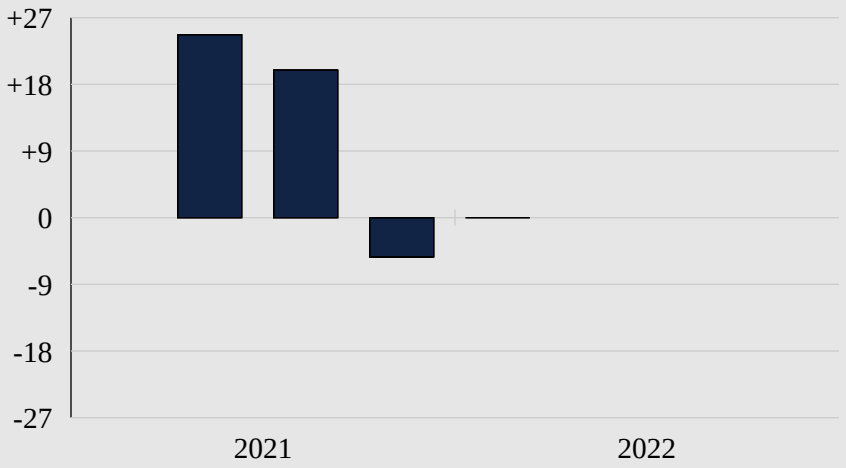
VALUE ASSUMING
7.0% RETURN $ 1,860,325

	LAST QUARTER	ONE YEAR
BEGINNING VALUE	$ 2,253,000	$ 723,675
NET CONTRIBUTIONS	0	1,064,768
INVESTMENT RETURN	0	464,557
ENDING VALUE	$ 2,253,000	$ 2,253,000
INCOME	0	0
CAPITAL GAINS (LOSSES)	0	464,557
INVESTMENT RETURN	0	464,557

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: CAMBRIDGE US PRIVATE EQUITY

VARIATION FROM BENCHMARK



Total Quarters Observed	**4**
Quarters At or Above the Benchmark	**3**
Quarters Below the Benchmark	**1**
Batting Average	**.750**

RATES OF RETURN

Date	Portfolio	Benchmark	Difference
6/21	39.5	14.8	24.7
9/21	25.9	6.0	19.9
12/21	0.0	5.3	-5.3
3/22	0.0	0.0	0.0

CHESTER COUNTY EMPLOYEES RETIREMENT SYSTEM
BEN FRANKLIN TECHNOLOGY PARTNERS - VENTURE CHESCO
PERFORMANCE REVIEW
MARCH 2022

DAHAB Associates, Inc.

© 1990, 2022

INVESTMENT RETURN

On March 31st, 2022, the Chester County Employees Retirement System's Ben Franklin Technology Partners Venture Chesco portfolio was valued at $918,065, representing an increase of $273,412 from the December quarter's ending value of $644,653. Last quarter, the Fund posted net contributions totaling $280,000, which overshadowed the account's $6,588 net investment loss that was sustained during the quarter.

RELATIVE PERFORMANCE

Total Fund

A current quarter valuation for Ben Franklin Technology Partners Venture Chesco portfolio and its benchmark, the Cambridge Private Equity Index were not available at the time of this report. Current quarter performance for the portfolio is the result of a capital contribution for an item that had been previously marked down below its cost. A flat return of 0.0% was assumed for the index.

During the first quarter, the Ben Franklin Technology Partners Venture Chesco portfolio returned -0.8%. Over the trailing year, the account returned -9.9%, which was 37.9% less than the benchmark's 28.0% return. Since September 2018, the portfolio returned -15.7% per annum, while the Cambridge US Private Equity returned an annualized 20.9% over the same time frame.

Private Equity Investor Report
Ben Franklin Technology Partners - Venture Chesco

Net IRR Since Inception:	**-18.36%**	Report as of:
Market Value:	**$918,065**	3/31/2022
Total Committed Capital:	$1,140,000	Last Statement:
Cost Basis for Fees:	$1,040,000	12/31/2021

Date	Capital Calls	Distributions	Fees
Q3 2018	$ 100,000	$ -	$ 1,775
Q4 2018	$ -	$ -	$ 1,538
Q1 2019	$ 205,000	$ -	$ 2,038
Q2 2019	$ -	$ -	$ 2,288
Q3 2019	$ -	$ -	$ 2,288
Q4 2019	$ -	$ -	$ 2,288
Q1 2020	$ 25,000	$ -	$ 1,326
Q2 2020	$ -	$ -	$ 2,475
Q3 2020	$ -	$ -	$ 2,125
Q4 2020	$ 250,000	$ -	$ 4,663
Q1 2021	$ -	$ -	$ 6,138
Q2 2021	$ 280,000	$ -	$ 6,525
Q3 2021	$ -	$ -	$ 8,550
Q4 2021	$ -	$ -	$ 7,800
Q1 2022	$ 280,000	$ -	$ 7,800
Total	**$ 1,140,000**	**$ -**	**$ 59,613**

Fees for Q3 and Q4 of 2021 and Q1 of 2022 are estimated.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / YTD	1 Year	3 Year	5 Year	Since 09/18
Total Portfolio - Gross	-0.8	-9.9	-18.1	----	-15.7
Total Portfolio - Net	-1.7	-13.6	-21.3	----	-19.2
Cambridge PE	0.0	28.0	23.6	19.9	20.9
Private Equity - Gross	-0.8	-9.9	-18.1	----	-15.7
Cambridge PE	0.0	28.0	23.6	19.9	20.9

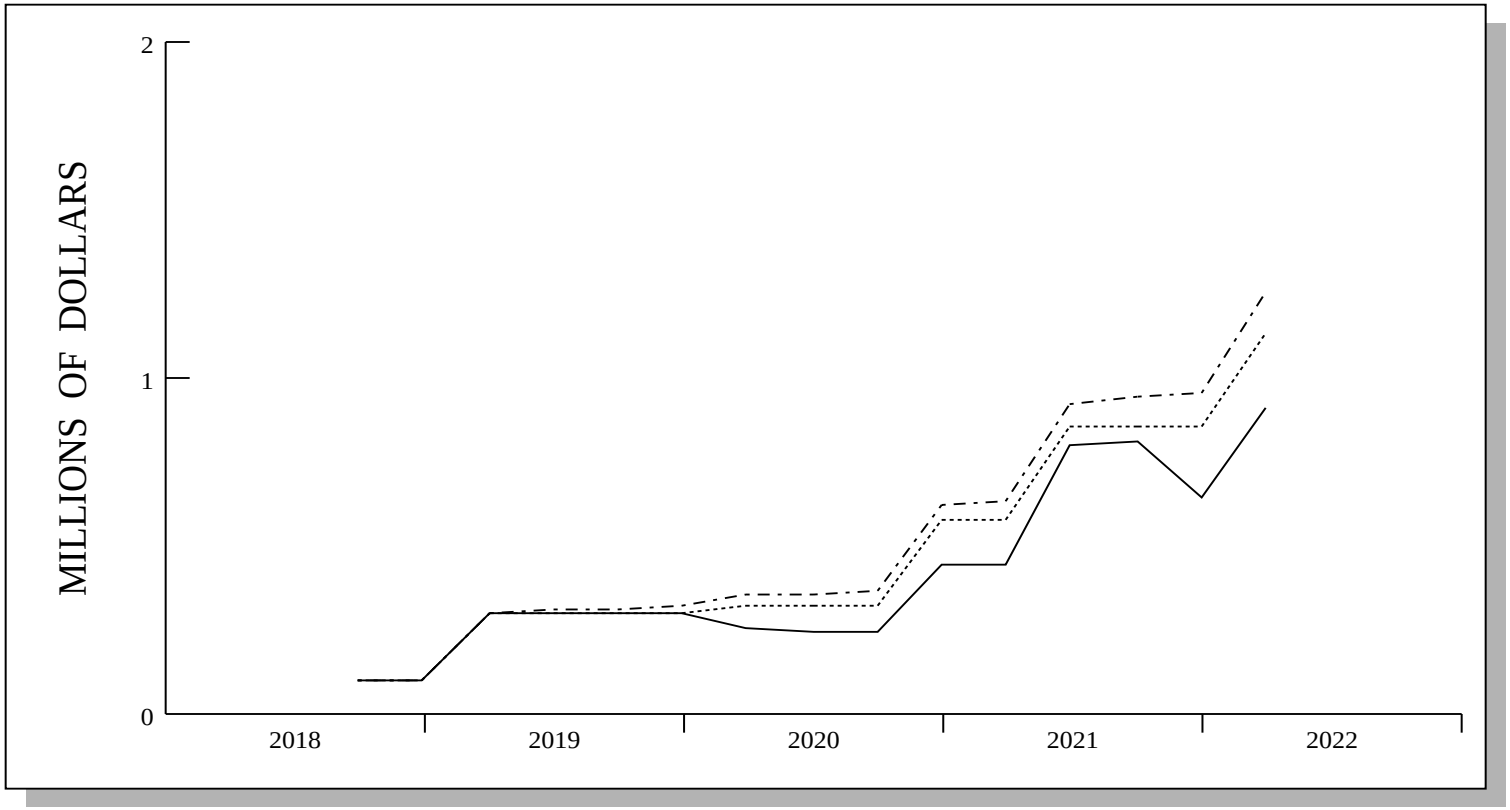
ASSET ALLOCATION

Private Equity	100.0%	$ 918,065
Total Portfolio	100.0%	$ 918,065

INVESTMENT RETURN

Market Value 12/2021	$ 644,653
Contribs / Withdrawals	280,000
Income	0
Capital Gains / Losses	- 6,588
Market Value 3/2022	$ 918,065

INVESTMENT GROWTH



ACTUAL RETURN
7.0%
0.0%

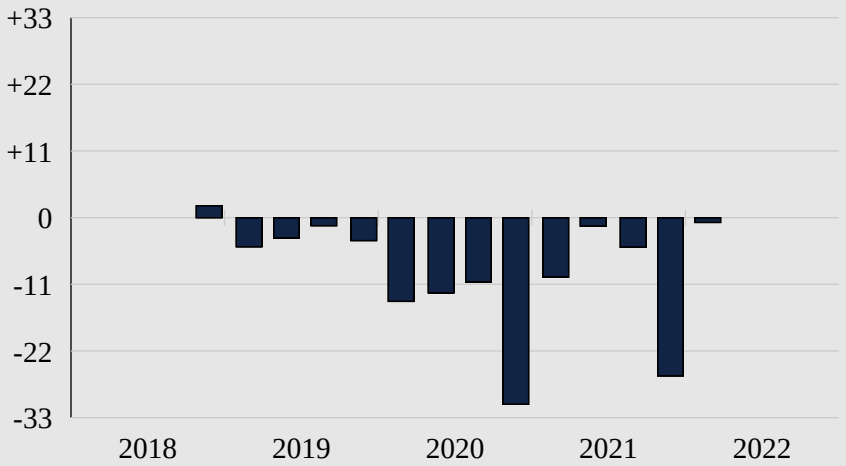
VALUE ASSUMING
7.0% RETURN $ 1,262,616

	LAST QUARTER	PERIOD 9/18 - 3/22
BEGINNING VALUE	$ 644,653	$ 100,000
NET CONTRIBUTIONS	280,000	1,040,000
INVESTMENT RETURN	- 6,588	-221,935
ENDING VALUE	$ 918,065	$ 918,065
INCOME	0	0
CAPITAL GAINS (LOSSES)	- 6,588	-221,935
INVESTMENT RETURN	- 6,588	-221,935

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: CAMBRIDGE US PRIVATE EQUITY

VARIATION FROM BENCHMARK



Total Quarters Observed	**14**
Quarters At or Above the Benchmark	**1**
Quarters Below the Benchmark	**13**
Batting Average	**.071**

RATES OF RETURN

Date	Portfolio	Benchmark	Difference
12/18	0.0	-2.0	2.0
3/19	0.0	4.8	-4.8
6/19	0.0	3.4	-3.4
9/19	0.0	1.3	-1.3
12/19	0.0	3.8	-3.8
3/20	-23.9	-10.1	-13.8
6/20	-3.0	9.4	-12.4
9/20	1.2	11.8	-10.6
12/20	-18.6	12.2	-30.8
3/21	0.2	10.0	-9.8
6/21	13.4	14.8	-1.4
9/21	1.1	6.0	-4.9
12/21	-20.8	5.3	-26.1
3/22	-0.8	0.0	-0.8

CHESTER COUNTY EMPLOYEES RETIREMENT SYSTEM
SIGULER GUFF - SMALL BUYOUT OPPORTUNITIES FUND IV
PERFORMANCE REVIEW
MARCH 2022

DAHAB Associates, Inc.

© 1990, 2022

INVESTMENT RETURN

A preliminary statement was provided by Siguler Guff. These figures will be revised when the final statement is available.

On March 31st, 2022, the Chester County Employees Retirement System's Siguler Guff Small Buyout Opportunities Fund IV portfolio was valued at $3,830,798, representing an increase of $619,249 from the December quarter's ending value of $3,211,549. Last quarter, the Fund posted net contributions equaling $398,566 plus a net investment gain equaling $220,683. Since there were no income receipts during the quarter, the portfolio's net investment return was the result of net realized and unrealized capital gains totaling $220,683.

RELATIVE PERFORMANCE

Total Fund

Performance for the Cambridge Private Equity Index was not available at the time of this report. A flat return of 0.0% was assumed for the quarter.

In the first quarter, the Siguler Guff Small Buyout Opportunities Fund IV portfolio returned 6.6%. Over the trailing twelve-month period, the portfolio returned 30.5%, which was 2.5% above the benchmark's 28.0% performance. Since December 2019, the Siguler Guff Small Buyout Opportunities Fund IV portfolio returned 32.5% annualized, while the Cambridge US Private Equity returned an annualized 27.9% over the same period.

Siguler Guff
Small Buyout Opportunities IV

Net IRR Since Inception:	**28.06%**	
Market Value:	**$3,830,798**	
Total Commitment:	$5,000,000	
Unfunded Commitment:	$2,029,407	40.6%
Report as of:	3/31/2022	
Last Statement:	3/31/2022 *(Preliminary)*	

Siguler Guff has provided an estimated capital account balance that is subject to revision.

Date	Capital Calls	Recallable Distributions	Ordinary Distributions	Special Distributions	Interest Paid/(Received)
2019-12-13	$ 227,500	$ -	$ -	$ -	$ -
2020-01-27	$ 182,500	$ -	$ -	$ -	$ -
2020-02-28	$ 45,000	$ -	$ -	$ -	$ -
2020-03-17	$ 190,000	$ -	$ -	$ -	$ 464.54
2020-03-26	$ -	$ -	$ -	$ 2,088.87	$ -
2020-04-13	$ 77,500	$ -	$ -	$ -	$ -
2020-05-11	$ 25,000	$ -	$ -	$ -	$ -
2020-05-26	$ 50,000	$ -	$ -	$ -	$ -
2020-06-25	$ -	$ -	$ -	$ 687.50	$ -
2020-07-13	$ 25,000	$ -	$ -	$ -	$ -
2020-09-04	$ 25,000	$ -	$ -	$ -	$ -
2020-09-24	$ -	$ -	$ -	$ 687.50	$ -
2020-10-13	$ 247,500	$ -	$ -	$ -	$ -
2020-12-16	$ 65,000	$ -	$ -	$ -	$ -
2020-12-17	$ -	$ -	$ -	$ 687.50	$ -
2021-01-20	$ 77,500	$ -	$ -	$ -	$ -
2021-02-22	$ 135,000	$ -	$ -	$ -	$ -
2021-03-22	$ 72,500	$ -	$ -	$ -	$ -
2021-03-25	$ -	$ -	$ -	$ 687.50	$ -
2021-04-23	$ 50,000	$ -	$ -	$ -	$ -
2021-05-24	$ 110,000	$ 3,564	$ 20,118	$ -	$ -
2021-06-17	$ 197,500	$ -	$ -	$ -	$ -
2021-06-24	$ -	$ -	$ -	$ 687.50	$ -
2021-07-21	$ 47,500	$ -	$ -	$ -	$ -
2021-08-19	$ 150,000	$ -	$ -	$ -	$ -
2021-09-24	$ -	$ -	$ -	$ 687.50	$ -
2021-09-27	$ 190,000	$ -	$ -	$ -	$ -
2021-10-25	$ 92,500	$ -	$ -	$ -	$ -
2021-11-29	$ 65,000	$ -	$ -	$ -	$ -
2021-12-17	$ -	$ -	$ -	$ 687.50	$ -
2021-12-22	$ 185,000	$ -	$ 36,906	$ -	$ -
2022-01-18	$ 105,000	$ -	$ -	$ -	$ -
2022-03-10	$ 347,500	$ -	$ -	$ -	$ -
2022-03-18	$ -	$ 10,843	$ 42,404	$ -	$ -
2022-03-25	$ -	$ -	$ -	$ 687.50	$ -
Total	**$ 2,985,000**	**$ 14,407**	**$ 99,428**	**$ 7,588.87**	**$ 464.54**

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / YTD	1 Year	3 Year	5 Year	Since 12/19
Total Portfolio - Gross	6.6	30.5	----	----	32.5
Total Portfolio - Net	6.6	26.7	----	----	24.2
Cambridge PE	0.0	28.0	23.6	19.9	27.9
Private Equity - Gross	6.6	30.5	----	----	32.5
Cambridge PE	0.0	28.0	23.6	19.9	27.9

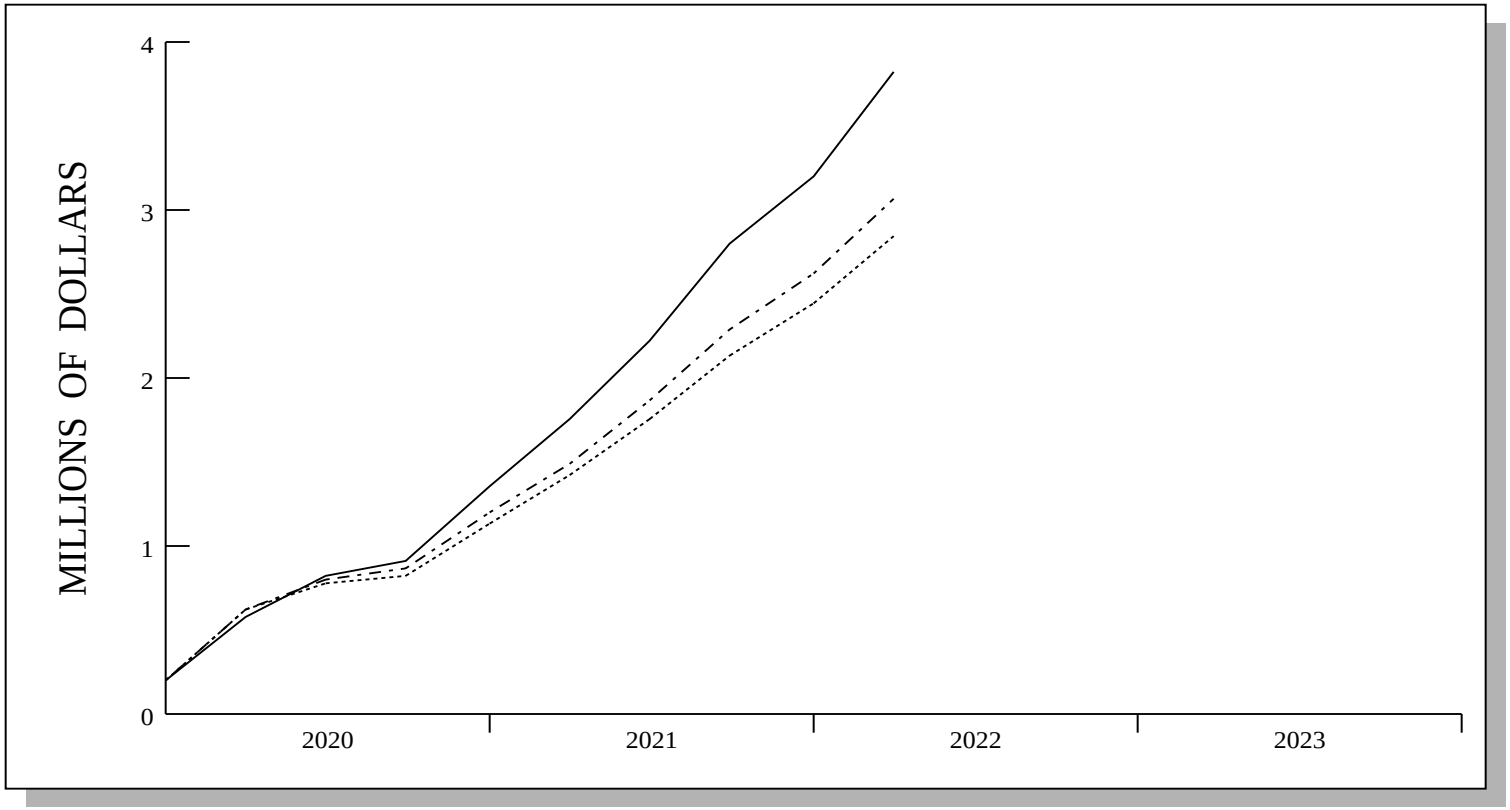
ASSET ALLOCATION

Private Equity	100.0%	$ 3,830,798
Total Portfolio	100.0%	$ 3,830,798

INVESTMENT RETURN

Market Value 12/2021	$ 3,211,549
Contribs / Withdrawals	398,566
Income	0
Capital Gains / Losses	220,683
Market Value 3/2022	$ 3,830,798

INVESTMENT GROWTH



ACTUAL RETURN
7.0%
0.0%

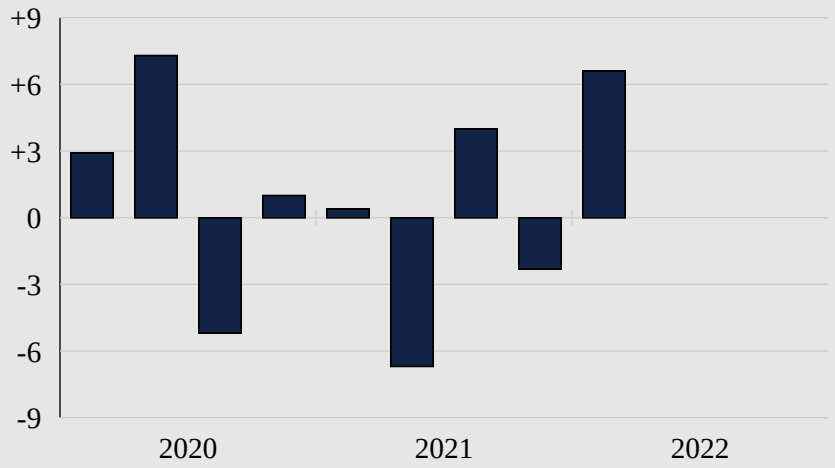
VALUE ASSUMING
7.0% RETURN $ 3,083,785

	LAST QUARTER	PERIOD 12/19 - 3/22
BEGINNING VALUE	$ 3,211,549	$ 220,066
NET CONTRIBUTIONS	398,566	2,637,228
INVESTMENT RETURN	220,683	973,504
ENDING VALUE	$ 3,830,798	$ 3,830,798
INCOME	0	0
CAPITAL GAINS (LOSSES)	220,683	973,504
INVESTMENT RETURN	220,683	973,504

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: CAMBRIDGE US PRIVATE EQUITY

VARIATION FROM BENCHMARK



Total Quarters Observed	**9**
Quarters At or Above the Benchmark	**6**
Quarters Below the Benchmark	**3**
Batting Average	**.667**

RATES OF RETURN

Date	Portfolio	Benchmark	Difference
3/20	-7.2	-10.1	2.9
6/20	16.7	9.4	7.3
9/20	6.6	11.8	-5.2
12/20	13.2	12.2	1.0
3/21	10.4	10.0	0.4
6/21	8.1	14.8	-6.7
9/21	10.0	6.0	4.0
12/21	3.0	5.3	-2.3
3/22	6.6	0.0	6.6

CHESTER COUNTY EMPLOYEES RETIREMENT SYSTEM
TAURUS - PRIVATE MARKETS FUND
PERFORMANCE REVIEW
MARCH 2022

DAHAB Associates, Inc.
© 1990, 2022

INVESTMENT RETURN

On March 31st, 2022, the Chester County Employees Retirement System's Taurus Private Markets Fund was valued at $542,263.

RELATIVE PERFORMANCE

Total Fund

Performance for the Taurus Private Equity portfolio and its benchmark, the Cambridge Private Equity Index were not available at the time of this report. A flat return of 0.0% was assumed for the quarter.

Over the trailing year, the account returned 21.6%, which was 6.4% less than the benchmark's 28.0% performance. Since June 2020, the account returned 14.1% on an annualized basis, while the Cambridge US Private Equity returned an annualized 38.4% over the same period.

Private Equity Investor Report
Taurus Private Markets Fund, LP

Net IRR Since Inception:		**-2.67%**	Report as of:	3/31/2022
Market Value:	**$**	**542,263**	Last Statement:	9/30/2021
Total Commitment:	$	2,000,000		
Unfunded Commitment:	$	1,440,000	72.0%	

Date	Capital Calls	% of Commitment	Distributions	Interest Paid / (Received)
2020-06-26	$ 165,000	8.3%	$ -	$ 10,479
2020-11-30	$ 45,000	2.3%	$ -	$ (4,053)
2021-05-13	$ 80,000	4.0%	$ -	$ -
2021-07-28	$ 50,000	2.5%	$ -	$ (9,455)
2021-10-15	$ 60,000	3.0%	$ -	$ -
2021-11-05	$ 160,000	8.0%	$ -	$ -
Total	**$ 560,000**	**28.0%**	**$ -**	**$ (3,029)**

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / YTD	1 Year	3 Year	5 Year	Since 06/20
Total Portfolio - Gross	0.0	21.6	----	----	14.1
Total Portfolio - Net	0.0	20.7	----	----	13.0
Cambridge PE	0.0	28.0	23.6	19.9	38.4
Private Equity - Gross	0.0	21.6	----	----	14.1
Cambridge PE	0.0	28.0	23.6	19.9	38.4

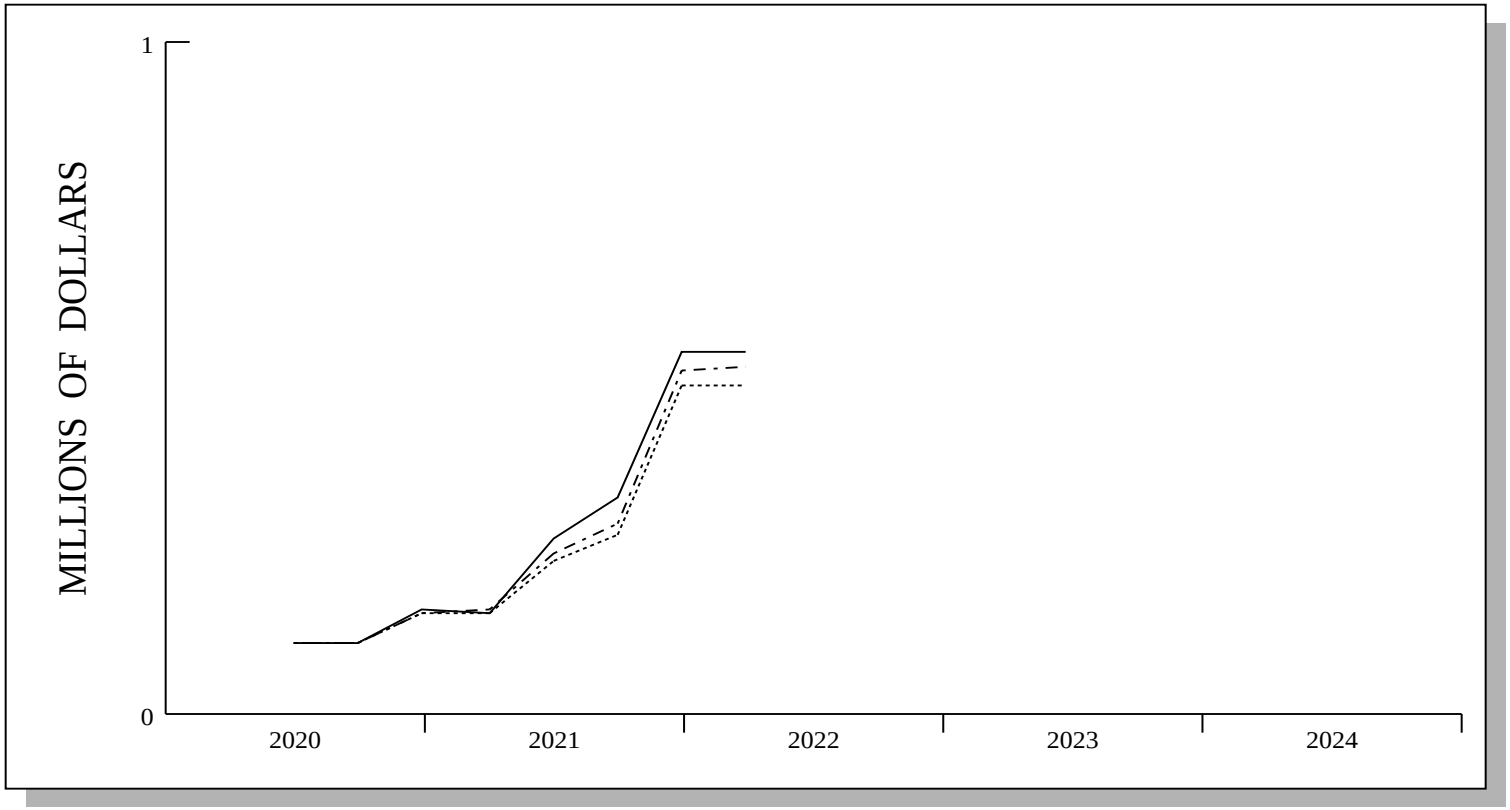
ASSET ALLOCATION

Private Equity	100.0%	$ 542,263
Total Portfolio	100.0%	$ 542,263

INVESTMENT RETURN

Market Value 12/2021	$ 542,263
Contribs / Withdrawals	0
Income	0
Capital Gains / Losses	0
Market Value 3/2022	$ 542,263

INVESTMENT GROWTH



ACTUAL RETURN
7.0%
0.0%

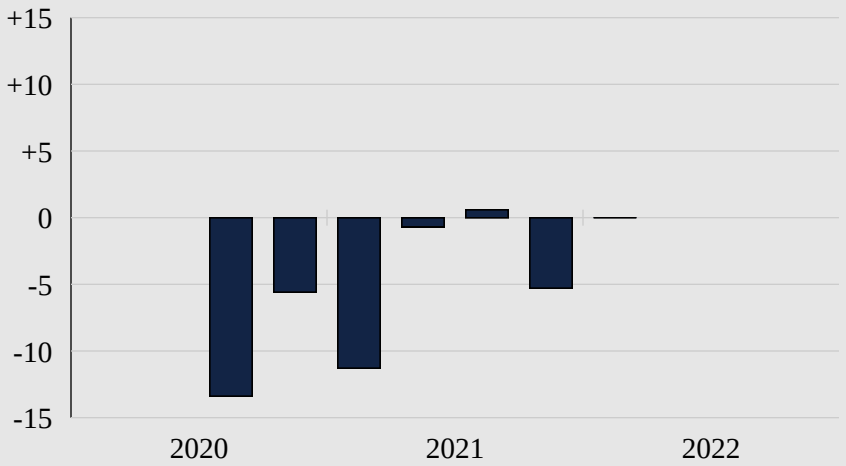
VALUE ASSUMING
7.0% RETURN $ 521,330

	LAST QUARTER	PERIOD 6/20 - 3/22
BEGINNING VALUE	$ 542,263	$ 109,242
NET CONTRIBUTIONS	0	381,492
INVESTMENT RETURN	0	51,529
ENDING VALUE	$ 542,263	$ 542,263
INCOME	0	0
CAPITAL GAINS (LOSSES)	0	51,529
INVESTMENT RETURN	0	51,529

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: CAMBRIDGE US PRIVATE EQUITY

VARIATION FROM BENCHMARK



Total Quarters Observed	**7**
Quarters At or Above the Benchmark	**2**
Quarters Below the Benchmark	**5**
Batting Average	**.286**

RATES OF RETURN

Date	Portfolio	Benchmark	Difference
9/20	-1.6	11.8	-13.4
12/20	6.6	12.2	-5.6
3/21	-1.3	10.0	-11.3
6/21	14.1	14.8	-0.7
9/21	6.6	6.0	0.6
12/21	0.0	5.3	-5.3
3/22	0.0	0.0	0.0

CHESTER COUNTY EMPLOYEES RETIREMENT SYSTEM
BRANDES - CORE PLUS FIXED INCOME
PERFORMANCE REVIEW
MARCH 2022

DAHAB Associates, Inc.

© 1990, 2022

INVESTMENT RETURN

On March 31st, 2022, the Chester County Employees Retirement System's Brandes Core Plus Fixed Income portfolio was valued at $43,803,131, a decrease of $2,152,421 from the December ending value of $45,955,552. Last quarter, the account recorded total net withdrawals of $22,802 in addition to $2,129,619 in net investment losses. The fund's net investment loss was a result of income receipts totaling $393,543 and realized and unrealized capital losses totaling $2,523,162.

RELATIVE PERFORMANCE

Total Fund

During the first quarter, the Brandes Core Plus Fixed Income portfolio lost 4.6%, which was 1.3% greater than the Bloomberg Aggregate Index's return of -5.9% and ranked in the 7th percentile of the Core Fixed Income universe. Over the trailing year, the portfolio returned -3.2%, which was 1.0% greater than the benchmark's -4.2% performance, and ranked in the 13th percentile. Since March 2018, the account returned 2.0% per annum and ranked in the 99th percentile. For comparison, the Bloomberg Aggregate Index returned an annualized 2.4% over the same time frame.

ANALYSIS

At the end of the quarter, nearly 70% of the total bond portfolio was comprised of USG quality securities. The remainder of the portfolio consisted of corporate securities, rated AA through less than BBB, giving the portfolio an overall average quality rating of AAA-AA. The average maturity of the portfolio was 6.29 years, less than the Bloomberg Barclays Aggregate Index's 8.77-year maturity. The average coupon was 3.26%.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / YTD	1 Year	3 Year	5 Year	Since 03/18
Total Portfolio - Gross	-4.6	-3.2	1.5	----	2.0
CORE FIXED INCOME RANK	(7)	(13)	(98)	----	(99)
Total Portfolio - Net	-4.7	-3.4	1.3	----	1.7
Aggregate Index	-5.9	-4.2	1.7	2.1	2.4
Fixed Income - Gross	-4.6	-3.2	1.5	----	2.0
CORE FIXED INCOME RANK	(7)	(13)	(98)	----	(99)
Aggregate Index	-5.9	-4.2	1.7	2.1	2.4

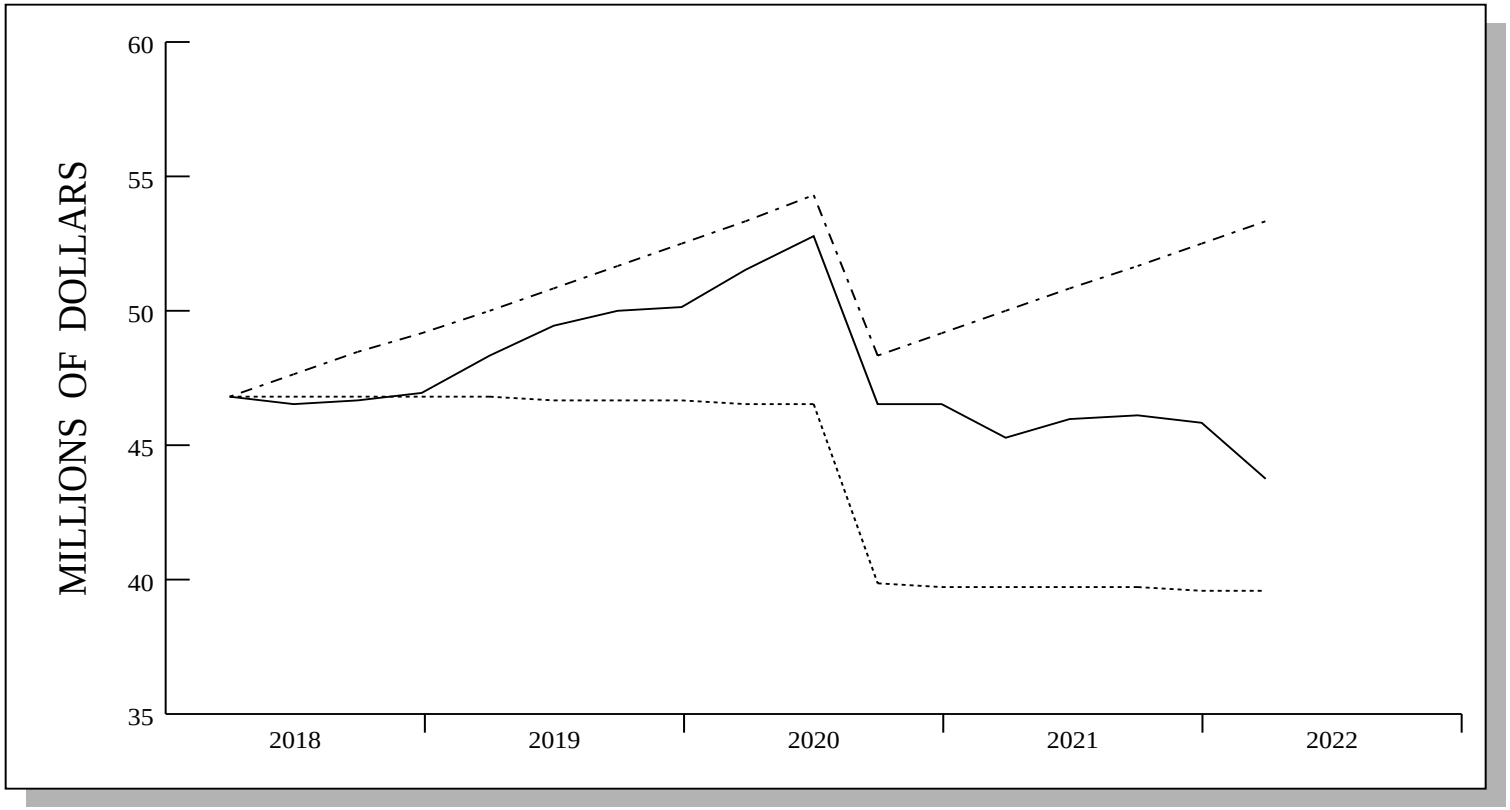
ASSET ALLOCATION

Fixed Income	100.0%	$ 43,803,131
Total Portfolio	100.0%	$ 43,803,131

INVESTMENT RETURN

Market Value 12/2021	$ 45,955,552
Contribs / Withdrawals	- 22,802
Income	393,543
Capital Gains / Losses	- 2,523,162
Market Value 3/2022	$ 43,803,131

INVESTMENT GROWTH

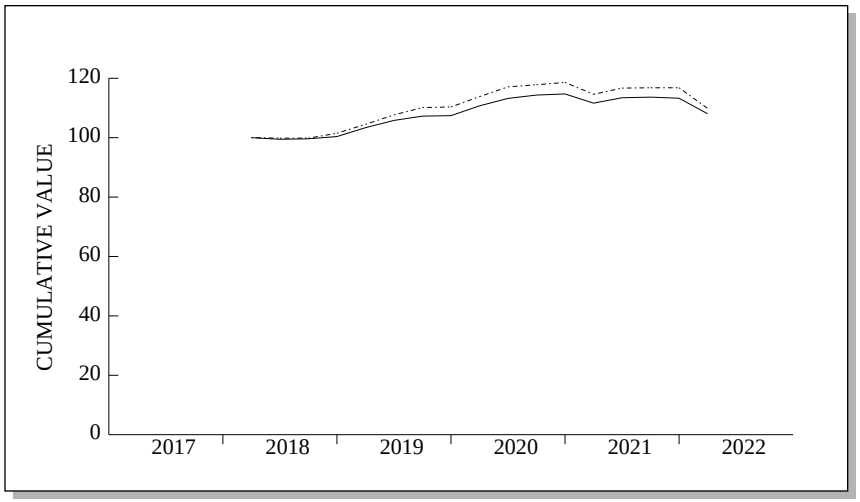


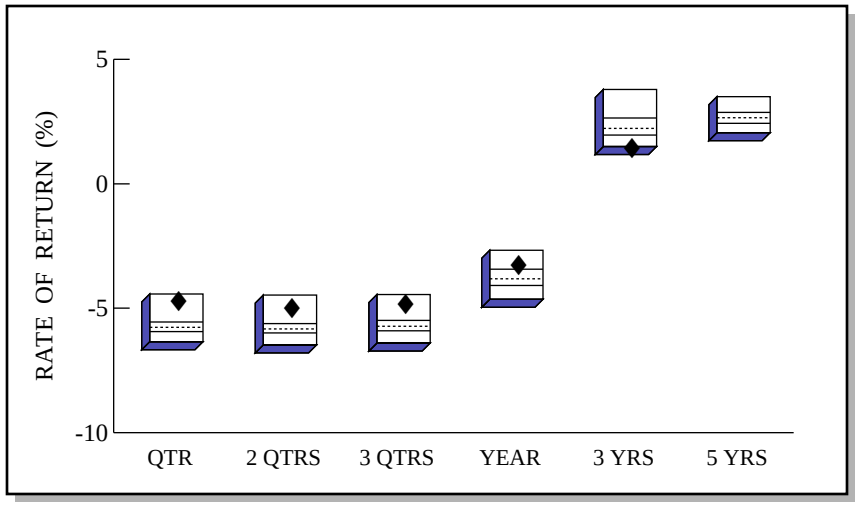
ACTUAL RETURN
7.0%
0.0%

VALUE ASSUMING
7.0% RETURN $ 53,418,413

	LAST QUARTER	PERIOD 3/18 - 3/22
BEGINNING VALUE	$ 45,955,552	$ 46,919,863
NET CONTRIBUTIONS	- 22,802	- 7,228,126
INVESTMENT RETURN	- 2,129,619	4,111,394
ENDING VALUE	$ 43,803,131	$ 43,803,131
INCOME	393,543	1,646,493
CAPITAL GAINS (LOSSES)	- 2,523,162	2,464,901
INVESTMENT RETURN	- 2,129,619	4,111,394

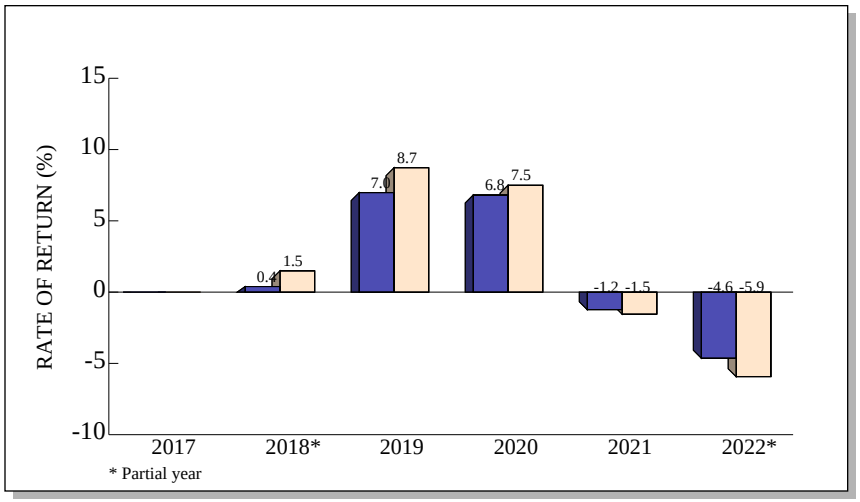
TOTAL RETURN COMPARISONS





Core Fixed Income Universe

PORTFOLIO
AGGREGATE INDEX



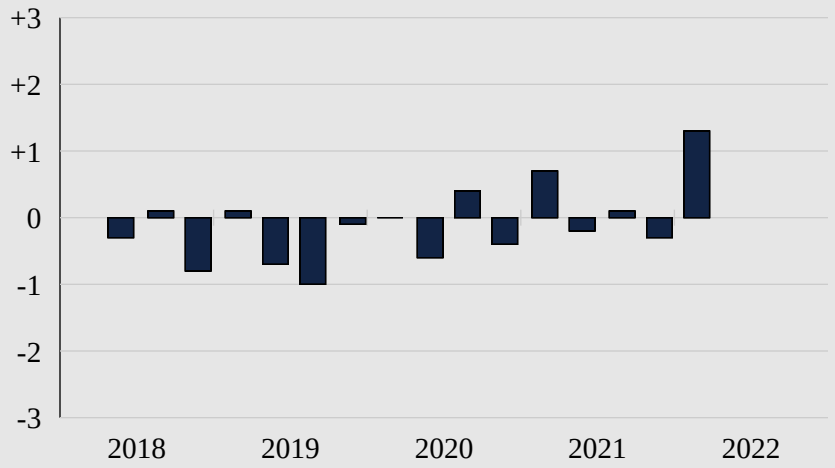
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
					------ANNUALIZED------	
RETURN	-4.6	-4.9	-4.8	-3.2	1.5	----
(RANK)	(7)	(9)	(10)	(13)	(98)	----
5TH %ILE	-4.4	-4.5	-4.5	-2.7	3.8	3.5
25TH %ILE	-5.6	-5.6	-5.5	-3.4	2.6	2.9
MEDIAN	-5.8	-5.8	-5.7	-3.8	2.2	2.7
75TH %ILE	-5.9	-6.0	-5.9	-4.1	2.0	2.4
95TH %ILE	-6.4	-6.5	-6.4	-4.6	1.5	2.1
Agg	***-5.9***	***-5.9***	***-5.9***	***-4.2***	***1.7***	***2.1***

Core Fixed Income Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: BLOOMBERG AGGREGATE INDEX

VARIATION FROM BENCHMARK

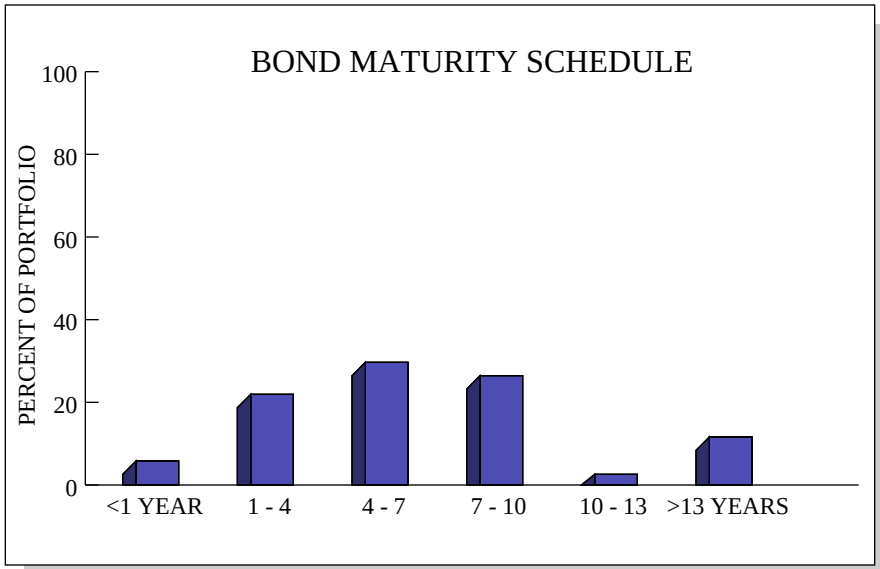


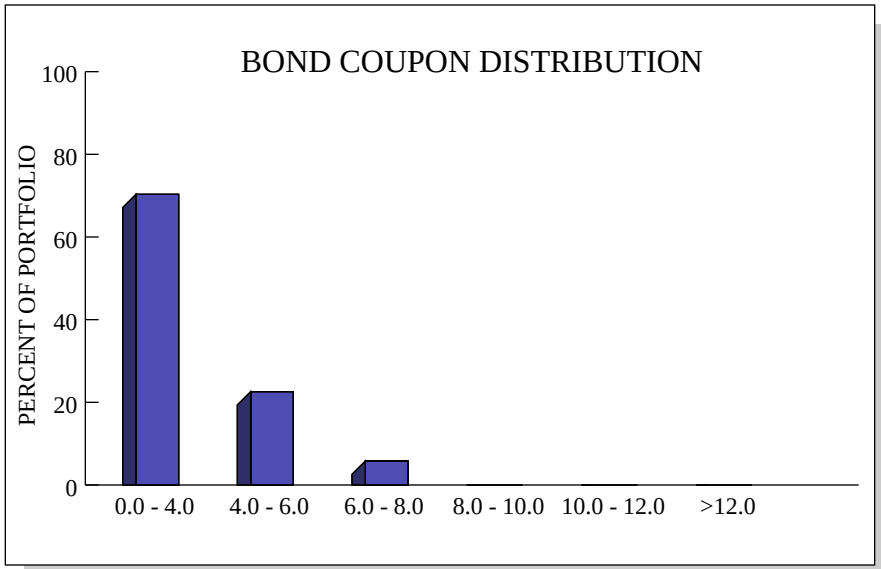
Total Quarters Observed	**16**
Quarters At or Above the Benchmark	**7**
Quarters Below the Benchmark	**9**
Batting Average	**.438**

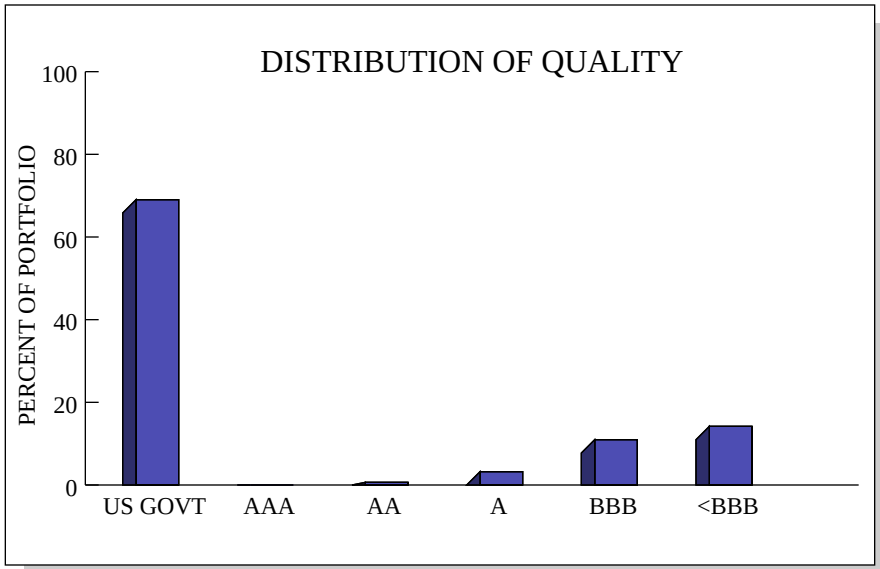
RATES OF RETURN

Date	Portfolio	Benchmark	Difference
6/18	-0.5	-0.2	-0.3
9/18	0.1	0.0	0.1
12/18	0.8	1.6	-0.8
3/19	3.0	2.9	0.1
6/19	2.4	3.1	-0.7
9/19	1.3	2.3	-1.0
12/19	0.1	0.2	-0.1
3/20	3.1	3.1	0.0
6/20	2.3	2.9	-0.6
9/20	1.0	0.6	0.4
12/20	0.3	0.7	-0.4
3/21	-2.7	-3.4	0.7
6/21	1.6	1.8	-0.2
9/21	0.2	0.1	0.1
12/21	-0.3	0.0	-0.3
3/22	-4.6	-5.9	1.3

BOND CHARACTERISTICS







	PORTFOLIO	AGGREGATE INDEX
No. of Securities	48	12,538
Duration	5.18	6.58
YTM	3.22	2.92
Average Coupon	3.26	2.44
Avg Maturity / WAL	6.29	8.77
Average Quality	AAA-AA	AA

CHESTER COUNTY EMPLOYEES RETIREMENT SYSTEM
BIRCH RUN - INTERMEDIATE FIXED INCOME
PERFORMANCE REVIEW
MARCH 2022

DAHAB Associates, Inc.

© 1990, 2022

INVESTMENT RETURN

On March 31st, 2022, the Chester County Employees Retirement System's Birch Run Intermediate Fixed Income portfolio was valued at $40,071,705, a decrease of $1,535,500 from the December ending value of $41,607,205. Last quarter, the account recorded total net withdrawals of $20,717 in addition to $1,514,783 in net investment losses. The fund's net investment loss was a result of income receipts totaling $184,938 and realized and unrealized capital losses totaling $1,699,721.

RELATIVE PERFORMANCE

Total Fund

During the first quarter, the Birch Run Intermediate Fixed Income portfolio lost 3.6%, which was 0.9% greater than the Intermediate Gov/Credit Index's return of -4.5% and ranked in the 12th percentile of the Intermediate Fixed Income universe. Over the trailing year, the portfolio returned -3.5%, which was 0.6% greater than the benchmark's -4.1% performance, and ranked in the 30th percentile. Since June 2017, the account returned 2.2% per annum and ranked in the 13th percentile. For comparison, the Intermediate Gov/Credit returned an annualized 1.7% over the same time frame.

ANALYSIS

At the end of the quarter, nearly 70% of the total bond portfolio was comprised of USG quality securities. The remainder of the portfolio consisted of corporate securities, rated AA through BBB, giving the portfolio an overall average quality rating of AAA. The average maturity of the portfolio was 4.16 years, less than the Bloomberg Barclays Intermediate Gov/Credit Index's 4.40-year maturity. The average coupon was 1.76%.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / YTD	1 Year	3 Year	5 Year	Since 06/17
Total Portfolio - Gross	-3.6	-3.5	2.3	----	2.2
INTERMEDIATE FIXED RANK	(12)	(30)	(20)	----	(13)
Total Portfolio - Net	-3.7	-3.7	2.1	----	2.0
Int Gov/Credit	-4.5	-4.1	1.5	1.8	1.7
Fixed Income - Gross	-3.6	-3.5	2.3	----	2.2
INTERMEDIATE FIXED RANK	(12)	(30)	(20)	----	(13)
Int Gov/Credit	-4.5	-4.1	1.5	1.8	1.7

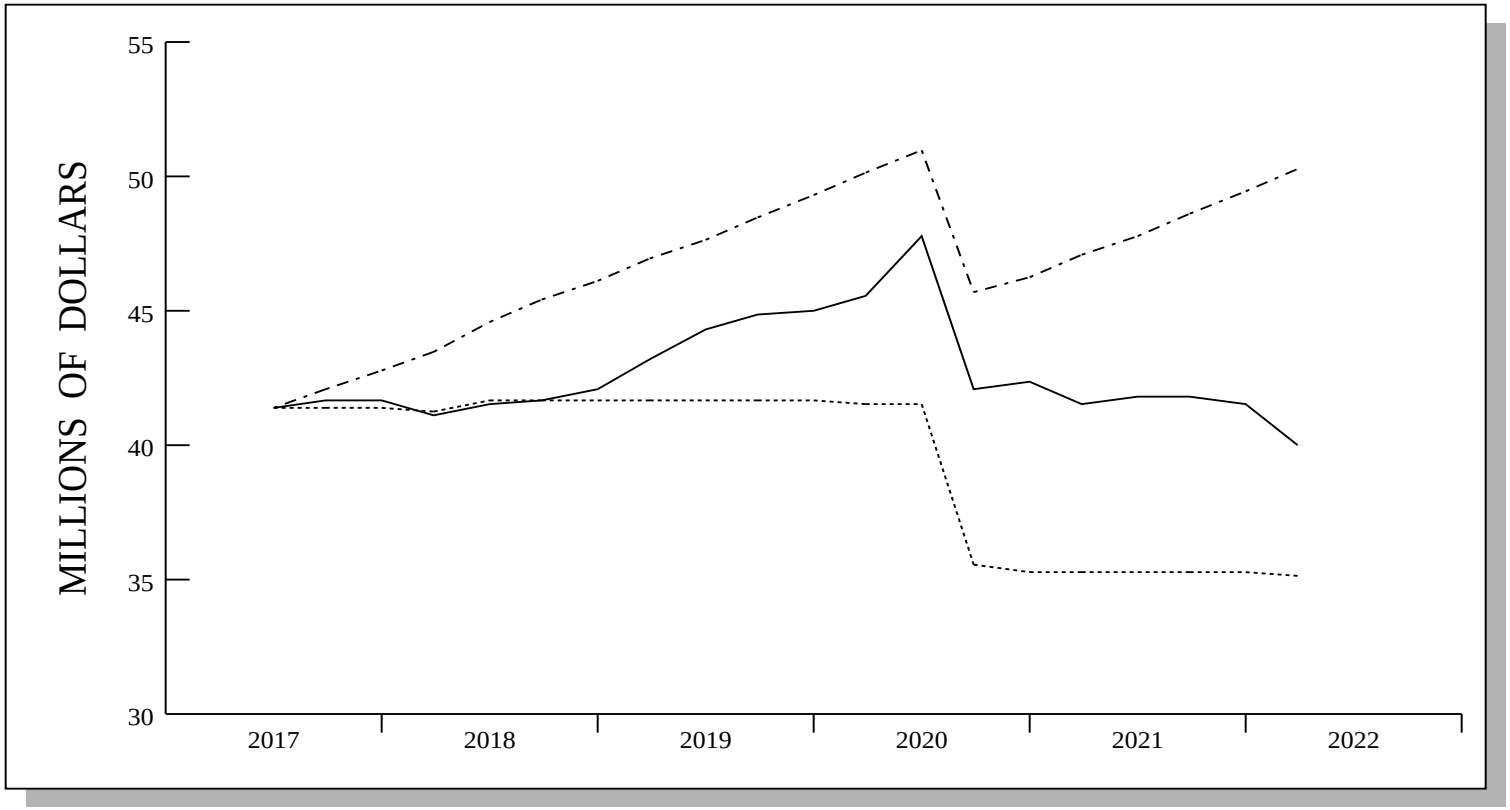
ASSET ALLOCATION

Fixed Income	100.0%	$ 40,071,705
Total Portfolio	100.0%	$ 40,071,705

INVESTMENT RETURN

Market Value 12/2021	$ 41,607,205
Contribs / Withdrawals	- 20,717
Income	184,938
Capital Gains / Losses	- 1,699,721
Market Value 3/2022	$ 40,071,705

INVESTMENT GROWTH

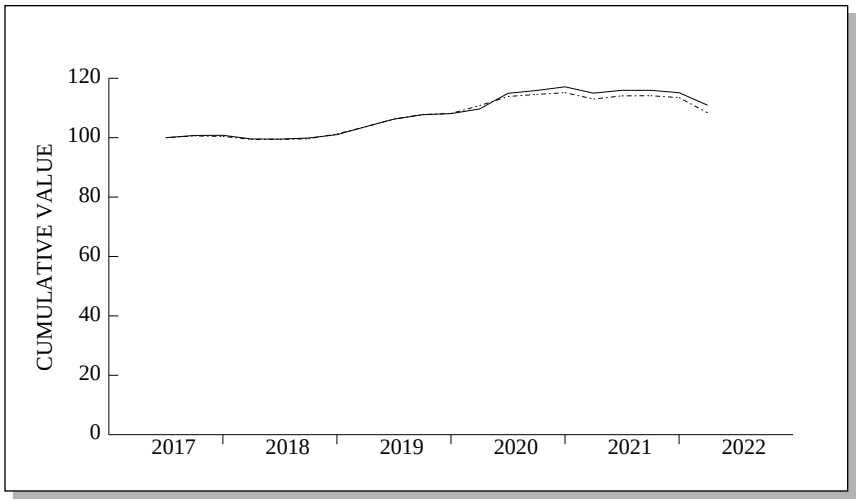


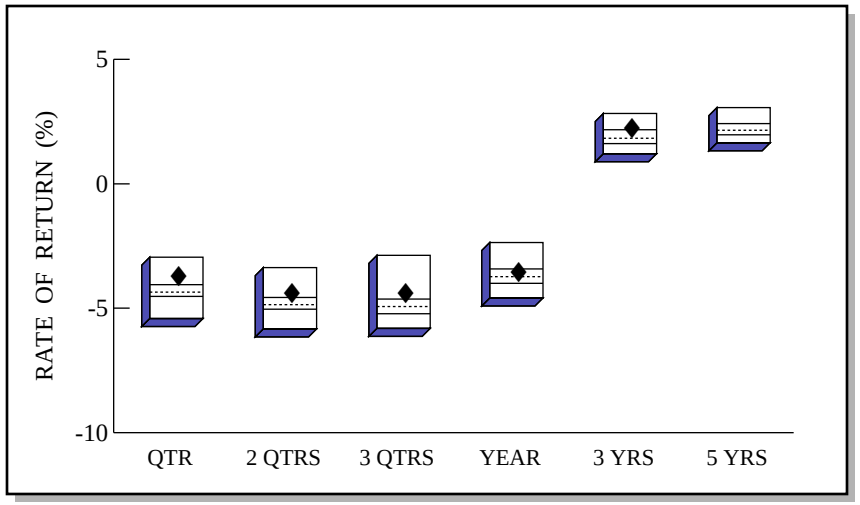
ACTUAL RETURN
7.0%
0.0%

VALUE ASSUMING
7.0% RETURN $ 50,306,159

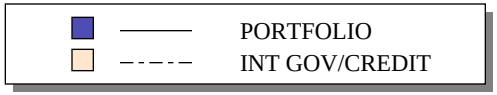
	LAST QUARTER	PERIOD 6/17 - 3/22
BEGINNING VALUE	$ 41,607,205	$ 41,449,315
NET CONTRIBUTIONS	- 20,717	- 6,190,988
INVESTMENT RETURN	- 1,514,783	4,813,378
ENDING VALUE	$ 40,071,705	$ 40,071,705
INCOME	184,938	994,587
CAPITAL GAINS (LOSSES)	- 1,699,721	3,818,791
INVESTMENT RETURN	- 1,514,783	4,813,378

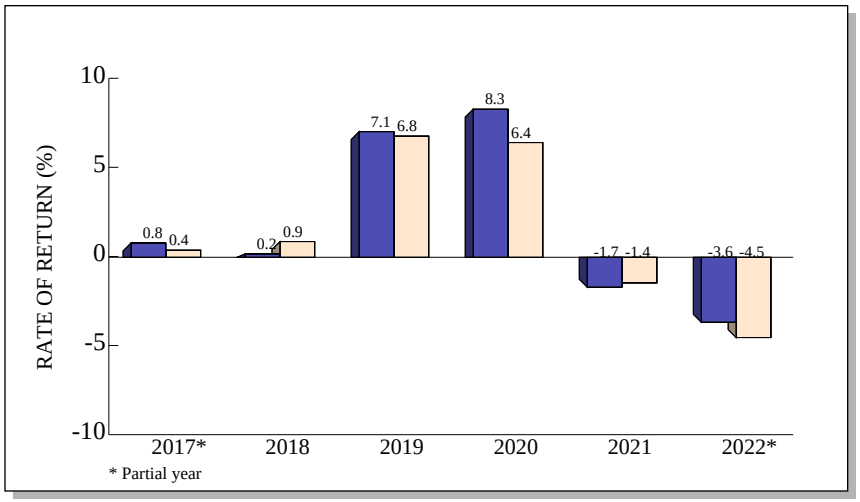
TOTAL RETURN COMPARISONS





Intermediate Fixed Universe





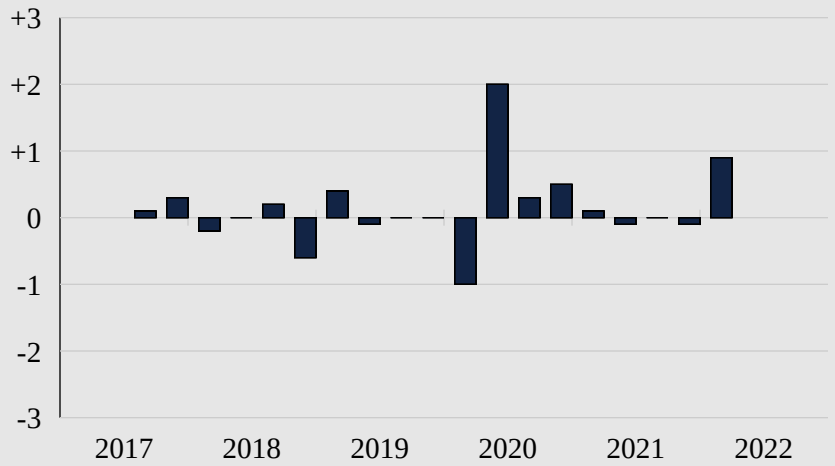
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
					------ANNUALIZED------	
RETURN	-3.6	-4.3	-4.3	-3.5	2.3	----
(RANK)	(12)	(17)	(16)	(30)	(20)	----
5TH %ILE	-3.0	-3.4	-2.9	-2.4	2.8	3.1
25TH %ILE	-4.1	-4.6	-4.6	-3.4	2.2	2.4
MEDIAN	-4.4	-4.9	-4.9	-3.7	1.8	2.2
75TH %ILE	-4.5	-5.0	-5.2	-4.0	1.6	2.0
95TH %ILE	-5.4	-5.8	-5.8	-4.6	1.2	1.7
Int G/C	***-4.5***	***-5.1***	***-5.0***	***-4.1***	***1.5***	***1.8***

Intermediate Fixed Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: INTERMEDIATE GOV/CREDIT

VARIATION FROM BENCHMARK

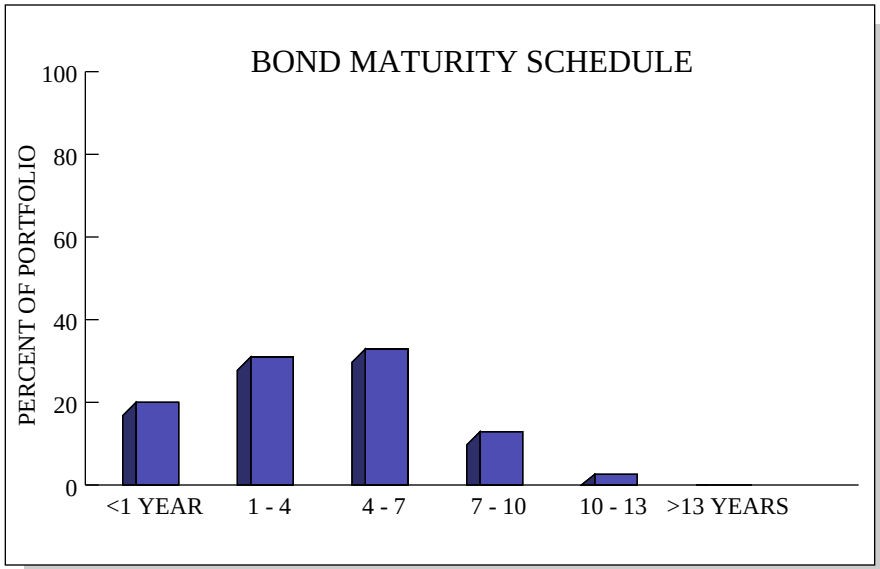


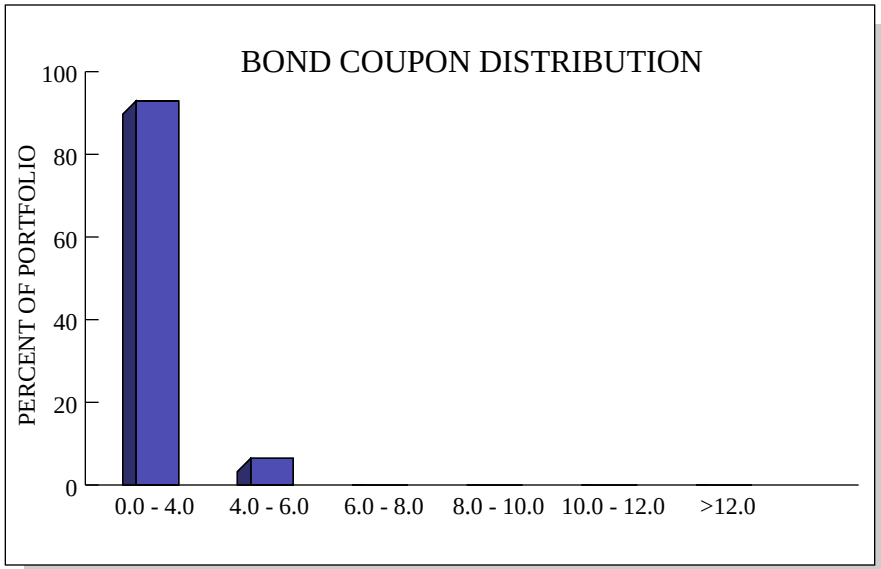
Total Quarters Observed	**19**
Quarters At or Above the Benchmark	**13**
Quarters Below the Benchmark	**6**
Batting Average	**.684**

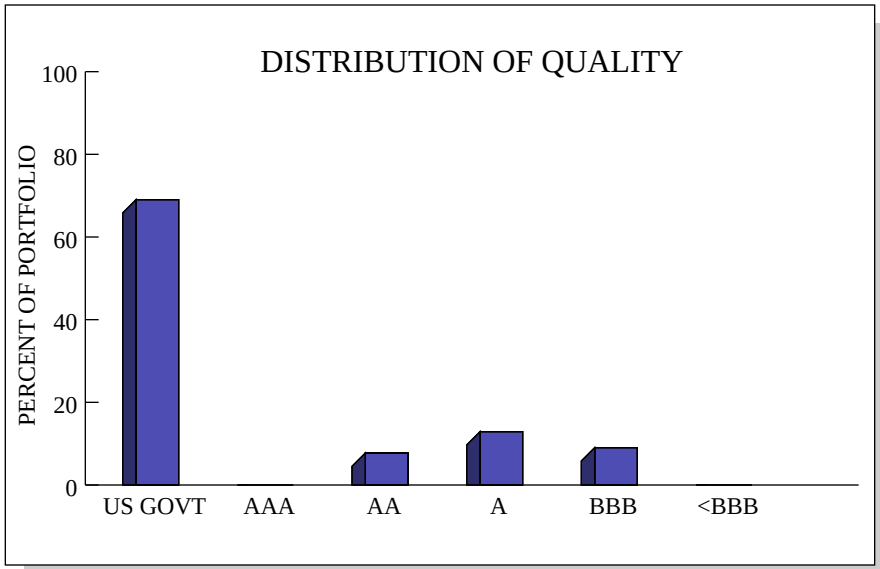
RATES OF RETURN

Date	Portfolio	Benchmark	Difference
9/17	0.7	0.6	0.1
12/17	0.1	-0.2	0.3
3/18	-1.2	-1.0	-0.2
6/18	0.0	0.0	0.0
9/18	0.4	0.2	0.2
12/18	1.1	1.7	-0.6
3/19	2.7	2.3	0.4
6/19	2.5	2.6	-0.1
9/19	1.4	1.4	0.0
12/19	0.4	0.4	0.0
3/20	1.4	2.4	-1.0
6/20	4.8	2.8	2.0
9/20	0.9	0.6	0.3
12/20	1.0	0.5	0.5
3/21	-1.8	-1.9	0.1
6/21	0.9	1.0	-0.1
9/21	0.0	0.0	0.0
12/21	-0.7	-0.6	-0.1
3/22	-3.6	-4.5	0.9

BOND CHARACTERISTICS







	PORTFOLIO	INT GOV/CREDIT
No. of Securities	71	5,515
Duration	3.78	4.05
YTM	2.58	2.70
Average Coupon	1.76	1.94
Avg Maturity / WAL	4.16	4.40
Average Quality	AAA	AA

CHESTER COUNTY EMPLOYEES RETIREMENT SYSTEM
VANGUARD - SHORT-TERM CORPORATE BOND
PERFORMANCE REVIEW
MARCH 2022

DAHAB Associates, Inc.

© 1990, 2022

INVESTMENT RETURN

On March 31st, 2022, the Chester County Employees Retirement System's Vanguard Short-Term Corporate Bond portfolio was valued at $17,401,833, a decrease of $1,027,921 from the December ending value of $18,429,754. Last quarter, the account recorded total net withdrawals of $347,848 in addition to $680,073 in net investment losses. The fund's net investment loss was a result of income receipts totaling $43,089 and realized and unrealized capital losses totaling $723,162.

RELATIVE PERFORMANCE

The ticker for this investment is VSTBX.

Total Fund

During the first quarter, the Vanguard Short-Term Corporate Bond portfolio lost 3.7%, which was 0.5% less than the ML/BoA 1-5 Year Treasury Index's return of -3.2% and ranked in the 99th percentile of the Short-Term Fixed Income universe. Over the trailing year, the portfolio returned -3.5%, which was 0.2% greater than the benchmark's -3.7% performance, and ranked in the 94th percentile. Since December 2017, the account returned 1.9% per annum and ranked in the 14th percentile. For comparison, the ML/BoA 1-5 Year Treasury returned an annualized 1.3% over the same time frame.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / YTD	1 Year	3 Year	5 Year	Since 12/17
Total Portfolio - Gross	-3.7	-3.5	1.6	----	1.9
SHORT-TERM FIXED RANK	(99)	(94)	(27)	----	(14)
Total Portfolio - Net	-3.7	-3.5	1.6	----	1.9
ML/BoA 1-5 Trea	-3.2	-3.7	0.9	1.1	1.3
Fixed Income - Gross	-3.7	-3.5	1.6	----	1.9
SHORT-TERM FIXED RANK	(99)	(94)	(27)	----	(14)
ML/BoA 1-5 Trea	-3.2	-3.7	0.9	1.1	1.3

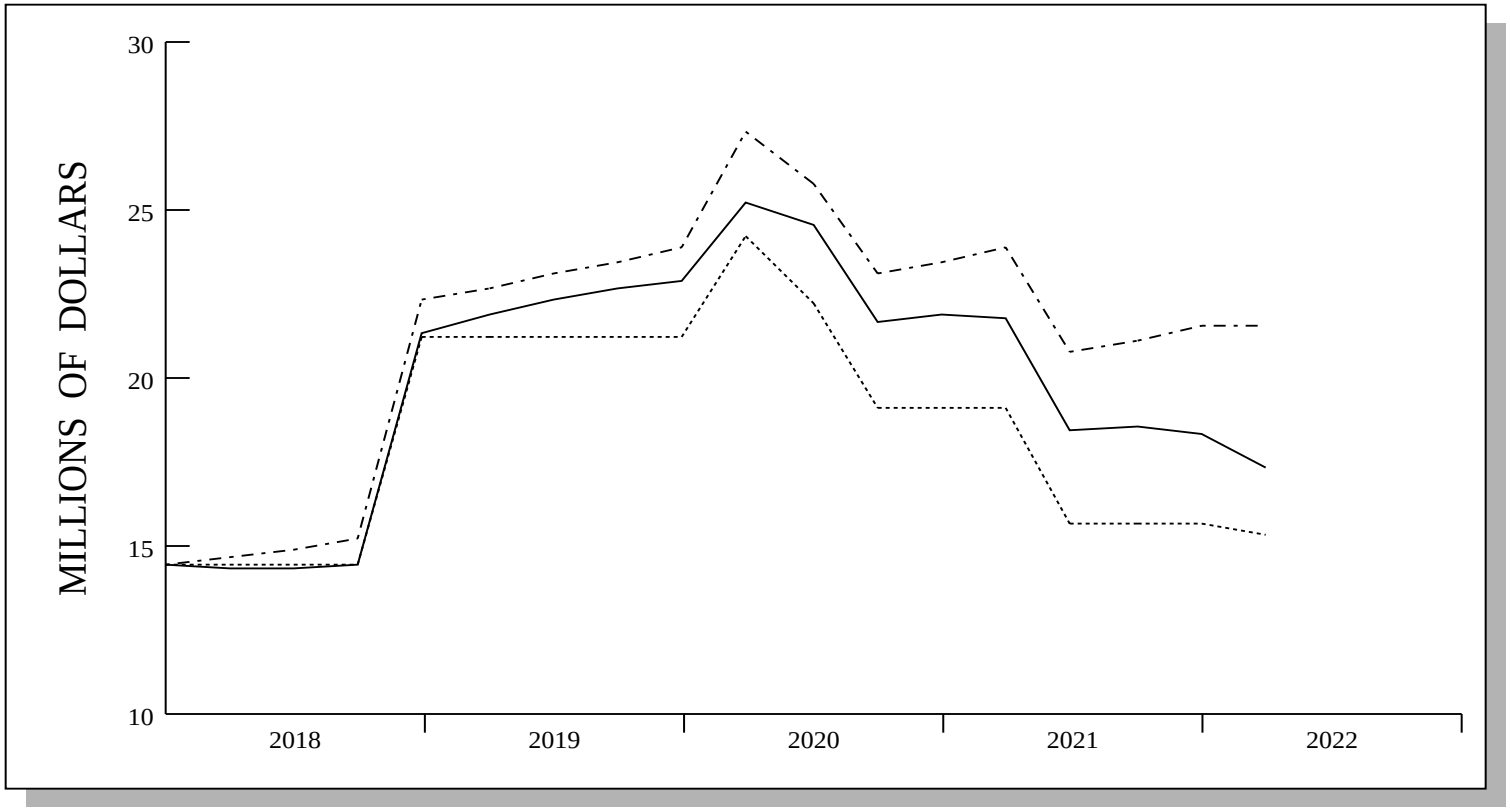
ASSET ALLOCATION

Fixed Income	100.0%	$ 17,401,833
Total Portfolio	100.0%	$ 17,401,833

INVESTMENT RETURN

Market Value 12/2021	$ 18,429,754
Contribs / Withdrawals	-347,848
Income	43,089
Capital Gains / Losses	-723,162
Market Value 3/2022	$ 17,401,833

INVESTMENT GROWTH

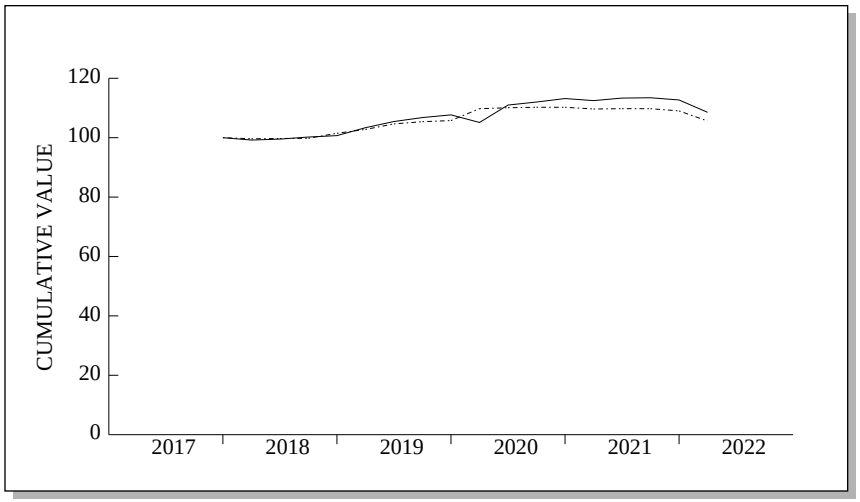


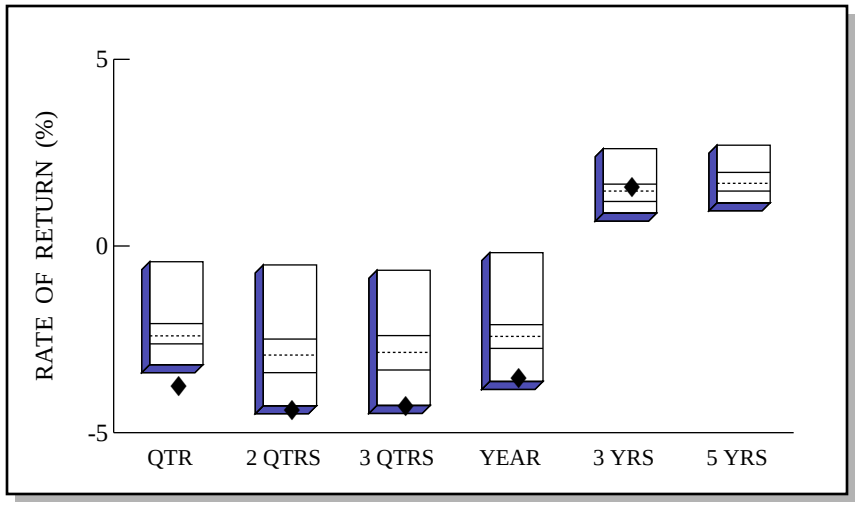
ACTUAL RETURN
7.0%
0.0%

VALUE ASSUMING
7.0% RETURN $ 21,592,577

	LAST QUARTER	PERIOD 12/17 - 3/22
BEGINNING VALUE	$ 18,429,754	$ 14,494,248
NET CONTRIBUTIONS	-347,848	859,323
INVESTMENT RETURN	-680,073	2,048,262
ENDING VALUE	$ 17,401,833	$ 17,401,833
INCOME	43,089	2,022,160
CAPITAL GAINS (LOSSES)	-723,162	26,102
INVESTMENT RETURN	-680,073	2,048,262

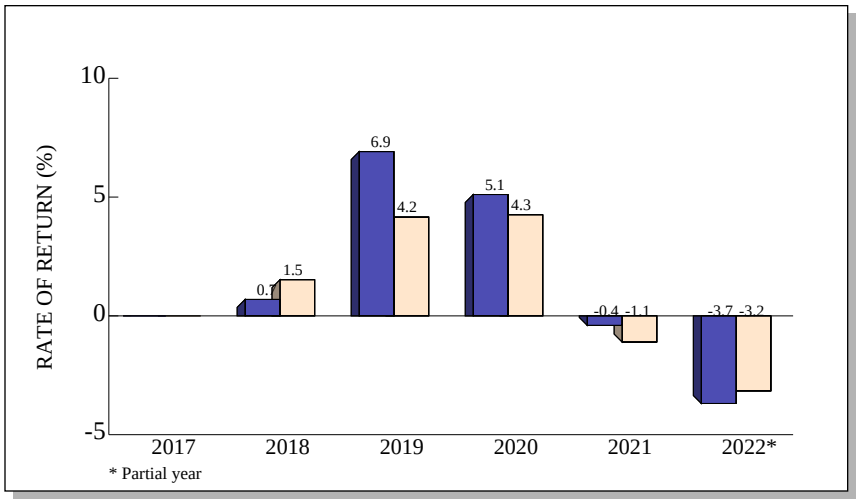
TOTAL RETURN COMPARISONS





Short-Term Fixed Universe

PORTFOLIO
ML/BOA 1-5 TREA



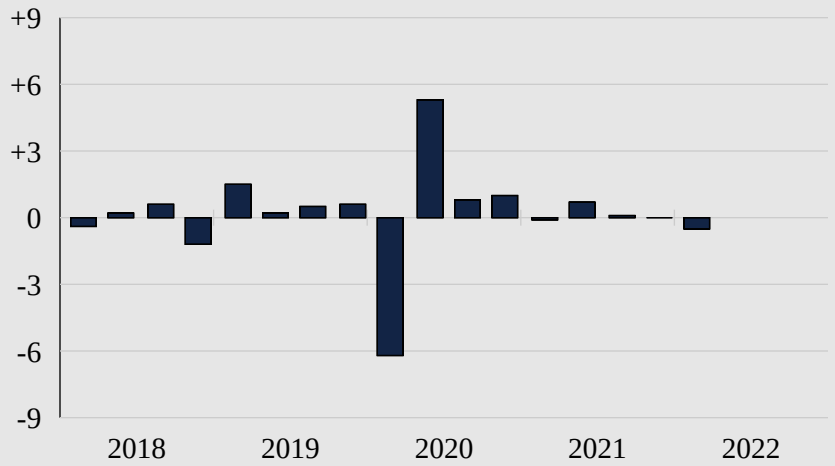
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
					------ANNUALIZED------	
RETURN	-3.7	-4.3	-4.2	-3.5	1.6	----
(RANK)	(99)	(98)	(95)	(94)	(27)	----
5TH %ILE	-0.4	-0.5	-0.7	-0.2	2.6	2.7
25TH %ILE	-2.1	-2.5	-2.4	-2.1	1.7	2.0
MEDIAN	-2.4	-2.9	-2.9	-2.4	1.5	1.7
75TH %ILE	-2.6	-3.4	-3.3	-2.7	1.2	1.5
95TH %ILE	-3.2	-4.3	-4.3	-3.6	0.9	1.2
ML/BoA 1-5	***-3.2***	***-3.8***	***-3.8***	***-3.7***	***0.9***	***1.1***

Short-Term Fixed Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: ML/BOA 1-5 YEAR TREASURY

VARIATION FROM BENCHMARK



Total Quarters Observed	**17**
Quarters At or Above the Benchmark	**12**
Quarters Below the Benchmark	**5**
Batting Average	**.706**

RATES OF RETURN

Date	Portfolio	Benchmark	Difference
3/18	-0.8	-0.4	-0.4
6/18	0.3	0.1	0.2
9/18	0.7	0.1	0.6
12/18	0.5	1.7	-1.2
3/19	2.7	1.2	1.5
6/19	2.0	1.8	0.2
9/19	1.2	0.7	0.5
12/19	0.9	0.3	0.6
3/20	-2.4	3.8	-6.2
6/20	5.6	0.3	5.3
9/20	0.9	0.1	0.8
12/20	1.0	0.0	1.0
3/21	-0.6	-0.5	-0.1
6/21	0.8	0.1	0.7
9/21	0.1	0.0	0.1
12/21	-0.7	-0.7	0.0
3/22	-3.7	-3.2	-0.5

CHESTER COUNTY EMPLOYEES RETIREMENT SYSTEM
PRUDENTIAL - SHORT-TERM CORPORATE BOND
PERFORMANCE REVIEW
MARCH 2022

DAHAB Associates, Inc.

© 1990, 2022

INVESTMENT RETURN

On March 31st, 2022, the Chester County Employees Retirement System's Prudential Short-Term Corporate Bond portfolio was valued at $21,038,295, a decrease of $861,311 from the December ending value of $21,899,606. Last quarter, the account recorded no net contributions or withdrawals, while recording a net investment loss for the quarter of $861,311. Net investment loss was composed of income receipts totaling $79,072 and $940,383 in net realized and unrealized capital losses.

RELATIVE PERFORMANCE

The ticker for this investment is PSTQX.

Total Fund

For the first quarter, the Prudential Short-Term Corporate Bond portfolio returned -3.8%, which was 0.6% below the ML/BoA 1-5 Year Treasury Index's return of -3.2% and ranked in the 99th percentile of the Short-Term Fixed Income universe. Over the trailing year, this portfolio returned -3.3%, which was 0.4% greater than the benchmark's -3.7% return, ranking in the 92nd percentile. Since December 2017, the account returned 2.4% on an annualized basis and ranked in the 6th percentile. The ML/BoA 1-5 Year Treasury returned an annualized 1.3% over the same time frame.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Qtr / YTD	1 Year	3 Year	5 Year	Since 12/17
Total Portfolio - Gross	-3.8	-3.3	2.2	----	2.4
SHORT-TERM FIXED RANK	(99)	(92)	(10)	----	(6)
Total Portfolio - Net	-3.9	-3.7	1.8	----	2.0
ML/BoA 1-5 Trea	-3.2	-3.7	0.9	1.1	1.3
Fixed Income - Gross	-3.8	-3.3	2.2	----	2.4
SHORT-TERM FIXED RANK	(99)	(92)	(10)	----	(6)
ML/BoA 1-5 Trea	-3.2	-3.7	0.9	1.1	1.3

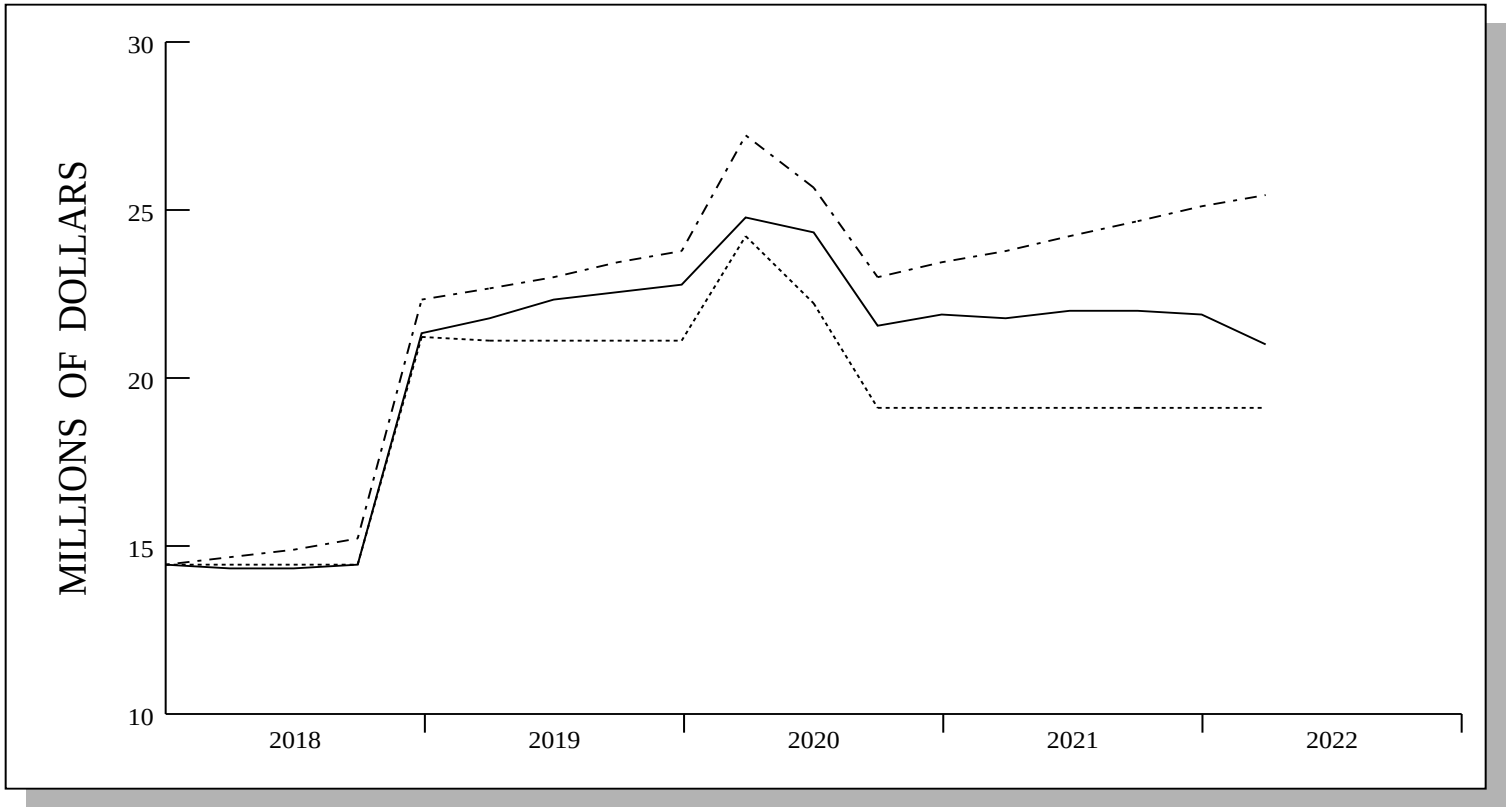
ASSET ALLOCATION

Fixed Income	100.0%	$ 21,038,295
Total Portfolio	100.0%	$ 21,038,295

INVESTMENT RETURN

Market Value 12/2021	$ 21,899,606
Contribs / Withdrawals	0
Income	79,072
Capital Gains / Losses	-940,383
Market Value 3/2022	$ 21,038,295

INVESTMENT GROWTH

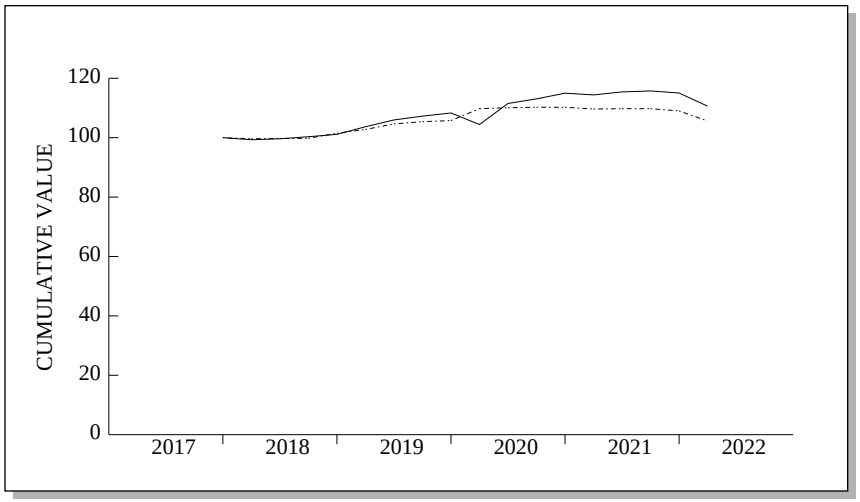


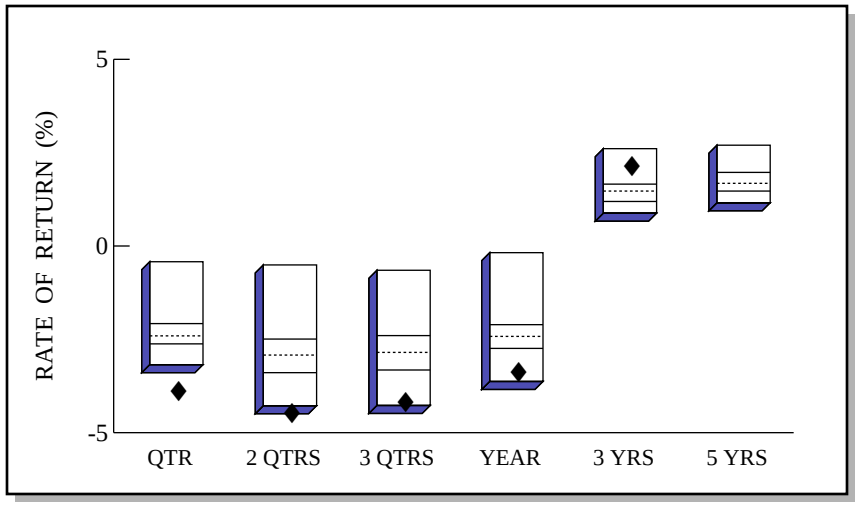
ACTUAL RETURN
7.0%
0.0%

VALUE ASSUMING
7.0% RETURN $ 25,549,944

	LAST QUARTER	PERIOD 12/17 - 3/22
BEGINNING VALUE	$ 21,899,606	$ 14,491,997
NET CONTRIBUTIONS	0	4,637,381
INVESTMENT RETURN	-861,311	1,908,917
ENDING VALUE	$ 21,038,295	$ 21,038,295
INCOME	79,072	2,314,835
CAPITAL GAINS (LOSSES)	-940,383	-405,918
INVESTMENT RETURN	-861,311	1,908,917

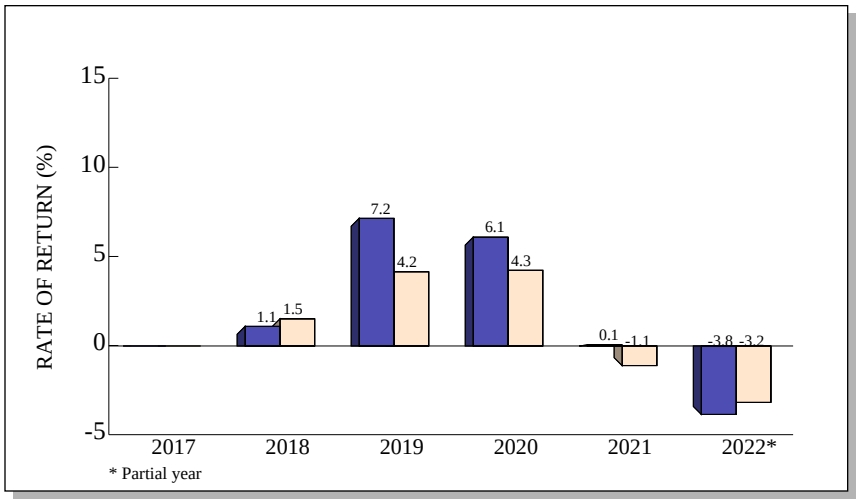
TOTAL RETURN COMPARISONS





Short-Term Fixed Universe

PORTFOLIO
ML/BOA 1-5 TREA



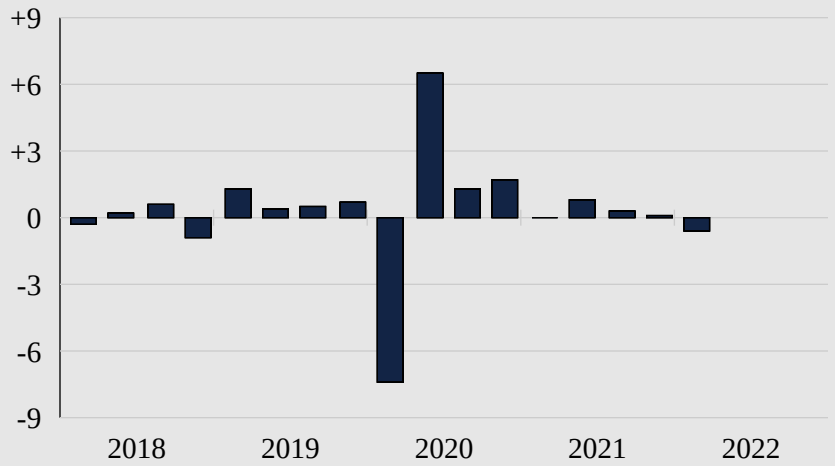
	QTR	2 QTRS	3 QTRS	YEAR	3 YRS	5 YRS
					------ANNUALIZED------	
RETURN	-3.8	-4.4	-4.1	-3.3	2.2	----
(RANK)	(99)	(99)	(92)	(92)	(10)	----
5TH %ILE	-0.4	-0.5	-0.7	-0.2	2.6	2.7
25TH %ILE	-2.1	-2.5	-2.4	-2.1	1.7	2.0
MEDIAN	-2.4	-2.9	-2.9	-2.4	1.5	1.7
75TH %ILE	-2.6	-3.4	-3.3	-2.7	1.2	1.5
95TH %ILE	-3.2	-4.3	-4.3	-3.6	0.9	1.2
ML/BoA 1-5	***-3.2***	***-3.8***	***-3.8***	***-3.7***	***0.9***	***1.1***

Short-Term Fixed Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY

COMPARATIVE BENCHMARK: ML/BOA 1-5 YEAR TREASURY

VARIATION FROM BENCHMARK



Total Quarters Observed	**17**
Quarters At or Above the Benchmark	**13**
Quarters Below the Benchmark	**4**
Batting Average	**.765**

RATES OF RETURN

Date	Portfolio	Benchmark	Difference
3/18	-0.7	-0.4	-0.3
6/18	0.3	0.1	0.2
9/18	0.7	0.1	0.6
12/18	0.8	1.7	-0.9
3/19	2.5	1.2	1.3
6/19	2.2	1.8	0.4
9/19	1.2	0.7	0.5
12/19	1.0	0.3	0.7
3/20	-3.6	3.8	-7.4
6/20	6.8	0.3	6.5
9/20	1.4	0.1	1.3
12/20	1.7	0.0	1.7
3/21	-0.5	-0.5	0.0
6/21	0.9	0.1	0.8
9/21	0.3	0.0	0.3
12/21	-0.6	-0.7	0.1
3/22	-3.8	-3.2	-0.6