Agenda
Village of Glen Ellyn
Police Pension Board Meeting
Wednesday, October 20, 2021
7:30 PM
Glen Ellyn Police Department
65 S. Park Boulevard
Community Room - In Person Only

Any individual with a disability requiring a reasonable accommodation in order to participate in a meeting should contact The Village of Glen Ellyn ADA Coordinator, 630-469-5000, in advance of the next scheduled meeting. All matters on the Agenda may be discussed, amended, and acted upon.

A. Call to Order

B. Public Comment (Non Agenda Items)

C. Approval of Minutes

1) Minutes - July 21, 2021

D. Quarterly Investment Report

1) Samantha Grant and Christopher Caparelli from Marquette Associates will present the third quarter investment report and any recommendations for the investment portfolio.

E. Actuarial Report and Pension Report to the Board

1) Jason Franken from Foster & Foster will present the 2021 Police Pension Actuarial Report as well as some additional information on a 15 year open amortization model.

2) Motion to Approve the Annual Report to the Village Board

F. Approval of Expenses

1) Approve the expense vouchers in the amount of $476,674.88 and pension expenses in the amount of $637,164.75 for a total of $1,113,839.63

G. Approval of Membership Changes / Contribution Refunds / Transfers

1) Approval of Membership Changes / Transfers / Contribution Refunds

H. Pensionable Salary Discussion/Update

I. Other Business

1) Meetings in 2022: January 19, April 20, July 20, October 19

J. Adjournment

Village of Glen Ellyn

Minutes
Village of Glen Ellyn
Police Pension Board
Regular Meeting
July 21, 2021
4:00 PM
Police Station Community Room via Zoom

A. **Call to Order –** The Police Pension meeting was called to order by President Adduci at 4:01 pm.

Attendee Name	Title	Status
John Adduci	Board Member	Present
Anthony Terranova	Board Member	Present
Bill Housey	Board Member	Present
Jim Monson	Board Member	Present
Jim King	Board Member	Absent

Also Present: Finance Director Coyle, Investment Consultants Chris Caparelli & Samantha Grant (Marquette Associates), Trustee Liaison Gary Fasules.

B. **Public Comment/Participation (Non Agenda Items) –** No public comment.

C. **Approval of Minutes**

RESULT:	Approval of Minutes from April 21, 2021 & June 1, 2021 [UNANIMOUS]
MOVER:	James Monson, Trustee
SECONDER:	Bill Housey, Trustee
AYES:	Adduci, Terranova, Monson, Housey

D. Quarterly Investment Report

1. Samantha Grant and Christopher Caparelli from Marquette Associates will present the second quarter investment report and any recommendations for the portfolio.

   Ms. Grant reports the commodities and equities continued to lead in 2021. Volatility will be present in the near future. Unemployment was at 5.9% in June. That is continuing to trend downward and is expected to be around 5% once unemployment benefits expire in September. GDP and unemployment are approaching pre-pandemic levels. Inflation is rising which the Fed expected as reopening continues. The issues in the supply chains are also driving inflation up. History indicates that the second half of 2021 could see a pullback in the equity markets. The S&P is up 15% YTD. We have not seen any drawdowns yet. Typically we would expect to see a 5% decline in the S&P three times a year. We haven't even seen it one time this year. So we are expecting to see some volatility this year. Meme stock speculation continues in small caps. Returns of the S&P are a result of earnings, which is what we like to see. Last year pricing drove the S&P. The S&P 500 is strong, 15.3% YTD. Total Fund Composite: 4.2% QTR., 7.5% YTD, U.S. Fixed income: .9% QTR.; -.8 YTD, U.S Equities: 6.8% Qtr.; 14.3% YTD., Non U.S. equities: 5.8% QTR; 11.3% YTD., Global Tactical: 3.4% QTR, 5.5% YTD, and Real Estate: 3.6% QTR, 6.1% YTD..

   Trustee Housey asks if we should look at commodities. Mr. Caparelli adds we don't usually recommend commodities, but we can look to run a commodities search and bring options to you for the next meeting. Mr. Caparelli adds next meeting we should consider rebalancing cash into fixed income, which is a little underweight for the policy targets.

   Trustee Housey motions to accept the investment report. Trustee Terranova seconds the motion.

RESULT:	Approval [UNANIMOUS]
MOVER:	Bill Housey, Trustee
SECONDER:	Anthony Terranova, Trustee
AYES:	Adduci, Terranova, Monson, Housey

E. Approval of Expenses

1. Approve the expense vouchers in the amount of $109,208.50 and pension expenses in the amount of $637,164.75 for a total of $746,373.25.

   Trustee Monson motions to approve the expense vouchers in the amount of $109,208.50 and pension expenses in the amount of $637,164.75 for a total of $746,373.25. Trustee Terranova seconds the motion.

RESULT:	Approval [UNANIMOUS]
MOVER:	James Monson, Trustee
SECONDER:	Anthony Terranova, Trustee
AYES:	Adduci, Terranova, Monson, Housey

F. Approval of Membership Changes / Contribution Refunds / Transfers – None

1. Motion to admit officers Dionta Acklin and John Murray to the pension fund, effective June 11, 2021.

   Trustee Monson motions to admit officers Dionta Acklin and John Murray to the pension fund, effective June 11, 2021. Trustee Housey seconds the motion.

RESULT:	Approval [UNANIMOUS]
MOVER:	James Monson, Trustee
SECONDER:	James Housey, Trustee
AYES:	Adduci, Terranova, Monson, Housey

G. Election of Officers

1. President Adduci asks if he will need to be reappointed now that his term is up. Finance Director Coyle states it is her understanding that both Adduci and Housey will be reappointed to the Police Pension Board. Trustee Fasules confirms the reappointment. President Adduci asks the Police Pension Board if anyone would be interested in taking on the President role for next year. Trustee Terranova motions to keep the existing officers for next year. Trustee Monson seconds the motion.

RESULT:	Approval
MOVER:	Anthony Terranova, Trustee
SECONDER:	James Monson, Trustee
AYES:	Terranova, Monson, Housey
NAYS:	Adduci

H. Appointment of Authorized Representative

1. Motion to approve a Resolution to Appoint an Authorized Representative to the Illinois Police Officers' Pension Investment Fund.

   Trustee Terranova motions to approve a resolution to appoint Christina Coyle and Jim Monson as an Authorized Representative to the Illinois Police Officers' Pension Investment Fund. Trustee Monson seconds the motion.

RESULT:	Approval [UNANIMOUS]
MOVER:	Anthony Terranova, Trustee
SECONDER:	James Monson, Trustee
AYES:	Adduci, Terranova, Monson, Housey

I. Department of Insurance Report

1. Motion to accept the Department of Insurance report for the year ending December 31, 2020.

   Trustee Monson motions to accept the Department of Insurance report for the year December 31, 2020**.** Trustee Housey seconds the motion.

RESULT:	Approval [UNANIMOUS]
MOVER:	James Monson, Trustee
SECONDER:	Bill Housey, Trustee
AYES:	Adduci, Terranova, Monson, Housey

J. Other Business

President Adduci asks what the meeting plans are for October. Finance Director Coyle states we can have remote participation as long as we have a physical in-person quorum. If we can continue to meet over zoom we will. If it no longer allowed, we will be in person.

K. Adjournment – Trustee Housey moves and Trustee Monson seconds to adjourn the meeting. The meeting was adjourned at 4:59 pm.

RESULT:	Approval [UNANIMOUS]
MOVER:	Bill Housey, Trustee
SECONDER:	James Monson, Trustee
AYES:	Terranova, Monson, Adduci, Housey

Glen Ellyn Police Pension Board
535 Duane Street
Glen Ellyn, IL 60137

Meeting 10/20/2021 7:30 PM
Department: Finance
Department Head: Christina Coyle
Category: Report
Prepared By: Christina Coyle

AGENDA ITEM (ID # 2021-1070)

DOC ID: 2021-1070

Samantha Grant and Christopher Caparelli from Marquette Associates will present the third quarter investment report and any recommendations for the investment portfolio.

Statement of the Issue:
Please see the reports attached.

Analysis:
N/A

Budget Impact:
N/A

Action Requested:
Motion to accept the second quarter investment report and implement actions recommended by the investment consultant.

Attachments:

1. 3Q 2021 Market Environment
2. 3Q21 Glen Ellyn Police
3. Glen Ellyn Police Pension Commodities - Long Only Searchbook

3Q 2021
Market Environment

Overview

Commodities and equities still lead through 3Q

2021 YTD	2020	2019	2018	2017	2016	2015	2014	2013	2012	5yr	10yr
Commodities 38.3%	Broad U.S. Equities 20.9%	Large Cap 31.5%	Real Estate 6.7%	Emerging Markets 37.3%	Small Cap 21.3%	Real Estate 13.3%	Large Cap 13.7%	Small Cap 38.8%	Intl Small Cap 20.0%	Large Cap 16.9%	Large Cap 16.6%
Large Cap 15.9%	Small Cap 20.0%	Broad U.S. Equities 31.0%	Bank Loans 1.1%	Intl Small Cap 33.0%	High Yield 17.1%	Intl Small Cap 9.6%	Mid Cap 13.2%	Mid Cap 34.8%	Emerging Markets 18.2%	Broad U.S. Equities 16.9%	Broad U.S. Equities 16.6%
Mid Cap 15.2%	Large Cap 18.4%	Mid Cap 30.5%	Core Bond 0.0%	Broad Intl Equities 27.2%	Mid Cap 13.8%	Large Cap 1.4%	Broad U.S. Equities 12.6%	Broad U.S. Equities 33.6%	Intl Large Cap 17.3%	Mid Cap 14.4%	Mid Cap 15.5%
Broad U.S. Equities 15.0%	Emerging Markets 18.3%	Small Cap 25.5%	High Yield -2.1%	Intl Large Cap 25.0%	Broad U.S. Equities 12.7%	Core Bond 0.5%	Real Estate 11.8%	Large Cap 32.4%	Mid Cap 17.3%	Small Cap 13.5%	Small Cap 14.6%
Small Cap 12.4%	Mid Cap 17.1%	Intl Small Cap 25.0%	Hedge Funds -4.0%	Large Cap 21.8%	Large Cap 12.0%	Broad U.S. Equities 0.5%	Core Bond 6.0%	Intl Small Cap 29.3%	Broad Intl Equities 16.8%	Intl Small Cap 10.4%	Intl Small Cap 10.7%
Intl Small Cap 10.0%	Intl Small Cap 12.3%	Intl Large Cap 22.0%	Large Cap -4.4%	Broad U.S. Equities 21.1%	Commodities 11.4%	Hedge Funds -0.3%	Small Cap 4.9%	Intl Large Cap 22.8%	Broad U.S. Equities 16.4%	Emerging Markets 9.2%	Real Estate 8.8%
Hedge Funds 9.9%	Hedge Funds 10.9%	Broad Intl Equities 21.5%	Broad U.S. Equities -5.2%	Mid Cap 18.5%	Emerging Markets 11.2%	Bank Loans -0.4%	Hedge Funds 3.4%	Broad Intl Equities 15.3%	Small Cap 16.4%	Broad Intl Equities 8.9%	Intl Large Cap 8.1%
Intl Large Cap 8.3%	Broad Intl Equities 10.7%	Emerging Markets 18.4%	Mid Cap -9.1%	Small Cap 14.6%	Bank Loans 9.9%	Intl Large Cap -0.8%	High Yield 2.5%	Real Estate 11.0%	Large Cap 16.0%	Intl Large Cap 8.8%	Broad Intl Equities 7.5%
Broad Intl Equities 5.9%	Intl Large Cap 7.8%	Commodities 17.6%	Small Cap -11.0%	Hedge Funds 7.8%	Real Estate 8.0%	Mid Cap -2.4%	Bank Loans 2.1%	Hedge Funds 9.0%	High Yield 15.8%	Hedge Funds 7.4%	High Yield 7.4%
Real Estate 5.4%	Core Bond 7.5%	High Yield 14.3%	Intl Large Cap -13.8%	High Yield 7.5%	Broad Intl Equities 4.5%	Small Cap -4.4%	Emerging Markets -2.2%	High Yield 7.4%	Real Estate 10.5%	High Yield 6.5%	Emerging Markets 6.1%
Bank Loans 4.17%	High Yield 7.1%	Core Bond 8.7%	Commodities -13.8%	Real Estate 7.0%	Core Bond 2.6%	High Yield -4.5%	Broad Intl Equities -3.9%	Bank Loans 6.2%	Bank Loans 9.4%	Real Estate 6.1%	Hedge Funds 5.4%
High Yield 4.5%	Bank Loans 2.8%	Hedge Funds 8.4%	Broad Intl Equities -14.2%	Commodities 5.8%	Intl Small Cap 2.2%	Broad Intl Equities -5.7%	Intl Large Cap -4.9%	Commodities -1.2%	Hedge Funds 4.8%	Bank Loans 4.6%	Bank Loans 5.0%
Emerging Markets -1.2%	Real Estate 1.6%	Bank Loans 8.2%	Emerging Markets -14.6%	Bank Loans 4.2%	Intl Large Cap 1.0%	Emerging Markets -14.9%	Intl Small Cap -4.9%	Core Bond -2.0%	Core Bond 4.2%	Commodities 3.6%	Core Bond 3.0%
Core Bond -1.6%	Commodities -23.7%	Real Estate 6.4%	Intl Small Cap -17.9%	Core Bond 3.5%	Hedge Funds 0.5%	Commodities -32.9%	Commodities -33.1%	Emerging Markets -2.6%	Commodities 0.1%	Core Bond 2.9%	Commodities -4.8%

Source: Bloomberg as of September 30, 2021; hedge funds as of August 31, 2021, real estate as of June 30, 2021. Please see end of document for benchmark information.

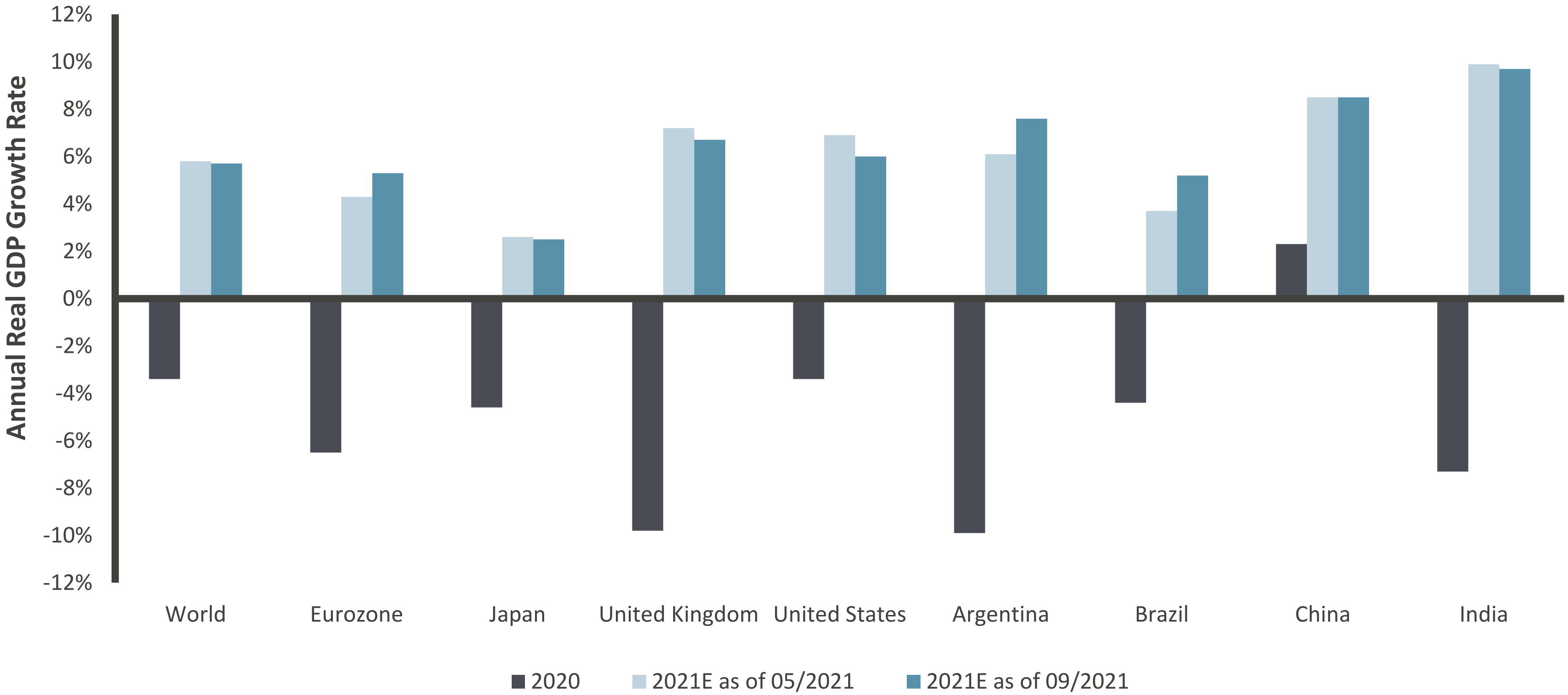
MarquetteAssociates

3Q21 Market Themes

- **Delta does its damage**: 2021 GDP projections move lower because of Delta impact, but surge appears to be fading as 4Q begins.
- **Labor shortages continue**: Lower labor force participation rates have left many companies short-staffed and unable to fulfill their growth potential; this dynamic bears watching and will serve as a headwind to full recovery until the pattern reverses.
- **Rising energy costs emerge as primary source of inflation worries**: Price growth for commodities and used cars has abated, but the looming winter coupled with soaring energy prices and ongoing supply chain issues has exacerbated inflation concerns; most experts expect inflation to remain elevated going into 2022.
- **Evergrande debt crisis stirs market volatility**: Evergrande's debt load and potential default ignited market volatility and fears of a global debt crisis, though it appears that the brunt of damage will be concentrated in China; U.S. credit markets appear healthy with tight spreads and very limited defaults.
- **Typical September for equity markets**: Consistent with most years, September was a down month for markets; tech sell-off, U.S. debt ceiling debate, and Evergrande issues drove losses for all indices. For 3Q, indices were mostly negative with the greatest losses in U.S. small-cap and EM.
- **Taper announcement expected in November:** Given the amount of QE and prevalence of low rates, the taper has potential to negatively impact equity markets, both domestically and abroad.
- **Earnings peak**: Data suggests that earnings peaked in 2Q, and the path forward for earnings will have a material impact on equity market returns for the remainder of 2021 and going into 2022.

Expected world GDP growth ticks back

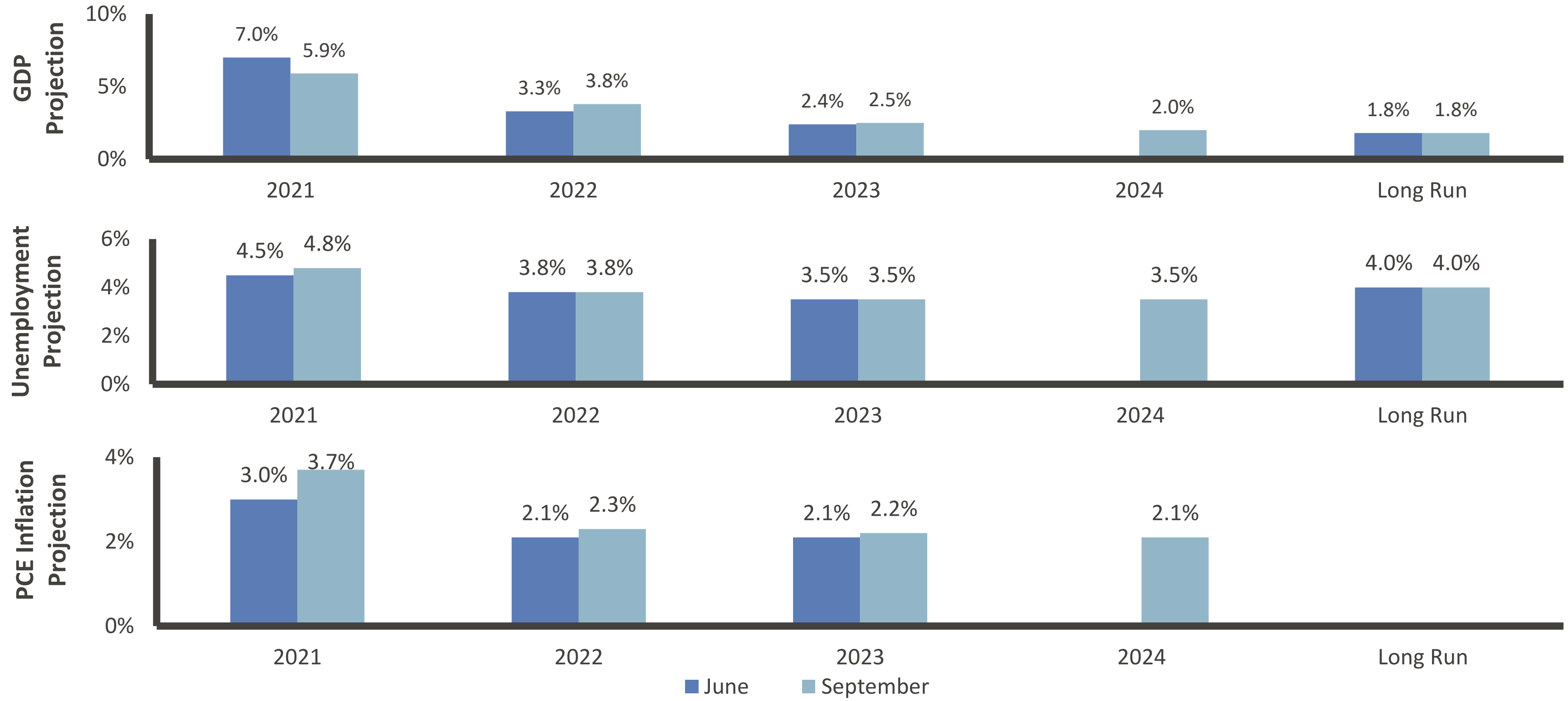
As regions continue to tackle COVID-19 variants with varying vaccination rates and supply chain bottlenecks, global GDP growth expectations dropped to 5.7%



Source: OECD Interim Economic Outlook Forecasts September 2021.

Delta slows Fed's projected 2021 GDP growth

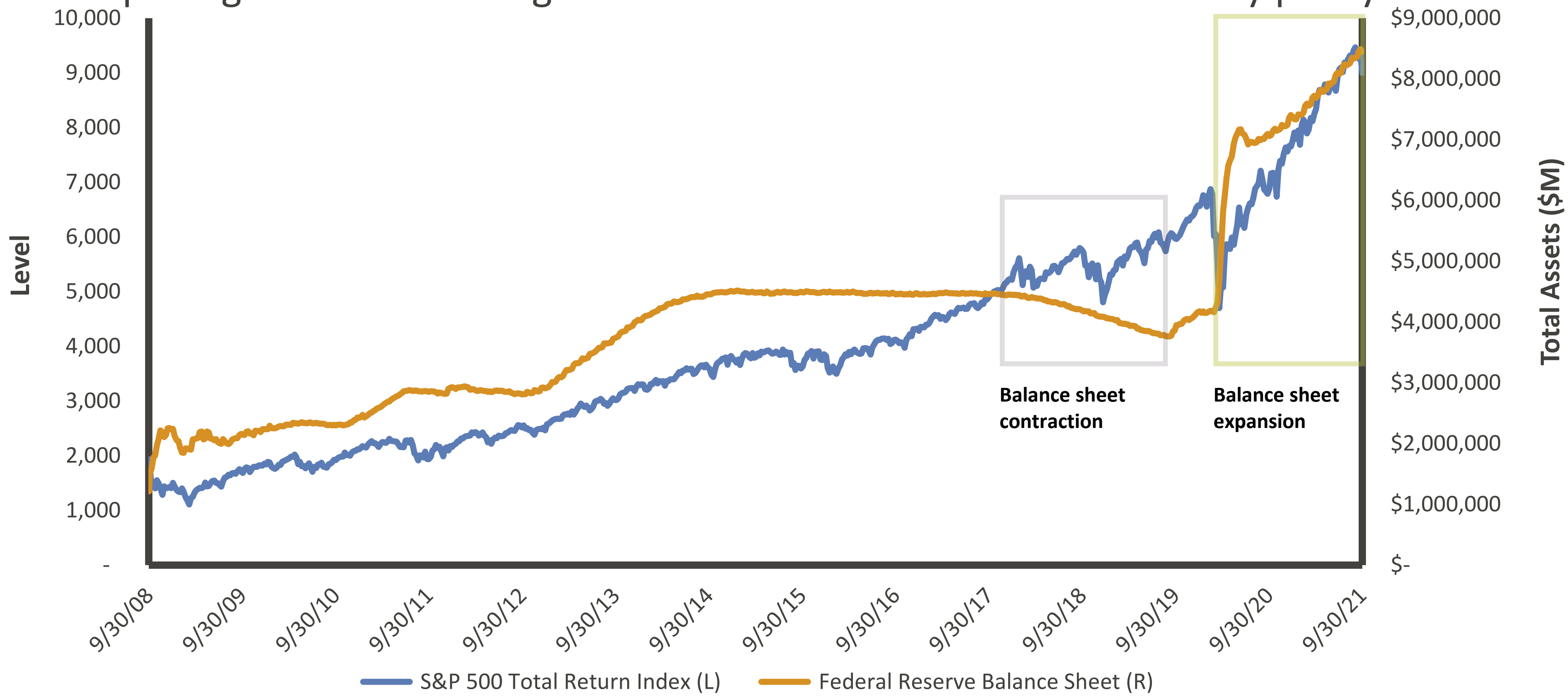
Fed signaling potential tapering as it reduces 2021 GDP forecast due to delta surge but raised 2022 and 2023 forecasts



Sources: Marquette Research, Federal Reserve. Note: The Federal Reserve did not provide a 2024 projection as part of its June estimate.

U.S. equities, the Fed balance sheet, and tapering

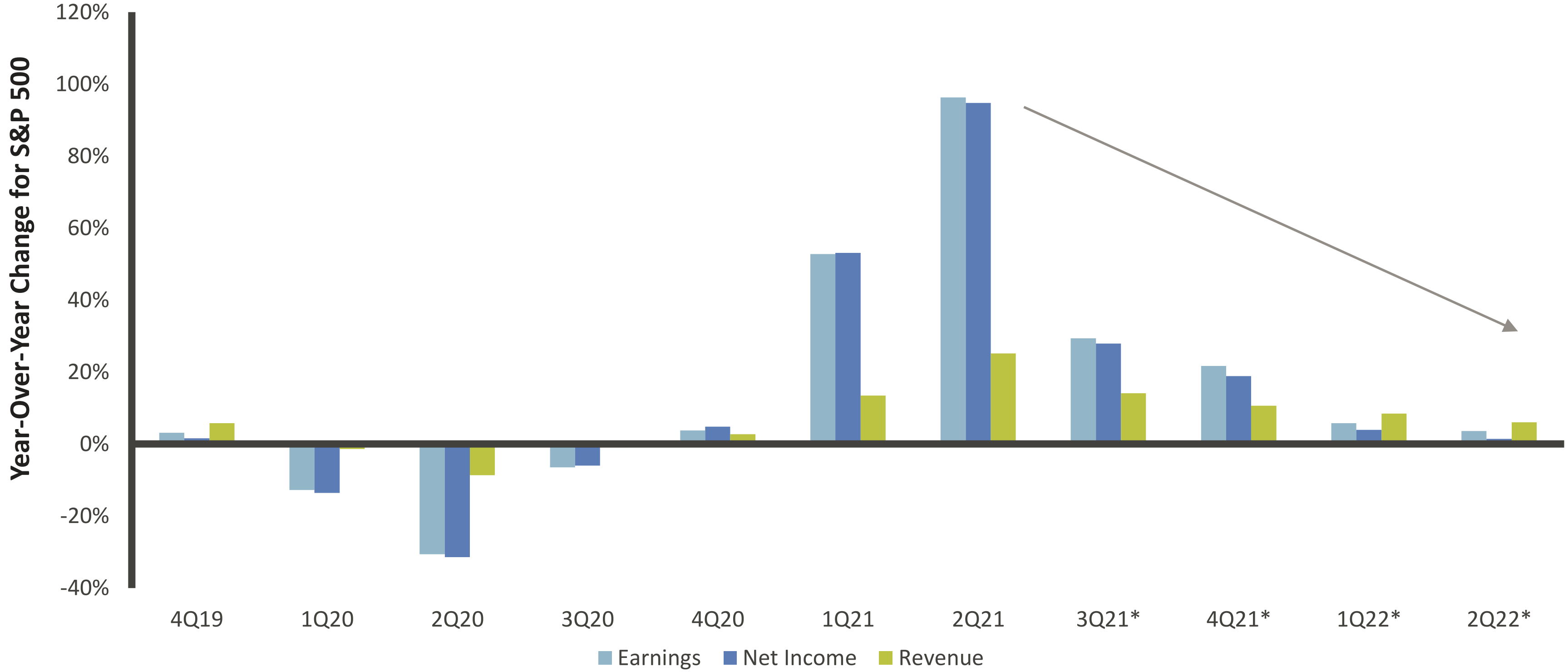
Quantitative easing has helped buoy asset prices and keep the U.S. equity market performing strongly, however future balance sheet tapering could lead to some repricing as investors weigh the costs of more restrictive monetary policy



Source: Bloomberg and Federal Reserve Bank of St. Louis as of September 30, 2021

Forecasts indicate S&P 500 earnings growth has peaked

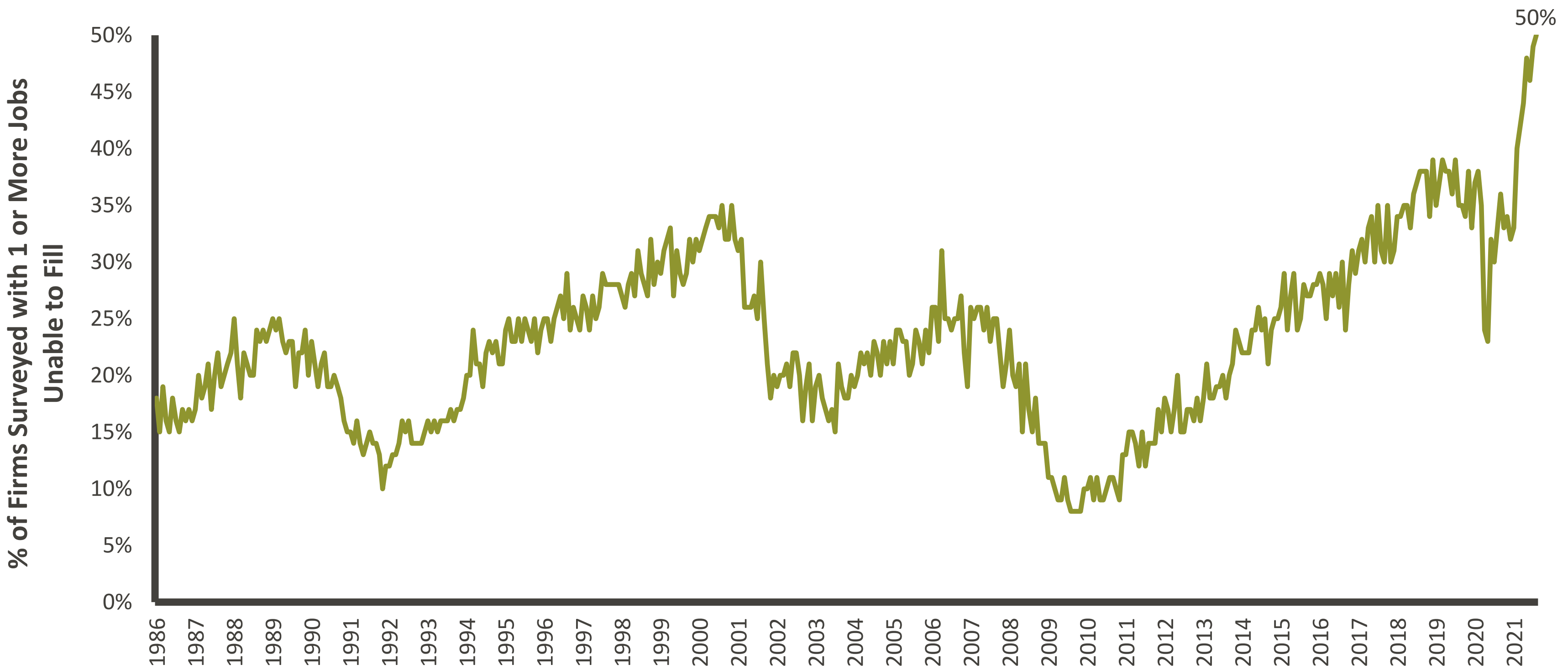
Going forward, most analysts expect earnings growth for S&P 500 companies to slow amid ongoing economic reopenings, which could impact index performance given the importance of earnings to equity returns



Sources: FactSet and Refinitiv (Institutional Brokers' Estimate System) as of September 30, 2021; *Indicates estimates

Labor shortage remains a headwind for growth

50% of respondents to a recent NFIB Small Business Jobs survey reported difficulty filling one or more positions, which constitutes the highest figure on record



Sources: FactSet as of August 31, 2021; NFIB Small Business Jobs Report

Fixed Income

Fixed income: Rates rise slightly as COVID cases subside

However, Evergrande contagion fears jitter markets along with tech-driven sell-off due to elevated valuation concerns

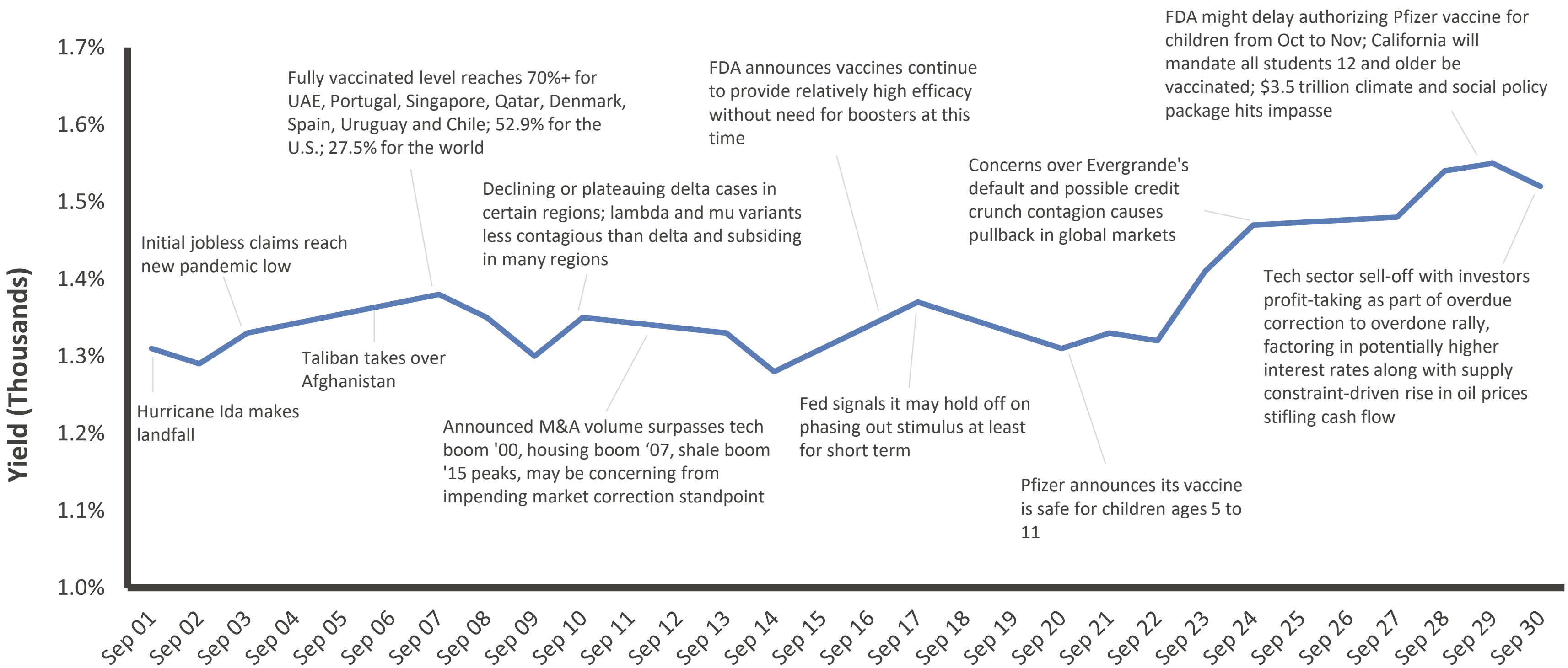
		1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yr (%)	5 Yr (%)	10 Yr (%)
Broad Market Indices	Blm BC Aggregate	-0.87	0.05	-1.55	-0.90	5.36	2.94	3.01
Intermediate Indices	Blm BC Int. Gov./Credit	-0.57	0.02	-0.87	-0.40	4.63	2.60	2.52
Government Only Indices	Blm BC Long Gov.	-2.85	0.46	-7.40	-10.13	9.17	3.34	4.40
	Blm BC Int. Gov.	-0.60	0.00	-1.12	-1.33	3.98	1.99	1.81
	Blm BC 1-3 Year Gov.	-0.10	0.07	-0.02	0.03	2.67	1.65	1.18
	Blm BC U.S. TIPS	-0.71	1.75	3.51	5.19	7.45	4.34	3.12
Credit Indices	Blm BC U.S. Long Credit	-1.97	-0.18	-2.66	2.13	10.20	6.14	6.59
	Blm BC High Yield	-0.01	0.89	4.53	11.28	6.91	6.52	7.42
	CS Leveraged Loan Index	0.65	1.13	4.65	8.46	4.09	4.64	5.04
Securitized Bond Indices	Blm BC MBS	-0.36	0.10	-0.67	-0.43	3.85	2.17	2.41
	Blm BC ABS	-0.15	0.05	0.23	0.59	3.50	2.36	2.13
	Blm BC CMBS	-0.76	-0.03	-0.25	0.99	5.71	3.36	4.16
Non-U.S. Indices	Blm BC Global Aggregate Hedged	-0.94	0.09	-1.43	-0.56	4.64	2.89	3.57
	JPM EMBI Global Diversified	-2.07	-0.70	-1.36	4.36	5.65	3.89	5.80
	JPM GBI-EM Global Diversified	-3.43	-3.10	-6.38	2.63	3.66	2.06	1.05
Municipal Indices	Blm BC Municipal 5 Year	-0.46	0.13	0.30	1.08	3.87	2.41	2.52
	Blm BC HY Municipal	-0.65	0.38	6.53	11.33	7.44	6.00	6.68

Note: The local currency GBI index is hedged and denominated in U.S. dollars. Sources: Bloomberg Barclays, Credit Suisse, JPMorgan, as of September 30, 2021

September: 10-year rises as delta variant subsides

While COVID cases turn a corner and economic results remain strong, hints of weakness in the markets arise from Evergrande and tech sell-off

10-Year Treasury Yield

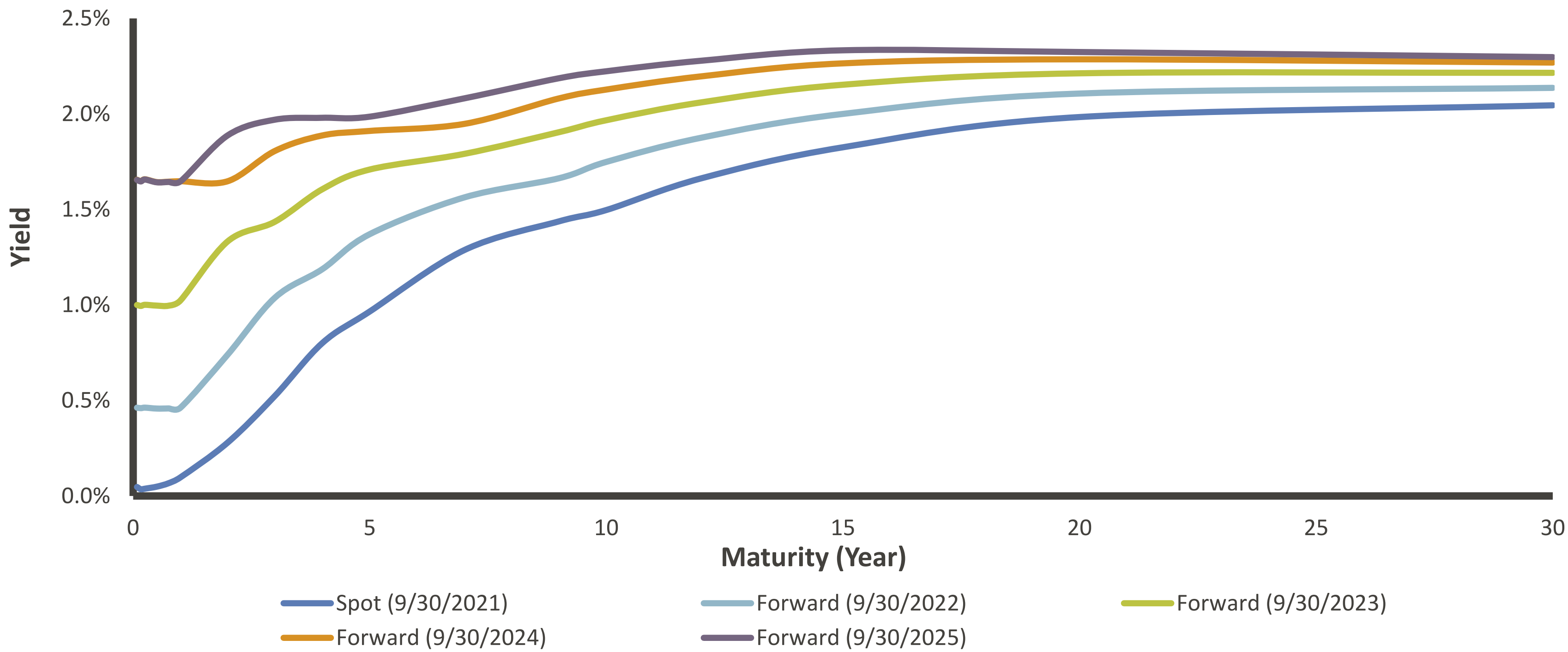


Sources: Marquette Research, Federal Reserve as of September 30, 2021

Market still expects rates to rise

The 10-yr rose from 0.90% at the end of 2020 to 1.70% in 1Q, then fell to 1.50% in 2Q and stayed there in 3Q, projected to reach 2.20% in four years

Projected Treasury Forward Curves, Next Four Years



Sources: Marquette Research, Bloomberg, U.S. Treasury

U.S. Equities

September drop leads to mixed results for U.S. equities in 3Q

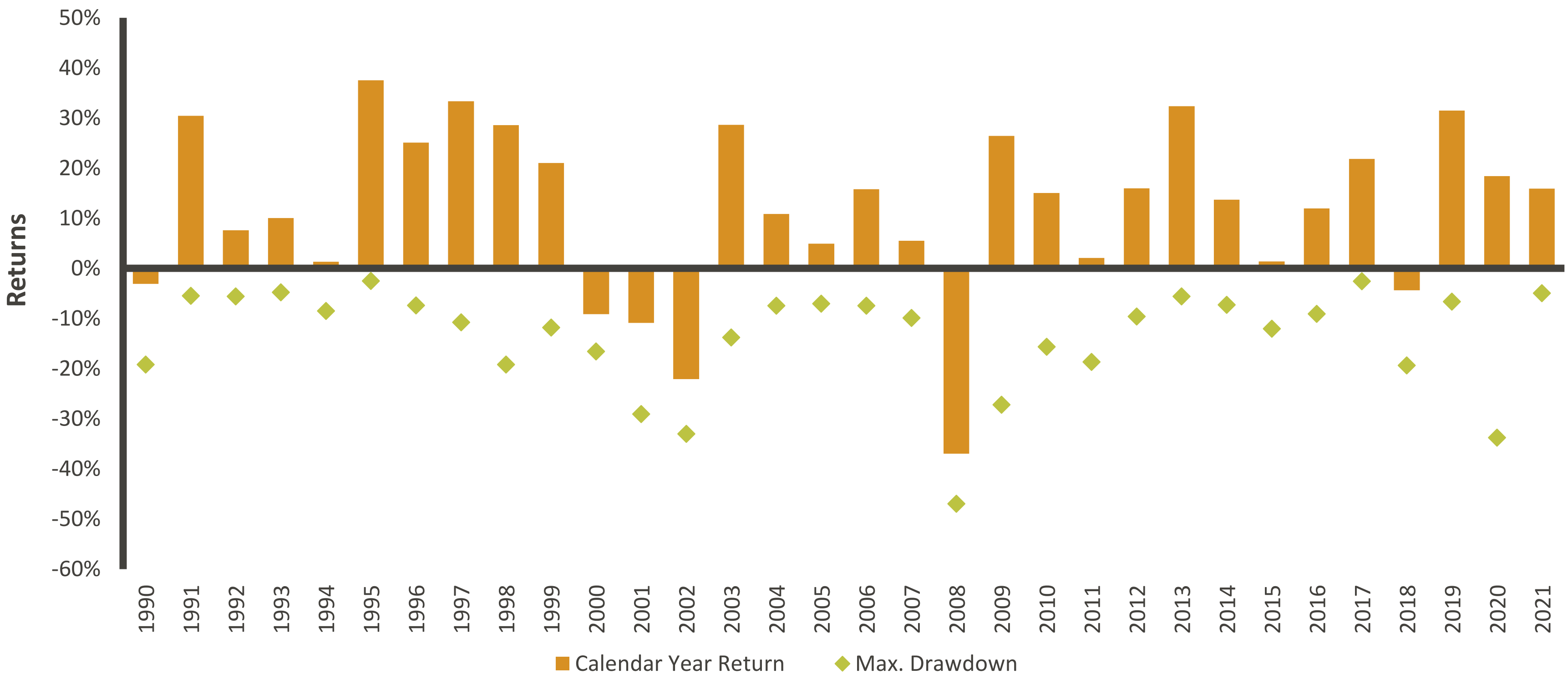
All major U.S. equity indices fell in September, leading to negative third quarter returns for mid- and small-cap stocks; large-cap growth companies eked out modest gains while their value-oriented counterparts slightly trailed

	Month (%)	3-Month (%)	YTD (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)
Broad Market Indices							
Dow Jones	-4.2	-1.5	12.1	24.2	11.0	15.7	14.7
Wilshire 5000	-4.4	0.1	15.6	32.4	16.2	17.0	16.7
Russell 3000	-4.5	-0.1	15.0	31.9	16.0	16.9	16.6
Large-Cap Market Indices							
S&P 500	-4.7	0.6	15.9	30.0	16.0	16.9	16.6
Russell 1000	-4.6	0.2	15.2	31.0	16.4	17.1	16.8
Russell 1000 Value	-3.5	-0.8	16.1	35.0	10.1	10.9	13.5
Russell 1000 Growth	-5.6	1.2	14.3	27.3	22.0	22.8	19.7
Mid-Cap Market Indices							
Russell Mid-Cap	-4.1	-0.9	15.2	38.1	14.2	14.4	15.5
Russell Mid-Cap Value	-3.7	-1.0	18.2	42.4	10.3	10.6	13.9
Russell Mid-Cap Growth	-4.8	-0.8	9.6	30.5	19.1	19.3	17.5
Small-Cap Market Indices							
Russell 2000	-2.9	-4.4	12.4	47.7	10.5	13.5	14.6
Russell 2000 Value	-2.0	-3.0	22.9	63.9	8.6	11.0	13.2
Russell 2000 Growth	-3.8	-5.7	2.8	33.3	11.7	15.3	15.7

Source: Morningstar Direct as of September 30, 2021

Sept. swoon modest compared to historical pullbacks

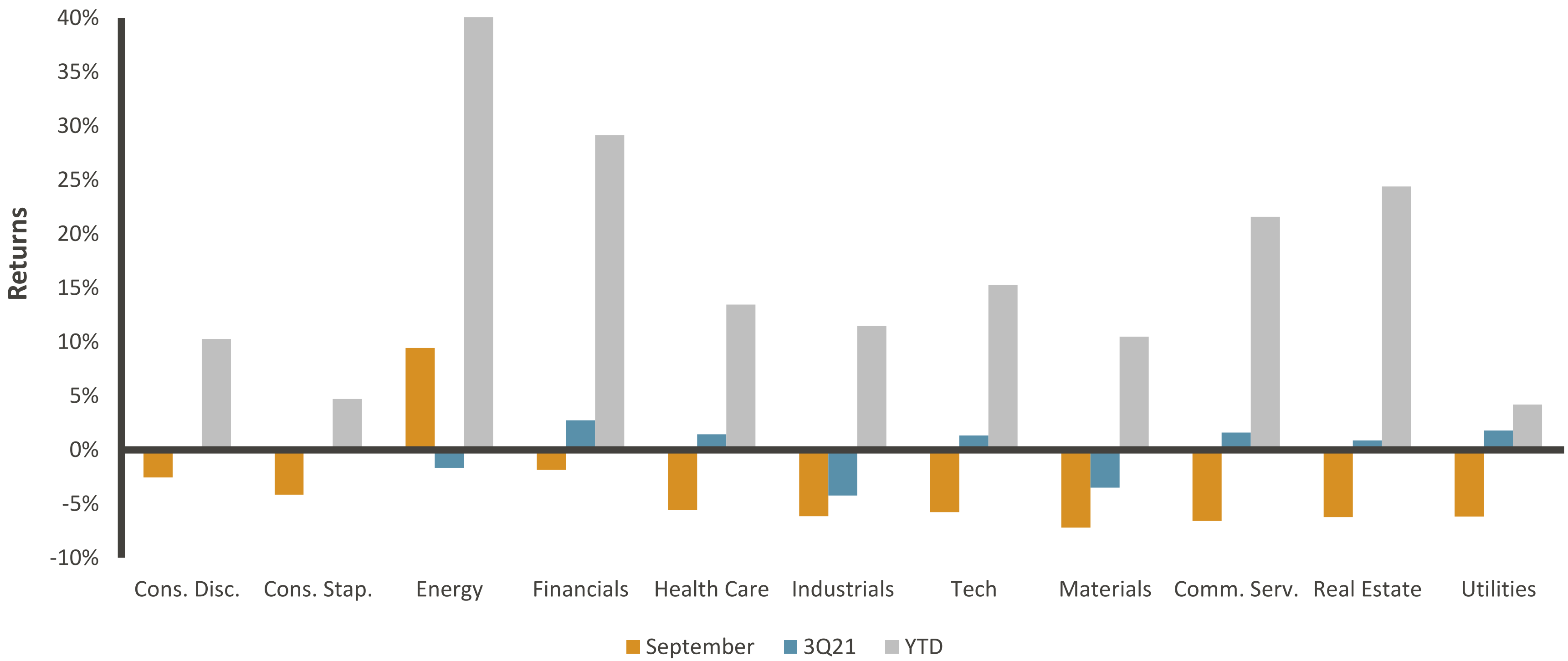
The roughly 5% drop exhibited by the S&P 500 in September is negligible compared to drawdowns in previous periods, and is roughly half of the median annual drawdown for the index in the last 30 years



Source: Bloomberg as of September 30, 2021

Energy the only S&P 500 sector to notch positive Sept.

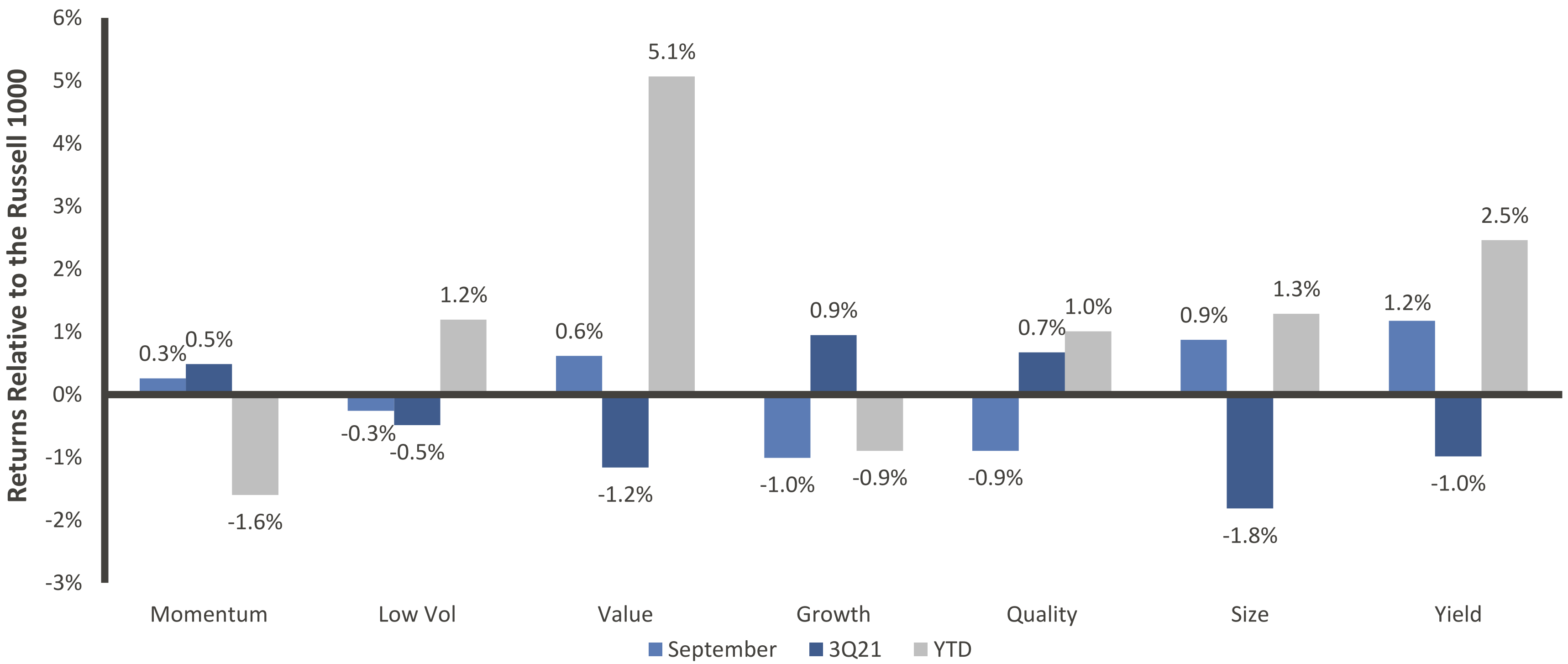
Despite a difficult month of September, all S&P 500 sectors remain positive on a year-to-date basis; the Financials sector led the way during the third quarter, building upon strong performance since the start of 2021



Source: Morningstar Direct as of September 30, 2021

No outsized factor leadership in September or 3Q

The size factor struggled during the third quarter of 2021, while September saw value-oriented stocks slightly add to their year-to-date leadership



Source: Bloomberg as of September 30, 2021

Valuations remain mostly elevated across size spectrum

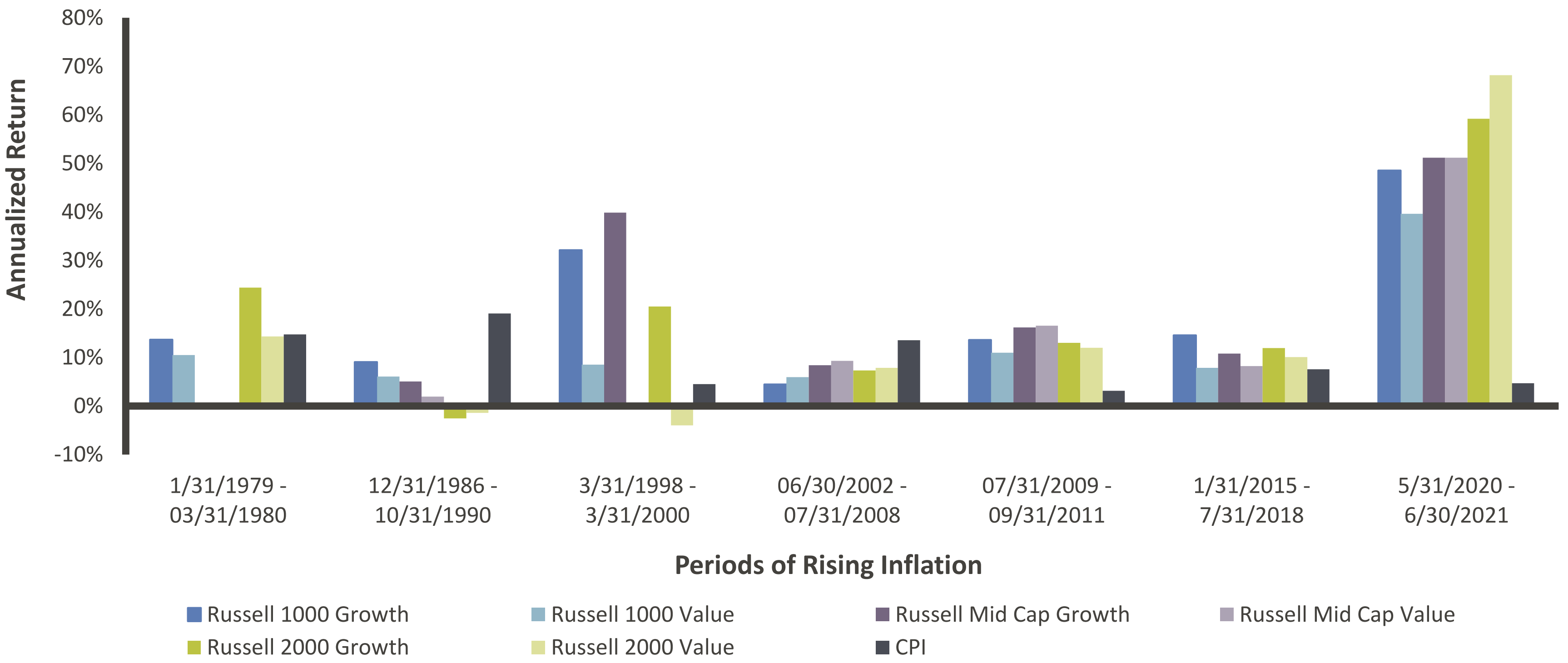
Most major U.S. equity benchmarks continue to display extreme multiples relative to historical levels, with the Russell 2000 index appearing most attractive from a historical valuation standpoint

	S&P 500		Russell 1000		Russell Mid Cap		Russell 2000	
Valuation Metrics	**Current**	**Historical Percentile (%)**	**Current**	**Historical Percentile (%)**	**Current**	**Historical Percentile (%)**	**Current**	**Historical Percentile (%)**
P/E	24.4	88	24.1	88	21.3	89	16.6	29
Forward P/E	19.6	87	20.1	89	19.8	94	15.2	58
P/B	4.5	92	4.4	95	3.4	98	2.9	100
P/S	3.0	98	2.9	98	2.1	98	1.2	86
P/CF	19.3	99	19.7	99	17.9	99	18.1	95
EV/EBITDA	16.7	96	17.2	96	18.5	96	20.2	93
Average		**93**		**94**		**96**		**77**

Source: Bloomberg. TTM P/E is adjusted for negative earnings. Small-cap forward P/E is adjusted for negative earnings. Percentiles are based on data Jan. 1995 – Sept. 2021

Equities tend to rise during periods of high inflation

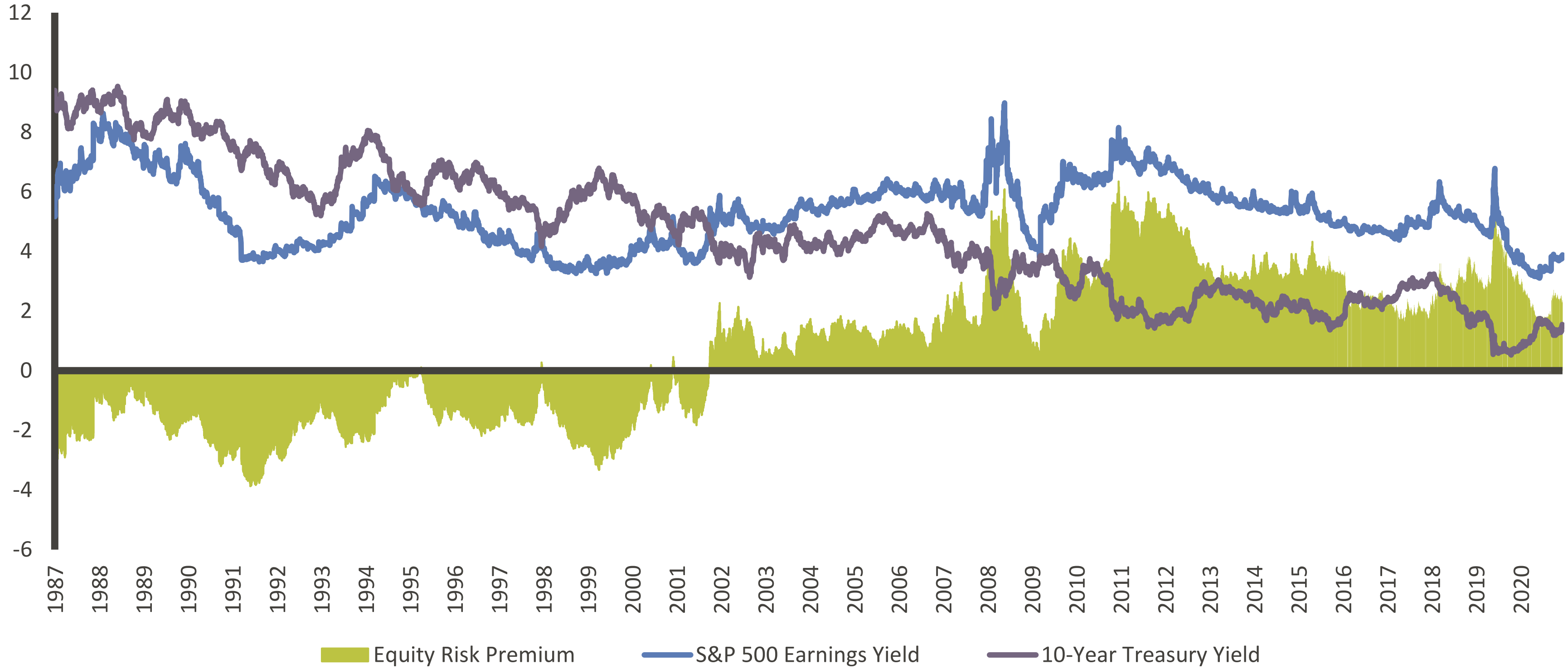
Despite some investor fears surrounding the potential for elevated price levels, equities have generally served as a hedge during periods of sustained inflation



Source: Bloomberg as of September 30, 2021

U.S. equities remain more attractive than bonds

Despite a slight uptick in the 10-year Treasury yield during the third quarter, U.S. stocks are still attractive relative to fixed income securities despite valuations which remain elevated



Source: Bloomberg as of September 30, 2021. The equity risk premium is the earnings yield of the S&P 500 minus the yield on the 10-year Treasury bond

Non-U.S. Equities

Emerging markets struggle in third quarter

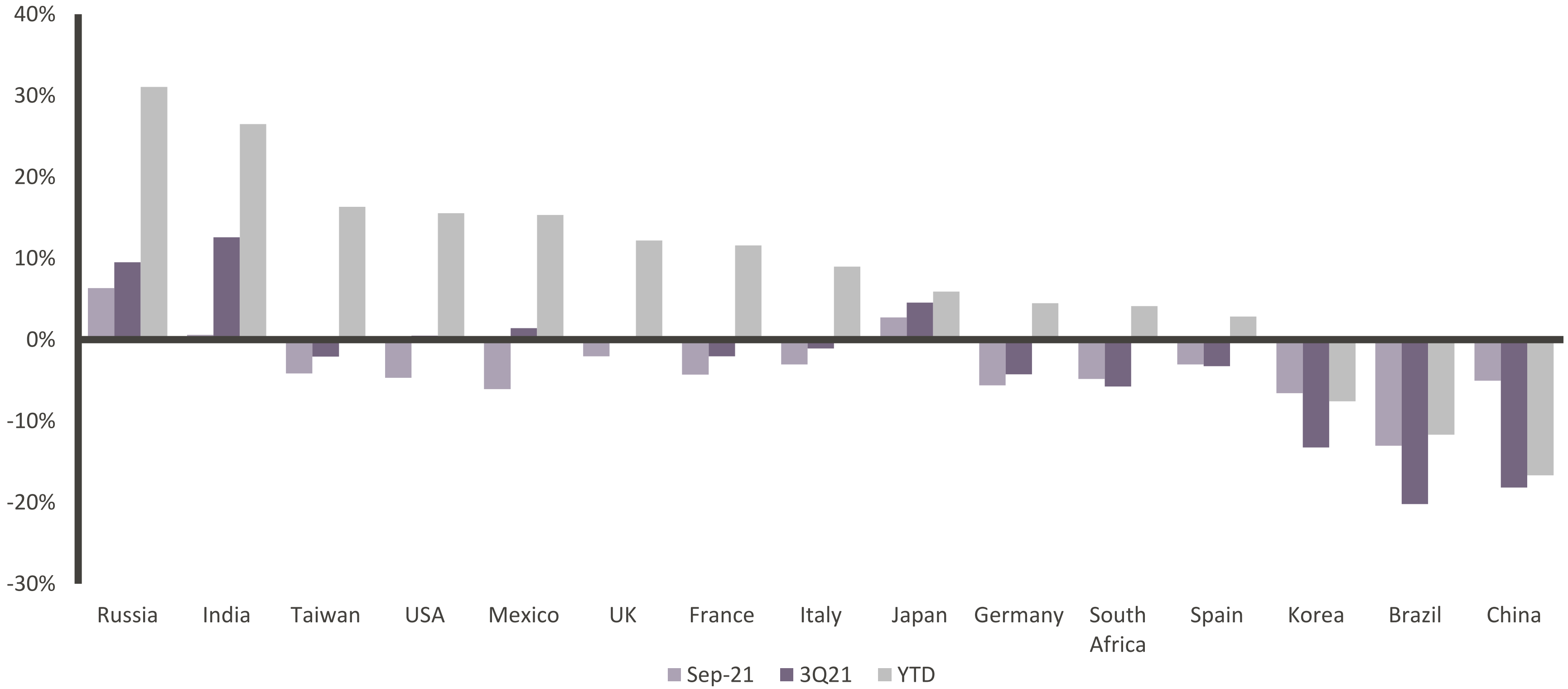
Developed markets outperform EM as China comes under pressure

	Month (%)	3-Month (%)	YTD (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)
MSCI ACWI	-4.1	-1.1	11.1	27.4	12.6	13.2	11.9
MSCI ACWI ex. U.S.	-3.2	-3.0	5.9	23.9	8.0	8.9	7.5
MSCI EAFE	-2.9	-0.4	8.3	25.7	7.6	8.8	8.1
MSCI EAFE Local	-1.3	1.3	14.2	27.2	7.2	9.0	10.1
MSCI Emerging Markets	-4.0	-8.1	-1.2	18.2	8.6	9.2	6.1
MSCI EM Local	-2.8	-6.7	0.7	16.9	9.5	10.4	8.7
MSCI EAFE Small-Cap	-3.6	0.9	10.0	29.0	9.0	10.4	10.7
MSCI EM Small-Cap	-2.0	-2.2	17.2	43.2	13.1	9.8	7.2
MSCI Frontier	1.2	3.4	18.9	32.2	10.8	9.5	7.1

Source: eVestment as of September 30, 2021

China continues to struggle in 2021

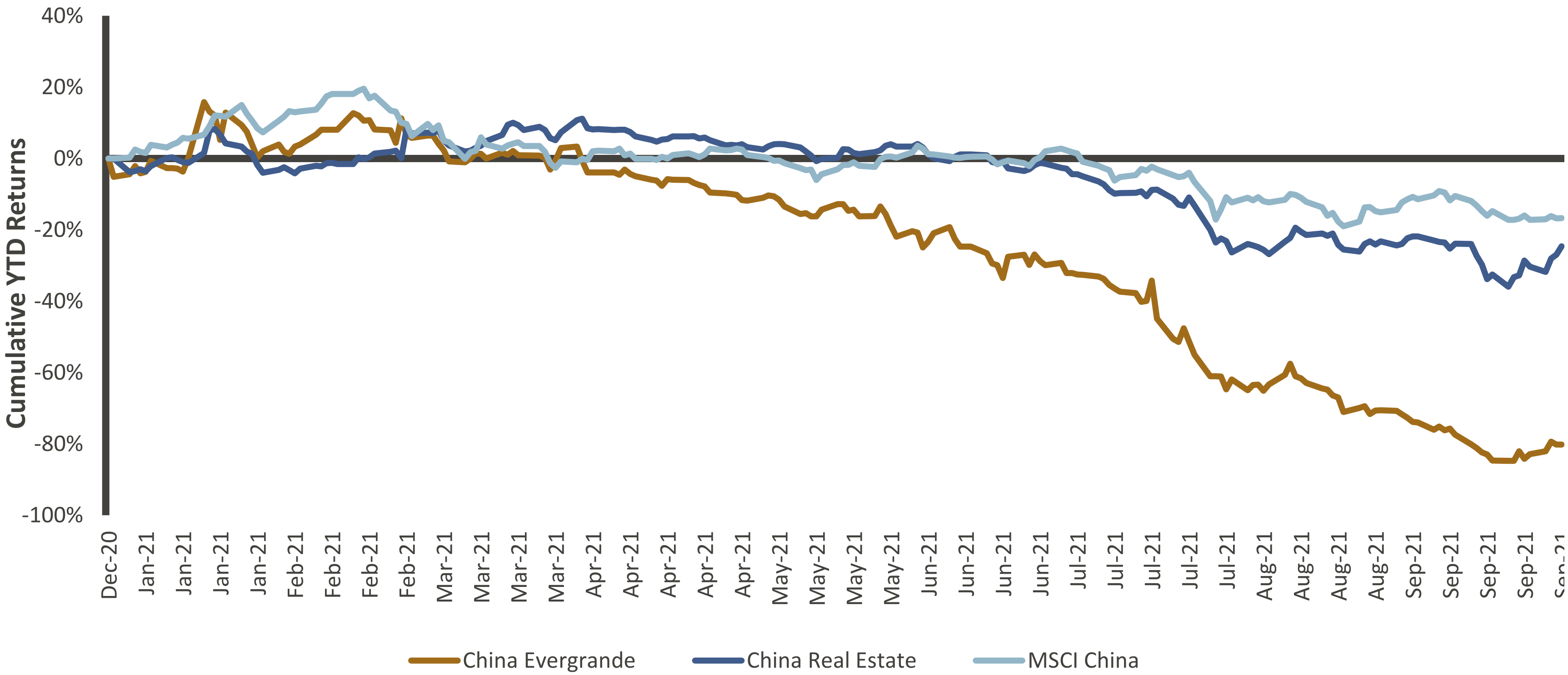
Russia and India remain the top performing countries through September



Source: Bloomberg as of September 30, 2021

Evergrande debt crisis creates market concerns

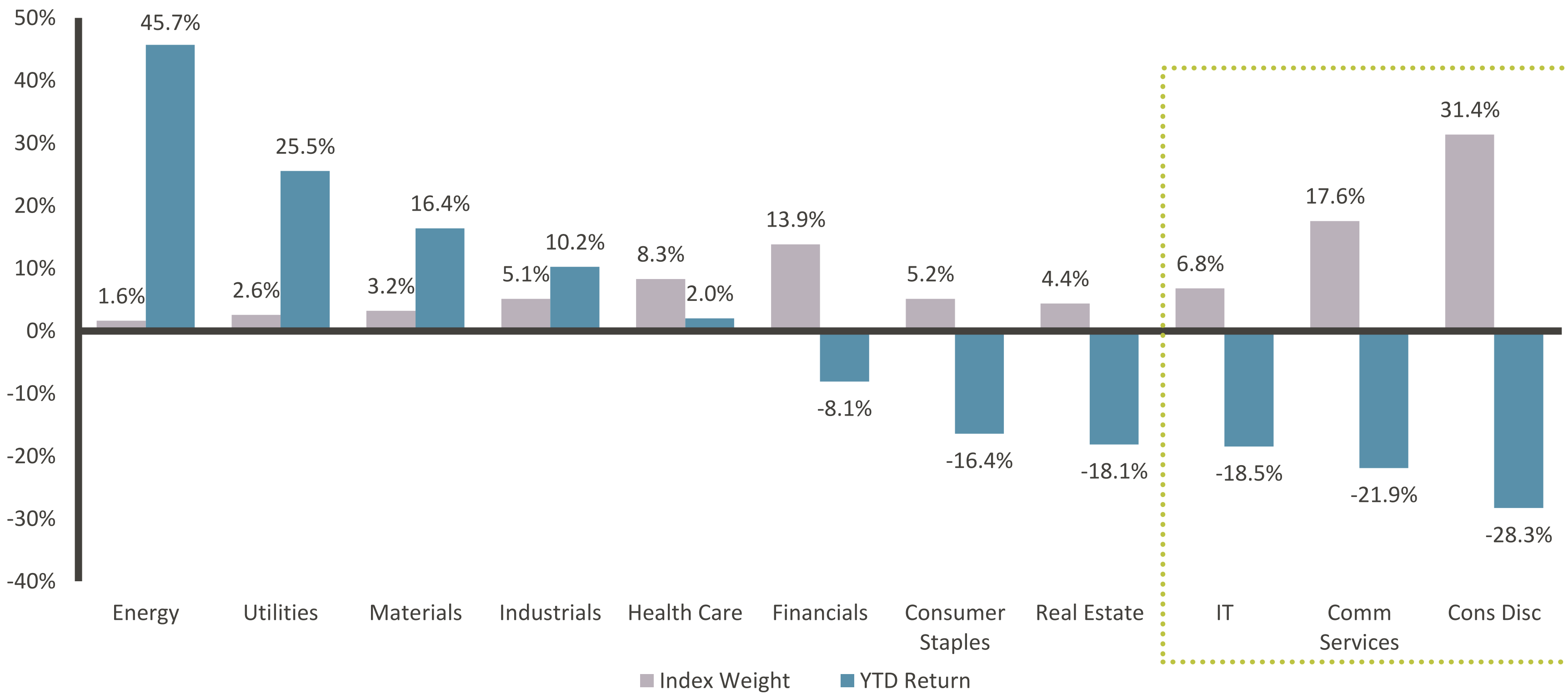
Evergrande's debt troubles led to an 80% stock sell-off and stirred fears of credit market contagion, though most expect it be resolved without major global market implications



Source: Bloomberg as of September 30, 2021

China's policy changes lead to big winners & losers

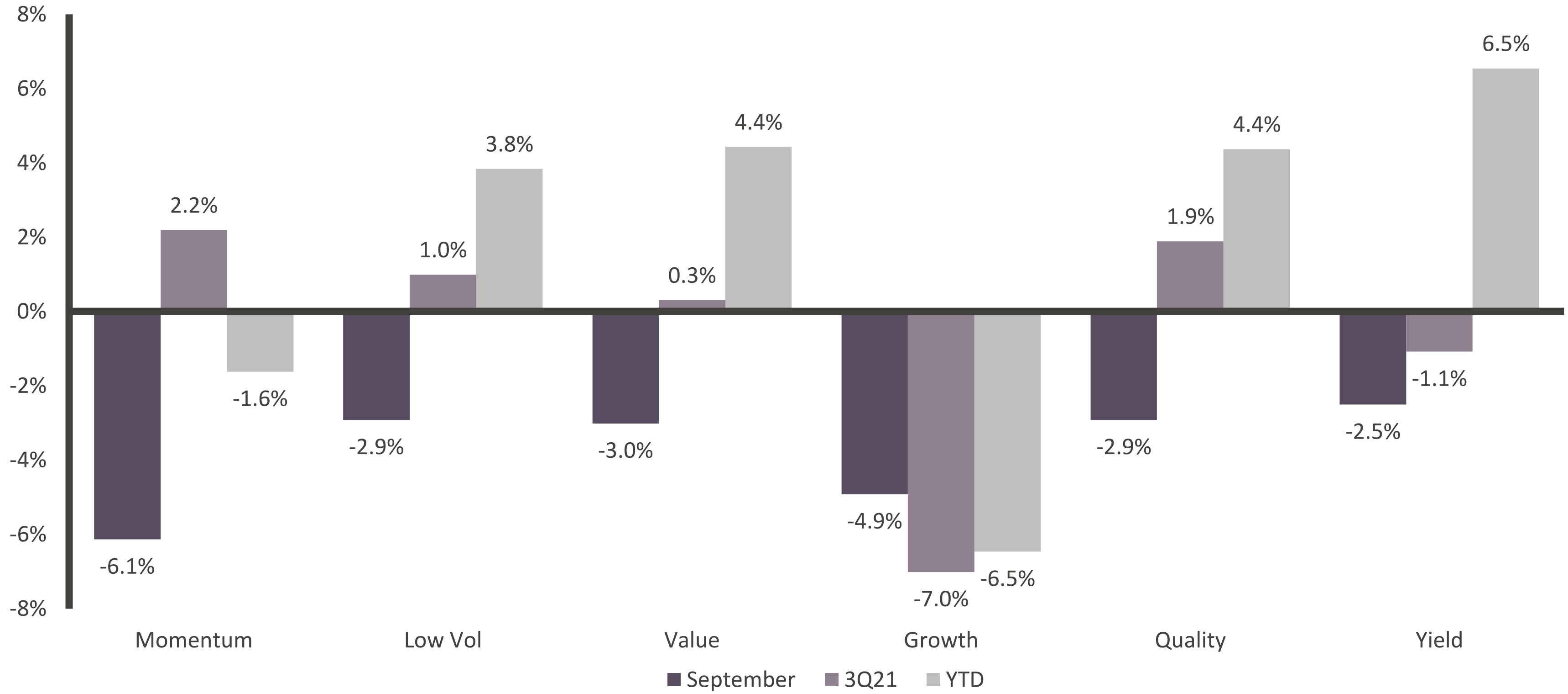
Internet platforms and services have come under pressure, which are the latest targets of Chinese regulations; past patterns suggest that markets will re-calibrate accordingly



Source: Bloomberg as of September 30, 2021

MSCI Emerging Markets: Yield drives performance YTD

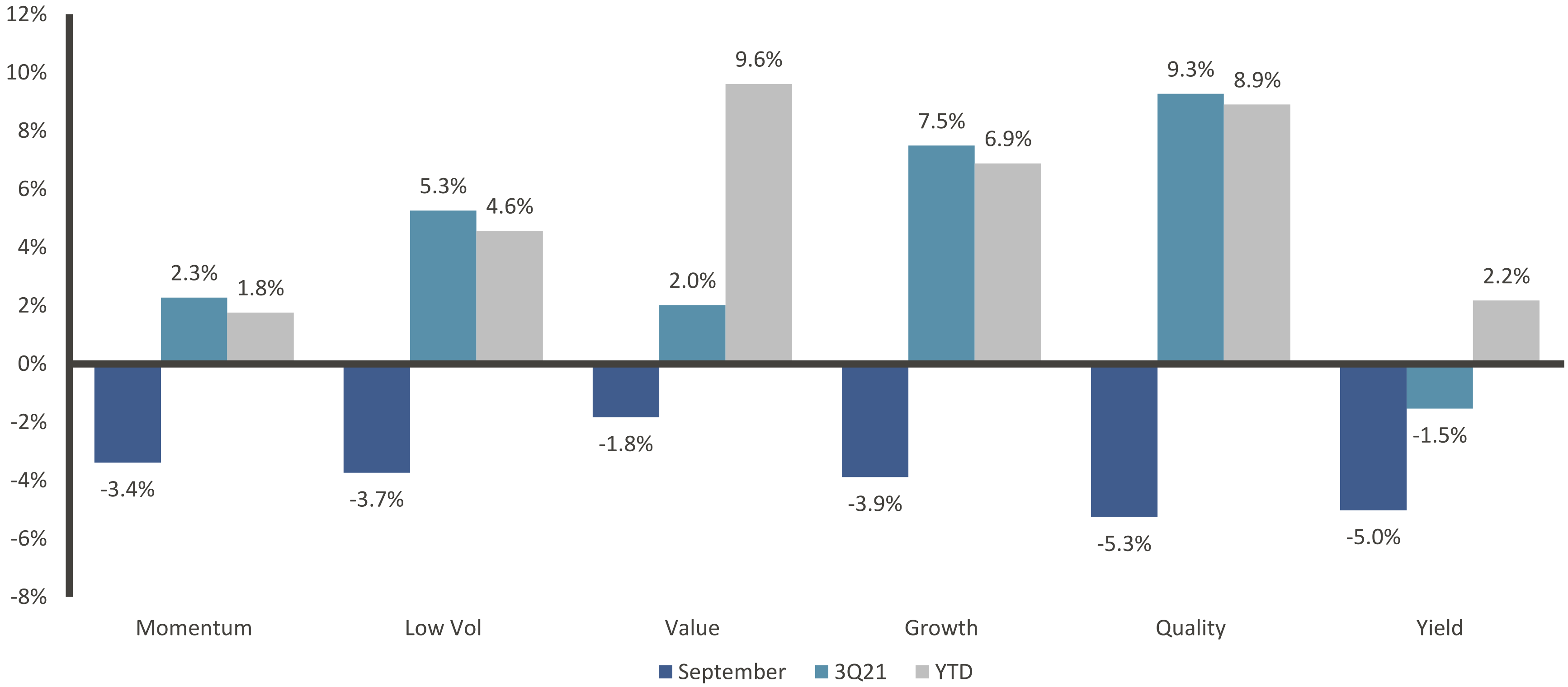
All factors in the EM space struggled in September, yet momentum and growth were hit the hardest in 3Q21



Source: eVestment as of September 30, 2021

MSCI EAFE factors: Value and quality lead YTD

Developed markets saw all factors dip to negative territory in September while value continues to outpace growth YTD



Source: eVestment as of September 30, 2021

Valuations remain elevated for all equities

The EAFE and EAFE Small-Cap universe offer relative attractiveness

	S&P 500		MSCI EAFE		MSCI EM		MSCI EAFE SC	
Valuation Metrics	**Current**	**Historical Percentile (%)**	**Current**	**Historical Percentile (%)**	**Current**	**Historical Percentile (%)**	**Current**	**Historical Percentile (%)**
P/E	24.4	88	16.4	60	13.8	77	12.3	19
Forward P/E	19.6	94	14.8	89	12.4	87	15.9	90
P/B	4.5	92	1.8	61	1.8	71	1.5	70
P/S	3.0	98	1.5	98	1.5	89	1.0	90
P/CF	19.3	99	7.1	25	9.4	79	6.9	18
EV/EBITDA	16.6	95	10.6	81	10.5	89	12.7	84
Average		**94**		**69**		**82**		**61**

Source: Bloomberg through September 30, 2021, as of October 7, 2021
P/E is adjusted for negative earnings; percentiles are based on data going back to 1999 except for FP/E which goes back to 2005.

Hedge Funds

Hedge funds tread water during the third quarter

Hedge funds returns held up well in September considering the sell-off in equity markets

	Month (%)	3-Month (%)	YTD (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)
HFRX Global	-0.4	-0.1	3.6	8.9	4.3	3.7	2.5
HFRX Hedged Equity	-0.5	1.3	9.2	17.7	5.0	4.9	3.7
HFRI Composite	0.1	0.0	10.1	22.1	8.5	7.3	5.9
HFRI Fund of Funds	0.8	1.4	6.4	15.0	6.7	5.9	4.5
HFRI Convertible Arbitrage	1.0	1.5	6.1	13.2	8.0	6.7	6.1
HFRI Equity Hedge	-0.3	-0.4	11.5	28.1	11.0	9.7	7.6
HFRI Event-Driven	0.0	-0.5	11.2	24.2	7.5	7.3	6.3
HFRI Macro	0.5	0.0	8.4	13.7	5.9	3.4	2.1
HFRI Merger Arbitrage	1.2	0.8	9.3	19.4	7.1	6.1	4.6
HFRI Relative Value	1.0	1.2	7.9	13.6	5.0	5.0	5.3
CBOE S&P 500 PutWrite	-1.2	1.9	13.9	23.0	5.4	7.2	9.0

Sources: Hedge Fund Research, CBOE as of September 30, 2021

Real Estate

Real estate momentum continues…

Major real estate benchmarks illustrate post pandemic snapback across core property sectors and U.S. regions in 2Q21

Indices	2Q21 (%)	YTD (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)
NPI	**3.6**	**5.4**	**7.4**	**5.5**	**6.1**	**8.8**
Income	1.1	2.1	4.2	4.4	4.5	5.0
Appreciation	2.5	3.2	3.1	1.1	1.6	3.7
NFI-ODCE	**3.9**	**6.1**	**8.0**	**5.5**	**6.6**	**9.6**
Income	1.0	2.0	3.9	4.0	4.2	4.6
Appreciation	2.9	4.1	4.0	1.4	2.3	4.8
FTSE NAREIT All Eq. REITs	**12.0**	**21.4**	**32.8**	**11.8**	**8.0**	**10.3**
Property Type						
NPI Apartment	3.6	5.4	7.0	5.2	5.7	8.3
NPI Office	1.4	2.4	3.3	4.7	5.2	7.8
NPI Industrial	8.9	14.0	23.0	15.6	14.6	13.7
NPI Retail	0.9	0.5	-1.3	-1.8	1.2	7.0
NPI Hotel	0.6	1.0	-8.3	-7.3	-2.6	3.2
Geographic Sectors						
NPI East	2.7	4.1	5.8	4.2	4.7	7.2
NPI Midwest	3.0	4.2	5.0	2.4	3.7	7.2
NPI South	3.8	5.6	7.7	5.5	6.1	9.1
NPI West	4.3	6.5	8.9	7.2	7.9	10.4

Source: NCREIF as of June 30, 2021

Uncertainty lingers in office and retail

Opportunities

Property sector divergence likely to persist

Post-Covid property bifurcation is likely to continue into the foreseeable future. Sub-sectors benefitting from the evolving real estate landscape include warehouses, life sciences, apartment rentals, and self-storage.

Transaction volume gaining momentum

Real estate deal volume is expected to gain traction for the balance of the year as favorable occupancy and utilization rates will incentivize investors to move up the risk spectrum. The intense competition for deal flow may cause valuations to increase and cap rates to further compress within multifamily and industrial.

Apartments further enhanced by job boom

As the U.S. job market builds momentum, apartment fundamentals should continue to strengthen with new leases, accelerating month over month rent growth, and increasing demands for living spaces. However, the sector may face secular headwinds from elevated supply, construction costs, rent control, and eviction moratorium regulations.

Risks

Pandemic sensitive property types continue decline

Secular themes such as e-commerce penetration, life sciences research, lifestyle affordability, and online collaboration are expected to influence opportunity sets. Sectors that are expected to be negatively impacted by these idiosyncratic disruptions include hotels, CBD offices, regional malls, and high street retail.

The outlook for office is still foggy

As employers continue to be challenged in maintaining productive levels of collaboration and innovation amidst a pandemic that refuses to disappear, the future of office has yet to normalize. Office vacancy and rent growth trends are expected to be driven by a transition to flexible, hybrid workplaces, growth in creative hiring practices, and repositioning to evolving tenant preferences.

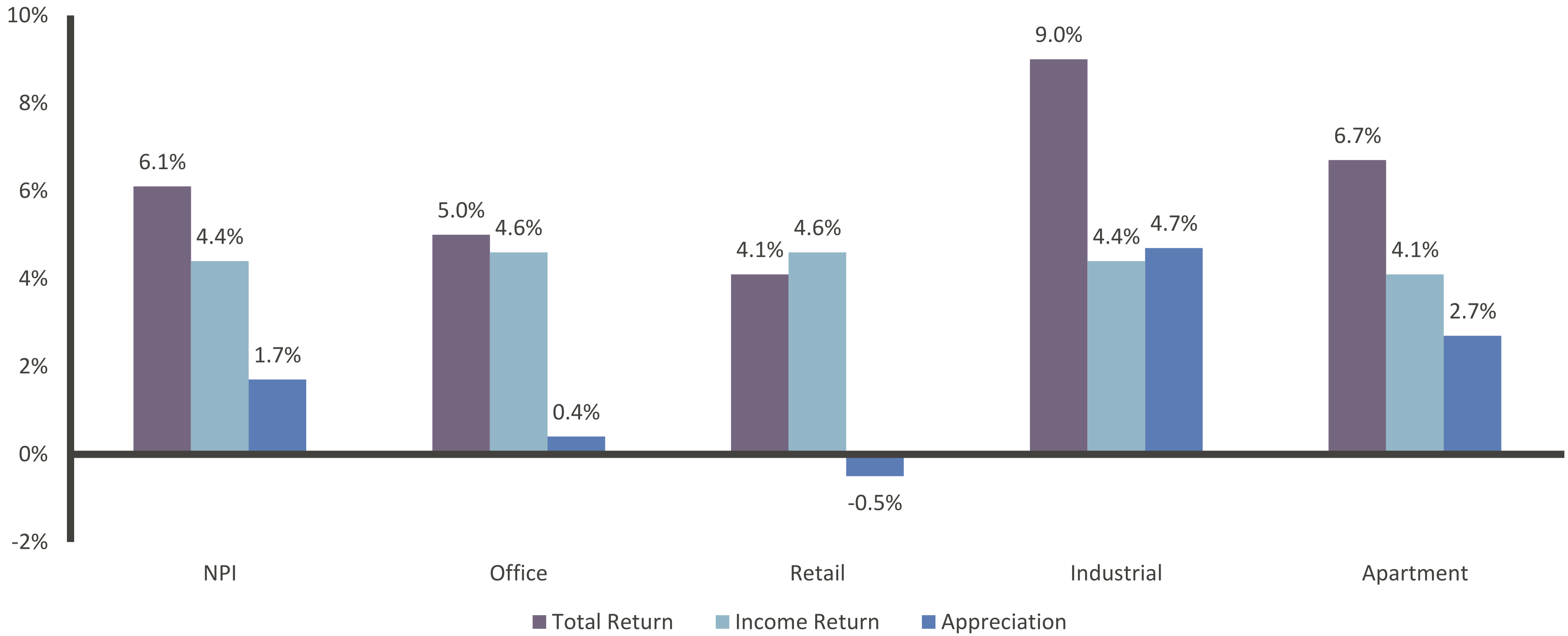
Retail recovery hampered by structural changes

The pandemic has amplified operational changes within retail. Persistent e-commerce headwinds, shifting consumer preferences, and widespread store vacancies have slowed the recovery for discretionary retail. Investors find themselves redeploying capital and assets into alternative sector opportunities, particularly cold storage, senior housing, data centers, and medical office buildings.

Income expected to drive performance

Net operating income growth, rather than cap rate compression, is expected to be the main source of return attribution across most core property sectors over the next five years

Expected annual returns by property type 2021-2025

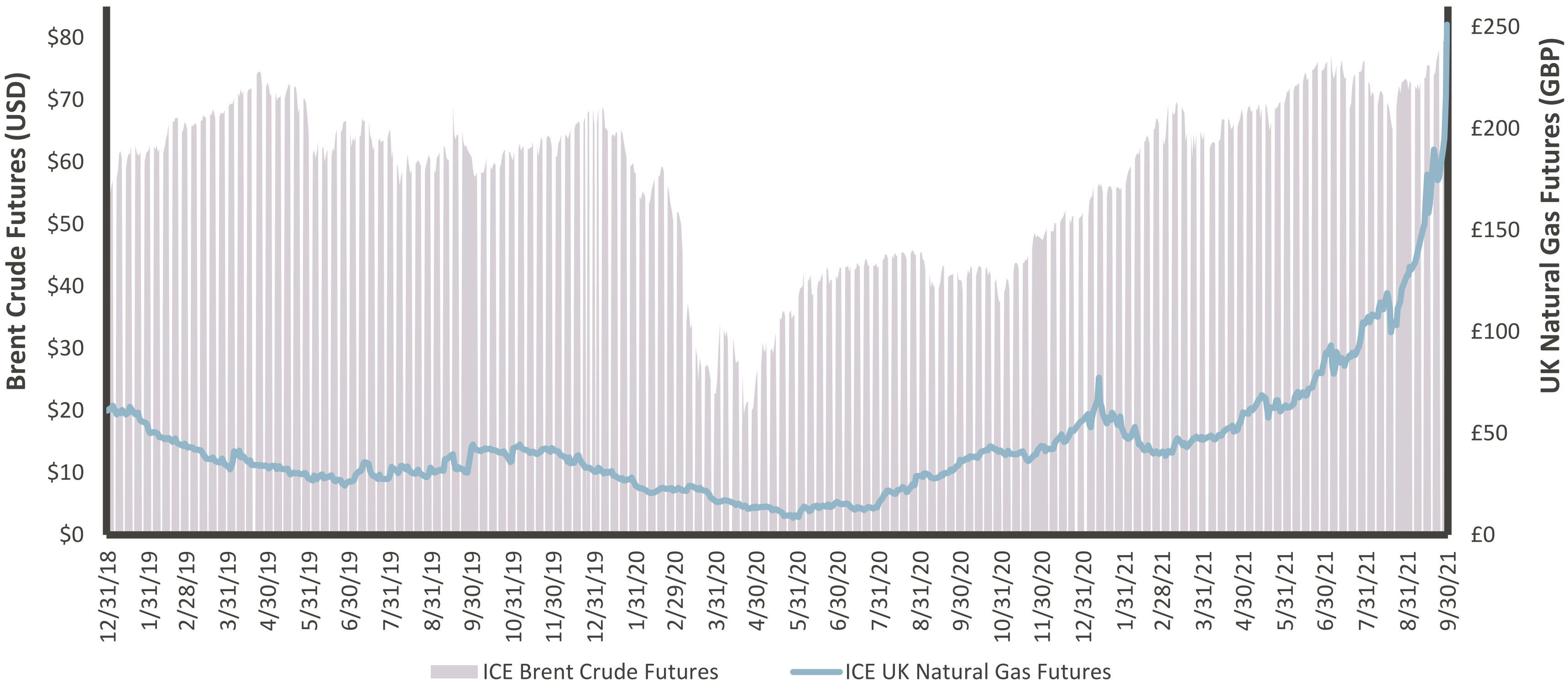


Sources: PREA Consensus Survey 2021 Q2, AEW

Commodities

Ballooning prices for energy

As winter approaches, Europe and the UK are experiencing soaring energy costs due to reopening demand and supply challenges; a similar dynamic is emerging in the U.S.

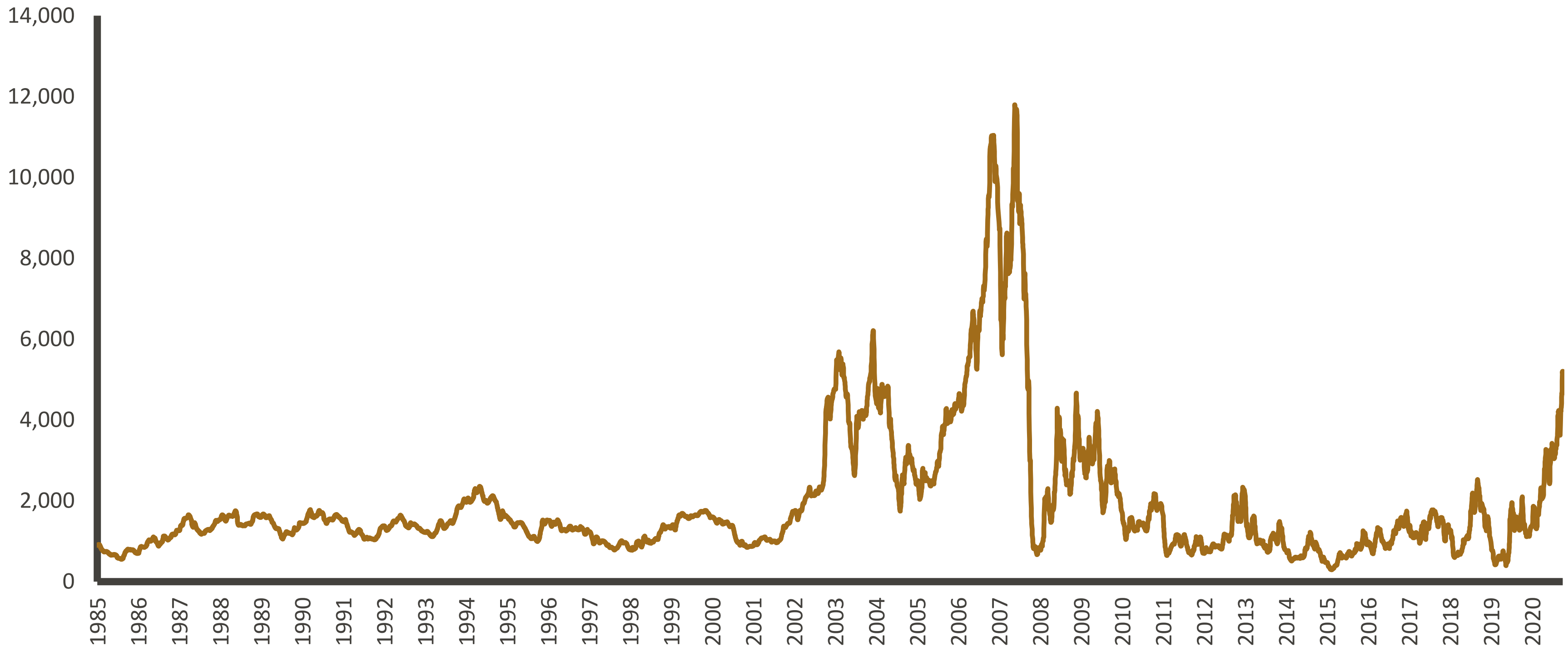


Source: Bloomberg as of September 30, 2021. ICE = Intercontinental Exchange

Shipping prices rise further

Baltic Dry Index, a shipping market bellwether, continues to climb as a result of port backlogs and bottlenecks, which supports the demand-pull inflation thesis

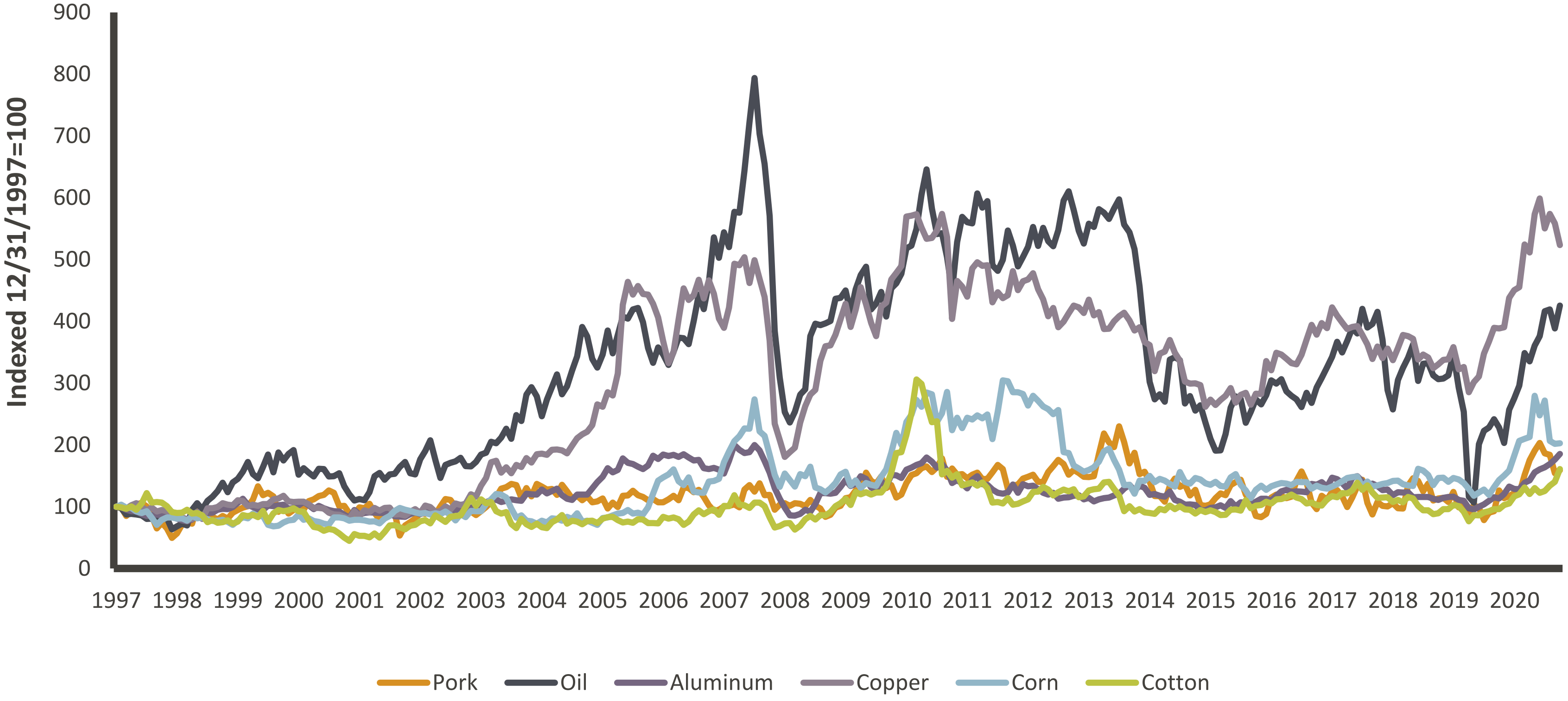
Baltic Dry Index



Sources: Bloomberg, Baltic Exchange as of September 30, 2021

Commodity prices disperse at the end of Q3

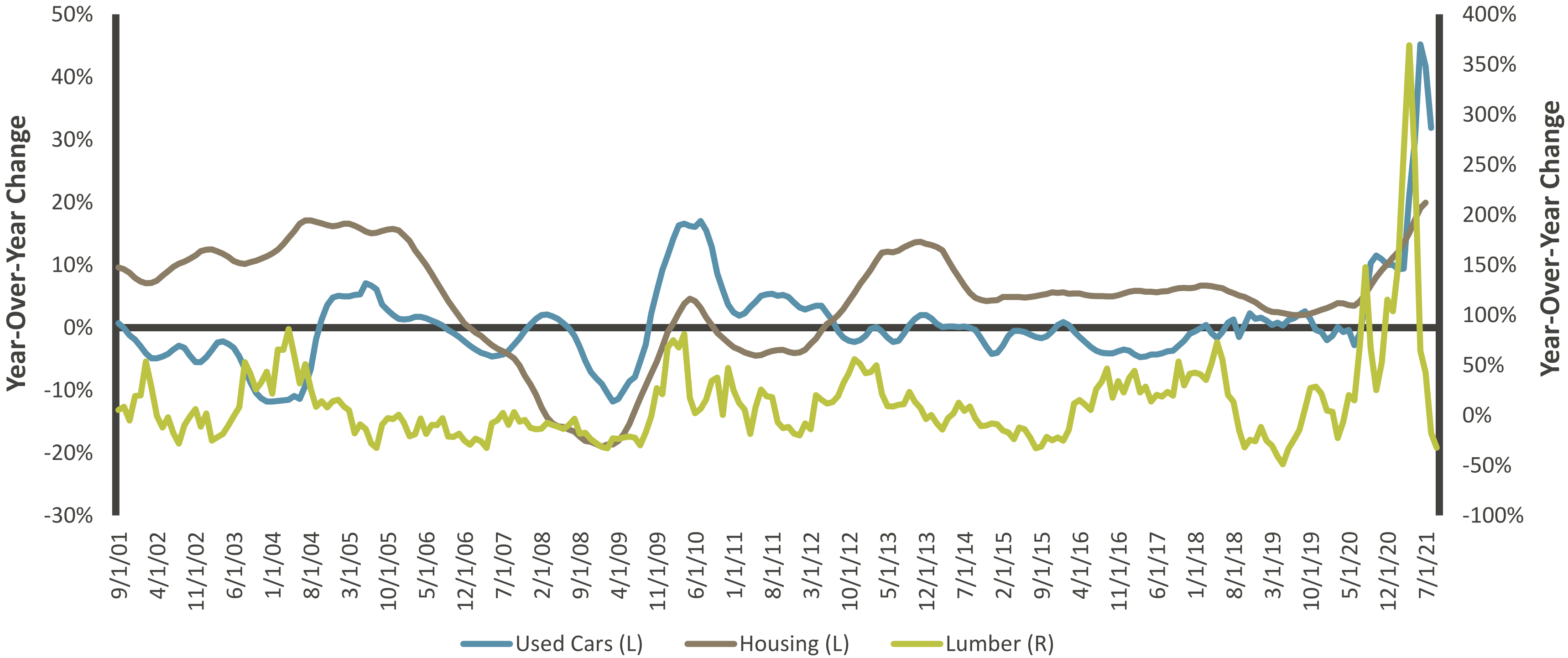
Copper, corn, and pork prices continue to reverse; aluminum, cotton, and oil experience slight uptick



Source: Bloomberg as of September 30, 2021

Early drivers of inflation show further signs of slowing

Lumber and used car prices spiked in the first quarter of 2021 and continue to normalize; housing starts to flatten

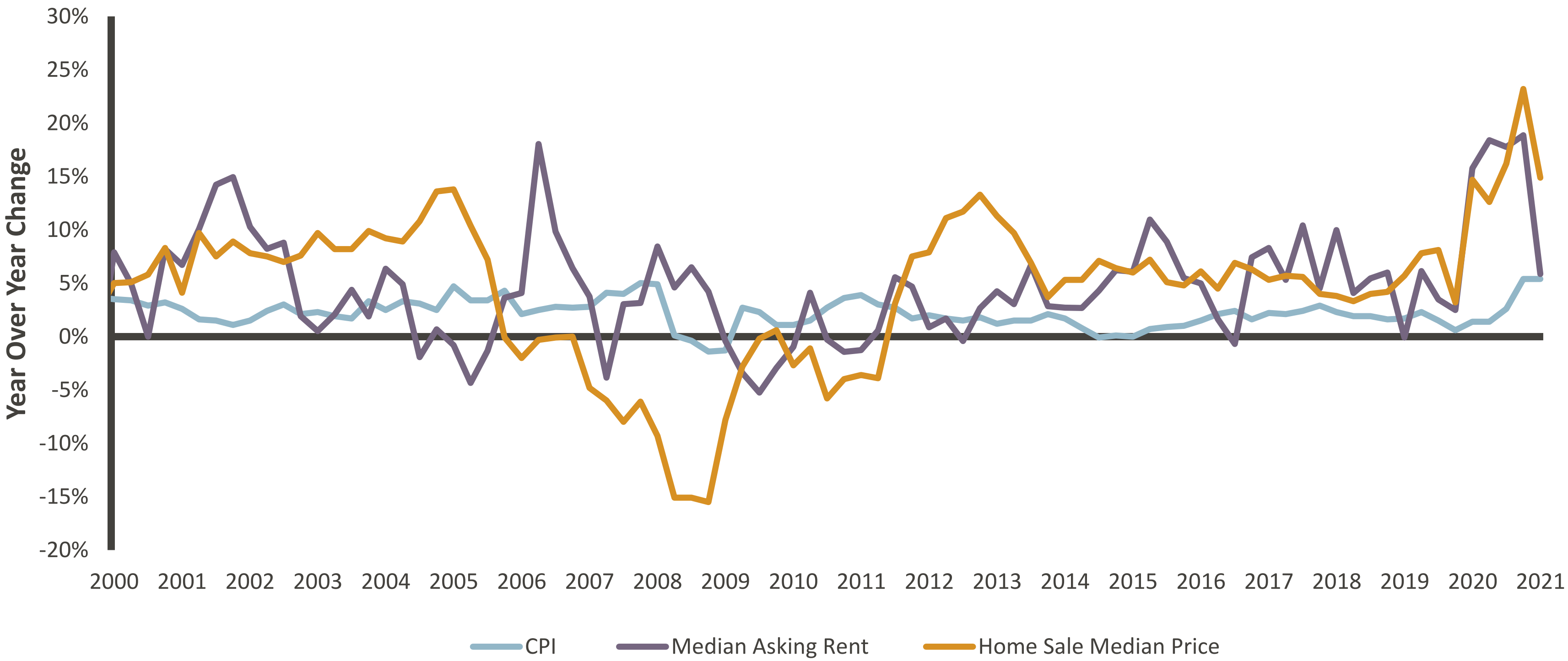


Sources: Marquette Research, Bloomberg, Federal Reserve; used cars from U.S. CPI Urban Consumers Used Car & Trucks Price Index y/y % from Bureau of Labor Statistics, housing from S&P/Case-Schiller 20-City Composite City Home Price Index y/y %, lumber from Lumber Future 110,000 Board Feet of Random Length 8-20 Softwood 2x4s y/y % from Chicago Mercantile Exchange; latest available as of September 30,2021

Home and rent prices begin to stabilize

Home and rent prices, which surged at the beginning of the pandemic, have trended downwards from their pandemic highs, but there is concern about where these numbers go from here

Year over year changes in CPI, median asking rent, and home sale median prices

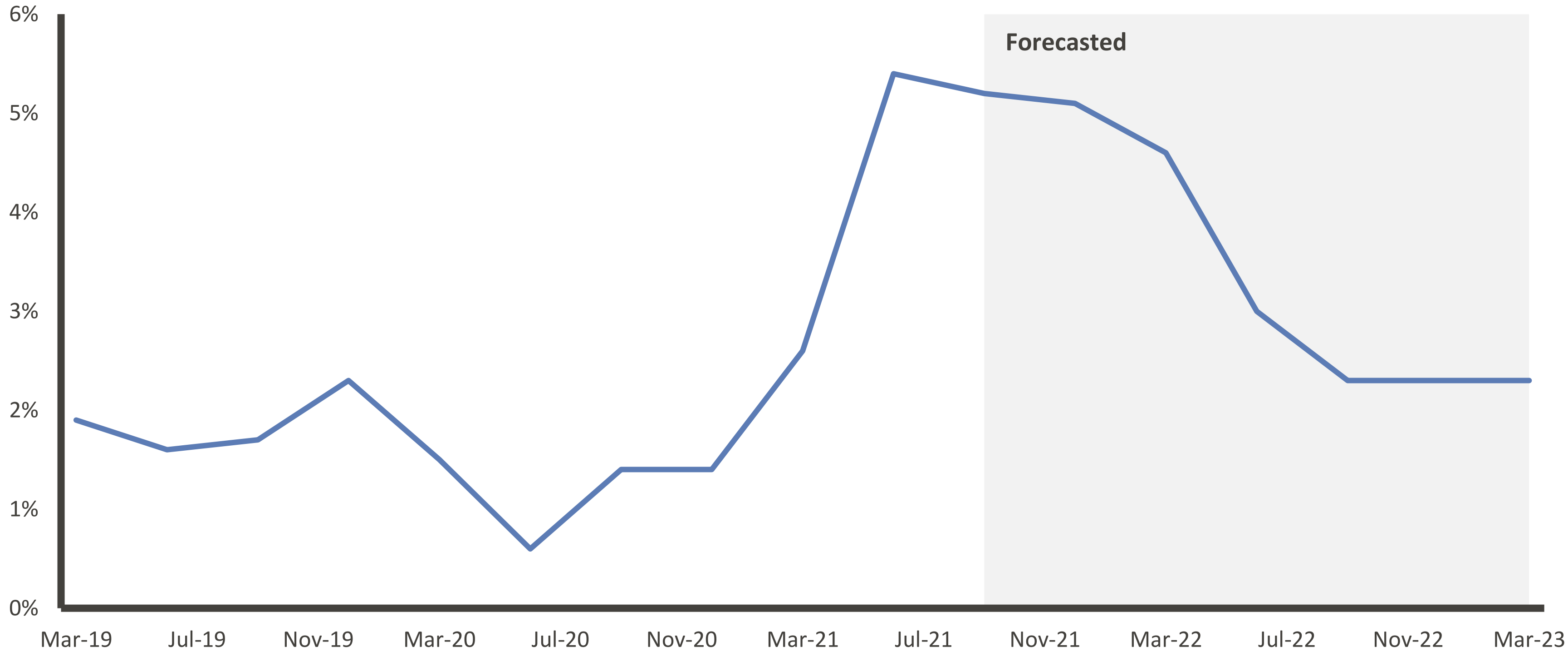


Sources: Marquette Research, Bloomberg; data as of September 30, 2021

Inflation forecasts show gradual decline…

The spike in inflation has begun to decline but forecasts show elevated levels of inflation into 2022

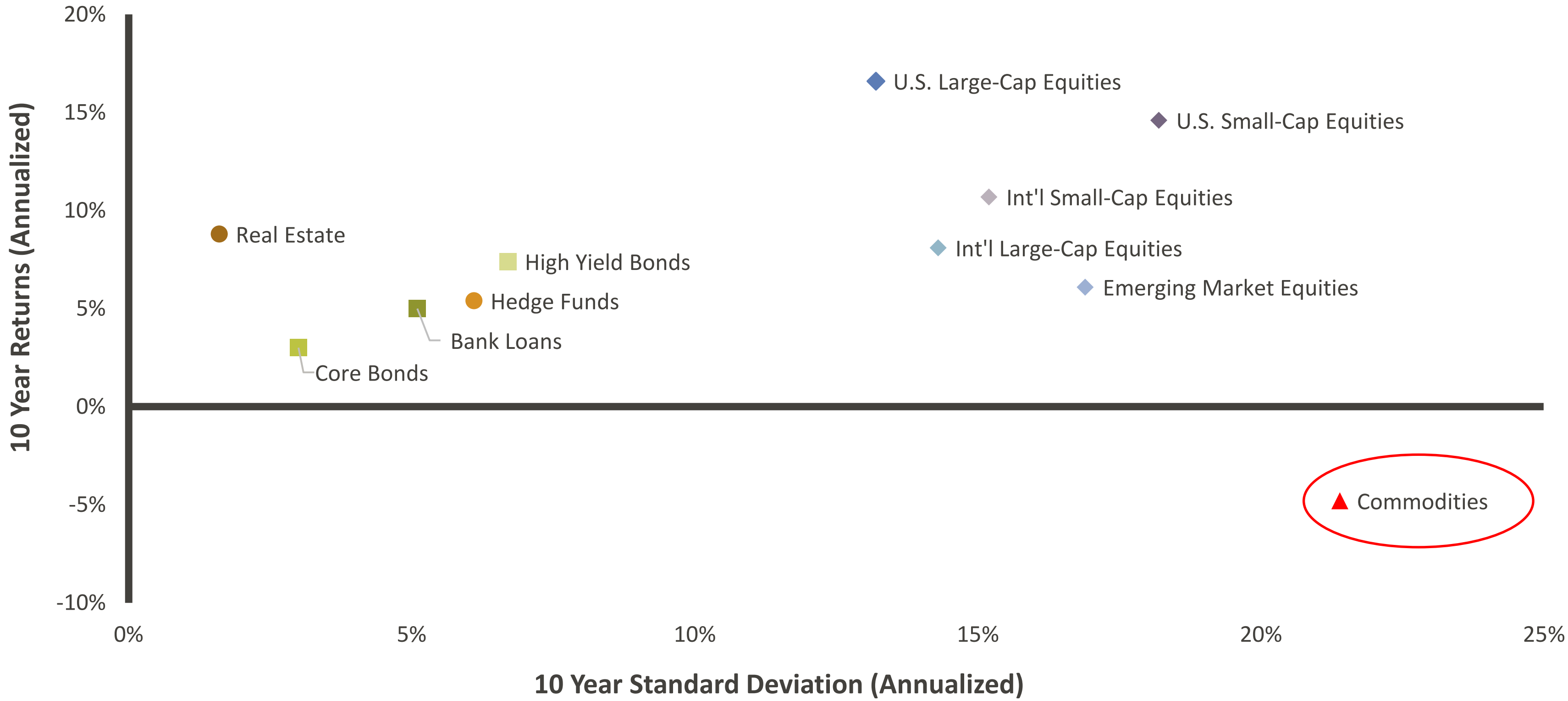
CPI Year-Over-Year Index



Sources: Marquette Research, Bloomberg; forecast from composite of 80 investment banks as of September 30, 2021

..but overall commodity prices remain elevated

Commodities have experienced high returns in 2021, but are a major portfolio detractor on a 10-year risk-adjusted basis



Sources: Bloomberg as of September 30, 2021

Purpose:

Empower our clients to meet their investment objectives

Vision

Be a trusted partner to our clients through effective investment programs

Mission

Provide independent and thoughtful investment guidance

Why Marquette?

- ✓ Our people
- ✓ Independent expertise
- ✓ Focused client service
- ✓ Careful research

Periodic table benchmarks

Core Bond	Barclays Aggregate
High Yield	Barclays High Yield
Bank Loans	CS Leverage Loan
Broad U.S. Equities	Russell 3000
Large Cap	S&P 500
Mid Cap	Russell Mid Cap
Small Cap	Russell 2000
Broad Intl Equities	ACWI ex-U.S.
Intl Large Cap	EAFE
Intl Small Cap	EAFE Small Cap
Emerging Markets	MSCI EM
Commodities	S&P GSCI
Hedge Funds	HFRI FoFs
Real Estate	NCREIF

Hedge Fund returns through 8/31/21

Real Estate returns through 6/30/21

Based on quarterly returns for real estate and monthly returns for the rest

Disclosure

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About Marquette Associates

Marquette was founded in 1986 with the sole objective of providing investment consulting at the highest caliber of service. Our expertise is grounded in our commitment to client service — our team aims to be a trusted partner and as fiduciaries, our clients' interests and objectives are at the center of everything we do. Our approach brings together the real-world experience of our people and our dedication to creativity and critical thinking in order to empower our clients to meet their goals. For more information, please visit www.MarquetteAssociates.com.

Pension Fund

Glen Ellyn Police

Pension Fund

Executive Summary

September 30, 2021

Total Fund Composite

Manager Status

Market Value: $37.8 Million and 100.0% of Fund

Investment Manager	Asset Class	Status	Reason
Great Lakes Advisors	Int. Fixed Income	In Compliance	---
Vanguard Value Index	Large-Cap Value	In Compliance	---
Vanguard 500 Index	Large-Cap Core	In Compliance	---
Vanguard Mid-Cap Growth ETF	Mid-Cap Growth	In Compliance	---
Virtus KAR Small-Cap Value	Small-Cap Value	In Compliance	---
Vanguard Developed Markets	Non-U.S. Large-Cap Core	In Compliance	---
Goldman Sachs International Small Cap Insights	Non-U.S. Small-Cap Core	In Compliance	---
DFA Emerging Markets Core Equity Fund	Emerging Markets	Alert	Performance
BlackRock Multi-Asset Income	Global Tactical Asset Allocation	In Compliance	---
Principal U.S. Property Separate Account	Core Real Estate	In Compliance	---

Open-End Investment Manager Evaluation Terminology

The following terminology has been developed by Marquette Associates to facilitate efficient communication among the Investment Manager, Investment Consultant, and the Plan Sponsor. Each term signifies a particular status with the Fund and any conditions that may require improvement. In each case, communication is made only after consultation with the Trustees and/or the Investment Committee of the Plan.

In Compliance – The investment manager states it is acting in accordance with the Investment Policy Guidelines.

Alert – The investment manager is notified of a problem in performance (usually related to a benchmark or volatility measure), a change in investment characteristics, an alteration in management style or key investment professionals, and/or any other irregularities.

On Notice – The investment manager is notified of continued concern with one or more Alert issues. Failure to improve upon stated issues within a specific time frame justifies termination.

Termination – The Trustees have decided to terminate the investment manager. The investment manager is notified and transition plans are in place.

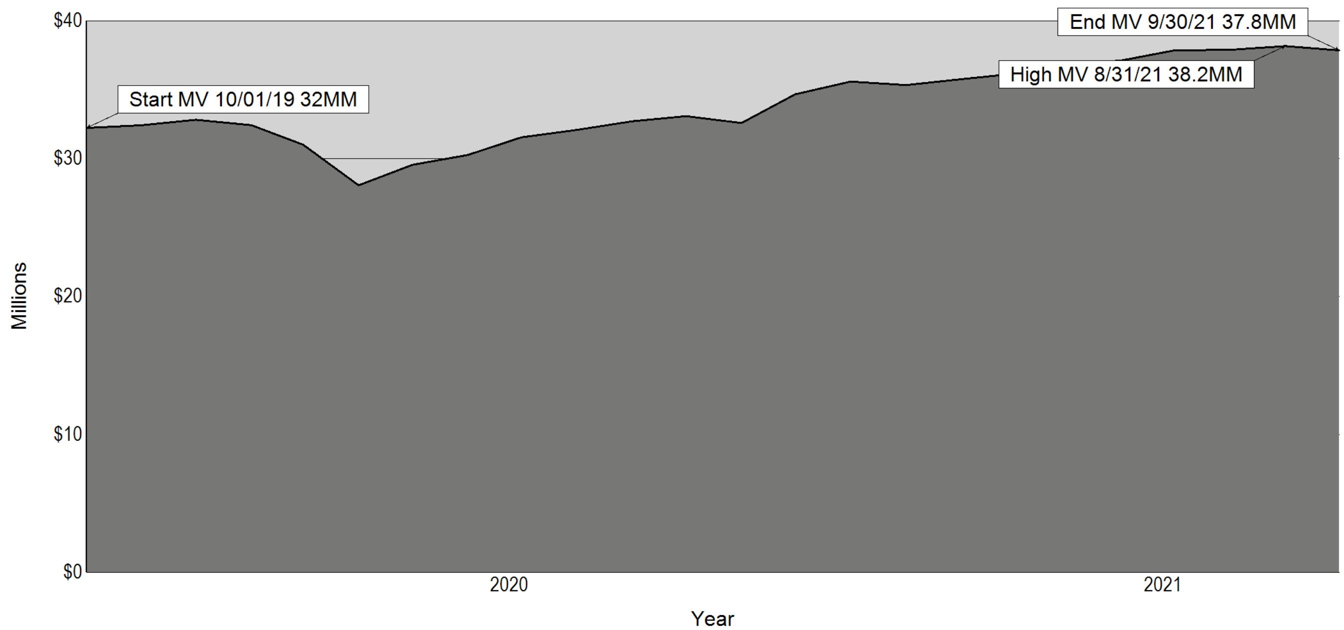
Total Fund Composite

Market Value: $37.8 Million and 100.0% of Fund

Ending September 30, 2021

	Asset Class	Market Value ($)	3 Mo Net Cash Flows ($)	% of Portfolio	Policy %	Policy Difference ($)
Total Fund Composite		**37,848,212**	**182,654**	**100.0**	**100.0**	**0**
U.S. Fixed Income Composite		**11,539,988**	**-8,250**	**30.5**	**35.0**	**-1,706,886**
Great Lakes Advisors	Int. Fixed Income	11,539,988	-8,250	30.5	35.0	-1,706,886
U.S. Equity Composite		**12,214,489**	**-223,176**	**32.3**	**30.0**	**860,025**
Vanguard Value Index	Large-Cap Value	3,695,579	0	9.8	9.0	289,240
Vanguard 500 Index	Large-Cap Core	4,060,040	0	10.7	9.0	653,701
Vanguard Mid-Cap Growth ETF	Mid-Cap Growth	2,492,256	-223,176	6.6	6.0	221,363
Virtus KAR Small-Cap Value	Small-Cap Value	1,966,614	0	5.2	6.0	-304,279
Non U.S. Equity Composite		**8,442,325**	**0**	**22.3**	**20.0**	**872,683**
Vanguard Developed Markets	Non-U.S. Large-Cap Core	4,038,745	0	10.7	10.0	253,924
Goldman Sachs International Small Cap Insights	Non-U.S. Small-Cap Core	2,232,334	0	5.9	5.0	339,924
DFA Emerging Markets Core Equity Fund	Emerging Markets	2,171,246	0	5.7	5.0	278,835
Global Tactical Composite		**1,861,421**	**0**	**4.9**	**5.0**	**-30,989**
BlackRock Multi-Asset Income	Global Tactical Asset Allocation	1,861,421	0	4.9	5.0	-30,989
Real Estate Composite		**2,480,173**	**0**	**6.6**	**10.0**	**-1,304,648**
Principal U.S. Property Separate Account	Core Real Estate	2,480,173	0	6.6	10.0	-1,304,648
Cash Composite		**1,309,816**	**414,080**	**3.5**	**0.0**	**1,309,816**
US Bank Money Market	Cash & Equivalents	1,309,816	414,080	3.5	0.0	1,309,816

Market Value: $37.8 Million and 100.0% of Fund



Summary of Cash Flows

	Third Quarter	Year-To-Date	One Year	2020	2019
Beginning Market Value	**$37,848,884**	**$35,586,366**	**$33,078,706**	**$32,814,921**	**$28,836,431**
Net Cash Flow	$182,654	-$206,279	-$793,896	-$420,688	-$449,321
Net Investment Change	-$183,326	$2,468,126	$5,563,402	$3,192,132	$4,427,811
Ending Market Value	**$37,848,212**	**$37,848,212**	**$37,848,212**	**$35,586,366**	**$32,814,921**

Annualized Performance (Net of Fees)

Market Value: $37.8 Million and 100.0% of Fund

Ending September 30, 2021

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite	**-2.3**	**-0.5**	**7.0**	**17.1**	**10.7**	**8.0**	**7.0**	**7.6**	**6.6**	**6.9**
Total Fund Composite Benchmark	*-2.1*	*-0.6*	*6.4*	*16.1*	*10.8*	*8.5*	*8.0*	*8.6*	*7.8*	*9.8*
U.S. Fixed Income Composite	**-0.4**	**0.0**	**-0.8**	**-0.3**	**3.1**	**4.4**	**3.1**	**3.5**	**3.5**	**3.4**
Bloomberg US Aggregate TR	*-0.9*	*0.1*	*-1.6*	*-0.9*	*3.0*	*5.4*	*3.7*	*2.9*	*3.3*	*3.0*
U.S. Equity Composite	**-4.1**	**-0.6**	**13.6**	**33.1**	**17.6**	**11.8**	**12.3**	**13.8**	**11.5**	**14.4**
Wilshire 5000	*-4.4*	*0.1*	*15.6*	*32.3*	*23.4*	*16.2*	*16.5*	*17.0*	*14.1*	*16.7*
Non U.S. Equity Composite	**-4.0**	**-2.7**	**8.3**	**26.5**	**14.4**	**8.2**	**6.2**	**--**	**--**	**--**
MSCI ACWI ex USA	*-3.2*	*-3.0*	*5.9*	*23.9*	*13.0*	*8.0*	*6.4*	*8.9*	*5.7*	*7.5*
Global Tactical Composite	**-1.7**	**-0.3**	**5.2**	**12.1**	**7.1**	**6.9**	**--**	**--**	**--**	**--**
Bloomberg US Govt/Credit Int TR	*-0.6*	*0.0*	*-0.9*	*-0.4*	*2.9*	*4.6*	*3.2*	*2.6*	*2.7*	*2.5*
Real Estate Composite	**2.6**	**4.9**	**11.3**	**13.1**	**6.4**	**6.2**	**--**	**--**	**--**	**--**
NFI	*0.0*	*0.0*	*5.7*	*6.9*	*3.6*	*4.0*	*4.9*	*5.3*	*7.0*	*8.3*

Total Fund Composite Benchmark is 40% BBgBarc US Govt/Credit Int, 9% CRSP US Large Cap Value, 9% S&P 500, 6% CRSP US Mid Cap Growth, 6% Russell 2000 Value, 10% FTSE Developed ex US All Cap, 5% MSCI EAFE Small Cap, 5% MSCI Emerging Markets, 10% NFI. Prior to 12/31/2017, the Benchmark was 60/40 S&P 500/BBgBarc US Aggregate.

Investment Manager

Annualized Performance (Net of Fees)

Market Value: $37.8 Million and 100.0% of Fund

Ending September 30, 2021

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Total Fund Composite	**-2.3%**	**-0.5%**	**7.0%**	**17.1%**	**10.7%**	**8.0%**	**7.0%**	**7.6%**	**6.6%**	**6.9%**	**6.0%**	**Oct-93**
Total Fund Composite Benchmark	*-2.1%*	*-0.6%*	*6.4%*	*16.1%*	*10.8%*	*8.5%*	*8.0%*	*8.6%*	*7.8%*	*9.8%*	*8.0%*	*Oct-93*
U.S. Fixed Income Composite	**-0.4%**	**0.0%**	**-0.8%**	**-0.3%**	**3.1%**	**4.4%**	**3.1%**	**3.5%**	**3.5%**	**3.4%**	**4.7%**	**Dec-01**
Bloomberg US Aggregate TR	*-0.9%*	*0.1%*	*-1.6%*	*-0.9%*	*3.0%*	*5.4%*	*3.7%*	*2.9%*	*3.3%*	*3.0%*	*4.4%*	*Dec-01*
Great Lakes Advisors	-0.4%	0.0%	-0.8%	-0.3%	3.1%	4.4%	3.1%	--	--	--	3.1%	Sep-17
Bloomberg US Govt/Credit Int TR	*-0.6%*	*0.0%*	*-0.9%*	*-0.4%*	*2.9%*	*4.6%*	*3.2%*	*2.6%*	*2.7%*	*2.5%*	*3.2%*	*Sep-17*
U.S. Equity Composite	**-4.1%**	**-0.6%**	**13.6%**	**33.1%**	**17.6%**	**11.8%**	**12.3%**	**13.8%**	**11.5%**	**14.4%**	**9.6%**	**Dec-01**
Wilshire 5000	*-4.4%*	*0.1%*	*15.6%*	*32.3%*	*23.4%*	*16.2%*	*16.5%*	*17.0%*	*14.1%*	*16.7%*	*9.5%*	*Dec-01*
Vanguard Value Index	-4.0%	-1.0%	15.7%	32.5%	13.2%	9.9%	10.8%	--	--	--	11.2%	Jun-17
CRSP US Large Cap Value TR USD	*-4.0%*	*-0.9%*	*15.7%*	*32.5%*	*13.2%*	*9.9%*	*10.8%*	*12.2%*	*10.4%*	*14.2%*	*11.2%*	*Jun-17*
Vanguard 500 Index	-4.7%	0.6%	15.9%	30.0%	22.3%	16.0%	16.4%	--	--	--	16.6%	Jun-17
S&P 500	*-4.7%*	*0.6%*	*15.9%*	*30.0%*	*22.4%*	*16.0%*	*16.5%*	*16.9%*	*14.0%*	*16.6%*	*16.6%*	*Jun-17*
Vanguard Mid-Cap Growth ETF	-4.7%	0.0%	11.7%	31.7%	27.1%	19.2%	18.8%	18.1%	--	--	19.0%	Jan-16
CRSP US Mid Cap Growth TR USD	*-4.6%*	*0.2%*	*11.8%*	*31.9%*	*27.2%*	*19.3%*	*18.9%*	*18.2%*	*14.7%*	*16.8%*	*19.1%*	*Jan-16*
Virtus KAR Small-Cap Value	-2.2%	-3.4%	--	--	--	--	--	--	--	--	5.4%	Jan-21
Russell 2000 Value	*-2.0%*	*-3.0%*	*22.9%*	*63.9%*	*18.1%*	*8.6%*	*8.8%*	*11.0%*	*10.2%*	*13.2%*	*16.8%*	*Jan-21*
Non U.S. Equity Composite	**-4.0%**	**-2.7%**	**8.3%**	**26.5%**	**14.4%**	**8.2%**	**6.2%**	**--**	**--**	**--**	**7.3%**	**Jun-17**
MSCI ACWI ex USA	*-3.2%*	*-3.0%*	*5.9%*	*23.9%*	*13.0%*	*8.0%*	*6.4%*	*8.9%*	*5.7%*	*7.5%*	*7.5%*	*Jun-17*
Vanguard Developed Markets	-3.4%	-1.6%	8.2%	26.5%	13.7%	8.2%	6.8%	--	--	--	7.7%	Jun-17
FTSE Developed ex US All Cap	*-3.1%*	*-1.1%*	*8.6%*	*27.2%*	*13.8%*	*8.1%*	*6.8%*	*9.1%*	*6.1%*	*--*	*7.7%*	*Jun-17*
Goldman Sachs International Small Cap Insights	-5.3%	-1.0%	11.8%	25.5%	14.9%	6.9%	5.7%	--	--	--	5.7%	Sep-17
MSCI EAFE Small Cap	*-3.6%*	*0.9%*	*10.0%*	*29.0%*	*17.4%*	*9.0%*	*7.7%*	*10.4%*	*9.2%*	*10.7%*	*7.7%*	*Sep-17*
DFA Emerging Markets Core Equity Fund	-3.6%	-6.3%	4.9%	27.2%	14.9%	9.1%	6.1%	--	--	--	6.1%	Sep-17
MSCI Emerging Markets	*-4.0%*	*-8.1%*	*-1.2%*	*18.2%*	*14.3%*	*8.6%*	*6.2%*	*9.2%*	*5.6%*	*6.1%*	*6.2%*	*Sep-17*
Global Tactical Composite	**-1.7%**	**-0.3%**	**5.2%**	**12.1%**	**7.1%**	**6.9%**	**--**	**--**	**--**	**--**	**5.8%**	**Nov-17**
Bloomberg US Govt/Credit Int TR	*-0.6%*	*0.0%*	*-0.9%*	*-0.4%*	*2.9%*	*4.6%*	*3.2%*	*2.6%*	*2.7%*	*2.5%*	*3.4%*	*Nov-17*
BlackRock Multi-Asset Income	-1.7%	-0.3%	5.2%	12.1%	7.1%	6.9%	--	--	--	--	5.8%	Nov-17
Bloomberg US Govt/Credit Int TR	*-0.6%*	*0.0%*	*-0.9%*	*-0.4%*	*2.9%*	*4.6%*	*3.2%*	*2.6%*	*2.7%*	*2.5%*	*3.4%*	*Nov-17*
Real Estate Composite	**2.6%**	**4.9%**	**11.3%**	**13.1%**	**6.4%**	**6.2%**	**--**	**--**	**--**	**--**	**6.7%**	**Dec-17**
NFI	*0.0%*	*0.0%*	*5.7%*	*6.9%*	*3.6%*	*4.0%*	*4.9%*	*5.3%*	*7.0%*	*8.3%*	*4.7%*	*Dec-17*
Principal U.S. Property Separate Account	2.6%	4.9%	11.3%	13.1%	6.4%	6.2%	--	--	--	--	6.7%	Dec-17
NFI	*0.0%*	*0.0%*	*5.7%*	*6.9%*	*3.6%*	*4.0%*	*4.9%*	*5.3%*	*7.0%*	*8.3%*	*4.7%*	*Dec-17*

Calendar Performance (Net of Fees)

Market Value: $37.8 Million and 100.0% of Fund

	Calendar Year										
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Total Fund Composite	**9.8%**	**15.3%**	**-5.5%**	**12.0%**	**6.1%**	**0.4%**	**6.7%**	**8.1%**	**6.5%**	**4.1%**	**10.1%**
Total Fund Composite Benchmark	*10.2%*	*16.0%*	*-4.0%*	*14.2%*	*8.3%*	*1.3%*	*10.6%*	*17.6%*	*11.3%*	*4.7%*	*12.1%*
InvMetrics Public DB < $50mm Net Rank	*90*	*98*	*81*	*87*	*83*	*23*	*26*	*97*	*98*	*3*	*76*
U.S. Fixed Income Composite	**7.0%**	**6.3%**	**0.4%**	**5.3%**	**6.4%**	**0.6%**	**3.8%**	**-1.7%**	**5.0%**	**11.9%**	**6.8%**
Bloomberg US Aggregate TR	*7.5%*	*8.7%*	*0.0%*	*3.5%*	*2.6%*	*0.5%*	*6.0%*	*-2.0%*	*4.2%*	*7.8%*	*6.5%*
InvMetrics Public DB Total Fix Inc Net Rank	*59*	*90*	*37*	*46*	*22*	*35*	*48*	*59*	*58*	*2*	*70*
Great Lakes Advisors	7.0%	6.3%	0.3%	--	--	--	--	--	--	--	--
Bloomberg US Govt/Credit Int TR	*6.4%*	*6.8%*	*0.9%*	*2.1%*	*2.1%*	*1.1%*	*3.1%*	*-0.9%*	*3.9%*	*5.8%*	*5.9%*
eV US Interm Duration Fixed Inc Net Rank	*36*	*75*	*86*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
U.S. Equity Composite	**13.0%**	**27.4%**	**-8.1%**	**23.5%**	**8.7%**	**-0.2%**	**11.3%**	**32.7%**	**14.7%**	**-1.3%**	**21.1%**
Wilshire 5000	*20.8%*	*31.0%*	*-5.3%*	*21.0%*	*13.4%*	*0.7%*	*12.7%*	*33.1%*	*16.1%*	*1.0%*	*17.2%*
InvMetrics Public DB US Eq Net Rank	*92*	*94*	*83*	*6*	*93*	*52*	*43*	*84*	*77*	*79*	*16*
Vanguard Value Index	2.3%	25.8%	-5.4%	--	--	--	--	--	--	--	--
CRSP US Large Cap Value TR USD	*2.3%*	*25.9%*	*-5.4%*	*17.2%*	*16.9%*	*-0.9%*	*13.3%*	*33.3%*	*16.7%*	*1.4%*	*16.1%*
Large Value MStar MF Rank	*57*	*50*	*21*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
Vanguard 500 Index	18.4%	31.5%	-4.4%	--	--	--	--	--	--	--	--
S&P 500	*18.4%*	*31.5%*	*-4.4%*	*21.8%*	*12.0%*	*1.4%*	*13.7%*	*32.4%*	*16.0%*	*2.1%*	*15.1%*
Large Blend MStar MF Rank	*39*	*26*	*24*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
Vanguard Mid-Cap Growth ETF	34.5%	33.8%	-5.5%	21.8%	6.9%	--	--	--	--	--	--
CRSP US Mid Cap Growth TR USD	*34.6%*	*33.9%*	*-5.6%*	*21.9%*	*6.8%*	*-0.9%*	*13.6%*	*33.0%*	*15.8%*	*-2.2%*	*27.5%*
Mid-Cap Growth MStar MF Rank	*49*	*50*	*52*	*73*	*45*	*--*	*--*	*--*	*--*	*--*	*--*
Virtus KAR Small-Cap Value	--	--	--	--	--	--	--	--	--	--	--
Russell 2000 Value	*4.6%*	*22.4%*	*-12.9%*	*7.8%*	*31.7%*	*-7.5%*	*4.2%*	*34.5%*	*18.0%*	*-5.5%*	*24.5%*
Small Growth MStar MF Rank	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
Non U.S. Equity Composite	**10.8%**	**20.4%**	**-15.9%**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MSCI ACWI ex USA	*10.7%*	*21.5%*	*-14.2%*	*27.2%*	*4.5%*	*-5.7%*	*-3.9%*	*15.3%*	*16.8%*	*-13.7%*	*11.2%*
InvMetrics Public DB Glbl Eq Net Rank	*74*	*99*	*95*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
Vanguard Developed Markets	10.3%	22.0%	-14.5%	--	--	--	--	--	--	--	--
FTSE Developed ex US All Cap	*9.8%*	*22.1%*	*-15.0%*	*26.1%*	*2.9%*	*-2.0%*	*-4.6%*	*20.3%*	*--*	*--*	*--*
Foreign Large Blend MStar MF Rank	*46*	*47*	*42*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
Goldman Sachs International Small Cap Insights	7.7%	21.7%	-18.8%	--	--	--	--	--	--	--	--
MSCI EAFE Small Cap	*12.3%*	*25.0%*	*-17.9%*	*33.0%*	*2.2%*	*9.6%*	*-4.9%*	*29.3%*	*20.0%*	*-15.9%*	*22.0%*
Foreign Small/Mid Value MStar MF Rank	*25*	*13*	*39*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
DFA Emerging Markets Core Equity Fund	13.9%	16.0%	-15.2%	--	--	--	--	--	--	--	--
MSCI Emerging Markets	*18.3%*	*18.4%*	*-14.6%*	*37.3%*	*11.2%*	*-14.9%*	*-2.2%*	*-2.6%*	*18.2%*	*-18.4%*	*18.9%*
Diversified Emerging Mkts MStar MF Rank	*75*	*81*	*35*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*

Investment Manager

Calendar Performance (Net of Fees)

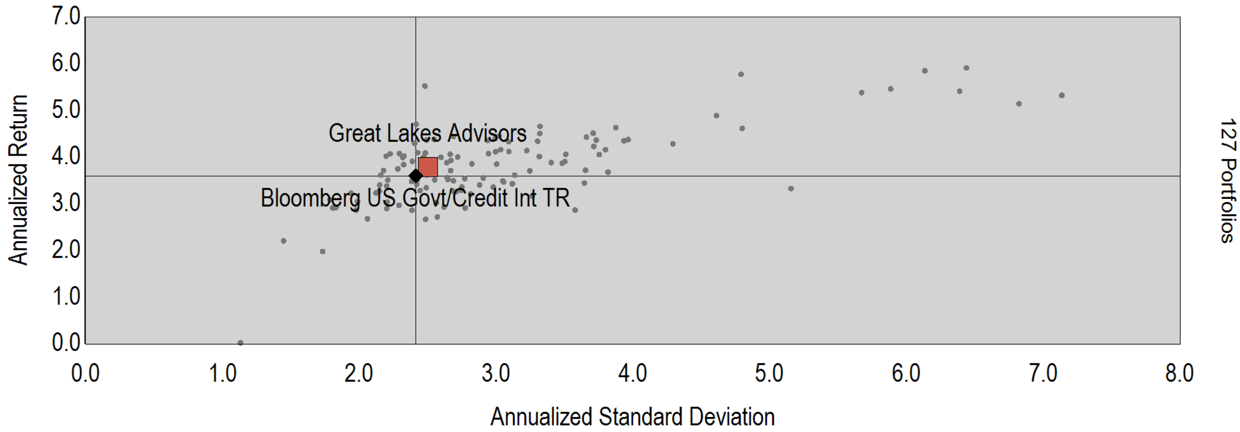
Market Value: $37.8 Million and 100.0% of Fund

	Calendar Year										
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Global Tactical Composite	**6.5%**	**14.0%**	**-3.5%**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
Bloomberg US Govt/Credit Int TR	*6.4%*	*6.8%*	*0.9%*	*2.1%*	*2.1%*	*1.1%*	*3.1%*	*-0.9%*	*3.9%*	*5.8%*	*5.9%*
InvMetrics Corp DB Global Tactical Net Rank	*53*	*58*	*3*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
BlackRock Multi-Asset Income	6.5%	14.0%	-3.5%	--	--	--	--	--	--	--	--
Bloomberg US Govt/Credit Int TR	*6.4%*	*6.8%*	*0.9%*	*2.1%*	*2.1%*	*1.1%*	*3.1%*	*-0.9%*	*3.9%*	*5.8%*	*5.9%*
Multialternative MStar MF Rank	*33*	*13*	*42*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
Real Estate Composite	**0.5%**	**5.8%**	**7.9%**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
NFI	*0.3%*	*4.4%*	*7.4%*	*6.7%*	*7.8%*	*13.9%*	*11.5%*	*12.9%*	*9.8%*	*15.0%*	*15.3%*
InvMetrics Public DB Real Estate Pub Net Rank	*17*	*87*	*2*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
Principal U.S. Property Separate Account	0.5%	5.8%	7.9%	--	--	--	--	--	--	--	--
NFI	*0.3%*	*4.4%*	*7.4%*	*6.7%*	*7.8%*	*13.9%*	*11.5%*	*12.9%*	*9.8%*	*15.0%*	*15.3%*

As of June 30, 2021

Market Value: $11.5 Million and 30.5% of Fund

Risk/Return - 2 Years



Characteristics

	Portfolio Q2-21	Index Q2-21
Yield to Maturity	1.1%	0.9%
Avg. Eff. Maturity	4.2 yrs.	4.5 yrs.
Avg. Duration	3.9 yrs.	4.2 yrs.
Avg. Quality	A	--

Region	Number Of Assets
United States	142
Europe Ex U.K.	3
United Kingdom	1
Pacific Basin Ex Japan	1
Japan	1
Other	0
Total	**148**

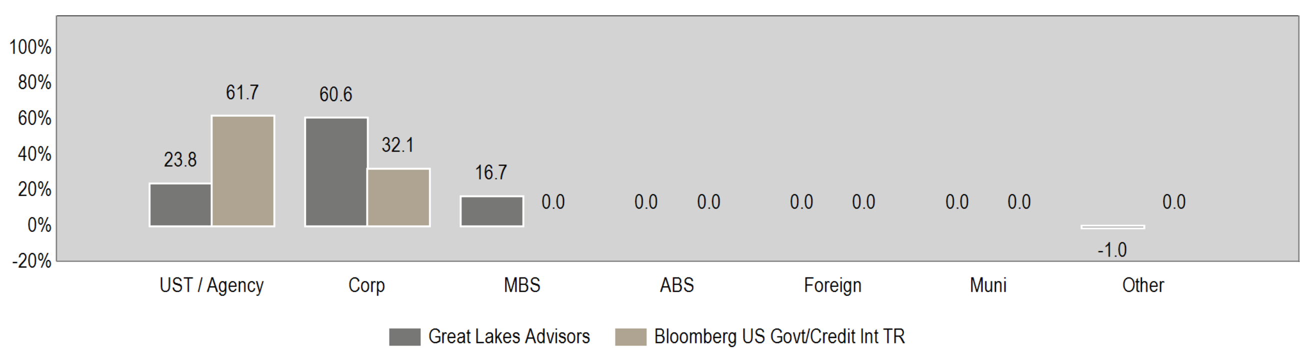
Sector

	Portfolio Q2-21	Index Q2-21
UST/Agency	23.8%	61.7%
Corporate	60.6%	32.1%
MBS	16.7%	--
ABS	--	--
Foreign	--	--
Muni	--	--
Other	-1.0%	--

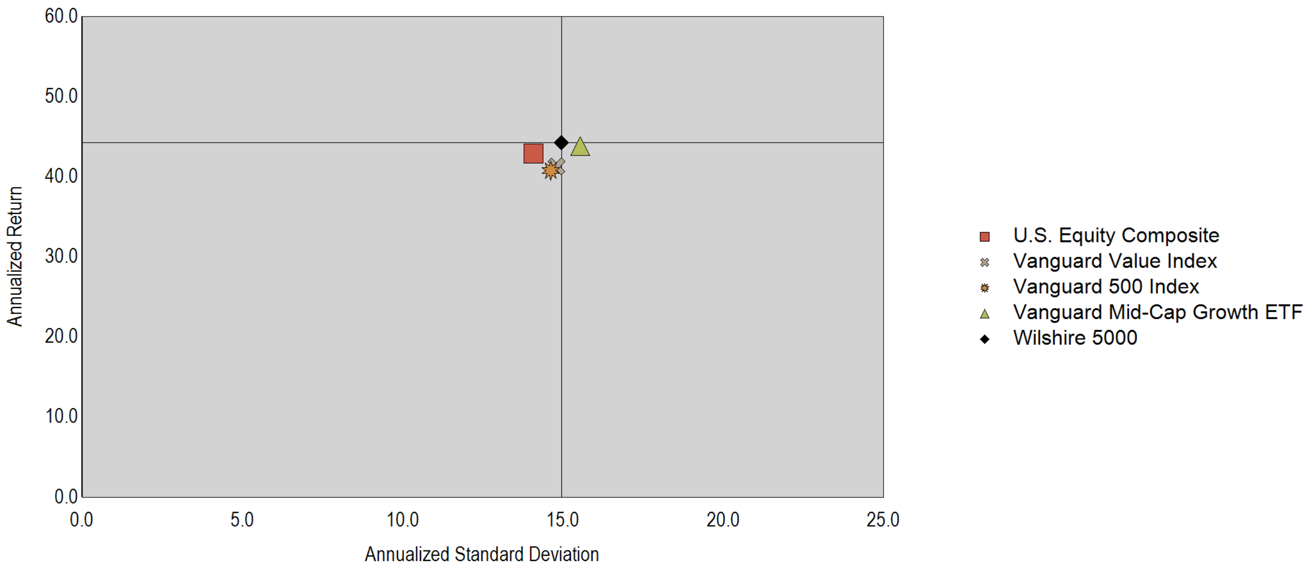
Maturity

	Q2-21
<1 Year	5.3%
1-3 Years	27.6%
3-5 Years	33.8%
5-7 Years	23.3%
7-10 Years	10.1%
10-15 Years	0.0%
15-20 Years	0.0%
>20 Years	0.0%
Not Rated/Cash	0.0%

Sectors
Great Lakes Advisors



Risk / Return - 1 Year



Characteristics

	Portfolio	Dow Jones U.S. Total Stock Market
Number of Holdings	652	3,877
Weighted Avg. Market Cap. ($B)	231.0	442.8
Median Market Cap. ($B)	27.5	1.4
Price To Earnings	26.5	26.4
Price To Book	4.1	4.4
Price To Sales	3.2	3.2
Return on Equity (%)	20.3	17.3
Yield (%)	1.4	1.3
Beta	1.0	1.0
R-Squared	1.0	1.0

Characteristics

	Portfolio	Dow Jones U.S. Total Stock Market
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	3.1	2.8
Materials	3.3	2.8
Industrials	15.6	9.4
Consumer Discretionary	9.9	12.2
Consumer Staples	6.2	5.3
Health Care	14.4	13.4
Financials	14.4	11.7
Information Technology	20.3	26.5
Communication Services	6.7	10.3
Utilities	2.4	2.3
Real Estate	3.5	3.3
Unclassified	0.0	0.0

Largest Holdings

	End Weight	Return
APPLE INC	1.9	12.3
MICROSOFT CORP	1.8	15.2
BERKSHIRE HATHAWAY INC	1.4	8.8
AMAZON.COM INC	1.3	11.2
JPMORGAN CHASE & CO	1.3	2.8

Top Contributors

	Beg Wgt	Return	Contribution
MICROSOFT CORP	1.7	15.2	0.3
APPLE INC	1.8	12.3	0.2
NVIDIA CORPORATION	0.3	49.9	0.2
HOULIHAN LOKEY INC	0.6	23.7	0.1
AMAZON.COM INC	1.2	11.2	0.1

Bottom Contributors

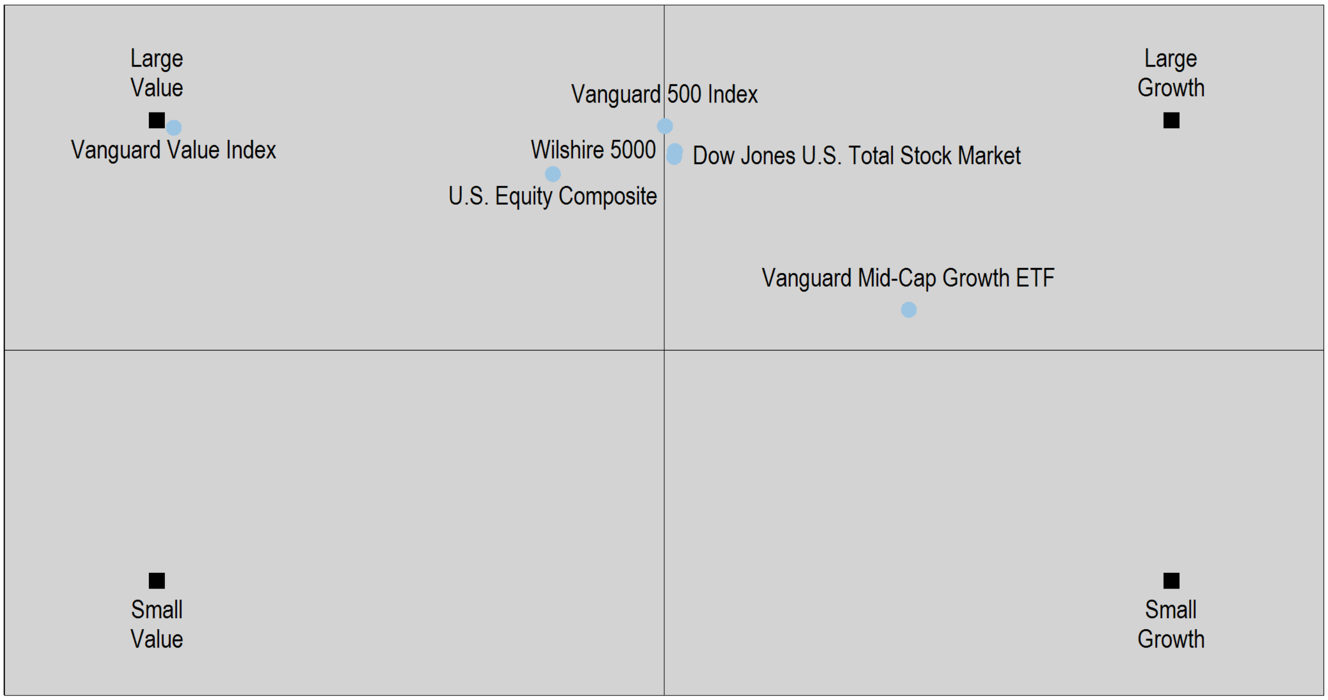
	Beg Wgt	Return	Contribution
SCOTTS MIRACLE-GRO CO (THE)	1.3	-21.4	-0.3
THOR INDUSTRIES INC.	0.9	-16.1	-0.1
INTEL CORP	0.7	-11.7	-0.1
WD-40 CO	0.5	-16.1	-0.1
CHEESECAKE FACTORY INC. (THE)	0.8	-7.4	-0.1

Market Capitalization

	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
U.S. Equity Composite	5.9%	11.7%	27.1%	24.9%	30.4%
Dow Jones U.S. Total Stock Market	6.0%	8.1%	15.7%	25.6%	44.5%
Weight Over/Under	*-0.1%*	*3.6%*	*11.5%*	*-0.7%*	*-14.1%*

Virtus KAR Small Cap Value is not included in risk/return chart due to limited historical information.

Equity Style Map - 1 Year



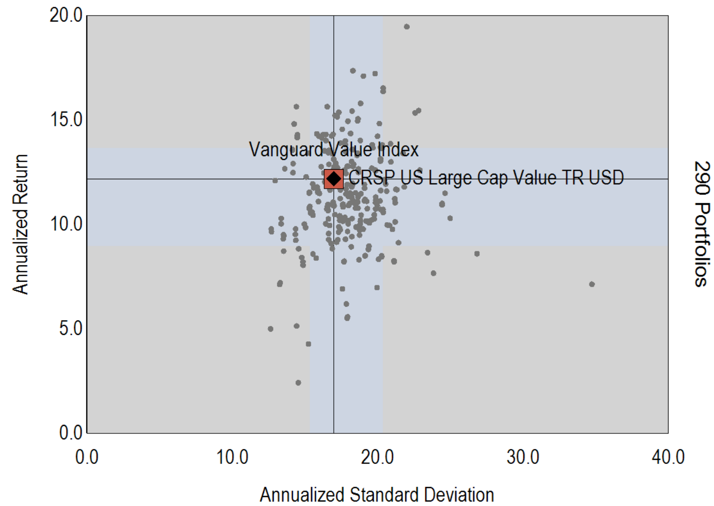
Common Holdings Matrix

	Vanguard Value Index		Vanguard 500 Index		Vanguard Mid-Cap Growth ETF		Virtus KAR Small-Cap Value	
	#	%	#	%	#	%	#	%
Vanguard Value Index	--	--	306	48	32	12	0	0
Vanguard 500 Index	306	97	--	--	101	64	1	2
Vanguard Mid-Cap Growth ETF	32	2	101	7	--	--	1	2
Virtus KAR Small-Cap Value	0	0	1	0	1	0	--	--

Virtus KAR Small Cap Value is not included in style map chart due to limited historical information.

Style Drift - 2 Years

Risk/Return - 2 Years



Characteristics

	Portfolio	CRSP US Large Cap Value TR USD
Number of Holdings	350	344
Weighted Avg. Market Cap. ($B)	161.5	161.9
Median Market Cap. ($B)	28.8	28.8
Price To Earnings	19.9	20.0
Price To Book	2.9	2.9
Price To Sales	2.2	2.2
Return on Equity (%)	18.6	18.8
Yield (%)	2.3	2.4
Beta	1.0	1.0
R-Squared	1.0	1.0

Largest Holdings

	End Weight	Return
BERKSHIRE HATHAWAY INC	3.0	8.8
JPMORGAN CHASE & CO	2.8	2.8
JOHNSON & JOHNSON	2.6	0.9
UNITEDHEALTH GROUP INC	2.3	8.0
PROCTER & GAMBLE CO (THE)	2.0	0.3

Top Contributors

	Beg Wgt	Return	Contribution
BERKSHIRE HATHAWAY INC	3.0	8.8	0.3
ELI LILLY AND CO	1.0	23.4	0.2
EXXON MOBIL CORP	1.5	14.6	0.2
UNITEDHEALTH GROUP INC	2.2	8.0	0.2
WELLS FARGO & CO	1.0	16.2	0.2

Characteristics

	Portfolio	CRSP US Large Cap Value TR USD
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	5.6	5.1
Materials	3.5	3.5
Industrials	12.8	12.9
Consumer Discretionary	4.2	3.8
Consumer Staples	10.1	10.2
Health Care	19.6	19.8
Financials	22.9	23.1
Information Technology	7.6	7.7
Communication Services	5.5	5.5
Utilities	5.4	5.4
Real Estate	2.9	2.9
Unclassified	0.0	0.0

Bottom Contributors

	Beg Wgt	Return	Contribution
INTEL CORP	1.6	-11.7	-0.2
WALT DISNEY CO (THE)	1.1	-4.7	-0.1
CATERPILLAR INC	0.8	-5.7	0.0
AT&T INC	1.4	-3.3	0.0
ABBOTT LABORATORIES	1.3	-2.9	0.0

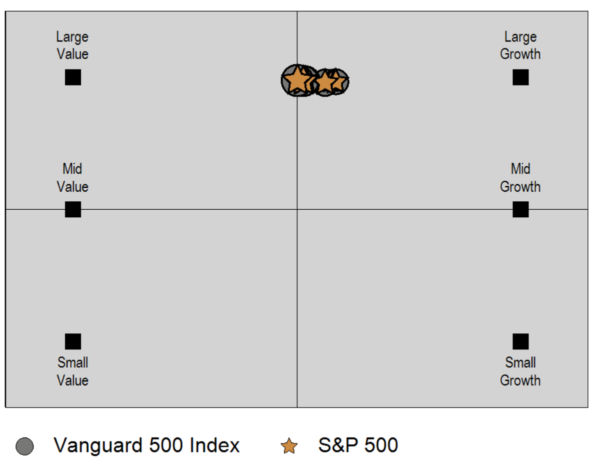
Market Capitalization

	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
Vanguard Value Index	0.0%	6.5%	6.0%	16.5%	70.9%
CRSP US Large Cap Value TR USD	0.6%	6.5%	6.0%	16.5%	70.5%
Weight Over/Under	*-0.5%*	*0.0%*	*0.0%*	*0.0%*	*0.5%*

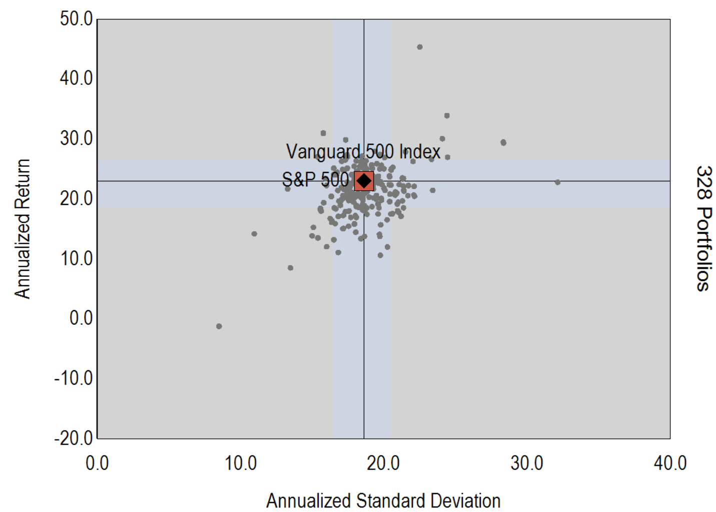
As of June 30, 2021

Market Value: $4.0 Million and 10.7% of Fund

Style Drift - 2 Years



Risk/Return - 2 Years



Characteristics

	Portfolio	S&P 500
Number of Holdings	507	504
Weighted Avg. Market Cap. ($B)	533.9	540.3
Median Market Cap. ($B)	30.4	30.4
Price To Earnings	27.9	28.0
Price To Book	4.7	4.7
Price To Sales	3.5	3.4
Return on Equity (%)	28.7	28.7
Yield (%)	1.4	1.4
Beta	1.0	1.0
R-Squared	1.0	1.0

Largest Holdings

	End Weight	Return
APPLE INC	5.9	12.3
MICROSOFT CORP	5.6	15.2
AMAZON.COM INC	4.0	11.2
FACEBOOK INC	2.3	18.1
ALPHABET INC	2.0	18.4

Top Contributors

	Beg Wgt	Return	Contribution
MICROSOFT CORP	5.3	15.2	0.8
APPLE INC	5.7	12.3	0.7
NVIDIA CORPORATION	1.0	49.9	0.5
AMAZON.COM INC	3.9	11.2	0.4
FACEBOOK INC	2.1	18.1	0.4

Characteristics

	Portfolio	S&P 500
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	2.8	2.8
Materials	2.6	2.5
Industrials	8.5	8.4
Consumer Discretionary	12.2	12.9
Consumer Staples	5.8	6.4
Health Care	13.0	12.6
Financials	11.2	11.5
Information Technology	27.4	26.9
Communication Services	11.1	11.2
Utilities	2.4	2.3
Real Estate	2.6	2.5
Unclassified	0.0	0.0

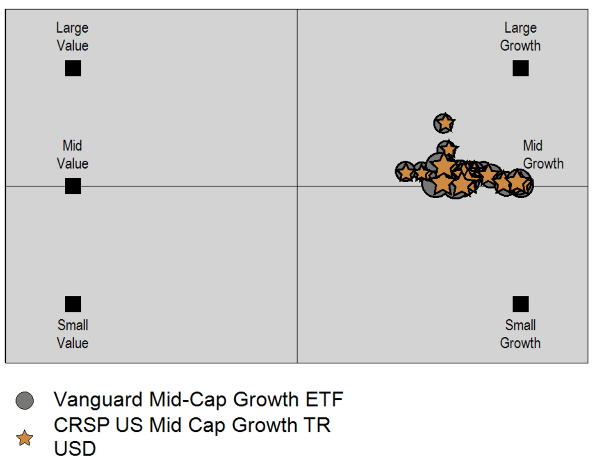
Bottom Contributors

	Beg Wgt	Return	Contribution
INTEL CORP	0.8	-11.7	-0.1
WALT DISNEY CO (THE)	1.0	-4.7	0.0
BOEING CO	0.4	-6.0	0.0
CATERPILLAR INC	0.4	-5.7	0.0
AT&T INC	0.6	-3.3	0.0

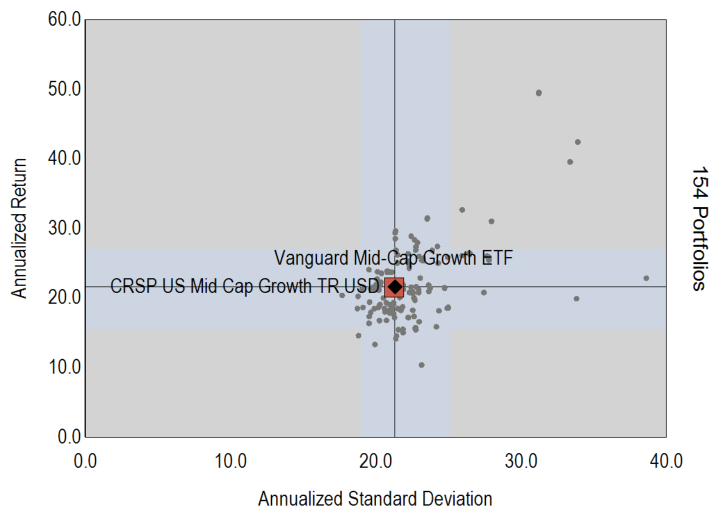
Market Capitalization

	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
Vanguard 500 Index	0.0%	1.9%	15.1%	28.6%	54.4%
S&P 500	0.0%	1.9%	15.0%	28.0%	55.1%
Weight Over/Under	*0.0%*	*0.0%*	*0.0%*	*0.6%*	*-0.7%*

Style Drift - 3 Years



Risk/Return - 3 Years



Characteristics

	Portfolio	Russell MidCap Growth
Number of Holdings	184	378
Weighted Avg. Market Cap. ($B)	29.9	26.0
Median Market Cap. ($B)	21.9	14.5
Price To Earnings	47.3	41.1
Price To Book	6.8	10.9
Price To Sales	7.0	5.2
Return on Equity (%)	9.1	11.3
Yield (%)	0.4	0.5
Beta	1.0	1.0
R-Squared	1.0	1.0

Largest Holdings

	End Weight	Return
IDEXX LABORATORIES INC	1.5	29.1
DOCUSIGN INC.	1.4	38.1
MARVELL TECHNOLOGY INC	1.3	19.2
IQVIA HOLDINGS INC	1.3	25.5
CHIPOTLE MEXICAN GRILL INC	1.2	9.1

Top Contributors

	Beg Wgt	Return	Contribution
DOCUSIGN INC.	1.1	38.1	0.4
IDEXX LABORATORIES INC	1.3	29.1	0.4
IQVIA HOLDINGS INC	1.2	25.5	0.3
MSCI INC	1.0	27.4	0.3
RESMED INC	0.9	27.3	0.2

Characteristics

	Portfolio	Russell MidCap Growth
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	2.1	1.1
Materials	1.8	2.0
Industrials	16.4	14.4
Consumer Discretionary	11.9	16.0
Consumer Staples	1.5	2.1
Health Care	18.4	17.6
Financials	4.6	4.5
Information Technology	31.7	34.2
Communication Services	6.3	6.2
Utilities	0.0	0.1
Real Estate	5.1	1.8
Unclassified	0.0	0.0

Bottom Contributors

	Beg Wgt	Return	Contribution
DOLLAR TREE INC	0.8	-13.1	-0.1
CITRIX SYSTEMS INC.	0.5	-16.2	-0.1
PENN NATIONAL GAMING INC	0.3	-27.0	-0.1
TELADOC HEALTH INC	0.8	-8.5	-0.1
MICROCHIP TECHNOLOGY INC	1.3	-3.3	0.0

Market Capitalization

	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
Vanguard Mid-Cap Growth ETF	0.1%	3.8%	72.1%	23.9%	0.0%
Russell MidCap Growth	1.1%	19.4%	60.6%	18.9%	0.0%
Weight Over/Under	*-1.0%*	*-15.5%*	*11.5%*	*5.0%*	*0.0%*

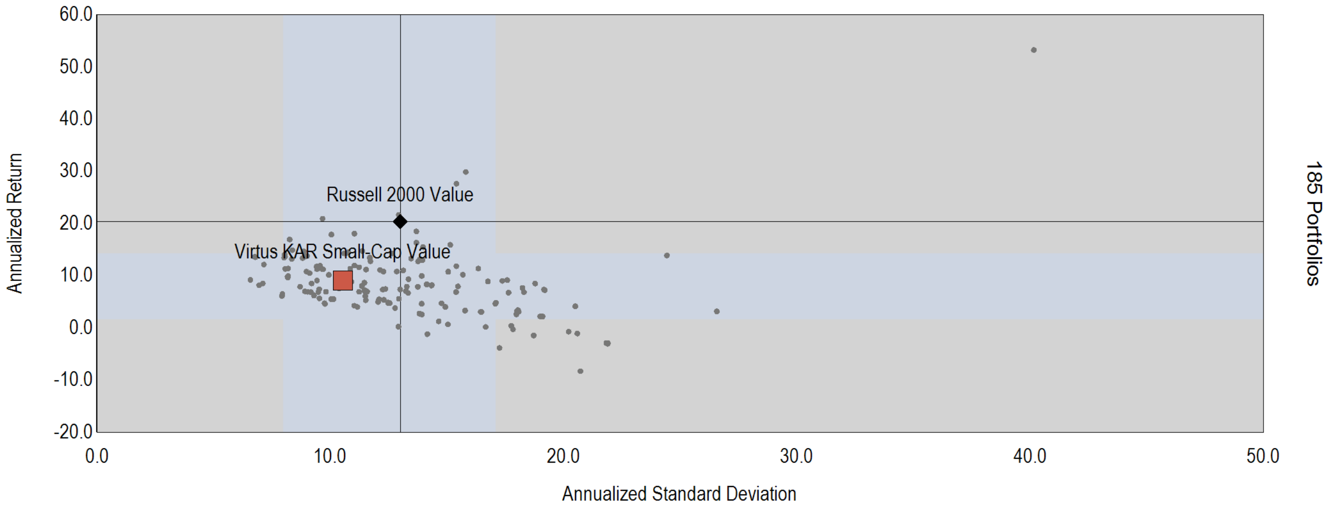
Virtus KAR Small-Cap Value

Characteristics

As of June 30, 2021

Market Value: $2.0 Million and 5.4% of Fund

Risk/Return - Since Inception



Characteristics

	Portfolio	Russell 2000 Value
Number of Holdings	30	1,337
Weighted Avg. Market Cap. ($B)	5.8	3.1
Median Market Cap. ($B)	4.7	1.2
Price To Earnings	26.2	15.3
Price To Book	4.5	1.8
Price To Sales	3.1	1.5
Return on Equity (%)	19.9	1.7
Yield (%)	1.2	1.6
Beta		1.0
R-Squared		1.0

Characteristics

	Portfolio	Russell 2000 Value
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	0.0	6.6
Materials	6.6	4.7
Industrials	35.0	15.2
Consumer Discretionary	13.4	8.3
Consumer Staples	6.0	2.8
Health Care	1.5	11.4
Financials	18.3	25.3
Information Technology	14.3	5.5
Communication Services	0.0	4.4
Utilities	0.0	4.6
Real Estate	4.4	11.1
Unclassified	0.0	0.0

Largest Holdings

	End Weight	Return
SCOTTS MIRACLE-GRO CO (THE)	6.6	-21.4
BROOKS AUTOMATION INC	6.1	16.8
WATSCO INC	4.9	10.7
CHEESECAKE FACTORY INC. (THE)	4.8	-7.4
HOULIHAN LOKEY INC	4.8	23.7

Top Contributors

	Beg Wgt	Return	Contribution
HOULIHAN LOKEY INC	3.7	23.7	0.9
BROOKS AUTOMATION INC	4.8	16.8	0.8
ARMSTRONG WORLD INDUSTRIES INC	3.1	19.3	0.6
MGM GROWTH PROPERTIES LLC	3.7	13.9	0.5
EVERTEC INC	2.8	17.4	0.5

Bottom Contributors

	Beg Wgt	Return	Contribution
SCOTTS MIRACLE-GRO CO (THE)	7.8	-21.4	-1.7
THOR INDUSTRIES INC.	5.3	-16.1	-0.8
WD-40 CO	3.1	-16.1	-0.5
CHEESECAKE FACTORY INC. (THE)	4.7	-7.4	-0.3
BANK OF HAWAII CORP	3.6	-5.2	-0.2

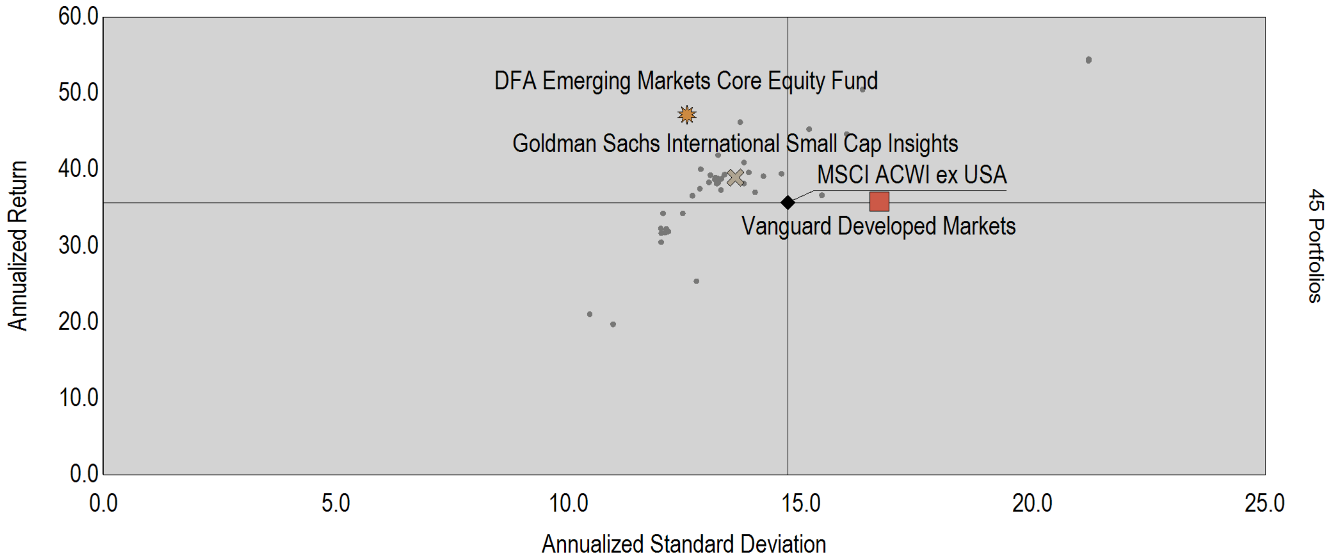
Market Capitalization

	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
Virtus KAR Small-Cap Value	37.7%	62.3%	0.0%	0.0%	0.0%
Russell 2000 Value	86.7%	11.7%	1.6%	0.0%	0.0%
Weight Over/Under	*-49.0%*	*50.5%*	*-1.6%*	*0.0%*	*0.0%*

Style drift is not available due to limited historical information.

As of June 30, 2021

Market Value: $8.7 Million and 22.9% of Fund



Characteristics

	Portfolio	MSCI ACWI ex USA
Number of Holdings	9,347	2,344
Weighted Avg. Market Cap. ($B)	64.5	105.9
Median Market Cap. ($B)	1.2	10.4
Price To Earnings	17.1	19.1
Price To Book	2.5	2.7
Price To Sales	1.2	1.6
Return on Equity (%)	10.7	11.7
Yield (%)	2.5	2.4
Beta	1.1	1.0
R-Squared	1.0	1.0

Region	% of Total	% of Bench
North America ex U.S.	4.7%	7.0%
United States	1.0%	0.0%
Europe Ex U.K.	31.1%	30.9%
United Kingdom	7.0%	8.9%
Pacific Basin Ex Japan	9.4%	7.2%
Japan	17.4%	14.3%
Emerging Markets	28.3%	31.0%
Other	1.0%	0.6%
Total	**100.0%**	**100.0%**

Characteristics

	Portfolio	FTSE Developed ex North America
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	3.7	3.0
Materials	8.7	8.4
Industrials	15.7	15.6
Consumer Discretionary	12.3	12.9
Consumer Staples	8.1	9.7
Health Care	10.3	11.4
Financials	16.6	16.1
Information Technology	11.2	10.9
Communication Services	5.3	5.1
Utilities	3.1	3.3
Real Estate	4.2	3.5
Unclassified	0.4	0.0

Market Capitalization

	Small Cap	Mid Cap	Large Cap
Non U.S. Equity Composite	48.2%	15.1%	36.7%
MSCI ACWI ex USA	12.9%	23.1%	63.9%
Weight Over/Under	*35.3%*	*-8.0%*	*-27.2%*

Equity Style Map - 1 Year

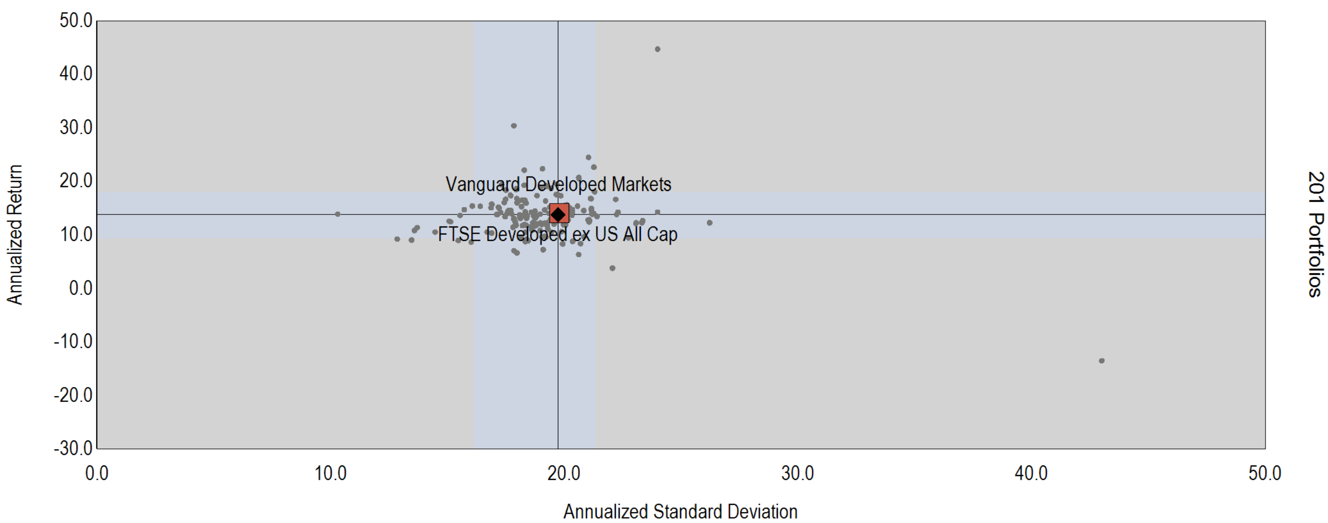
Common Holdings Matrix

	Vanguard Developed Markets #	Vanguard Developed Markets %	Goldman Sachs International Small Cap Insights #	Goldman Sachs International Small Cap Insights %	DFA Emerging Markets Core Equity Fund #	DFA Emerging Markets Core Equity Fund %
Vanguard Developed Markets	--	--	391	90	481	15
Goldman Sachs International Small Cap Insights	391	3	--	--	0	0
DFA Emerging Markets Core Equity Fund	481	6	0	0	--	--

As of June 30, 2021

Market Value: $4.1 Million and 10.8% of Fund

Risk/Return - 2 Years



Characteristics

	Portfolio	FTSE Developed ex North America
Number of Holdings	3,942	1,512
Weighted Avg. Market Cap. ($B)	71.3	80.8
Median Market Cap. ($B)	2.1	8.1
Price To Earnings	19.9	20.5
Price To Book	2.6	2.6
Price To Sales	1.4	1.4
Return on Equity (%)	10.0	10.2
Yield (%)	2.4	2.5
Beta	1.0	1.0
R-Squared	1.0	1.0

Region	% of Total	% of Bench
North America ex U.S.	9.9%	0.0%
United States	1.8%	0.0%
Europe Ex U.K.	42.0%	44.7%
United Kingdom	7.4%	13.9%
Pacific Basin Ex Japan	10.5%	11.8%
Japan	21.5%	23.2%
Emerging Markets	6.1%	6.0%
Other	0.8%	0.5%
Total	**100.0%**	**100.0%**

Characteristics

	Portfolio	FTSE Developed ex North America
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	3.7	3.0
Materials	8.7	8.4
Industrials	15.7	15.6
Consumer Discretionary	12.3	12.9
Consumer Staples	8.1	9.7
Health Care	10.3	11.4
Financials	16.6	16.1
Information Technology	11.2	10.9
Communication Services	5.3	5.1
Utilities	3.1	3.3
Real Estate	4.2	3.5
Unclassified	0.4	0.0

Market Capitalization

	Small Cap	Mid Cap	Large Cap
Vanguard Developed Markets	41.6%	24.2%	34.2%
FTSE Developed ex North America	35.1%	25.7%	39.2%
Weight Over/Under	*6.5%*	*-1.5%*	*-5.0%*

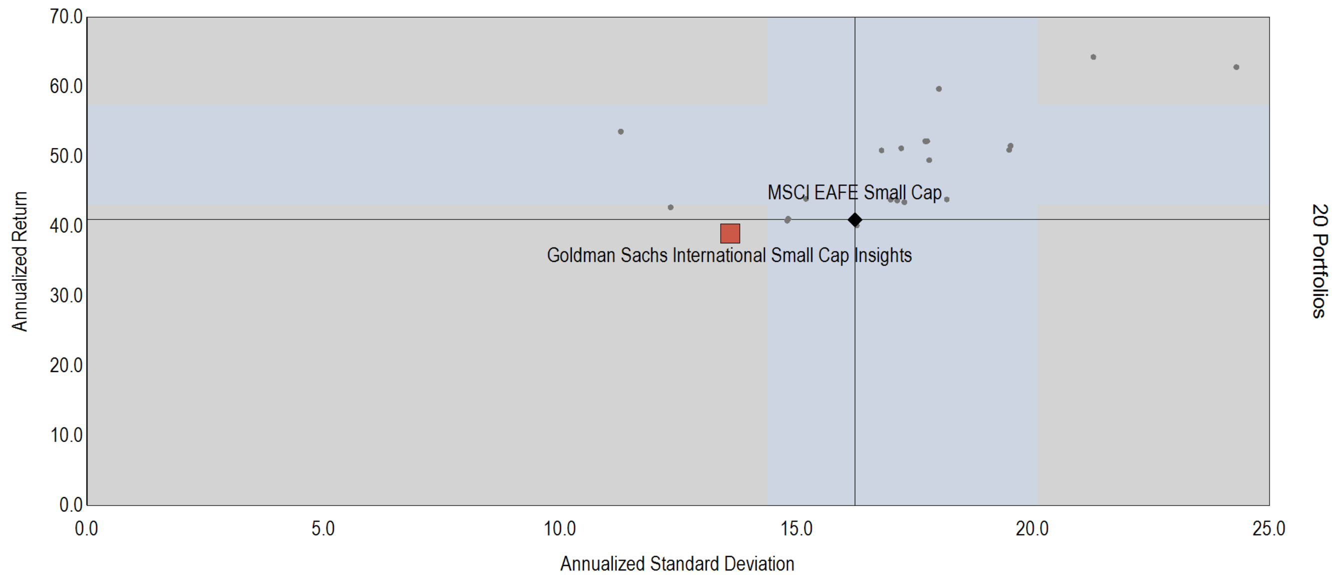
Goldman Sachs International Small Cap Insights

Characteristics

As of June 30, 2021

Market Value: $2.3 Million and 6.0% of Fund

Risk/Return - 1 Year



Characteristics

	Portfolio	MSCI EAFE Small Cap
Number of Holdings	445	2,387
Weighted Avg. Market Cap. ($B)	3.4	3.4
Median Market Cap. ($B)	1.9	1.4
Price To Earnings	16.8	19.4
Price To Book	2.2	2.4
Price To Sales	0.9	1.1
Return on Equity (%)	11.8	6.9
Yield (%)	2.8	2.1
Beta	1.0	1.0
R-Squared	1.0	1.0

Region	% of Total	% of Bench
North America ex U.S.	0.0%	0.0%
United States	0.2%	0.0%
Europe Ex U.K.	43.2%	37.6%
United Kingdom	13.6%	17.5%
Pacific Basin Ex Japan	12.2%	14.1%
Japan	28.2%	28.0%
Emerging Markets	0.7%	0.0%
Other	1.8%	2.8%
Total	**100.0%**	**100.0%**

Characteristics

	Portfolio	MSCI EAFE Small Cap
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	0.5	1.6
Materials	10.6	9.0
Industrials	26.1	23.4
Consumer Discretionary	14.9	13.3
Consumer Staples	3.6	5.7
Health Care	8.3	7.4
Financials	9.1	10.4
Information Technology	11.3	10.0
Communication Services	3.6	4.5
Utilities	0.9	2.9
Real Estate	9.8	11.7
Unclassified	0.2	0.0

Market Capitalization

	Small Cap	**Mid Cap**	**Large Cap**
Goldman Sachs International Small Cap Insights	97.5%	2.5%	0.0%
MSCI EAFE Small Cap	97.6%	2.2%	0.1%
Weight Over/Under	*-0.1%*	*0.2%*	*-0.1%*

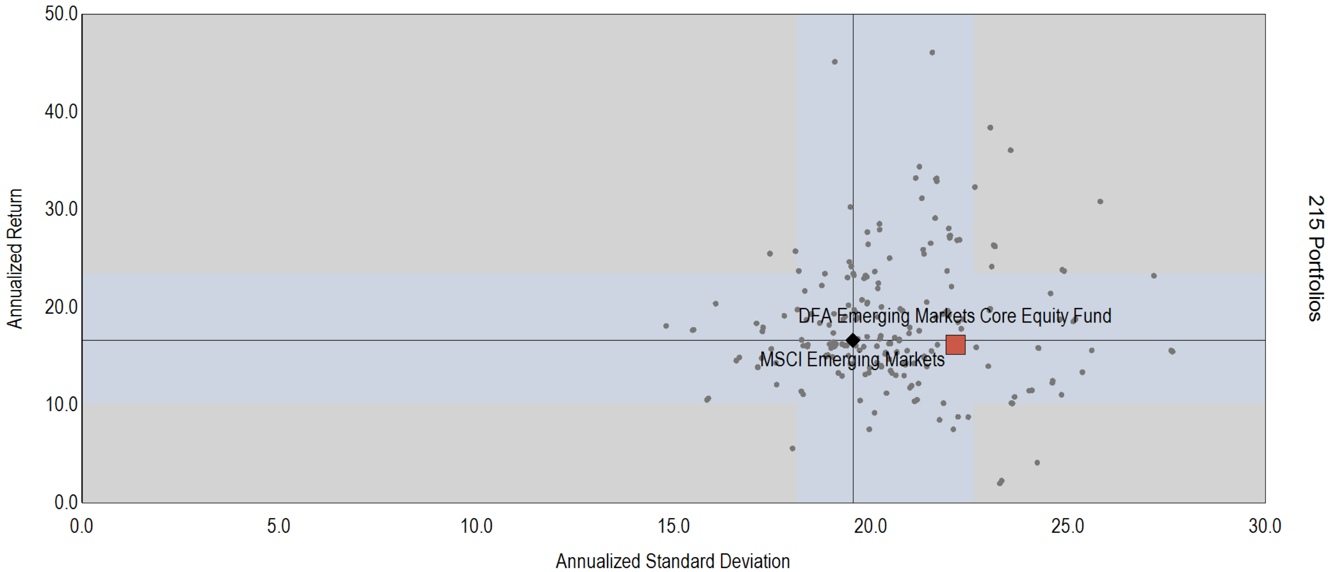
DFA Emerging Markets Core Equity Fund

Characteristics

As of June 30, 2021

Market Value: $2.3 Million and 6.1% of Fund

Risk/Return - 1 Years



Characteristics

	Portfolio	MSCI Emerging Markets
Number of Holdings	5,835	1,411
Weighted Avg. Market Cap. ($B)	114.3	169.1
Median Market Cap. ($B)	0.7	7.3
Price To Earnings	14.2	16.4
Price To Book	2.7	3.1
Price To Sales	1.1	1.5
Return on Equity (%)	12.0	12.5
Yield (%)	2.4	2.1
Beta	1.1	1.0
R-Squared	1.0	1.0

Region	% of Total	% of Bench
EM Asia	75.2%	79.4%
EM Latin America	8.3%	7.7%
EM Europe & Middle East	2.4%	4.3%
EM Africa	4.4%	3.6%
Other	9.8%	5.0%
Total	**100.0%**	**100.0%**

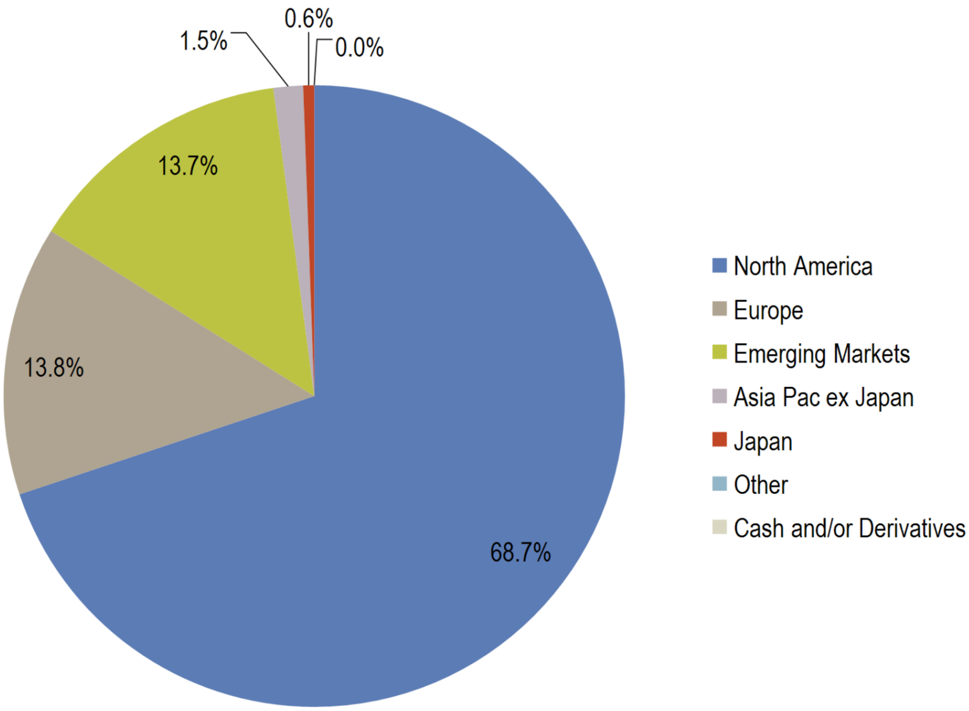
Characteristics

	Portfolio	MSCI Emerging Markets
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	4.5	5.0
Materials	11.4	8.4
Industrials	8.7	4.9
Consumer Discretionary	13.5	17.6
Consumer Staples	6.0	5.6
Health Care	4.4	5.1
Financials	15.2	17.8
Information Technology	20.4	20.5
Communication Services	8.5	11.0
Utilities	2.8	2.0
Real Estate	3.7	2.0
Unclassified	0.2	0.0

Market Capitalization

	Small Cap	Mid Cap	Large Cap
DFA Emerging Markets Core Equity Fund	30.4%	20.1%	49.4%
MSCI Emerging Markets	11.4%	19.5%	69.0%
Weight Over/Under	*19.0%*	*0.6%*	*-19.6%*

Geographic Allocation



Asset Class

Fixed-Income	60.3%
Equity	37.3%

Credit Quality

AAA Rated	4.2%
AA Rated	2.8%
A Rated	5.6%
BBB Rated	14.5%
BB Rated	30.3%
B Rated	28.4%
Below B	8.0%
Not Rated	6.3%
Cash and/or Derivatives	0.0%

As of June 30, 2021

Market Value: $2.4 Million and 6.2% of Fund

Characteristics

Fund GAV ($MM)	$10,761.2
Fund NAV ($MM)	$8,033.6
Cash (% of NAV)	2.4%
# of Investments	133
% in Top 10 by NAV	30.6%
Leverage %	23.6%
Occupancy	91.6%
# of MSAs	41
1-Year Dividend Yield	0.0%
As of Date	30-Jun-21

Strategy Breakdown

	% of Portfolio
Pre-Development	0.4%
Development	3.9%
Initial Leasing	2.4%
Operating	93.3%
Re-Development	0.0%
Other	0.0%

Top Five Metro Areas	% of NAV
Seattle, WA	8.3%
Austin, TX	7.3%
New York, NY	7.0%
Phoenix, AZ	6.0%
Los Angeles, CA	5.7%

Queue In:

Contribution Queue ($MM)	$263.45
Anticipated Drawdown (Months)	6

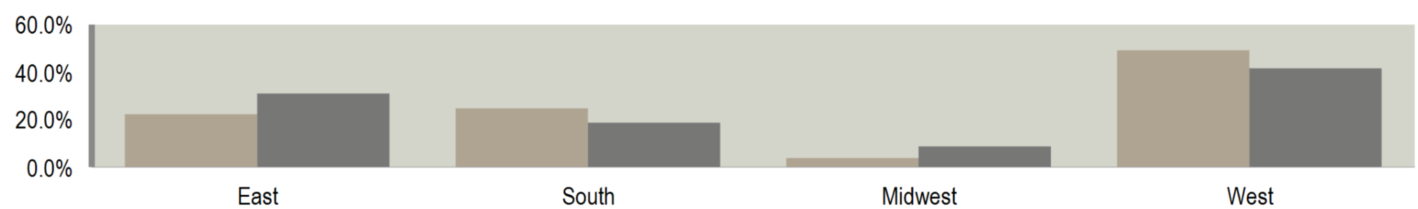
Queue Out:

Redemption Queue ($MM)	$0.00
Anticipated Payout (Months)	0

Top Ten Holdings Investment Detail

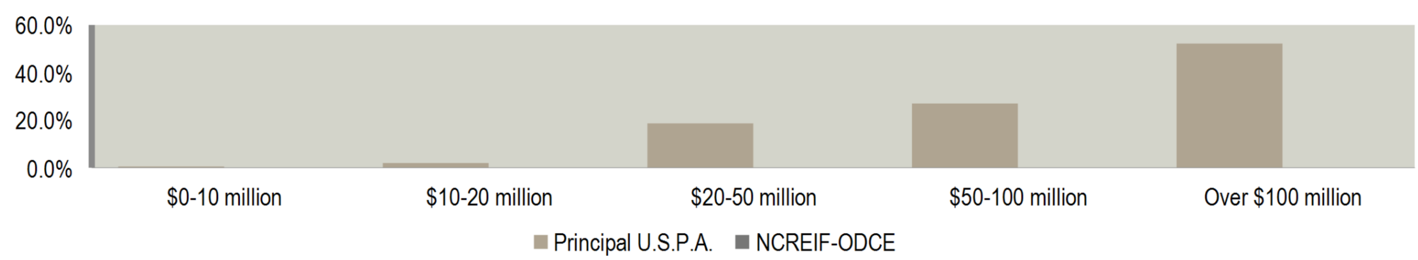
#	Property	Type	Location	% of Fund NAV
1	500 West Second Street	Office	Austin, TX	5.1%
2	Nine Two Nine	Office	Seattle, WA	5.0%
3	555 City Center	Office	Oakland, CA	3.0%
4	Park Place	Office	Anaheim, CA	2.8%
5	225 West Santa Clara	Office	San Jose, CA	2.6%
6	Watermark Kendall East & West	Apartment	Cambridge, MA	2.5%
7	Valley Centre Corporate Park	Industrial	Seattle, WA	2.5%
8	Jurupa Business Park	Industrial	Riverside, CA	2.4%
9	March Business Center	Industrial	Riverside, CA	2.4%
10	Sonoran Village	Apartment	Phoenix, AZ	2.4%
Total				**30.6%**

Regional Breakdown by NAV (Excluding Cash & Debt)



Property Type Breakdown by NAV (Excluding Cash & Debt)

Property Size Breakdown by NAV (Excluding Cash & Debt)



Market Value: $37.8 Million and 100.0% of Fund

Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee [1]	Industry Median [2]
Int. Fixed Income	Great Lakes Advisors	0.30% on the first $10 million 0.20% on the balance	0.29% $33,080	0.30%
Large-Cap Value	Vanguard Value Index	0.05% on the balance	0.05% $1,848	0.72%
Large-Cap Core	Vanguard 500 Index	0.04% on the balance	0.04% $1,624	0.11%
Mid-Cap Growth	Vanguard Mid-Cap Growth ETF	0.07% on the balance	0.07% $1,745	0.16%
Small-Cap Value	Virtus KAR Small-Cap Value	0.89% on the balance	0.89% $17,503	1.00%
Non-U.S. Large-Cap Core	Vanguard Developed Markets	0.07% on the balance	0.07% $2,827	0.24%
Non-U.S. Small-Cap Core	Goldman Sachs International Small Cap Insights	0.86% on the balance	0.86% $19,198	0.97%
Emerging Markets	DFA Emerging Markets Core Equity Fund	0.39% on the balance	0.39% $8,468	1.35%
Global Tactical Asset Allocation	BlackRock Multi-Asset Income	0.52% on the balance	0.52% $9,679	0.65%
Core Real Estate	Principal U.S. Property Separate Account	1.10% on the balance	1.10% $27,282	1.00%
Total Investment Management Fees			**0.33%** **$123,254**	**0.49%**
Investment Consultant	Marquette Associates, Inc.	$50,000 Annual Fee	0.13% $50,000	
Custodian	US Bank	0.02% on the balance $7,500 annual minimum	0.02% $7,570	
Total Fund			**0.48%** **$180,823**	

[1] Expense Ratio & Estimated Annual Fee are Based on Market Value at Quarter End.
[2] Source: 2019 Marquette Associates Investment Management Fee Study.

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Commodities Search

Glen Ellyn Police

Searchbook

June 30, 2021

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Appendix

Search Background

Marquette Associates has prepared this search utilizing data from various sources. The sources of information are believed to be reliable. Marquette has not independently verified all of the information contained herein. Past performance is no guarantee of future results.

NOTE: All data is as of June 30, 2021

NOTE: Approximate amount of assets in consideration: $1,900,000

NOTE: Performance data is net of stated, undiscounted fees

NOTE: Glossary of definitions enclosed

Benchmark: Bloomberg Commodity Index TR USD

Candidate Lineup

CoreCommodity: Complete Commodities Strategy Fund
Credit Suisse: Credit Suisse Commodity Return Strategy Fund
Dimensional: DFA Commodity Strategy
Deutsche Bank: Enhanced Commodity
PIMCO: Commodity Real Return

The information below may help make distinctions between investment managers. This information is intended to make reference to general areas Marquette Associates believes are important to consider when evaluating infrastructure publicly traded managers.

1. Risk and Return Statistics:

Total return should always be considered within the context of total risk. The ideal investment manager will outperform the benchmark while maintaining an acceptable level of risk.

2. Style Analysis:

Returns-based style analysis can both indicate whether a manager is generating alpha, and explain beta components of the manager's returns. Factor weights can be viewed across managers to compare different risk exposures. Equity factors considered include market, size and value. Fixed income factors considered include credit, duration, and MBS. A higher number indicates a higher exposure to a given risk factor, and a lower number indicates a lower exposure.

3. Rolling Three Year Risk and Returns:

Rolling returns are useful in reviewing historical performance over longer term investment cycles. Outperformance of the rolling three year returns of a manager over the benchmark is an indication of consistency. Likewise, rolling three year risk below the benchmark is an indication of managers with below market risk.

4. Three and Five Year Statistics:

Information Ratio and Sharpe Ratio help determine how much value a manager is contributing to performance, relative to risk. The best case scenario is a manager with historically strong returns without assuming too much market risk. As a result, high Information and Sharpe Ratios are signals of strong outperformance at reasonable risk levels. These two statistics become more accurate the higher the R-Squared Coefficient. Typically, an R-Squared Coefficient greater than 0.85 coincides with accurate Information and Sharpe Ratio statistics.

5. Up and Down Market Capture:

The greater the up-market capture ratio of a manager, the better they have performed when the market was positive. The lower the down-market capture ratio of a manager, the better they have preserved capital when the stock market is negative. Up-market capture ratios at or above 100% (indicating the manager performed at or above the index during periods of positive index performance), and the down-market capture ratios below 100% (indicating the manager outperformed during periods of negative index returns) are signals of strong managers.

Candidate Summary

Candidate Summary

Firm Name	Firm Assets ($MM)	Product ($MM)	Vehicle	Product Style	E&O Ins. Policy Limit ($MM)
CoreCommodity	$5,453.0	$1,056.0	Mutual Fund	Core Value	--
Credit Suisse	$509,292.0	$2,084.0	Mutual Fund	Relative Value	$25.0
Dimensional	$659,279.0	$1,587.0	Mutual Fund	Core	$145.0
Deutsche Bank	$1,019,158.0	$2,182.5	Mutual Fund	Relative Value	$20.0
PIMCO	$2,202,048.0	$6,872.0	Mutual Fund	Relative Value	$150.0

General Information Summary

Firm Name	Location	Phone	Contact Name
CoreCommodity	Stamford, CT	(203) 708-6500	Enrique Lopez-Balboa
Credit Suisse	New York, NY	(212) 325-7565	Allison Cerisano
Dimensional	Austin, TX	(512) 306-7400	Ryan Ennis
Deutsche Bank	New York, NY	(212) 454-4500	Kevin Sheehan
PIMCO	Newport Beach, CA	(949) 720-6000	Evan Francks

Firm Ownership

Firm Name	% Employee Owned	# Employee Owners	% Parent Owned	% Owned by Other*	% Minority Owned	% Female Owned
CoreCommodity	50.0%	2	0.0%	50.0%	0.0%	0.0%
Credit Suisse	0.0%	0	100.0%	0.0%	0.0%	0.0%
Dimensional	70.0%	--	0.0%	30.0%	0.0%	0.0%
Deutsche Bank	0.0%	0	79.0%	21.0%	0.0%	0.0%
PIMCO	0.0%	0	0.0%	0.0%	0.0%	0.0%

*See Other Manager Notes in Appendix

CoreCommodity Management

CoreCommodity Management is an independent asset management firm with approximately $4 billion in AUM whose singular focus is to provide commodity exposure to investors globally via commodity futures and natural resource equity strategies. Robert Hyman, Portfolio Manager for the Complete Commodities Fund since inception, has traded commodities for over 40 years. The Fund seeks to provide diversified and unlevered global commodity exposure through actively managed long-only commodity investments. Exposure can include energy, agriculture, industrial and precious metals, and other. The Fund takes a multi-factor, bottom-up approach focusing on "pure play" upstream commodity producing companies possessing in-ground reserves.

Credit Suisse

The Credit Suisse Commodity Return Strategy Fund is an enhanced index strategy that focuses on roll and term-structure management. The mutual fund version of this strategy primarily uses swaps to gain commodities exposure. The strategy does not take overweight or underweight positions but seeks to add value by identifying structural inefficiencies, rolling at different times from the benchmark, and holding different contracts from the benchmark. Collateral is managed conservatively and is often held in Treasuries with durations of less than one year to minimize exposure to fixed income risk. The strategy is unlevered and seeks to operate with a tracking error to the Bloomberg Commodity Index of 1.0 - 1.5%. The management of the roll process is the main source of alpha for the strategy.

Dimensional Fund Advisors

DFA Commodity Strategy Portfolio seeks to outperform the Bloomberg Commodity Index by primarily using commodity index swaps. The strategy makes limited use of futures, which tend to represent 3% - 7% of the Portfolio. The building blocks of the strategy start with an investment-grade fixed income portfolio of U.S. and non-U.S. securities with an average duration of three years or less. The Portfolio then adds a commodity index swap overlay to gain exposure to commodities. The final component of the strategy involves swap adjustments, which consist of hedging the Portfolio's swap payments for various maturities. The strategy's main source of alpha stems from its fixed income collateral management.

Deutsche Bank

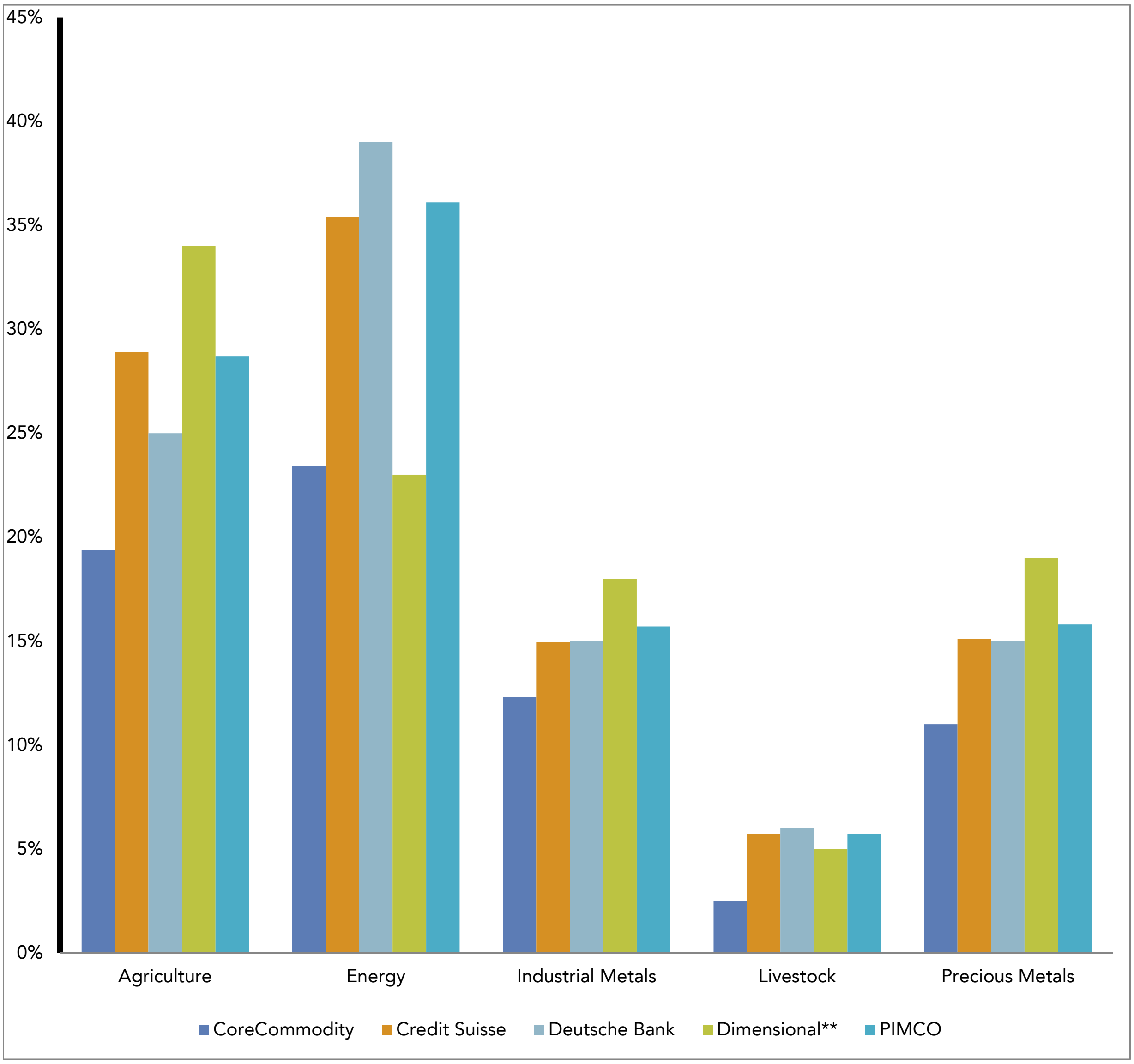
DWS has been investing directly in the commodities space for 14 years, launching the Enhanced Commodity Strategy in 2005. The Fund is managed by three dedicated investment professionals who are supported by three commodity analysts, leveraging DWS' firm-wide resources with over 50 investment professionals supporting the strategy. The Fund provides direct access to global commodities by utilizing swaps and futures, investing in approximately 20-25 commodities spanning the five main sectors of energy, agriculture, industrial metals, livestock and precious metals. The portfolio maintains a long-only bias of 50-100% with expected net long exposure of 80-90% on average across a full-market cycle.

PIMCO

The PIMCO CommodityRealReturn Strategy Fund seeks to outperform the Bloomberg Commodity Index. The Fund gains commodity exposure through the use of swaps on the Index and looks to add alpha with actively managed futures. The Fund manages collateral with Treasury Inflation-Protected Securities (TIPS), and the collateral is benchmarked against 1-5 Year TIPS. Collateral management and the decision to use TIPS instead of T-Bills have been a significant driver of alpha for the Fund.

Portfolio Holdings

Sector Comparison



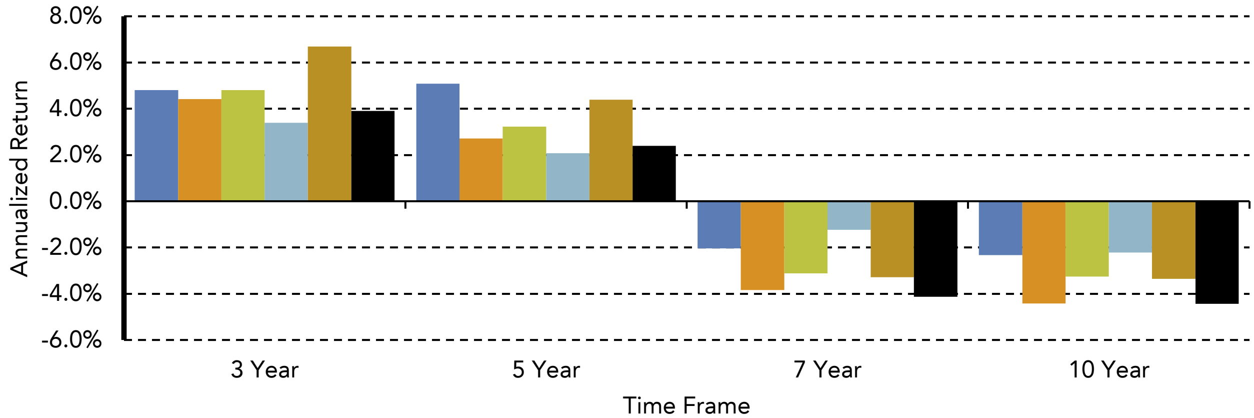
Current Weights*, Absolute(Cash and Other category not displayed)

Firm	Agriculture	Energy	Industrial Metals	Livestock	Precious Metals
CoreCommodity	19%	23%	12%	3%	11%
Credit Suisse	29%	35%	15%	6%	15%
Dimensional**	34%	23%	18%	5%	19%
Deutsche Bank	25%	39%	15%	6%	15%
PIMCO	29%	36%	16%	6%	16%

*Values may not equal 100% due to rounding.

**Values as of 4Q20.

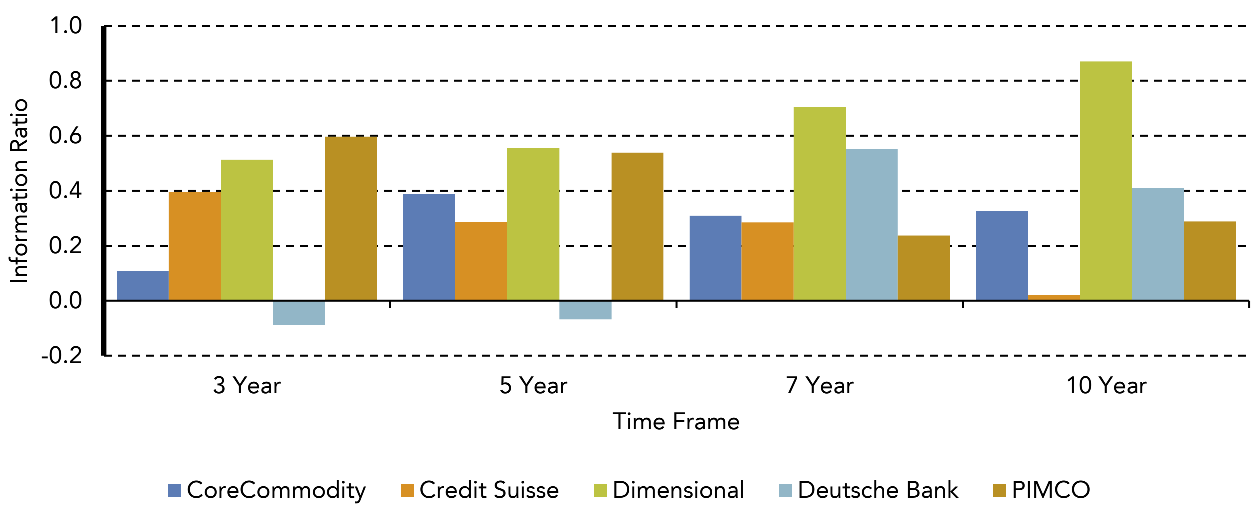
Trailing Returns



Trailing Returns and Risk

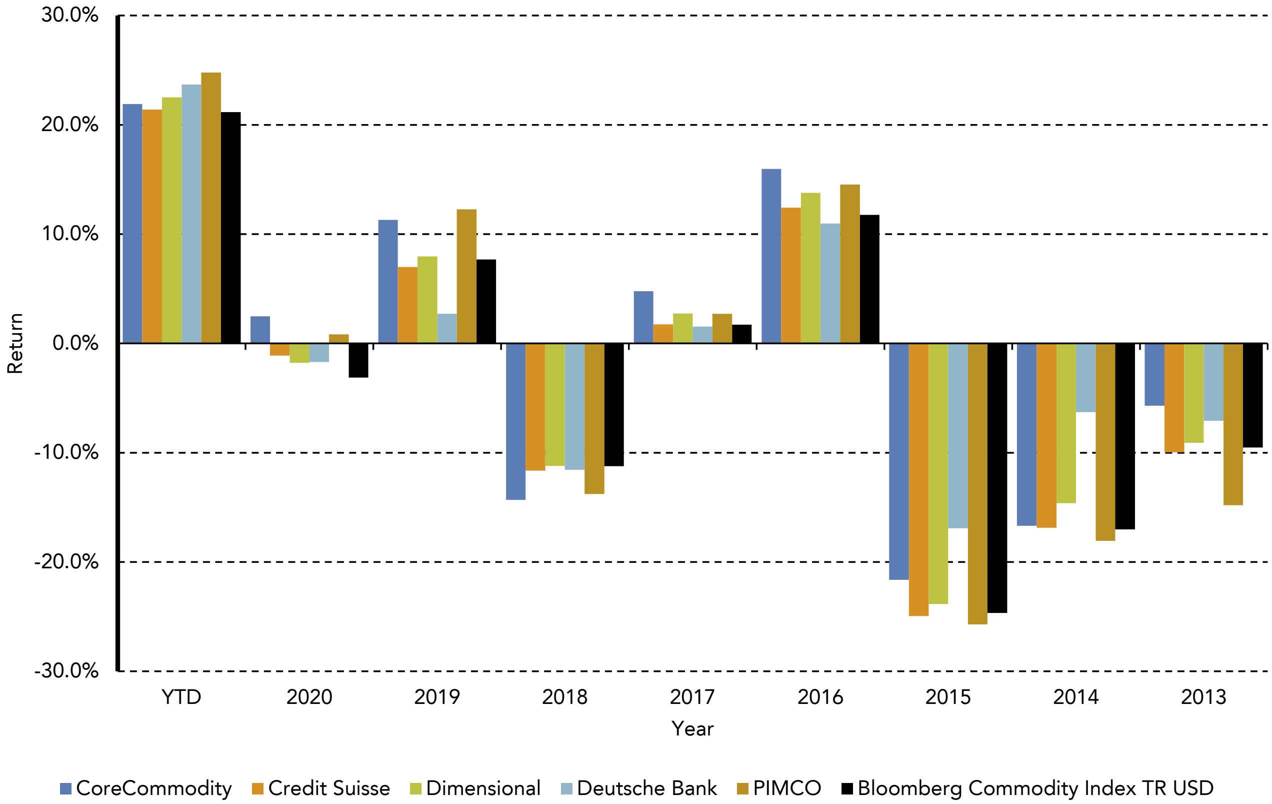
	3 Year		5 Year		7 Year		10 Year	
	Ret.	StDev	Ret.	StDev	Ret.	StDev	Ret.	StDev
CoreCommodity	4.8%	20.3%	5.1%	16.5%	-2.0%	16.7%	-2.3%	16.4%
Credit Suisse	4.4%	14.6%	2.7%	12.2%	-3.8%	13.4%	-4.4%	13.6%
Dimensional	4.8%	14.8%	3.2%	12.2%	-3.1%	13.4%	-3.3%	13.8%
Deutsche Bank	3.4%	14.1%	2.1%	11.8%	-1.2%	11.5%	-2.2%	11.1%
PIMCO	6.7%	18.7%	4.4%	15.2%	-3.3%	16.1%	-3.4%	16.2%
Bloomberg Commodity Index TR USD	3.9%	15.3%	2.4%	12.6%	-4.1%	13.8%	-4.4%	14.0%

Trailing Information Ratios



Performance Comparison

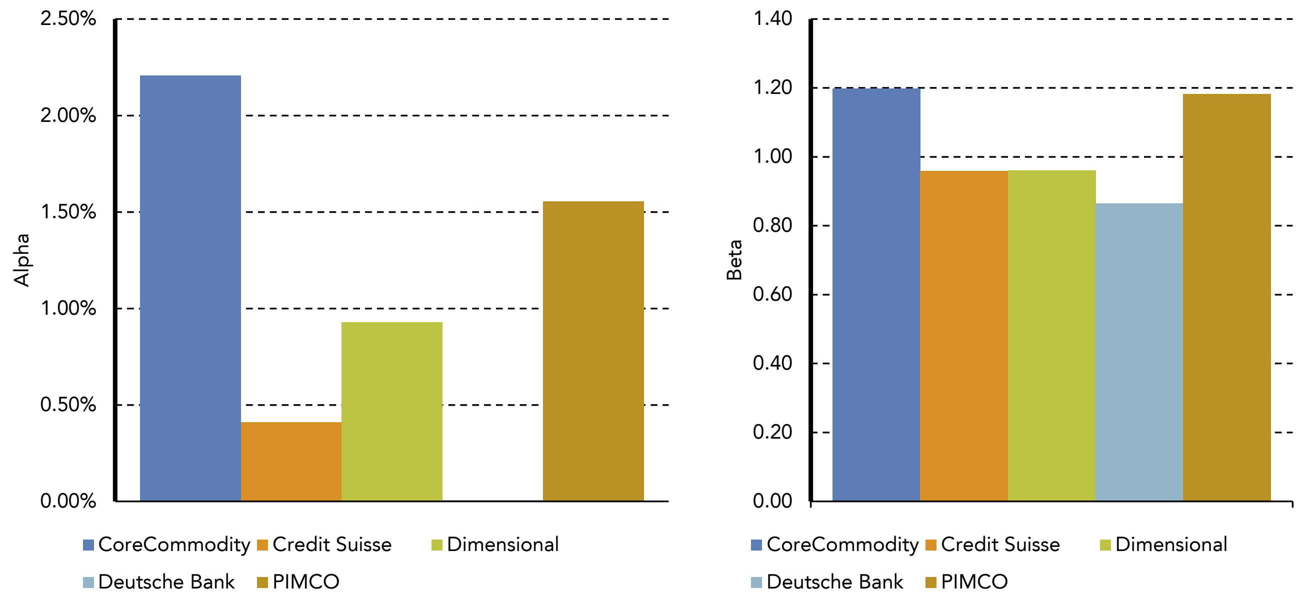
Calendar Returns - Net of Fees



Calendar Year Returns Data - Net of Fees

	YTD	2020	2019	2018	2017	2016	2015	2014	2013
CoreCommodity	21.9%	2.5%	11.3%	-14.3%	4.8%	16.0%	-21.6%	-16.7%	-5.7%
Credit Suisse	21.4%	-1.1%	7.0%	-11.7%	1.7%	12.4%	-25.0%	-16.9%	-10.0%
Dimensional	22.5%	-1.8%	8.0%	-11.2%	2.7%	13.8%	-23.8%	-14.6%	-9.1%
Deutsche Bank	23.7%	-1.7%	2.7%	-11.6%	1.5%	11.0%	-16.9%	-6.3%	-7.1%
PIMCO	24.8%	0.8%	12.3%	-13.8%	2.7%	14.5%	-25.7%	-18.1%	-14.8%
Bloomberg Commodity Index TR USD	21.2%	-3.1%	7.7%	-11.2%	1.7%	11.8%	-24.7%	-17.0%	-9.5%

5 Year Benchmark Based Alpha (left), Beta (right)

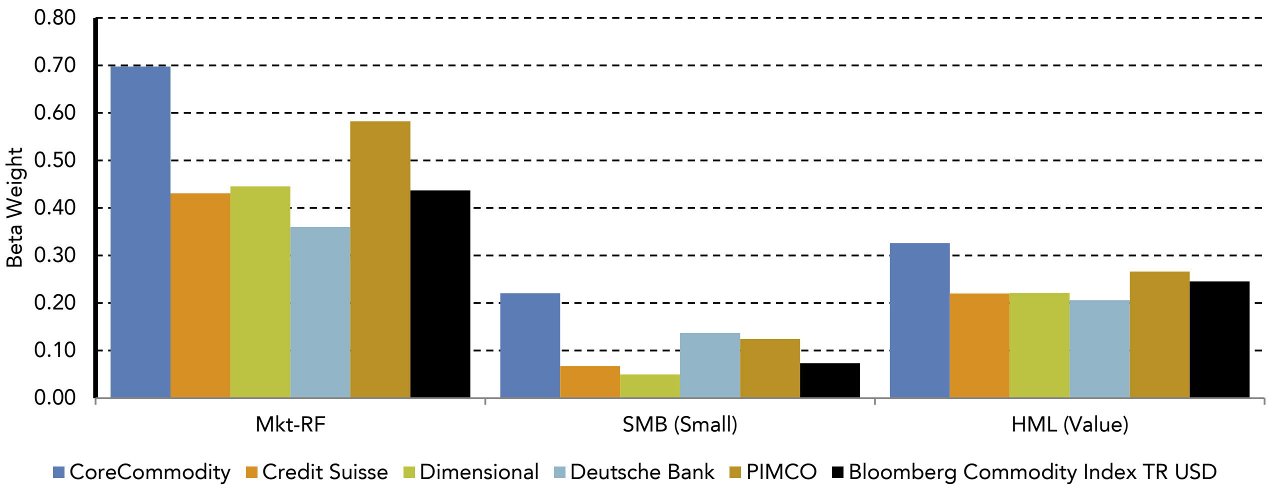


Return Statistics

	Alpha	Beta	R^2
CoreCommodity	2.21%	1.20	84.6%
Credit Suisse	0.41%	0.96	99.4%
Dimensional	0.93%	0.96	98.7%
Deutsche Bank	0.01%	0.87	86.5%
PIMCO	1.55%	1.18	96.4%
Bloomberg Commodity Index TR USD	0.00%	1.00	100.0%

Modern Portfolio Theory (Alpha & Beta) Explanation

The above calculations are based on the Capital Asset Pricing Model (CAPM). Developed in the 1960's, CAPM is a widely used method of understanding the relationship between risk and return. Under the CAPM, expected return is a function of risk. Assuming all security specific risk (the risk related to individual holdings and not to general market movements) is diversifiable, portfolios are then only exposed to market risk. Using a benchmark index as a proxy for "the market", past returns can be estimated as a function of market risk (beta), and unexplainable variance (alpha). By determining which segment of returns is derived from beta (market risk) or alpha (manager skill), investors can evaluate a product's performance record more accurately.



Factor Based Return Statistics

	Mkt-RF	SMB (Small)	HML (Value)	Alpha	R^2
CoreCommodity	0.70	0.22	0.33	-5.3%	68.5%
Credit Suisse	0.43	0.07	0.22	-3.9%	45.6%
Dimensional	0.45	0.05	0.22	-3.6%	46.8%
Deutsche Bank	0.36	0.14	0.21	-3.6%	39.6%
PIMCO	0.58	0.12	0.27	-4.3%	52.6%
Bloomberg Commodity Index TR USD	1.00	0.07	0.25	0.0%	45.5%

Factor Analysis Explanation

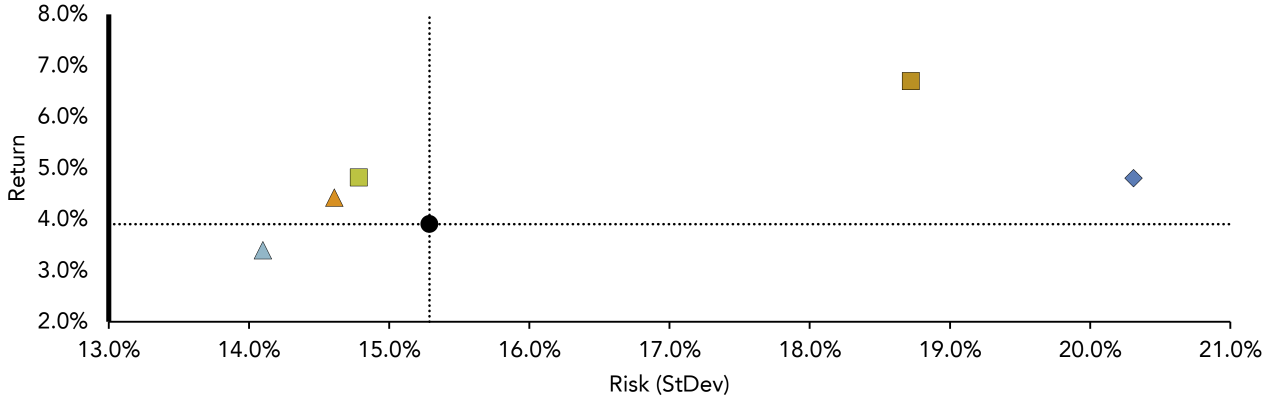
Returns based factor analysis attempts to take into account the fact that, in reality, there are multiple market risk factors that influence returns. Instead of one benchmark "market" factor, returns based style analysis uses multiple benchmarks as proxies for multiple sources of risk. The above calculations are based on a multiple linear regression using several benchmark returns to explain manager returns. Returns based factor analysis is useful to identify which risk factors different managers are exposed to relative to each other and to the benchmark, and to identify outperformance while controlling for multiple measures of risk.

Factor Weights represent manager exposure to benchmark risk factors, holding other factors constant. For example, a manager with a higher value factor likely invests in more value stocks. If the value factor is negative, this indicates a more growth oriented manager. Factor analysis can help determine a manager's historical style, such as small value. It can also help determine if excess returns over the benchmark are generated through security selection alpha, or simply by taking different small and value exposures than the benchmark.

R^2 in the multi-factor model has the same interpretation under the CAPM model (goodness of fit). If R^2 is higher with a multi-factor model, manager returns are better explained by taking into account additional risk factors. Therefore, a higher R^2 is desirable because it indicates a more useful model, and more confidence in the beta and alpha calculation results.

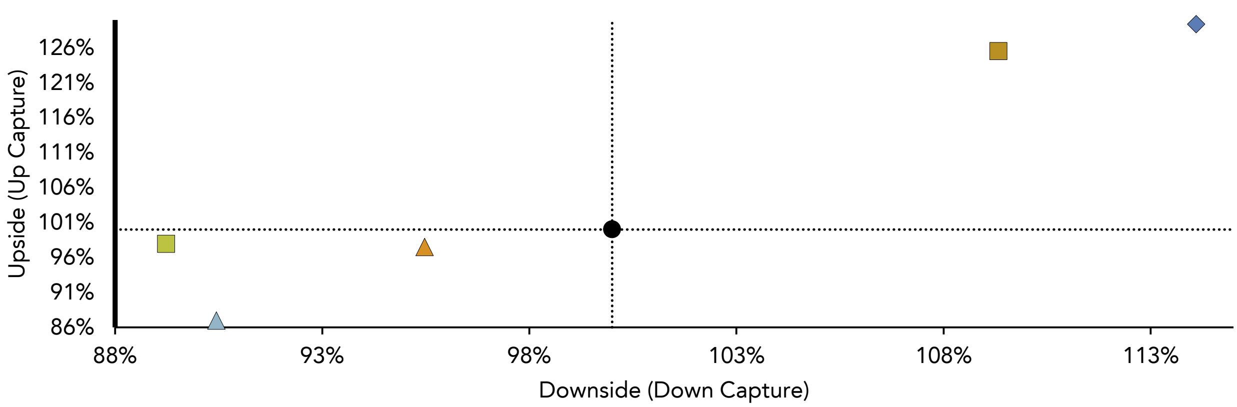
Alpha in the multi-factor model has the same interpretation under the CAPM. A lower alpha term under multi-factor analysis indicates that some manager alpha compared to a single benchmark may be generated by taking out-of-benchmark risks. Alpha is not a static number, and varies based on the time period of the regression. Therefore, a positive alpha number, indicating that a manager has outperformed in the past controlling for risk, may be more important than the size of the alpha term.

3 Year Risk/Return



◆ CoreCommodity ▲ Credit Suisse
■ Dimensional ▲ Deutsche Bank
■ PIMCO ● Bloomberg Commodity Index TR USD

3 Year Upside and Downside Capture

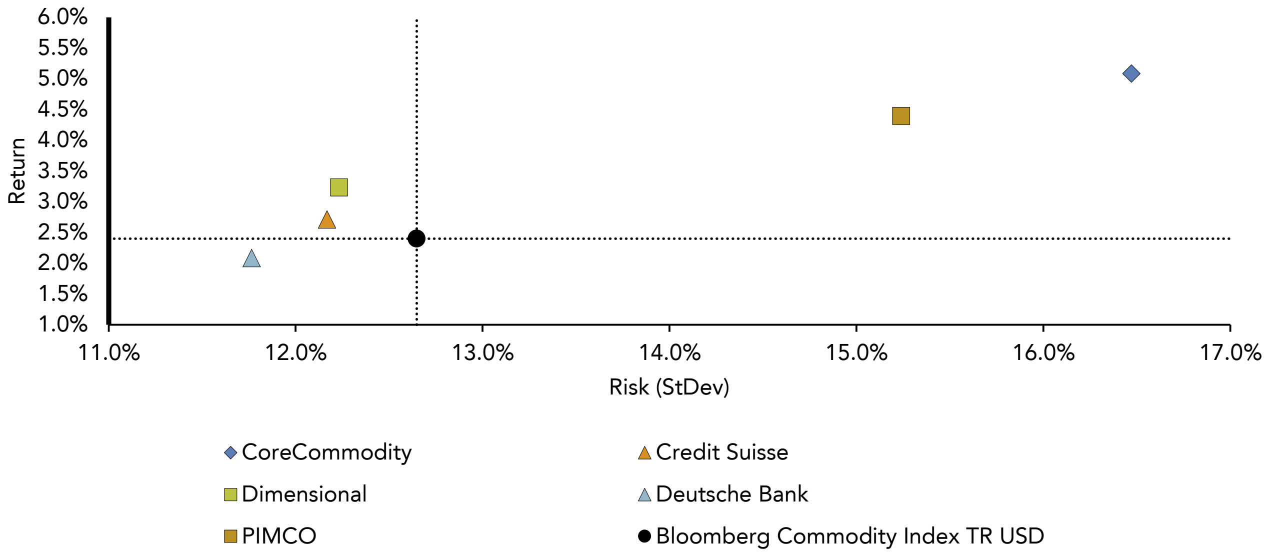


◆ CoreCommodity ▲ Credit Suisse
■ Dimensional ▲ Deutsche Bank
■ PIMCO ● Bloomberg Commodity Index TR USD

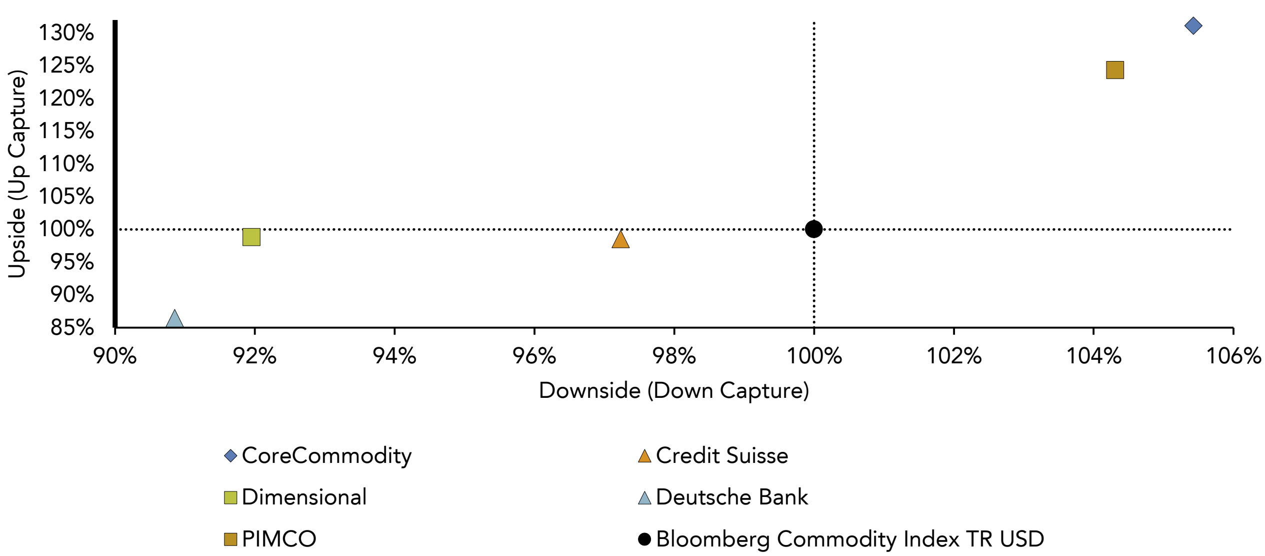
3 Year Return Statistics

	Return	StDev	Sharpe	Up Capture	Down Capture
CoreCommodity	4.80%	20.31%	0.18	129.38%	114.10%
Credit Suisse	4.43%	14.61%	0.22	97.49%	95.47%
Dimensional	4.81%	14.78%	0.24	97.93%	89.24%
Deutsche Bank	3.39%	14.10%	0.16	86.97%	90.44%
PIMCO	6.69%	18.72%	0.29	125.54%	109.33%
Bloomberg Commodity Index TR USD	3.90%	15.29%	0.18	100.00%	100.00%

5 Year Risk/Return



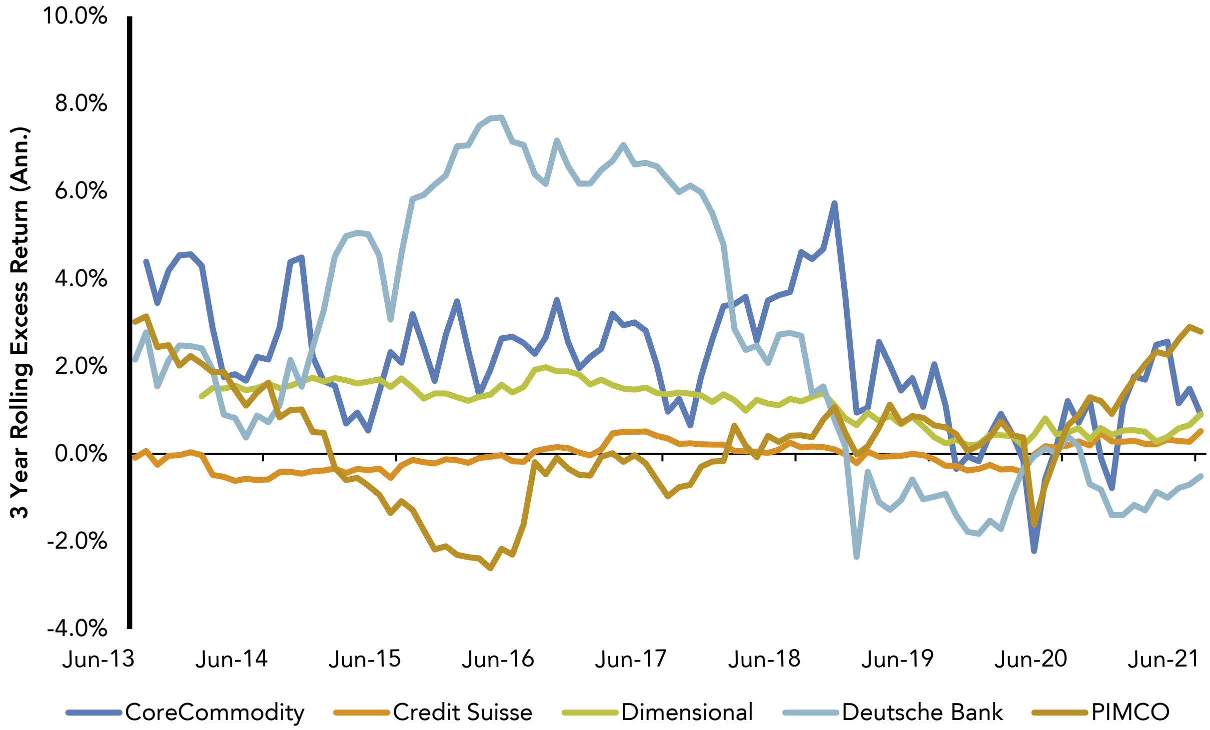
5 Year Upside and Downside Capture



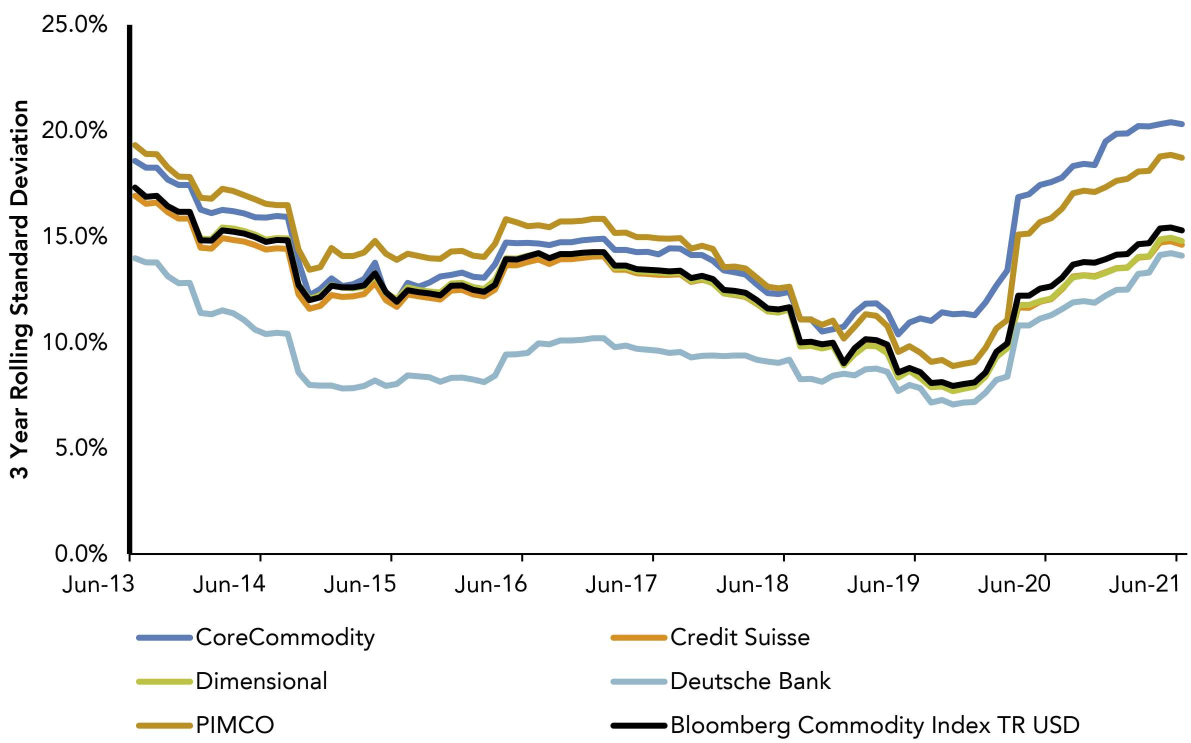
5 Year Return Statistics

	Return	StDev	Sharpe	Up Capture	Down Capture
CoreCommodity	5.08%	16.47%	0.24	131.13%	105.43%
Credit Suisse	2.71%	12.17%	0.13	98.54%	97.23%
Dimensional	3.23%	12.23%	0.17	98.84%	91.95%
Deutsche Bank	2.08%	11.76%	0.08	86.45%	90.85%
PIMCO	4.39%	15.24%	0.22	124.32%	104.31%
Bloomberg Commodity Index TR USD	2.40%	12.65%	0.10	100.00%	100.00%

Rolling 3 Year Excess Returns over Bloomberg Commodity Index TR USD

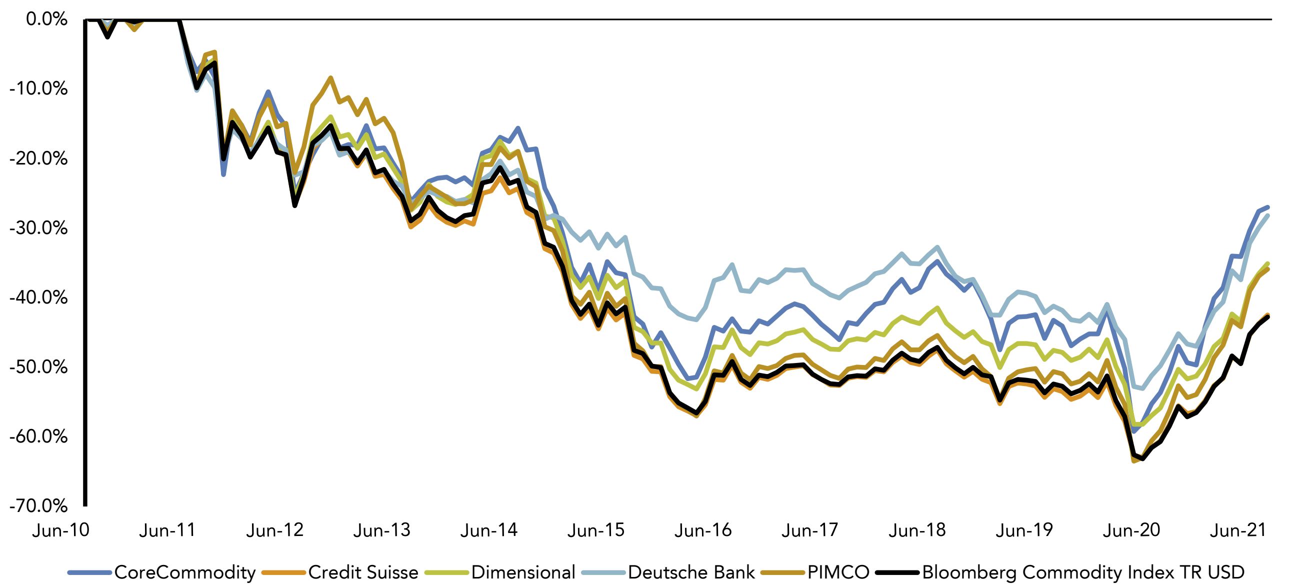


Rolling 3 Year Standard Deviation



Stress Test

Drawdown (10 Years)



Crisis Performance

	Financial Crisis May '07 - Feb '09	Euro Crisis April '11 - Sept '11	Taper Tantrum April '13 - Aug '13	Oil/Shale Crash May '15 - Jan '16	COVID-19 Crash Dec '19 - Mar '20
CoreCommodity	--	-22.3%	-3.3%	-23.9%	-30.2%
Credit Suisse	-36.2%	-19.8%	-3.0%	-23.0%	-22.1%
Dimensional	--	-19.7%	-3.0%	-22.6%	-22.5%
Deutsche Bank	-40.7%	-19.9%	-1.9%	-15.4%	-20.0%
PIMCO	-39.1%	-19.8%	-9.2%	-25.2%	-28.4%
Bloomberg Commodity Index TR USD	-36.2%	-20.1%	-2.4%	-23.4%	-23.3%

5 Year Correlations Excess Return

	CoreCommodity	Credit Suisse	Dimensional	Deutsche Bank	PIMCO
CoreCommodity	1.00				
Credit Suisse	0.02	1.00			
Dimensional	0.03	0.74	1.00		
Deutsche Bank	0.13	0.46	0.42	1.00	
PIMCO	0.69	-0.23	-0.02	0.07	1.00

5 Year Correlations with other Asset Classes

	S&P 500	Russell 2000	MSCI EAFE	Barclays Aggregate	Barclays High Yield	CS Leveraged Loans	HFRI Fund of Funds	HFRI Equity Hedge
CoreCommodity	0.76	0.79	0.79	-0.16	0.75	0.71	0.83	0.87
Credit Suisse	0.62	0.63	0.62	-0.17	0.62	0.59	0.72	0.73
Dimensional	0.63	0.63	0.63	-0.15	0.63	0.60	0.73	0.74
Deutsche Bank	0.56	0.60	0.60	-0.08	0.61	0.59	0.74	0.72
PIMCO	0.67	0.68	0.68	-0.10	0.72	0.71	0.80	0.80

Fee Comparison

Fee Schedule and Expense Ratios

Firm	Fee Schedule	Other Fees	Expense Ratio	Fee For $1,900,000
CoreCommodity JCRIX	115 bps on the Balance	--	1.15%	$21,850
Credit Suisse CRSOX	80 bps on the Balance	--	0.80%	$15,200
Dimensional DCMSX	32 bps on the Balance	--	0.32%	$6,080
Deutsche Bank SKIRX	129 bps on the Balance	--	1.29%	$24,510
PIMCO PCRIX	133 bps on the Balance	--	1.33%	$25,270

Appendix

Firm Client Breakdown

	CoreCommodity	Credit Suisse	Dimensional	Deutsche Bank	PIMCO
Corporate	10.0%	--	20.1%	8.9%	13.0%
E & F	0.0%	--	1.2%	0.5%	0.6%
Healthcare	0.0%	--	0.0%	0.1%	0.0%
HNW/Family	3.0%	--	2.4%	0.0%	0.1%
Ins/Fin	5.0%	--	0.7%	18.2%	6.0%
Mutual Fund	26.0%	--	0.0%	53.3%	34.8%
Public	45.0%	--	4.8%	3.4%	7.9%
Religious	0.0%	--	0.0%	0.4%	0.0%
Taft-Hartley	0.0%	--	0.3%	0.0%	0.4%
Sub-Advisory	0.0%	--	5.0%	0.0%	0.0%
Wrap	0.0%	--	0.0%	0.0%	1.1%
Other	11.0%	--	65.5%	15.1%	36.2%

Notes on Other

CoreCommodity - Non-profit

Credit Suisse - This information is unavailable for disclosure.

Dimensional - Omnibus Account

Deutsche Bank - Financial Institutions, Sovereign Wealth Fund, Superannuation, Supranational, Union/Multi-Employers.

PIMCO - Central Bank, German Fund, Group Trust, Ind Trade Org, LLC, Non-Profit (Church/Hospital), Non-US Fund, Nuclear Decomm. Trust, Partnership, Special Corps, & Spezialfonds.

Product Client Breakdown

	CoreCommodity	Credit Suisse	Dimensional	Deutsche Bank	PIMCO
Corporate	26.0%	0.0%	15.5%	0.0%	1.9%
E & F	0.7%	0.0%	0.9%	0.0%	0.4%
Healthcare	0.0%	0.0%	0.0%	0.0%	0.8%
HNW/Family	73.3%	0.0%	0.0%	0.0%	0.0%
Ins/Fin	0.0%	0.0%	0.3%	0.0%	0.0%
Mutual Fund	0.0%	0.0%	0.0%	100.0%	63.2%
Public	0.0%	0.0%	0.0%	0.0%	16.9%
Religious	0.0%	0.0%	0.0%	0.0%	0.0%
Taft-Hartley	0.0%	0.0%	1.0%	0.0%	0.0%
Sub-Advisory	0.0%	0.0%	0.0%	0.0%	0.0%
Wrap	0.0%	0.0%	0.0%	0.0%	0.0%
Other	0.0%	0.0%	82.4%	0.0%	16.8%

Notes on Other

Credit Suisse - Omnibus Account

Dimensional - Omnibus Account

Deutsche Bank - Omnibus Account

PIMCO - Partnership, Non-U.S. Fund

Compliance and Composite Information

Firm Compliance

Firm Name	Registered Investment Advisor?	GIPS Verified?	Last Year of Verification	Verification Firm	Soft Dollars?	Firmwide Soft Dollars Last Year $MM	Own Broker / Dealer?
CoreCommodity	Yes	Yes	2020	ACA Compliance Group	--	$0.00	--
Credit Suisse	Yes	Yes	2019	ACA Performance Services	No	$0.00	No
Dimensional	Yes	Yes	2020	ACA Performance	No	$0.00	No
Deutsche Bank	Yes	Yes	2014	Ashland Partners & Company LLP	Yes	$0.00	No
PIMCO	Yes	Yes	2020	ACA Performance Services	No	$0.00	No

CoreCommodity Product Profile

Current Team Key Employees

Name	Role on Product	Years Experience	Years with Firm	Years on Product	Education
Yan Frenkel	Analyst	11	13	10	BS
Robert Hyman	Portfolio Manager	40	12	12	BA
Nick Schwartz	Research	6	6	3	BS,CFA

Product Turnover

	2018	2019	2020	YTD
Total Clients	--	--	--	--
Total Assets $MM	$597.0	$637.0	$648.0	$1,056.0
Asset Inflow $MM	$394.0	$238.0	$206.0	$385.0
Asset Outflow $MM	$272.0	$260.0	$212.0	$125.0

Employee Turnover (5 Years)	
Hired	6
Terminated	4
Retired	3
Resigned	5
Total Firm Employees	25

Five Largest Clients

Client Type	Assets ($MM)	% of Assets
Private Client	$240.0	22.7%
Corporate	$163.0	15.4%
Private Client	$138.0	13.1%
Private Client	$118.0	11.2%
Private Client	$70.0	6.6%

Client Averages ($MM)	
Average Client Size	--
Smallest Client Size	--

Current Team Key Employees

Name	Role on Product	Years Experience	Years with Firm	Years on Product	Education
Christopher Burton	Senior Portfolio Manager	17	16	16	BS,CFA

Product Turnover

	2018	2019	2020	YTD
Total Clients	--	--	--	--
Total Assets $MM	$2,489.0	$1,581.0	$1,519.0	$2,084.0
Asset Inflow $MM	$1,410.0	$686.0	$880.0	$462.0
Asset Outflow $MM	$1,903.0	$1,768.0	$965.0	$251.0

Employee Turnover (5 Years)	
Hired	--
Terminated	--
Retired	--
Resigned	--
Total Firm Employees	1,500

Five Largest Clients

Client Type	Assets ($MM)	% of Assets
Insurance/Financial	$346.0	16.6%
Insurance/Financial	$337.0	16.2%
Insurance/Financial	$236.0	11.3%
Insurance/Financial	$152.0	7.3%
Insurance/Financial	$147.0	7.1%

Client Averages ($MM)	
Average Client Size	--
Smallest Client Size	--

Dimensional Product Profile

Current Team Key Employees

Name	Role on Product	Years Experience	Years with Firm	Years on Product	Education
David A. Plecha	Senior Portfolio Manager	34	33	11	CFA,MBA
Joseph F. Kolerich	Senior Portfolio Manager	28	21	10	MBA
Alan R. Hutchison	Senior Portfolio Manager	15	15	7	MBA

Product Turnover

	2018	2019	2020	YTD
Total Clients	22	21	17	15
Total Assets $MM	$1,729.3	$1,545.5	$1,166.0	$1,587.0
Asset Inflow $MM	$977.7	$530.9	$511.0	$336.0
Asset Outflow $MM	$735.2	$842.1	$821.0	$220.0

Employee Turnover (5 Years)	
Hired	7
Terminated	0
Retired	1
Resigned	1
Total Firm Employees	1,444

Five Largest Clients

Client Type	Assets ($MM)	% of Assets
Corporate	$77.4	4.9%
Other	$59.4	3.7%
Other	$17.0	1.1%
Taft-Hartley	$16.1	1.0%
Endowment/Foundation	$10.7	0.7%

Client Averages ($MM)	
Average Client Size	$16.0
Smallest Client Size	$1.0

Current Team Key Employees

Name	Role on Product	Years Experience	Years with Firm	Years on Product	Education
Rick Smith	Portfolio Manager	38	18	6	BA,CFA,MBA
Darwei Kung	Portfolio Manager	15	16	12	BS,Masters,MBA
Sonali Kapoor	Portfolio Manager	10	8	8	BS,Masters

Product Turnover

	2018	2019	2020	YTD
Total Clients	--	--	--	--
Total Assets $MM	$2,714.0	$2,064.0	$1,752.1	$2,182.5
Asset Inflow $MM	$1,445.0	$828.0	$1,017.5	$392.5
Asset Outflow $MM	$1,278.0	$1,439.0	$1,266.8	$412.4

Employee Turnover (5 Years)	
Hired	0
Terminated	0
Retired	0
Resigned	0
Total Firm Employees	4,083

Five Largest Clients

Client Type	Assets ($MM)	% of Assets
Mutual Fund	$514.6	23.6%
Mutual Fund	$486.9	22.3%

Client Averages ($MM)	
Average Client Size	$500.7
Smallest Client Size	$181.8

PIMCO Product Profile

Current Team Key Employees

Name	Role on Product	Years Experience	Years with Firm	Years on Product	Education
Steve Rodosky	Portfolio Manager	25	20	3	Masters
Nicholas Johnson	Portfolio Manager	16	18	15	Masters
Greg Sharenow	Portfolio Manager	20	10	10	BA,BS

Product Turnover

	2018	2019	2020	YTD
Total Clients	6	6	6	6
Total Assets $MM	$5,941.0	$4,735.0	$4,312.0	$6,872.0
Asset Inflow $MM	$0.0	$0.0	$0.0	$0.0
Asset Outflow $MM	$42.0	$0.0	$0.0	$0.0

Employee Turnover (5 Years)	
Hired	417
Terminated	0
Retired	0
Resigned	356
Total Firm Employees	911

Five Largest Clients

Client Type	Assets ($MM)	% of Assets
Mutual Fund	$3,303.0	48.1%
Other	$346.0	5.0%
Mutual Fund	$338.0	4.9%
Other	$325.0	4.7%

Client Averages ($MM)	
Average Client Size	--
Smallest Client Size	--

Notes on % Owned by Parent or Other

Firm Name	Notes
CoreCommodity	CoreCommodity Management, LLC ("CoreCommodity") is a limited liability company. CoreManagement, LLC ("CM") has sole control of CCC (and indirectly sole control of CoreCommodity) as CCC's managing member. Senior management (through CM) currently controls 100% of the voting control of CoreCommodity and approximately 50% of the economic interest in the Firm. The remaining 50% of the economic interest is passively held by LAM Holding LLC, which is a subsidiary of Jefferies Financial Group Inc.
Credit Suisse	Credit Suisse Asset Management, LLC (CSAM, LLC) is 100% indirectly privately-held by Credit Suisse Group AG. Credit Suisse is a publicly-traded company with registered shares listed on the SIX Swiss Exchange (ticker: CSGN) and on the New York Stock Exchange in the form of American Depositary Shares (ticker: CS).
Dimensional	Dimensional Fund Advisors LP is a Delaware limited partnership and conducts business under the supervision of the Board of Directors of Dimensional Holdings Inc. (“Dimensional’s Board”), its general partner and a Delaware corporation. Dimensional Holdings Inc. is a private S corporation. Dimensional Fund Advisors LP’s co-founders and current and former board members, employees, consultants, and their respective families hold, directly or indirectly, more than 70% of its beneficial interests. Outside individual investors who are not engaged in Dimensional Fund Advisors LP’s activities hold the remaining interest.
Deutsche Bank	DWS is listed on the Frankfurt Stock Exchange. Currently, DWS is 79% owned by Deutsche Bank, 5% owned by Nippon Life, and 16% owned by third-party public shareholders.
PIMCO	PIMCO is a limited liability company that is a majority-owned subsidiary of Allianz Asset Management of America L.P. (“AAM”), with minority interests held by certain of AAM’s affiliates and by certain current and former officers of PIMCO. Through various holding company structures, AAM is wholly owned by Allianz SE (“Allianz”). PIMCO offers the M unit program which provides mid-to-senior level employees with the potential to acquire an equity stake in PIMCO over their careers. PIMCO considered further details as confidential. PIMCO is not certified as a Minority, Women, or Disabled Business Enterprise. While we are not a diversity manager, PIMCO strongly supports the benefit of achieving diversity in the workplace. PIMCO’s employees are informed in writing of the firm’s Equal Opportunity policy stipulating that PIMCO is an Equal Opportunity Employer and prohibits discrimination against any employee or applicant for employment on the basis of race, color, religion, sex, age, disability, marital status, citizen status, national origin, creed, sexual orientation, uniformed service or any other characteristics protected by applicable law.

Phase Process Overview

Marquette Manager Search Phase Process

Bottom-up Evaluation Process: We use a bottom-up process to vet investment ideas. As an idea passes through multiple evaluation phases, the idea is provided with additional resources (i.e. time, attention, and money) and will be placed at a higher level of scrutiny. While the traditional and alternative research efforts utilize the same general approach, there are differences due to the specifics of each asset class. There is a product Set-Up and five levels of due diligence. Phase I and Phase II are the initial evaluation phases, Phase III is the documentation phase, Phase IV is the validation phase, and the last phase is the final recommendation and on-going due diligence. During every stage of the process, the lead analyst presents information at the weekly Investment Manager Search Committee ("IMC") meetings. The lead analyst or the IMC may "fail" an idea at any step in the process. In order to pass Phase III and IV, an idea must receive unanimous support from the IMC. Note: Managers included in Marquette searches may not be fully through all five phases of the evaluation process at the time the search is published.

Manager Products	Set Up	Phase I	Phase II	Phase III	Phase IV	Recommendation / Ongoing
Traditional	Enter Product into proprietary MAI database	Collect Basic Information	Quantitative Screen	Asset-Class/Account Specific RFI	Full Due Diligence Check/Data Verification	Final Recommendations and Ongoing Due Diligence
Open Alternatives		Collect Basic Information	Qualitative /Quantitative Screen	Asset-Class/Account Specific RFI		
Closed Alternatives		Collect Basic Information	Qualitative /Quantitative Screen	Asset-Class/Account Specific RFI		
	Initial Product Discovery	Determine Viability of Product	Determine whether product is attractive	Develop clear understanding of necessary info, including potential shortfalls	Includes: 1.On-site visit 2.Reference check 3.Technology evaluation 4.Culture evaluation 5.Compliance evaluation 6.Peer comparisons 7.IMC follow-up review	Ongoing due diligence

Definitions

Alpha measures nonsystematic return, or the return of the manager that cannot be attributed to the market. It can be thought of as how the manager performed if the market has no gain or loss. Marquette calculates alpha as the annualized y-intercept of the best fit line based on the ordinary least squares regression, using the market's monthly return less the risk-free rate as the independent variable and the manager's monthly return less the risk-free rate as the dependent variable. Marquette uses the one month T-Bill returns as the risk-free rate.

Average Coupon is the arithmetic average of the coupon rates of all of the bonds in a portfolio. The Coupon Rate of a bond is the interest the bond issuer agrees to pay annually.

Average Time to Maturity is the arithmetic average of the maturities of all of the bonds in a portfolio. The Time to Maturity of a bond is the number of years remaining prior to final principal payment.

Average Yield to Worst is the arithmetic average of yield to worst of all of the bonds in a portfolio. The Yield to Worst of a bond is the lowest possible yield of a bond, represented by the lower of either the yield to maturity or the yield to call. Yield is defined as the interest earned on a bond, calculated as coupon rate divided by current price. Yield to Maturity or Yield to Call refers the yield an investor will earn if the bond is held from purchase date to redeem date.

Batting Average is a measure of a manager's ability to beat a benchmark consistently. It is calculated by dividing the number of months in which the manager beat or matched the benchmark by the total number of months in the period. For example, a manager who meets or outperforms the market every month in a given period would have a batting average of 100. A manager who beats the market half of the time would have a batting average of 50. Marquette calculates batting average on five years of monthly returns.

Beta measures the risk level of the manager. It is a measure of systematic risk, or the manager return attributable to market movements. A beta equal to 1.0 indicates a risk level equivalent to the market. Higher betas are associated with higher risk levels, while lower betas are associated with lower risk levels. Marquette calculates beta as the covariance (correlation of two assets multiplied by their standard deviation) divided by the variance (standard deviation squared) of the market.

Composite Dispersion measures the variability of returns amongst all of the underlying portfolios representing a composite. The higher the dispersion, the larger the differences between the various manager portfolios in the product.

Correlation measures the variation between two sets of historical returns and is a useful tool in portfolio diversification. The correlation between two sets of returns is a number between -1.0 and +1.0. A +1.0 means that the two sets of returns move in the exact same manner, while a -1.0 means the returns move exactly opposite. The lower the correlation number, the stronger the diversification between two products.

Dividend Yield measures the annual return of the portfolio attributable to dividends. It is determined by dividing the total amount of annual dividends per total shares by the average market price of the total stocks in the portfolio.

Down-Market Capture Ratio is a measure of a manager's performance relative to the benchmark when the benchmark's monthly return is less than zero. The lower the manager's down-market capture ratio, the better the manager protected capital during a market decline. For instance, a value of 90.0 suggests that the manager's losses were only 90% of the benchmark's losses when the benchmark declined. A negative down-market capture ratio indicates that the manager's returns were actually positive when the benchmark declined.

Duration is a measure of the approximate price sensitivity of a bond to interest rate changes. Rule of thumb: duration is the approximate percentage change in the price of a bond for a 1% change in interest rates.

Factor Analysis is based multi-variate regression. R-squared represents the percentage of manager returns explained by the underlying factors, and each factor weight can be interpreted as the manager's sensitivity to the underlying factor.

Global Investment Performance Standards ® (GIPS) is a set of standards developed by the CFA Institute to provide a common methodology of calculating and presenting historical performance. These standards provide uniformity for comparing investment returns and ensure accurate, accountant verified data.

GIPS Soft Dollar Standards is a voluntary set of standards developed by the CFA Institute that managers may choose to comply with in relation to their firm's soft dollar trading practices. The standards are primarily made up of four ethical principles applying to seven major areas of firm practice. They were developed to guide managers toward ethical practices in the use and application of soft dollar client brokerage.

Definitions

Information Ratio is a measure of risk-adjusted value added by a manager. It is the ratio of a manager's excess return over the benchmark over the tracking error (residual risk).

Kurtosis, or excess kurtosis as used in this report, measures peakedness of the distribution of manager returns. A value greater than zero indicates a more peaked distribution than a normal distribution, with more returns clustered around the mean and more extreme values.

Minority Status is defined by Marquette Associates as Female, African American, Hispanic, Asian, and/or Native American.

R-Squared measures how closely the manager's returns track the benchmark. The closer the R-squared statistic is to 1.0, the more closely related the manager's returns are to the benchmark. A higher R-squared also increases the reliability of alpha and beta.

Sharpe Ratio measures the excess return per unit of risk. The higher the ratio, the more efficient the manager. It is the average return of the manager minus the risk-free rate, divided by the standard deviation of the differences of the two return streams.

Skew measures the symmetry of the distribution of manager returns relative to a normal distribution. A negative skew implies more extreme negative return values, a positive skew implies more extreme positive return values.

Soft Dollars refer to non-cash revenue on commissions, spreads, and discounts generated by trades that the manager may use to pay for proprietary and third-party research, which provide lawful and appropriate assistance to the manager in the investment decision making process. The manager must use its best judgment as a fiduciary to justify the use of client brokerage to pay for a product or service. The CFA Institute has developed a set of Standards to aid GIPS members in their determination process.

Sub-Advisory relationships are where the manager oversees another investment firm's product.

Turnover measures the trading activity of a portfolio during a given time period. It is the percentage of the portfolio's assets that have changed over the course of the time period. Turnover is calculated by dividing the average market value during the time period by the lesser value of the value of purchases or sales during the same period.

Tracking Error, also known as residual risk, is a measure of how closely a manager's returns track the returns of the benchmark. It can also be viewed as a measure of consistency of excess returns. It is computed as the annualized standard deviation of the difference between a portfolio's return and the benchmark.

Up-Market Capture Ratio is a measure of a manager's performance relative to the benchmark when the benchmark's monthly return is greater than or equal to zero. The higher the manager's up-market capture ratio, the better the manager performed during a market rise. For instance, a value of 110.0 suggests that the manager's returns were 110% of the benchmark's returns when the benchmark rose. An up-market capture ratio under 100.0 indicates that the manager's returns were less than the benchmark's returns in a positive market.

Wrap Relationships are negotiated relationships between the manager and a brokerage firm(s), whereby the brokerage firm(s) provide their clients access to the manager's product through a sub account.

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PREPARED BY MARQUETTE ASSOCIATES

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About Marquette Associates

Marquette Associates is an independent investment consulting firm that helps institutions guide investment programs with a focused three-point approach and carefully researched advice. For more than 30 years, Marquette has served this mission in close collaboration with clients – enabling institutions to be more effective investment stewards. Marquette is a completely independent and 100% employee-owned consultancy founded with the sole purpose of advising institutions. For more information, please visit www.marquetteassociates.com.

Glen Ellyn Police Pension Board
535 Duane Street
Glen Ellyn, IL 60137

Meeting 10/20/2021 7:30 PM
Department: Finance
Department Head:
Category: Discussion Item
Prepared By:

AGENDA ITEM (ID # 2021-1507)

DOC ID: 2021-1507

Jason Franken from Foster & Foster will present the 2021 Police Pension Actuarial Report as well as some additional information on a 15 year open amortization model.

Statement of the Issue:

Each year, the Village is required to perform an actuarial valuation for its Police Pension Fund. This is required to determine the annual contribution for the next year in accordance with the Village's funding policy as well as state statutes.

Several years ago, the Village reviewed the concept of transitioning from a closed amortization period (which ends in 2040) to a rolling 15 year open amortization. Unfortunately, the time of the review coincided with state cuts to Village revenues and the issue did not proceed forward. The goal with a 15-year open model is to provide a more stable funding model as compared to a closed model which has highly escalating contributions as we near 2040. The one caveat is that, under state statutes, the Village is required to contribute a minimum contribution based upon the 2040 closed model. It is anticipated the state will move the 2040 target date; however, it has not done so to date.

This issue was discussed with the Finance Commission at its October 8 meeting. A quorum was not present to vote on a recommendation, but the Commissioners present were supportive of transitioning to a 15 year open model.

Analysis:

Please see the attached reports.

At the meeting, Jason Franken will walk the Commission through highlights of the 2021 report and the modeled 15 year open scenarios.

Budget Impact:

The annual required contribution is included in the annual budget.

Action Requested:

The report presented for 2021 is informational only.   The Pension Board's feedback is requested on transitioning to a 15 year open model.

Attachments:

1. Valuation Report - Glen Ellyn Police - 2021
2. Projection_GlenEllynPolice_2021.10.08

VILLAGE OF GLEN ELLYN
POLICE PENSION FUND

ACTUARIAL VALUATION
AS OF JANUARY 1, 2021

CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING DECEMBER 31, 2022

GASB 67/68 DISCLOSURE INFORMATION
AS OF DECEMBER 31, 2020

FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

May 11, 2021

Christina Coyle, Finance Director
Village of Glen Ellyn Police Pension Fund

Re: Actuarial Valuation Report (including GASB Statements No. 67 and No. 68) – Village of Glen Ellyn Police Pension Fund

Dear Ms. Coyle:

We are pleased to present to the Village this report of the annual actuarial valuation of the Village of Glen Ellyn Police Pension Fund. Included are the related results for GASB Statements No. 67 and No. 68. The funding valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year. The calculation of the liability for GASB results was performed for the purpose of satisfying the requirements of GASB Statements No. 67 and No. 68. Use of the results for other purposes may not be applicable and could produce significantly different results.

The valuations have been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflect laws and regulations issued to date pursuant to the provisions of Article 3, Illinois Pension Code, as well as applicable federal laws and regulations. In our opinion, the assumptions used in this valuation, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations. Due to the limited scope of the valuations, we did not perform an analysis of the potential range of such future measurements.

The funding percentages and unfunded accrued liability as measured based on the actuarial value of assets will differ from similar measures based on the market value of assets. These measures, as provided, are appropriate for determining the adequacy of future contributions, but may not be appropriate for the purpose of settling a portion or all of its liabilities.

In conducting the valuations, we have relied on personnel, plan design, and asset information supplied by the Village, financial reports prepared by the custodian bank and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

The total pension liability, net pension liability, and certain sensitivity information shown in the GASB results are based on an actuarial valuation performed as of the valuation date.

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The undersigned are familiar with the immediate and long-term aspects of pension valuations and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the Village of Glen Ellyn, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Village of Glen Ellyn Police Pension Fund. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact us at 630-620-0200.

Respectfully submitted,

Foster & Foster, Inc.

By: Jason L. Franken
Jason L. Franken, FSA, EA, MAAA

By: Heidi Andorfer
Heidi E. Andorfer, FSA, EA, MAAA

JLF/lke
Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the Village of Glen Ellyn Police Pension Fund, performed as of January 1, 2021, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year ended December 31, 2022.

The contribution requirements, compared with those set forth in the January 1, 2020 actuarial report, are as follows:

Valuation Date	1/1/2021	1/1/2020
Applicable to Fiscal Year Ending	12/31/2022	12/31/2021
Total Recommended Contribution	$2,356,579	$2,413,007
% of Projected Annual Payroll	62.3%	67.4%
Member Contributions (Est.)	(374,998)	(354,789)
% of Projected Annual Payroll	(9.9%)	(9.9%)
Village Recommended Contribution	1,981,581	2,058,218
% of Projected Annual Payroll	52.4%	57.5%

As you can see, the Total Recommended Contribution shows a decrease when compared to the results determined in the January 1, 2020 actuarial valuation report. The decrease is attributable to favorable experience realized by the plan. The decrease was offset in part by the natural increase in the amortization payment due to the payroll growth assumption.

Plan experience was favorable overall on the basis of the plan's actuarial assumptions. Sources of favorable experience included higher than expected inactive mortality, more turnover than expected, and an average salary increase of 3.83% which fell short of the 4.98% assumption. There were no significant sources of unfavorable experience.

CHANGES SINCE PRIOR VALUATION

Plan Changes Since Prior Valuation

There were no plan changes since the prior valuation.

Actuarial Assumption/Method Changes Since Prior Valuation

There were no assumption or method changes since the prior valuation.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	1/1/2021	1/1/2020
A. Participant Data		
Number Included		
Actives	39	37
Service Retirees	30	31
Beneficiaries	5	4
Disability Retirees	2	2
Terminated Vested	9	6
Total	85	80
Total Annual Payroll	$3,784,040	$3,580,113
Payroll Under Assumed Ret. Age	3,784,040	3,580,113
Annual Rate of Payments to:		
Service Retirees	2,094,159	2,153,924
Beneficiaries	299,106	178,995
Disability Retirees	87,176	86,722
Terminated Vested	46,999	0
B. Assets		
Actuarial Value	34,556,947	32,459,565
Market Value	35,656,781	32,808,661
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	22,825,278	22,247,123
Disability Benefits	2,118,948	2,075,403
Death Benefits	298,065	279,175
Vested Benefits	2,202,934	2,184,092
Service Retirees	32,251,526	33,578,820
Beneficiaries	2,706,360	1,889,698
Disability Retirees	1,195,713	1,198,956
Terminated Vested	353,498	58,678
Total	63,952,322	63,511,945

C. Liabilities - (Continued)

	1/1/2021	1/1/2020
Present Value of Future Salaries	42,096,302	39,885,426
Present Value of Future Member Contributions	4,171,744	3,952,646
Normal Cost (Retirement)	613,649	621,195
Normal Cost (Disability)	106,571	104,775
Normal Cost (Death)	14,885	13,719
Normal Cost (Vesting)	111,752	110,224
Total Normal Cost	846,857	849,913
Present Value of Future Normal Costs	8,549,642	8,675,182
Accrued Liability (Retirement)	16,406,311	15,680,559
Accrued Liability (Disability)	981,248	954,158
Accrued Liability (Death)	135,510	133,147
Accrued Liability (Vesting)	1,372,514	1,342,747
Accrued Liability (Inactives)	36,507,097	36,726,152
Total Actuarial Accrued Liability	55,402,680	54,836,763
Unfunded Actuarial Accrued Liability (UAAL)	20,845,733	22,377,198
Funded Ratio (AVA / AL)	62.4%	59.2%

	1/1/2021	1/1/2020
D. Actuarial Present Value of Accrued Benefits		
Vested Accrued Benefits		
Inactives	36,507,097	36,726,152
Actives	4,768,131	4,415,022
Member Contributions	3,430,420	3,287,591
Total	44,705,648	44,428,765
Non-vested Accrued Benefits	1,177,546	1,038,781
Total Present Value Accrued Benefits	45,883,194	45,467,546
Funded Ratio (MVA / PVAB)	77.7%	72.2%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	115,969	
Benefits Paid	(2,572,118)	
Interest	2,871,797	
Other	0	
Total	415,648	

Valuation Date Applicable to Fiscal Year Ending	1/1/2021 12/31/2022	1/1/2020 12/31/2021
E. Pension Cost		
Normal Cost [1]	$901,903	$905,157
% of Total Annual Payroll [1]	23.8	25.3
Administrative Expenses [1]	18,043	20,040
% of Total Annual Payroll [1]	0.5	0.6
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 20 years (as of 1/1/2021) [1]	1,436,633	1,487,810
% of Total Annual Payroll [1]	38.0	41.5
Total Recommended Contribution	2,356,579	2,413,007
% of Total Annual Payroll [1]	62.3	67.4
Expected Member Contributions [1]	(374,998)	(354,789)
% of Total Annual Payroll [1]	(9.9)	(9.9)
Expected Village Contribution	1,981,581	2,058,218
% of Total Annual Payroll [1]	52.4	57.5
F. Past Contributions		
Plan Years Ending:	12/31/2020	
Total Recommended Contribution	2,312,584	
Village Requirement	1,924,575	
Actual Contributions Made:		
Members (excluding buyback)	388,009	
Village	1,959,000	
Total	2,347,009	
G. Net Actuarial (Gain)/Loss	(1,510,050)	

[1] Contributions developed as of 1/1/2021 displayed above have been adjusted to account for assumed interest.

H. Schedule Illustrating the Amortization of the Total Unfunded Actuarial Accrued Liability as of:

Year	Projected Unfunded Accrued Liability
2021	20,845,733
2022	20,764,073
2023	20,626,823
2028	18,903,659
2032	15,853,578
2037	8,968,319
2041	0

I. (i) 5 Year Comparison of Actual and Assumed Salary Increases

		Actual	Assumed
Year Ended	12/31/2020	3.83%	4.98%
Year Ended	12/31/2019	3.91%	5.03%
Year Ended	12/31/2018	8.67%	4.89%
Year Ended	12/31/2017	4.92%	5.57%
Year Ended	12/31/2016	0.99%	5.00%

(ii) 5 Year Comparison of Investment Return on Actuarial Value

		Actual MVA	Actual AVA	Assumed
Year Ended	12/31/2020	9.45%	7.23%	6.50%
Year Ended	12/31/2019	15.35%	4.87%	6.50%
Year Ended	12/31/2018	-5.72%	3.79%	6.50%
Year Ended	12/31/2017	12.00%	5.64%	6.50%
Year Ended	12/31/2016	6.00%	4.62%	6.75%

DEVELOPMENT OF JANUARY 1, 2021 AMORTIZATION PAYMENT

(1)	Unfunded Actuarial Accrued Liability as of January 1, 2020	$22,377,198
(2)	Sponsor Normal Cost developed as of January 1, 2020	495,124
(3)	Expected administrative expenses for the year ended December 31, 2020	18,817
(4)	Expected interest on (1), (2) and (3)	1,487,312
(5)	Sponsor contributions to the System during the year ended December 31, 2020	1,959,000
(6)	Expected interest on (5)	63,668
(7)	Expected Unfunded Actuarial Accrued Liability as of December 31, 2020, (1)+(2)+(3)+(4)-(5)-(6)	22,355,783
(8)	Change to UAAL due to Benefits/Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	(1,510,050)
(10)	Unfunded Accrued Liability as of January 1, 2021	20,845,733
(11)	UAAL Subject to Amortization (100% AAL less Actuarial Assets)	20,845,733

Date Established	Years Remaining	1/1/2021 Amount	Amortization Amount
1/1/2021	20	20,845,733	1,348,951

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1)	Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2020	$22,377,198
(2)	Expected UAAL as of January 1, 2021	22,355,783
(3)	Summary of Actuarial (Gain)/Loss, by component:	
	Investment Return (Actuarial Asset Basis)	(237,428)
	Salary Increases	(296,064)
	Active Decrements	(1,081,525)
	Inactive Mortality	(243,010)
	Other	347,977
	Change in UAAL due to (Gain)/Loss	(1,510,050)
	Change to UAAL due to Benefits/Assumption Change	0
(4)	Actual UAAL as of January 1, 2021	$20,845,733

RECONCILIATION OF CHANGES IN CONTRIBUTION REQUIREMENT

(1)	Contribution Determined as of January 1, 2020	$ 2,058,218
(2)	Summary of Contribution Impact by component:	
	Change in Normal Cost	(3,254)
	Change in Assumed Administrative Expense	(1,997)
	Investment Return (Actuarial Asset Basis)	(16,363)
	Salary Increases	(20,404)
	New Entrants	4,003
	Active Decrements	(74,536)
	Inactive Mortality	(16,748)
	Contributions (More) or Less than Recommended	(2,450)
	Increase in Amortization Payment Due to Payroll Growth Assumption	52,073
	Change in Expected Member Contributions	(20,209)
	Benefits/Assumption Change	-
	Other	23,248
	Total Change in Contribution	(76,637)
(3)	Contribution Determined as of January 1, 2021	$1,981,581

STATUTORY MINIMUM REQUIRED CONTRIBUTION

Contribution requirements shown on this page are calculated according to statutory minimum funding requirements of the Illinois Pension Code. We do not believe this method is sufficient to fund future benefits; as such, we recommend funding according to the contributions developed in Section E of this report.

Valuation Date	1/1/2021	1/1/2020
Applicable to Fiscal Year Ending	12/31/2022	12/31/2021
Actuarial Accrued Liability (PUC)	52,542,919	52,214,546
Actuarial Value of Assets	34,556,947	32,459,565
Unfunded Actuarial Accrued Liability (UAAL)	17,985,972	19,754,981
UAAL Subject to Amortization	12,731,680	14,533,526
Normal Cost [1]	$1,048,379	$1,011,789
% of Total Annual Payroll [1]	27.7	28.3
Administrative Expenses [1]	18,043	20,040
% of Total Annual Payroll [1]	0.5	0.6
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 20 years (as of 1/1/2021) [1]	877,434	966,302
% of Total Annual Payroll [1]	23.2	26.9
Total Required Contribution	1,943,856	1,998,131
% of Total Annual Payroll [1]	51.4	55.8
Expected Member Contributions [1]	(374,998)	(354,789)
% of Total Annual Payroll [1]	(9.9)	(9.9)
Expected Village Contribution	1,568,858	1,643,342
% of Total Annual Payroll [1]	41.5	45.9

Assumptions and Methods:

Actuarial Cost Method	Projected Unit Credit
Amortization Method	90% Funding by 2040

All other assumptions and methods are as described in the Actuarial Assumptions and Methods section.

[1] Contributions developed as of 1/1/2021 displayed above have been adjusted to account for assumed interest.

PROJECTION OF BENEFIT PAYMENTS

Year	Payments for Current Actives	Payments for Current Inactives	Total Payments
2021	95,575	2,533,539	2,629,114
2022	160,183	2,501,969	2,662,152
2023	217,306	2,541,604	2,758,910
2024	265,926	2,578,717	2,844,643
2025	310,107	2,626,311	2,936,418
2026	355,574	2,659,730	3,015,304
2027	417,545	2,688,879	3,106,424
2028	499,158	2,713,129	3,212,287
2029	631,711	2,731,898	3,363,609
2030	822,159	2,744,655	3,566,814
2031	991,395	2,750,968	3,742,363
2032	1,197,304	2,750,510	3,947,814
2033	1,404,453	2,743,087	4,147,540
2034	1,635,118	2,728,598	4,363,716
2035	1,848,452	2,707,048	4,555,500
2036	2,048,472	2,678,497	4,726,969
2037	2,232,285	2,643,086	4,875,371
2038	2,408,229	2,601,014	5,009,243
2039	2,577,226	2,597,592	5,174,818
2040	2,725,641	2,543,977	5,269,618
2041	2,889,653	2,507,181	5,396,834
2042	3,069,036	2,443,259	5,512,295
2043	3,214,755	2,373,870	5,588,625
2044	3,443,977	2,299,421	5,743,398
2045	3,593,087	2,220,342	5,813,429
2046	3,773,302	2,137,071	5,910,373
2047	3,975,011	2,050,016	6,025,027
2048	4,180,713	1,959,565	6,140,278
2049	4,451,187	1,866,047	6,317,234
2050	4,604,465	1,769,746	6,374,211
2051	4,816,824	1,670,923	6,487,747
2052	4,969,721	1,569,828	6,539,549
2053	5,080,232	1,466,734	6,546,966
2054	5,193,384	1,362,107	6,555,491
2055	5,272,207	1,256,634	6,528,841
2056	5,333,570	1,151,225	6,484,795
2057	5,380,759	1,047,007	6,427,766
2058	5,412,605	945,210	6,357,815
2059	5,430,140	847,020	6,277,160
2060	5,430,182	753,498	6,183,680

ACTUARIAL ASSUMPTIONS AND METHODS

Interest Rate	6.50% per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.
Mortality Rate	***Active Lives:*** PubS-2010 Employee mortality, projected 5 years past the valuation date with Scale MP-2020. 10% of active deaths are assumed to be in the line of duty. ***Inactive Lives:*** PubS-2010 Healthy Retiree mortality, projected 5 years past the valuation date with Scale MP-2020. ***Beneficiaries:*** PubS-2010 Survivor mortality, projected 5 years past the valuation date with Scale MP-2020. ***Disabled Lives:*** PubS-2010 Disabled mortality, projected 5 years past the valuation date with Scale MP-2020. The mortality assumptions sufficiently accommodate anticipated future mortality improvements.
Retirement Age	See table later in this section. This is based on a 2017 experience study performed for the State of Illinois Department of Insurance.
Disability Rate	See table later in this section. 60% of the disabilities are assumed to be in the line of duty. This is based on a 2017 experience study performed for the State of Illinois Department of Insurance.
Termination Rate	See table later in this section. This is based on a 2017 experience study performed for the State of Illinois Department of Insurance.
Inflation	2.50%.
Cost-of-Living Adjustment	Tier 1: 3.00% per year after age 55. Those that retire prior to age 55 receive an increase of 1/12 of 3.00% for each full month since benefit commencement upon reaching age 55. Tier 2: 1.25% per year after the later of attainment of age 60 or first anniversary of retirement.

Salary Increases	See table below. This is based on a 2017 experience study performed for the State of Illinois Department of Insurance.

Salary Scale	
Service	Rate
0	11.00%
1	10.75%
2	8.75%
3	8.50%
4	7.00%
5	6.25%
6	5.25%
7	4.25%
8 - 16	4.00%
17 - 32	3.75%
32+	3.50%

Marital Status	80% of Members are assumed to be married.
Spouse's Age	Males are assumed to be three years older than females.
Funding Method	Entry Age Normal Cost Method.
Actuarial Asset Method	Investment gains and losses are smoothed over a 5-year period. In the first year, 20% of the gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of the Market Value of Assets.
Funding Policy Amortization Method	The UAAL is amortized according to a Level Percentage of Payroll method over a period ending in 2041. The initial amortization amount is 100% of the Accrued Liability less the Actuarial Value of Assets.
Payroll Growth	3.50% per year.
Administrative Expenses	Expenses paid out of the fund other than investment-related expenses are assumed to be equal to those paid in the previous year.

Decrement Tables

% Terminating During the Year		% Becoming Disabled During the Year		% Retiring During the Year (Tier 1)		% Retiring During the Year (Tier 2)	
Age	Rate	Age	Rate	Age	Rate	Age	Rate
20	14.00%	20	0.000%	50 - 51	15%	50 - 54	5%
25	10.40%	25	0.030%	52 - 54	20%	55	40%
30	5.60%	30	0.140%	55 - 64	25%	56 - 64	25%
35	3.10%	35	0.260%	65 - 69	40%	65 - 69	40%
40	1.90%	40	0.420%	70+	100%	70+	100%
45	1.50%	45	0.590%				
50	1.50%	50	0.710%				
56+	0.00%	55	0.900%				
		60	1.150%				

GLOSSARY

Total Annual Payroll is the projected annual rate of pay for the fiscal year following the valuation date of all covered members.

Present Value of Benefits is the single sum value on the valuation date of all future benefits to be paid to current Members, Retirees, Beneficiaries, Disability Retirees and Vested Terminations.

Normal (Current Year's) Cost is the current year's cost for benefits yet to be funded.

Unfunded Accrued Liability is a liability which arises when a pension plan is initially established or improved and such establishment or improvement is applicable to all years of past service.

Total Recommended Contribution is equal to the Normal Cost plus an amount sufficient to amortize the Unfunded Accrued Liability over a period ending in 2041. The recommended amount is adjusted for interest according to the timing of contributions during the year.

Entry Age Normal Cost Method - Under this method, the normal cost is the sum of the individual normal costs for all active participants. For an active participant, the normal cost is the participant’s normal cost accrual rate, multiplied by the participant’s current compensation.

(a) The normal cost accrual rate equals:

(i) the present value of future benefits for the participant, determined as of the participant’s entry age, divided by

(ii) the present value of the compensation expected to be paid to the participant for each year of the participant’s anticipated future service, determined as of the participant’s entry age.

(b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.

(c) The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant’s accrued liability equals the present value, at the participant’s attained age, of future benefits less the present value at the participant’s attained age of the individual normal costs payable in the future. A beneficiary’s accrued liability equals the present value, at the beneficiary’s attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.

(d) Under this method, the entry age used for each active participant is the participant’s age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

DISCUSSION OF RISK

ASOP No. 51, Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions, states that the actuary should identify risks that, in the actuary's professional judgment, may reasonably be anticipated to significantly affect the plan's future financial condition.

Throughout this report, actuarial results are determined under various assumption scenarios. These results are based on the premise that all future plan experience will align with the plan's actuarial assumptions; however, there is no guarantee that actual plan experience will align with the plan's assumptions. It is possible that actual plan experience will differ from anticipated experience in an unfavorable manner that will negatively impact the plan's funded position.

Below are examples of ways in which plan experience can deviate from assumptions and the potential impact of that deviation. Typically, this results in an actuarial gain or loss representing the current-year financial impact on the plan's unfunded liability of the experience differing from assumptions; this gain or loss is amortized over a period of time determined by the plan's amortization method. When assumptions are selected that adequately reflect plan experience, gains and losses typically offset one another in the long term, resulting in a relatively low impact on the plan's contribution requirements associated with plan experience. When assumptions are too optimistic, losses can accumulate over time and the plan's amortization payment could potentially grow to an unmanageable level.

- Investment Return: When the rate of return on the Actuarial Value of Assets falls short of the assumption, this produces a loss representing assumed investment earnings that were not realized. Further, it is unlikely that the plan will experience a scenario that matches the assumed return in each year as capital markets can be volatile from year to year. Therefore, contribution amounts can vary in the future.

- Salary Increases: When a plan participant experiences a salary increase that was greater than assumed, this produces a loss representing the cost of an increase in anticipated plan benefits for the participant as compared to the previous year. The total gain or loss associated with salary increases for the plan is the sum of salary gains and losses for all active participants.

- Payroll Growth: The plan's payroll growth assumption, if one is used, causes a predictable annual increase in the plan's amortization payment in order to produce an amortization payment that remains constant as a percentage of payroll if all assumptions are realized. If payroll does not increase according to the plan's payroll growth assumption, the plan's amortization payment can increase significantly as a percentage of payroll even if all assumptions other than the payroll growth assumption are realized.

- Demographic Assumptions: Actuarial results take into account various potential events that could happen to a plan participant, such as retirement, termination, disability, and death. Each of these potential events is assigned a liability based on the likelihood of the event and the financial consequence of the event for the plan. Accordingly, actuarial liabilities reflect a blend of financial consequences associated with various possible outcomes (such as retirement at one of various possible ages). Once the outcome is known (e.g. the participant retires) the liability is adjusted to reflect the known outcome. This adjustment produces a gain or loss depending on whether the outcome was more or less favorable than other outcomes that could have occurred.

- Contribution Risk: This risk results from the potential that actual employer contributions may deviate from actuarially determined contributions, which are determined in accordance with the

Board’s funding policy. The funding policy is intended to result in contribution requirements that if paid when due, will result in a reasonable expectation that assets will accumulate to be sufficient to pay plan benefits when due. Contribution deficits, particularly large deficits and those that occur repeatedly, increase future contribution requirements and put the plan at risk for not being able to pay plan benefits when due.

Impact of Plan Maturity on Risk

For newer pension plans, most of the participants and associated liabilities are related to active members who have not yet reached retirement age. As pension plans continue in operation and active members reach retirement ages, liabilities begin to shift from being primarily related to active members to being shared amongst active and retired members. Plan maturity is a measure of the extent to which this shift has occurred. It is important to understand that plan maturity can have an impact on risk tolerance and the overall risk characteristics of the plan. For example, plans with a large amount of retired liability do not have as long of a time horizon to recover from losses (such as losses on investments due to lower than expected investment returns) as plans where the majority of the liability is attributable to active members. For this reason, less tolerance for investment risk may be warranted for highly mature plans with a substantial inactive liability. Similarly, mature plans paying substantial retirement benefits resulting in a small positive or net negative cash flow can be more sensitive to near term investment volatility, particularly if the size of the fund is shrinking, which can result in less assets being available for investment in the market.

To assist with determining the maturity of the plan, we have provided some relevant metrics in the table following titled “Plan Maturity Measures and Other Risk Metrics”. Highlights of this information are discussed below:

- The Support Ratio, determined as the ratio of active to inactive members, has decreased from 92.7% on January 1, 2018 to 84.8% on January 1, 2021, indicating that the plan has been maturing.

- The Accrued Liability Ratio, determined as the ratio of the Inactive Accrued Liability, which is the liability associated with members who are no longer employed but are due a benefit from the plan, to the Total Accrued Liability, is 65.9%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors will need to be made up for over a shorter time horizon than would be needed for a less mature plan.

- The Funded Ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, has increased from 61.1% on January 1, 2018 to 62.4% on January 1, 2021, due mainly to favorable plan experience.

- The Net Cash Flow Ratio, determined as the ratio of the Net Cash Flow (contributions minus benefit payments and administrative expenses) to the Market Value of Assets, stayed approximately the same from January 1, 2018 to January 1, 2021. The current Net Cash Flow Ratio of -0.7% indicates that contributions are not currently covering the plan's benefit payments and administrative expenses.

It is important to note that the actuary has identified the risks above as the most significant risks based on the characteristics of the plan and the nature of the project, however, it is not an exhaustive list of potential risks that could be considered. Additional advanced modeling, as well as the identification of additional risks, can be provided at the request of the audience addressed on page 2 of this report.

PLAN MATURITY MEASURES AND OTHER RISK METRICS

	1/1/2021	1/1/2020	1/1/2019	1/1/2018
Support Ratio				
Total Actives	39	37	38	38
Total Inactives	46	43	41	41
Actives / Inactives	84.8%	86.0%	92.7%	92.7%
Asset Volatility Ratio				
Market Value of Assets (MVA)	35,656,781	32,808,661	28,842,655	30,480,565
Total Annual Payroll	3,784,040	3,580,113	3,571,005	3,485,670
MVA / Total Annual Payroll	942.3%	916.4%	807.7%	874.5%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability	36,507,097	36,726,152	35,707,291	29,985,118
Total Accrued Liability	55,402,680	54,836,763	52,804,592	49,324,821
Inactive AL / Total AL	65.9%	67.0%	67.6%	60.8%
Funded Ratio				
Actuarial Value of Assets (AVA)	34,556,947	32,459,565	31,371,025	30,118,735
Total Accrued Liability	55,402,680	54,836,763	52,804,592	49,324,821
AVA / Total Accrued Liability	62.4%	59.2%	59.4%	61.1%
Net Cash Flow Ratio				
Net Cash Flow [1]	(242,051)	(428,117)	109,138	(198,316)
Market Value of Assets (MVA)	35,656,781	32,808,661	28,842,655	30,480,565
Ratio	-0.7%	-1.3%	0.4%	-0.7%

[1] Determined as total contributions minus benefit payments and administrative expenses.

STATEMENT OF FIDUCIARY NET POSITION
December 31, 2020

ASSETS	MARKET VALUE
Cash and Cash Equivalents:	
Money Market	265,155
Total Cash and Equivalents	265,155
Receivables:	
Accrued Past Due Interest	67,760
Total Receivable	67,760
Investments:	
Municipal Obligations	30,000
Corporate Bonds	6,473,383
U.S. Gov't and Agency Obligations	5,044,542
Insurance Company Contracts	2,228,231
Mutual Funds	21,560,210
Total Investments	35,336,366
Total Assets	35,669,281
LIABILITIES	
Liabilities:	
Payable:	
Expenses	12,500
Total Liabilities	12,500
Net Assets:	
Active and Retired Members' Equity	35,656,781
NET POSITION RESTRICTED FOR PENSIONS	35,656,781
TOTAL LIABILITIES AND NET ASSETS	35,669,281

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED December 31, 2020
Market Value Basis

ADDITIONS		
Contributions:		
Member	388,009	
Village	1,959,000	
Total Contributions		2,347,009
Investment Income:		
Miscellaneous Income	227	
Net Realized Gain (Loss)	173,398	
Unrealized Gain (Loss)	2,330,484	
Net Increase in Fair Value of Investments		2,504,109
Interest & Dividends		688,250
Less Investment Expense [1]		(102,188)
Net Investment Income		3,090,171
Total Additions		5,437,180
DEDUCTIONS		
Distributions to Members:		
Benefit Payments	2,479,617	
Refund of Contributions/Transfers	92,501	
Total Distributions		2,572,118
Administrative Expenses		16,942
Total Deductions		2,589,060
Net Increase in Net Position		2,848,120
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		32,808,661
End of the Year		35,656,781

[1] Investment Related expenses include investment advisory, custodial and performance monitoring fees.

ACTUARIAL ASSET VALUATION
December 31, 2020

Development of Actuarial Value of Assets

Market Value of Assets, 12/31/2020	35,656,781
(Gains)/Losses Not Yet Recognized	(1,099,834)
Actuarial Value of Assets, 12/31/2020	34,556,947
12/31/2020 Limited Actuarial Assets:	34,556,947

Development of Investment Gain/Loss

Market Value of Assets, 12/31/2019	32,808,661
Contributions Less Benefit Payments & Administrative Expenses	(242,051)
Expected Investment Earnings[1]	2,124,696
Actual Net Investment Earnings	3,090,171
2020 Actuarial Investment Gain/(Loss)	965,475

[1] Expected Investment Earnings = 6.50% x (32,808,661 + 0.5 x -242,051)

Gains/(Losses) Not Yet Recognized

Plan Year		Amounts Not Yet Recognized by Valuation Year				
Ending	Gain/(Loss)	2021	2022	2023	2024	2025
12/31/2017	1,501,145	300,229	0	0	0	0
12/31/2018	(3,731,832)	(1,492,733)	(746,366)	0	0	0
12/31/2019	2,533,264	1,519,958	1,013,306	506,653	0	0
12/31/2020	965,475	772,380	579,285	386,190	193,095	0
Total		1,099,834	846,225	892,843	193,095	0

Development of Asset Returns

(A) 12/31/2019 Actuarial Assets:	32,459,565
(I) Net Investment Income:	
1. Interest and Dividends	688,477
2. Realized Gains (Losses)	173,398
3. Change in Actuarial Value	1,579,746
4. Investment Expenses	(102,188)
Total	2,339,433
(B) 12/31/2020 Actuarial Assets:	34,556,947
Actuarial Asset Rate of Return = (2 x I) / (A + B - I):	7.23%
Market Value of Assets Rate of Return:	9.45%
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	237,428

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
December 31, 2020
Actuarial Asset Basis

INCOME		
Contributions:		
Member	388,009	
Village	1,959,000	
Total Contributions		2,347,009
Earnings from Investments		
Interest & Dividends	688,250	
Miscellaneous Income	227	
Net Realized Gain (Loss)	173,398	
Change in Actuarial Value	1,579,746	
Total Earnings and Investment Gains		2,441,621
EXPENSES		
Administrative Expenses:		
Investment Related[1]	102,188	
Other	16,942	
Total Administrative Expenses		119,130
Distributions to Members:		
Benefit Payments	2,479,617	
Refund of Contributions/Transfers	92,501	
Total Distributions		2,572,118
Change in Net Assets for the Year		2,097,382
Net Assets Beginning of the Year		32,459,565
Net Assets End of the Year[2]		34,556,947

[1] Investment Related expenses include investment advisory, custodial and performance monitoring fees.
[2] Net Assets may be limited for actuarial consideration.

STATISTICAL DATA

	1/1/2021	1/1/2020	1/1/2019	1/1/2018
Actives - Tier 1				
Number	21	23	24	27
Average Current Age	43.3	42.0	41.6	41.9
Average Age at Employment	24.6	24.5	25.5	25.5
Average Past Service	18.7	17.5	16.1	16.4
Average Annual Salary	$111,910	$108,768	$105,527	$102,584
Actives - Tier 2				
Number	18	14	14	11
Average Current Age	27.9	27.5	27.5	27.2
Average Age at Employment	24.4	24.1	24.9	24.9
Average Past Service	3.5	3.4	2.6	2.3
Average Annual Salary	$79,663	$77,032	$74,168	$65,082
Service Retirees				
Number	30	31	29	28
Average Current Age	67.5	66.8	66.8	67.2
Average Annual Benefit	$69,805	$69,481	$67,174	$64,082
Beneficiaries				
Number	5	4	3	3
Average Current Age	75.5	73.0	73.1	72.1
Average Annual Benefit	$59,821	$44,749	$42,770	$42,770
Disability Retirees				
Number	2	2	3	3
Average Current Age	62.7	61.7	63.3	62.3
Average Annual Benefit	$43,588	$43,361	$45,333	$44,865
Terminated Vested				
Number	9	6	6	7
Average Current Age	35.9	36.4	40.9	35.6
Average Annual Benefit [1]	$46,999	N/A	$58,440	N/A

[1] Average Annual Benefit for Terminated Vested members reflects the benefit for members entitled to a future annual benefit from the plan.

AGE AND SERVICE DISTRIBUTION

PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19	0	0	0	0	0	0	0	0	0	0	0	0
20 - 24	2	0	0	0	0	0	0	0	0	0	0	2
25 - 29	3	2	1	2	3	0	0	0	0	0	0	11
30 - 34	0	0	0	0	0	4	0	0	0	0	0	4
35 - 39	1	0	0	0	0	0	2	3	0	0	0	6
40 - 44	0	0	0	0	0	0	2	6	3	0	0	11
45 - 49	0	0	0	0	0	0	1	1	0	0	0	2
50 - 54	0	0	0	0	0	0	0	0	1	1	0	2
55 - 59	0	0	0	0	0	0	0	0	0	0	1	1
60 - 64	0	0	0	0	0	0	0	0	0	0	0	0
65+	0	0	0	0	0	0	0	0	0	0	0	0
Total	6	2	1	2	3	4	5	10	4	1	1	39

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 1/1/2020	37
b. Terminations	
i. Vested (partial or full) with deferred benefits	(2)
ii. Non-vested or full lump sum distribution received	(2)
iii. Transferred service to other fund	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	0
f. Continuing participants	33
g. New entrants	6
h. Total active life participants in valuation	39

2. Non-Active lives (including beneficiaries receiving benefits)

	Service Retirees, Vested Receiving Benefits	Receiving Death Benefits	Receiving Disability Benefits	Vested Deferred	Total
a. Number prior valuation	31	4	2	6	43
Retired	0	0	0	0	0
Vested Deferred	0	0	0	2	2
Death, With Survivor	(1)	1	0	0	0
Death, No Survivor	0	0	0	0	0
Disabled	0	0	0	0	0
Refund of Contributions	0	0	0	0	0
Rehires	0	0	0	0	0
Expired Annuities	0	0	0	0	0
Data Corrections	0	0	0	0	0
Hired/Termed in Same Year	0	0	0	1	1
b. Number current valuation	30	5	2	9	46

SUMMARY OF CURRENT PLAN

<u>Article 3 Pension Fund</u>

The Plan is established and administered as prescribed by "Article 3. Police Pension Fund – Municipalities 500,000 and Under" of the Illinois Pension Code.

<u>Plan Administration</u>

The Plan is a single employer defined benefit pension plan administered by a Board of Trustees comprised of:

a.) Two members appointed by the Municipality,
b.) Two active Members of the Police Department elected by the Membership, and
c.) One retired Member of the Police Department elected by the Membership.

<u>Credited Service</u>

Complete years of service as a sworn police officer employed by the Municipality.

<u>Normal Retirement</u>

Date

Tier 1: Age 50 and 20 years of Credited Service.

Tier 2: Age 55 with 10 years of Credited Service.

Benefit

Tier 1: 50% of annual salary attached to rank on last day of service plus 2.50% of annual salary for each year of service over 20 years, up to a maximum of 75% of salary. The minimum monthly benefit is $1,000 per month.

Tier 2: 2.50% per year of service times the average salary for the 48 consecutive months of service within the last 60 months of service in which the total salary was the highest prior to retirement times the number of years of service, up to a maximum of 75% of average salary. The minimum monthly benefit is $1,000 per month.

For Tier 2 participants, the salary is capped at a rate of $106,800 as of 2011, indexed annually at a rate of CPI-U, but not to exceed 3.00%.

Form of Benefit

Tier 1: For married retirees, an annuity payable for the life of the Member; upon the death of the member, 100% of the Member's benefit payable to the spouse until death. For unmarried retirees, the normal form is a Single Life Annuity.

Tier 2: Same as above, but with 66 2/3% of benefit continued to spouse.

Early Retirement

Date	**Tier 1**: Age 60 and 8 years of Credited Service. **Tier 2:** Age 50 with 10 years of Credited Service.
Benefit	**Tier 1:** Normal Retirement benefit with no minimum. **Tier 2**: Normal Retirement benefit, reduced 6.00% each year before age 55, with no minimum benefit.
Form of Benefit	Same as Normal Retirement

Disability Benefit

Eligibility	Total and permanent as determined by the Board of Trustees.
Benefit Amount	A maximum of: a.) 65% of salary attached to the rank held by Member on last day of service, and; b.) The monthly retirement pension that the Member is entitled to receive if he or she retired immediately. For non-service connected disabilities, a benefit of 50% of salary attached to rank held by Member on last day of service.

Cost-of-Living Adjustment

Tier 1:

Retirees: An annual increase equal to 3.00% per year after age 55. Those that retire prior to age 55 receive an increase of 1/12 of 3.00% for each full month since benefit commencement upon reaching age 55.

Disabled Retirees: An annual increase equal to 3.00% per year of the original benefit amount beginning at age 60. Those that become disabled prior to age 60 receive an increase of 3.00% of the original benefit amount for each year since benefit commencement upon reaching age 60.

Tier 2: An annual increase each January 1 equal to 3.00% per year or one-half of the annual unadjusted percentage increase in the consumer price index-u for the 12 months ending with the September preceding each November 1, whichever is less, of the original pension after the attainment of age 60 or first anniversary of pension start date whichever is later.

Pre-Retirement Death Benefit

Service Incurred	100% of salary attached to rank held by Member on last day of service.
Non-Service Incurred	A maximum of: a.) 54% of salary attached to the rank held by Member on last day of service, and; b.) The monthly retirement pension earned by the deceased Member at the time of death, regardless of whether death occurs before or after age 50. For non-service deaths with less than 10 years of service, a refund of member contributions is provided.

Vesting (Termination)

Vesting Service Requirement	**Tier 1:** 8 years. **Tier 2**: 10 years.
Non-Vested Benefit	Refund of Member Contributions.
Vested Benefit	Either the termination benefit, payable upon reaching age 60 (55 for Tier 2), provided contributions are not withdrawn, or a refund of member contributions. The termination benefit is 2.50% of annual salary held in the year prior to termination (8-year final average salary for Tier 2) times creditable service.

Contributions

Employee	9.91% of Salary.
Municipality	Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability.

SUMMARY

Valuation Date	1/1/2021	1/1/2020
Measurement Date	12/31/2020	12/31/2019
Plan Membership:		
Inactives Currently Receiving Benefits	37	37
Inactives Not Yet Receiving Benefits	9	6
Active Plan Members	39	37
Total	85	80
Covered Payroll	$ 3,784,040	$ 3,580,113
Net Pension Liability		
Total Pension Liability	$ 54,828,604	$ 54,257,944
Plan Fiduciary Net Position	35,656,781	32,808,661
Net Pension Liability	$ 19,171,823	$ 21,449,283
Plan Fiduciary Net Position As a Percentage of Total Pension Liability	65.03%	60.47%
Net Pension Liability As a Percentage of Covered Payroll	506.65%	599.12%
Total Pension Expense	$ 1,983,641	$ 3,177,809
Development of Single Discount Rate		
Single Discount Rate	6.50%	6.50%
Long-Term Expected Rate of Return	6.50%	6.50%
High-quality Municipal Bond Rate	1.93%	3.26%
Number of Years Future Benefit Payments Are Expected to be Paid	99	99

SCHEDULE OF CHANGES IN NET PENSION LIABILITY
PLAN AND VILLAGE REPORTING

GASB 68 Reporting Period Ending	12/31/2020	12/31/2019
Measurement Date	12/31/2020	12/31/2019
Total Pension Liability		
Service Cost	863,320	835,473
Interest	3,499,288	3,362,848
Changes of Benefit Terms	-	151,633
Differences Between Expected and Actual Experience	(1,219,830)	367,487
Changes of Assumptions	-	-
Benefit Payments, Including Refunds of Employee Contributions	(2,572,118)	(2,720,298)
Net Change in Total Pension Liability	570,660	1,997,143
Total Pension Liability - Beginning	54,257,944	52,260,801
Total Pension Liability - Ending (a)	$ 54,828,604	$ 54,257,944
Plan Fiduciary Net Position		
Contributions - Employer	1,959,000	1,959,000
Contributions - Employee	388,009	351,998
Net Investment Income	3,090,171	4,394,123
Benefit Payments, Including Refunds of Employee Contributions	(2,572,118)	(2,720,298)
Administrative Expense	(16,942)	(18,817)
Net Change in Plan Fiduciary Net Position	2,848,120	3,966,006
Plan Fiduciary Net Position - Beginning	32,808,661	28,842,655
Plan Fiduciary Net Position - Ending (b)	$ 35,656,781	$ 32,808,661
Net Pension Liability - Ending (a) - (b)	$ 19,171,823	$ 21,449,283
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	65.03%	60.47%
Covered Payroll	$ 3,784,040	$ 3,580,113
Net Pension Liability as a Percentage of Covered Payroll	506.65%	599.12%

STATEMENT OF CHANGES IN NET PENSION LIABILITY
VILLAGE REPORTING

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a)-(b)
Balances at December 31, 2019	$ 54,257,944	$ 32,808,661	$ 21,449,283
Changes for a Year:			
Service Cost	863,320	-	863,320
Interest	3,499,288	-	3,499,288
Differences Between Expected and Actual Experience	(1,219,830)	-	(1,219,830)
Changes of Assumptions	-	-	-
Changes of Benefit Terms	-	-	-
Contributions - Employer	-	1,959,000	(1,959,000)
Contributions - Employee	-	388,009	(388,009)
Net Investment Income	-	3,090,171	(3,090,171)
Benefit Payments, Including Refunds of Employee Contributions	(2,572,118)	(2,572,118)	-
Administrative Expense	-	(16,942)	16,942
Net Changes	570,660	2,848,120	(2,277,460)
Balances at December 31, 2020	$ 54,828,604	$ 35,656,781	$ 19,171,823

Sensitivity of Net Pension Liability to changes in the Discount Rate:

	1% Decrease 5.50%	Current Discount Rate 6.50%	1% Increase 7.50%
Sponsor's Net Pension Liability	$ 27,450,780	$ 19,171,823	$ 12,467,082

Pension Plan Fiduciary Net Position

Detailed information about the Pension Plan's Fiduciary Net Position is available in a separately issued Plan financial report.

PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS
YEAR-END DECEMBER 31, 2020

For the year ended December 31, 2020, the Sponsor will recognize a pension expense of $1,983,641.
On December 31, 2020, the Sponsor reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between actual and expected experience	714,937	1,075,287
Changes of assumptions	567,800	442,434
Net difference between projected and actual earnings on pension plan investments	0	1,099,836
Total	$1,282,737	$2,617,557

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year-ended December 31:	
2021	($422,969)
2022	($5,455)
2023	($604,872)
2024	($98,219)
2025	($203,305)
Thereafter	$0

COMPONENTS OF PENSION EXPENSE
YEAR-END DECEMBER 31, 2020

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning Balance	$ 21,449,283	$ 3,501,385	$ 4,468,666	
Total Pension Liability Factors:				
Service Cost	863,320	-	-	863,320
Interest	3,499,288	-	-	3,499,288
Changes in Benefit Terms	-	-	-	-
Differences Between Expected and Actual Experience With Regard to Economic or Demographic Assumptions	(1,219,830)	1,219,830	-	-
Current Year Amortization	-	(251,558)	(246,244)	(5,314)
Changes in Assumptions About Future Economic or Demographic Factors or Other Inputs	-	-	-	-
Current Year Amortization	-	(324,866)	(661,713)	336,847
Benefit Payments, Including Refunds of Employee Contributions	(2,572,118)	-	-	-
Net Change	570,660	643,406	(907,957)	4,694,141
Plan Fiduciary Net Position:				
Contributions - Employer	1,959,000	-	-	-
Contributions - Employee	388,009	-	-	(388,009)
Projected Net Investment Income	2,124,696	-	-	(2,124,696)
Difference Between Projected and Actual Earnings on Pension Plan Investments	965,475	965,475	-	-
Current Year Amortization	-	(999,977)	(785,240)	(214,737)
Benefit Payments, Including Refunds of Employee Contributions	(2,572,118)	-	-	-
Administrative Expenses	(16,942)	-	-	16,942
Net Change	2,848,120	(34,502)	(785,240)	(2,710,500)
Ending Balance	$ 19,171,823	$ 4,110,289	$ 2,775,469	$ 1,983,641

AMORTIZATION SCHEDULE – EXPERIENCE

Year Base Established	Differences Between Expected and Actual Experience	Recognition Period (Years)	Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience: 2020	2021	2022	2023	2024	Thereafter
2020	$ (1,219,830)	6	$ (203,305)	$ (203,305)	$ (203,305)	$ (203,305)	$ (203,305)	$ (203,305)
2019	$ 367,487	6	$ 61,248	$ 61,248	$ 61,248	$ 61,248	$ 61,248	$ -
2018	$ 664,880	7	$ 94,983	$ 94,983	$ 94,983	$ 94,983	$ 94,983	$ -
2017	$ (176,284)	6	$ (29,381)	$ (29,381)	$ (29,381)	$ -	$ -	$ -
2016	$ 540,079	6	$ 90,013	$ 90,013	$ -	$ -	$ -	$ -
2015	$ (140,172)	5.78	$ (18,872)	$ -	$ -	$ -	$ -	$ -
Net Increase (Decrease) in Pension Expense			(5,314)	13,558	(76,455)	(47,074)	(47,074)	(203,305)

AMORTIZATION SCHEDULE – CHANGES OF ASSUMPTIONS

Year Base Established	Effects of Changes in Assumptions	Recognition Period (Years)	2020	2021	2022	2023	2024	Thereafter
			Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Changes of Assumptions					
2018	$ 993,650	7	$ 141,950	$ 141,950	$ 141,950	$ 141,950	$ 141,950	$ -
2017	$ (705,405)	6	$ (117,568)	$ (117,568)	$ (117,568)	$ -	$ -	$ -
2016	$ (1,243,789)	6	$ (207,298)	$ (207,298)	$ -	$ -	$ -	$ -
2015	$ 3,830,149	5.78	$ 519,763	$ -	$ -	$ -	$ -	$ -
Net Increase (Decrease) in Pension Expense			$ 336,847	$ (182,916)	$ 24,382	$ 141,950	$ 141,950	$ -

AMORTIZATION SCHEDULE – INVESTMENTS

Year Base Established	Differences Between Projected and Actual Earnings	Recognition Period (Years)	Increase (Decrease) in Pension Expense Arising from the Recognition of the Differences Between Projected and Actual Earnings on Pension Plan Investments: 2020	2021	2022	2023	2024	Thereafter
2020	$ (965,475)	5	$ (193,095)	$ (193,095)	$ (193,095)	$ (193,095)	$ (193,095)	$ -
2019	$ (2,533,264)	5	$ (506,653)	$ (506,653)	$ (506,653)	$ (506,653)	$ -	$ -
2018	$ 3,731,832	5	$ 746,366	$ 746,366	$ 746,366	$ -	$ -	$ -
2017	$ (1,501,145)	5	$ (300,229)	$ (300,229)	$ -	$ -	$ -	$ -
2016	$ 194,370	5	$ 38,874	$ -	$ -	$ -	$ -	$ -
Net Increase (Decrease) in Pension Expense			$ (214,737)	$ (253,611)	$ 46,618	$ (699,748)	$ (193,095)	$ -

SCHEDULE OF CONTRIBUTIONS

Plan Year-End	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a Percentage of Covered Payroll
12/31/2020	1,924,575	1,959,000	(34,425)	3,784,040	51.77%
12/31/2019	1,770,649	1,959,000	(188,351)	3,580,113	54.72%

The following assumptions were used to determine the Actuarially Determined Contribution for the plan year ending December 31, 2020:

Calculation Timing	The Actuarially Determined Contribution is calculated using a January 1, 2019 valuation date.
Interest Rate	6.50%
Mortality Rate	***Active Lives:*** PubS-2010 Employee mortality, projected 5 years past the valuation date with Scale MP-2018. 10% of active deaths are assumed to be in the line of duty. ***Inactive Lives:*** PubS-2010 Healthy Retiree mortality, projected 5 years past the valuation date with Scale MP-2018. ***Beneficiaries:*** PubS-2010 Survivor mortality, projected 5 years past the valuation date with Scale MP-2018. ***Disabled Lives:*** PubS-2010 Disabled mortality, projected 5 years past the valuation date with Scale MP-2018.
Assumptions	All other assumptions and methods used for determining the Actuarially Determined Contribution can be found in the January 1, 2019 Actuarial Valuation Report for the Village of Glen Ellyn Police Pension Fund prepared by Foster & Foster Actuaries and Consultants.

SCHEDULE OF INVESTMENT RETURNS

For the year ended December 31, 2020, the annual money-weighted return on Pension Plan investments, net of pension plan investment expense, was 9.69 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Plan Year-End	Annual Money-Weighted Rate of Return Net of Investment Expense
12/31/2020	9.69%
12/31/2019	15.30%

ASSUMPTIONS – GASB PENSION LIABILITY AND PENSION EXPENSE

The GASB 67/GASB 68 Pension Liability as of December 31, 2020 and GASB 68 Pension Expense were determined as follows:

Valuation Date	January 1, 2021
Measurement Date	December 31, 2020
GASB 68 Expense Measurement Period	January 1, 2020 - December 31, 2020
Reporting Period	January 1, 2020 - December 31, 2020
Discount Rate	6.50%
Inflation	2.50%
Salary Increases	Service-based rates
Other Assumptions	A summary of complete assumptions can be found in the accompanying Actuarial Valuation as of January 1, 2021 for the Village of Glen Ellyn Police Pension Fund prepared by Foster & Foster Actuaries and Consultants.

NOTES TO THE FINANCIAL STATEMENTS

Support for Long-Term Expected Rate of Return

The Long-Term Expected Rate of Return on Pension Plan investments can be determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Pension Plan investment expenses and inflation) are developed for each major asset class.

These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by target asset allocation percentage and by adding expected inflation.

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation adopted as of December 31, 2020, as provided by Marquette Associates Inc., are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return[1]
Fixed Income	35.0%	2.1%
US Equity	30.0%	5.8%
International Equity	20.0%	6.3%
Global Tactical	5.0%	3.0%
Real Estate - Core	10.0%	5.5%
Total	100.0%	

[1] Please note that the implied long-term expected return of the total portfolio provided by the investment advisor would suggest that the Discount Rate is not supported. We will continue to monitor this in light of longer time horizons and the impact of Consolidation.

Inflation rate of investment advisor	2.00%

Concentrations

The Plan did not hold investments in any one organization that represent 5 percent or more of the Pension Plan's fiduciary net position.

Discount Rate

The Discount Rate used to measure the Total Pension Liability was 6.50 percent.

The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments (6.50 percent) was applied to all periods of projected benefit payments to determine the Total Pension Liability.

For the purpose of this valuation, the expected rate of return on pension plan investments is 6.50 percent. The municipal bond rate is 1.93 percent (based on the daily rate closest to, but not later than the measurement date of the S&P Municipal Bond 20 Year High Grade Rate Index). The resulting single discount rate is 6.50 percent.

SUMMARY OF CURRENT PLAN

Article 3 Pension Fund	The Plan is established and administered as prescribed by “Article 3. Police Pension Fund – Municipalities 500,000 and Under” of the Illinois Pension Code.
Plan Administration	The Plan is a single employer defined benefit pension plan administered by a Board of Trustees comprised of: a.) Two members appointed by the Municipality, b.) Two active members of the Police Department elected by the Membership. c.) One retired member of the Police Department elected by the Membership.
Benefits Provided	The Plan provides retirement, termination, disability and death benefits. A summary of the benefit provisions can be found in the accompanying Actuarial Valuation as of January 1, 2021 for the Village of Glen Ellyn Police Pension Fund prepared by Foster & Foster Actuaries and Consultants.

GLEN ELLYN POLICE PENSION PLAN

PROJECTION OF AMORTIZATION AND
ASSUMPTION CHANGE IMPACT

OCTOBER 8, 2021

FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

October 8, 2021

Ms. Christina Coyle
Finance Director
Village of Glen Ellyn
535 Duane St.
Glen Ellyn, IL 60137

Dear Ms. Coyle:

This report, prepared by Foster & Foster, Inc., outlines the impact of updating the amortization of the unfunded liability to ultimately arrive at a 15-year rolling amortization schedule.

This report has been prepared as requested by the Village of Glen Ellyn for assisting in making decisions about future financing of the pension. This report is the property of the Village of Glen Ellyn and may only be used for its intended purpose.

This analysis has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflects laws and regulations issued to date pursuant to the provisions of Article 3, Illinois Pension Code, as well as applicable federal laws and regulations. In our opinion, the assumptions used in this valuation, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations.

In conducting this study, we have relied on personnel, plan design, and asset information supplied by the Board, financial reports prepared by the custodian bank and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

In performing the analysis, we used third-party software to model (calculate) the underlying liabilities and costs. These results are reviewed in the aggregate and for individual sample lives. The output from the software is either used directly or input into internally developed models to generate the costs. All internally developed models are reviewed as part of the process. As a result of this review, we believe that the models have produced reasonable results. We do not believe there are any material inconsistencies among assumptions or unreasonable output produced due to the aggregation of assumptions.

The undersigned is familiar with the immediate and long-term aspects of pension valuations and meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the Village of Glen Ellyn, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Village of Glen Ellyn Police Pension Fund. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact us at 630-620-0200.

We look forward to discussing the results with you.

Regards,

Jason L. Franken

Jason L. Franken, FSA, EA, MAAA

Enrollment Number: 20-06888
Foster & Foster, Inc.

Projection of Amortization Schedule Change

To illustrate the impact of a change to the amortization of the unfunded actuarial accrued liability, we have assembled four scenarios for comparison:

1. Baseline: This is the “status quo” scenario.

2. Immediate Change to 15 Year Amortization: In this scenario, we immediately jump to the 15-year rolling amortization schedule in the 2022 valuation.

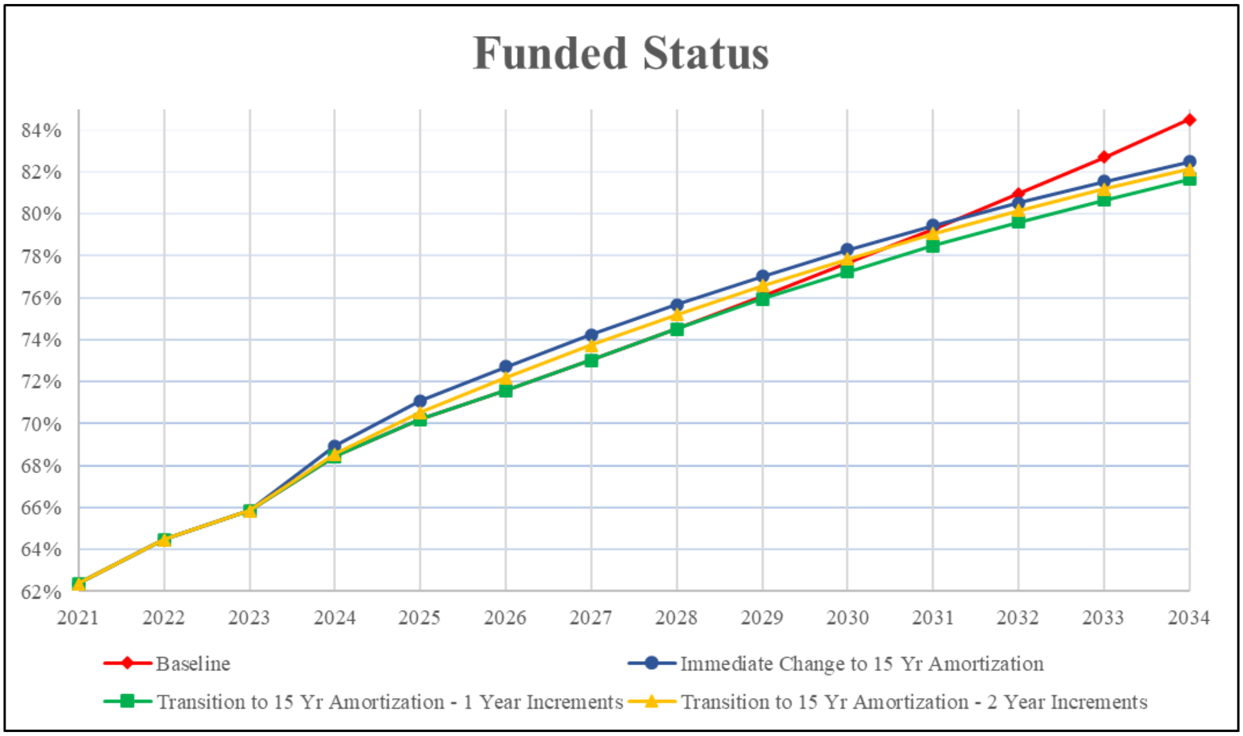
3. Transition to 15 Year Amortization: This scenario arrives at the 15-year rolling amortization on a more gradual basis by reducing the amortization period by 1 year annually, similar to how it moves in the Baseline scenario, but then staying on 15 years one it reaches that point.

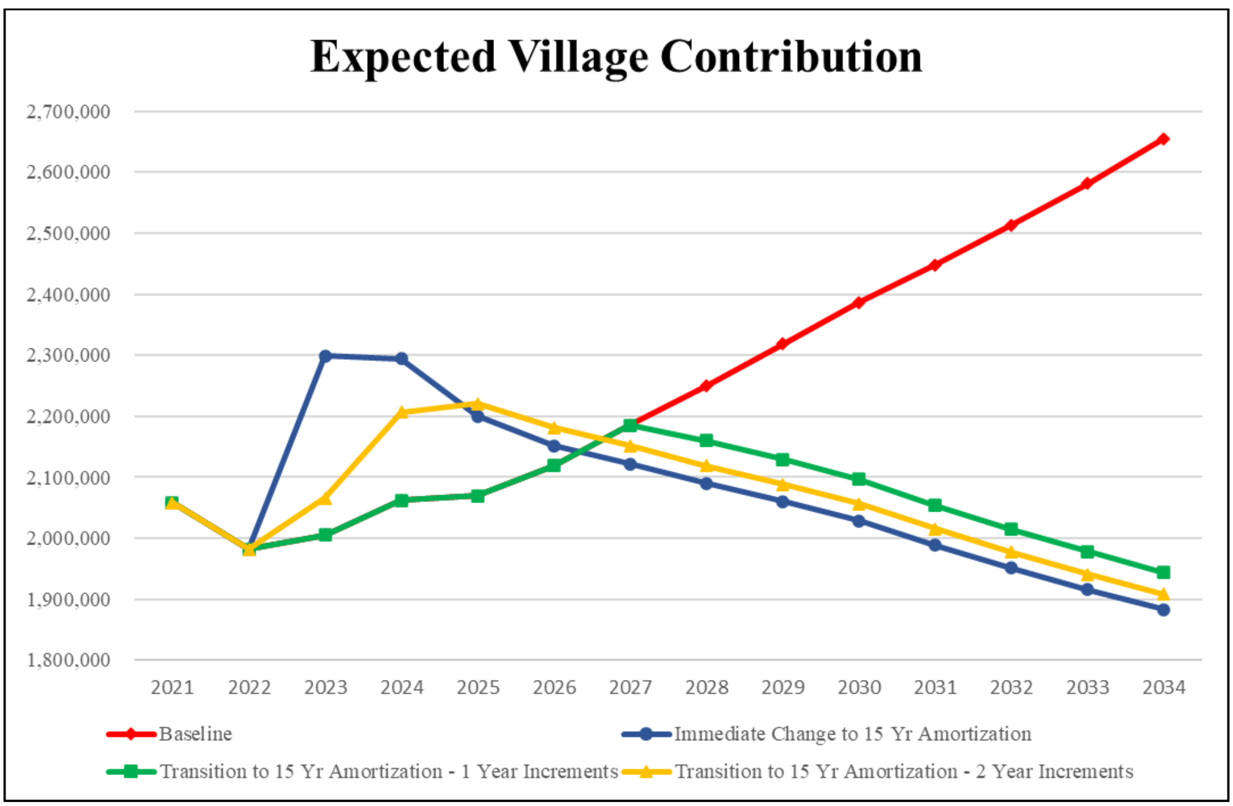
4. Transition to 15 Year Amortization: This scenario arrives at the 15-year rolling amortization slightly faster than option 3 by reducing the amortization period by 2 years annually instead of the one-year reduction in amortization period.

All assumptions are consistent with the January 1, 2021 actuarial valuation report issued on May 11, 2021. A complete summary of those assumptions and methods can be found on page 7 to 9 of this report.

As you can see by the charts and tables on the following pages, the short-term impact of making this change is a substantial increase in contributions. However, over time, this relationship reverses, and the Baseline scenario contributions exceed the rolling 15 Year Amortization contributions.

Funded status improves slightly faster and is higher long term the sooner that you move to the 15-year rolling amortization. However, the difference between the Baseline funded status and the other scenarios is never more than 3%.


Funded Status
84%
82%
80%
78%
76%
74%
72%
70%
68%
66%
64%
62%
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
2031
2032
2033
2034
Baseline
Immediate Change to 15 Yr Amortization
Transition to 15 Yr Amortization - 1 Year Increments
Transition to 15 Yr Amortization - 2 Year Increments


Expected Village Contribution
2,700,000
2,600,000
2,500,000
2,400,000
2,300,000
2,200,000
2,100,000
2,000,000
1,900,000
1,800,000
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
2031
2032
2033
2034
Baseline
Immediate Change to 15 Yr Amortization
Transition to 15 Yr Amortization - 1 Year Increments
Transition to 15 Yr Amortization - 2 Year Increments

Impact of Change to Amortization Schedule

Valuation Year	2021	2022	2023	2024	2025	2026	2027
Baseline							
Funded Status	62.4%	64.5%	65.8%	68.4%	70.2%	71.6%	73.0%
Expected Village Contribution	2,058,218	1,981,581	2,004,848	2,062,409	2,069,525	2,118,994	2,184,767
Immediate Change to 15 Yr Amortization							
Funded Status	62.4%	64.5%	65.8%	68.9%	71.1%	72.7%	74.2%
Expected Village Contribution	2,058,218	1,981,581	2,299,016	2,294,087	2,199,779	2,151,750	2,121,619
Annual Impact (vs. Baseline)	-	-	294,168	231,678	130,254	32,756	(63,148)
Transition to 15 Yr Amortization - 1 Year Increments							
Funded Status	62.4%	64.5%	65.8%	68.4%	70.2%	71.6%	73.0%
Expected Village Contribution	2,058,218	1,981,581	2,004,848	2,062,409	2,069,525	2,118,994	2,184,767
Annual Impact (vs. Baseline)	-	-	-	-	-	-	-
Transition to 15 Yr Amortization - 2 Year Increments							
Funded Status	62.4%	64.5%	65.8%	68.5%	70.5%	72.2%	73.7%
Expected Village Contribution	2,058,218	1,981,581	2,065,896	2,207,031	2,220,494	2,181,547	2,151,512
Annual Impact (vs. Baseline)	-	-	61,048	144,622	150,969	62,553	(33,255)

Valuation Year	2028	2029	2030	2031	2032	2033	2034
Baseline							
Funded Status	74.5%	76.1%	77.6%	79.3%	81.0%	82.7%	84.5%
Expected Village Contribution	2,249,695	2,318,348	2,386,956	2,447,782	2,512,970	2,581,649	2,654,965
Immediate Change to 15 Yr Amortization							
Funded Status	75.7%	77.0%	78.3%	79.4%	80.5%	81.5%	82.5%
Expected Village Contribution	2,089,647	2,060,032	2,028,855	1,988,362	1,950,990	1,915,582	1,883,334
Annual Impact (vs. Baseline)	(160,048)	(258,316)	(358,101)	(459,420)	(561,980)	(666,067)	(771,631)
Transition to 15 Yr Amortization - 1 Year Increments							
Funded Status	74.5%	75.9%	77.3%	78.5%	79.6%	80.7%	81.7%
Expected Village Contribution	2,159,810	2,129,145	2,096,225	2,053,970	2,014,876	1,977,791	1,943,909
Annual Impact (vs. Baseline)	(89,885)	(189,203)	(290,731)	(393,812)	(498,094)	(603,858)	(711,056)
Transition to 15 Yr Amortization - 2 Year Increments							
Funded Status	75.2%	76.6%	77.9%	79.1%	80.2%	81.2%	82.1%
Expected Village Contribution	2,118,835	2,088,462	2,056,539	2,015,320	1,977,240	1,941,142	1,908,223
Annual Impact (vs. Baseline)	(130,860)	(229,886)	(330,417)	(432,462)	(535,730)	(640,507)	(746,742)

Actuarial Assumptions and Methods for January 1, 2021 Valuation

Interest Rate

6.50% per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.

Mortality Rate

Active Lives:
PubS-2010 Employee mortality, projected 5 years past the valuation date with Scale MP-2020. 10% of active deaths are assumed to be in the line of duty.

Inactive Lives:
PubS-2010 Healthy Retiree mortality, projected 5 years past the valuation date with Scale MP-2020.

Beneficiaries:
PubS-2010 Survivor mortality, projected 5 years past the valuation date with Scale MP-2020.

Disabled Lives:
PubS-2010 Disabled mortality, projected 5 years past the valuation date with Scale MP-2020.

The mortality assumptions sufficiently accommodate anticipated future mortality improvements.

Retirement Age

See table later in this section. This is based on a 2017 experience study performed for the State of Illinois Department of Insurance.

Disability Rate

See table later in this section. 60% of the disabilities are assumed to be in the line of duty. This is based on a 2017 experience study performed for the State of Illinois Department of Insurance.

Termination Rate

See table later in this section. This is based on a 2017 experience study performed for the State of Illinois Department of Insurance.

Inflation

2.50%.

Cost-of-Living Adjustment

Tier 1: 3.00% per year after age 55. Those that retire prior to age 55 receive an increase of 1/12 of 3.00% for each full month since benefit commencement upon reaching age 55.

Tier 2: 1.25% per year after the later of attainment of age 60 or first anniversary of retirement.

Salary Increases	See table below. This is based on a 2017 experience study performed for the State of Illinois Department of Insurance.

Salary Scale	
Service	Rate
0	11.00%
1	10.75%
2	8.75%
3	8.50%
4	7.00%
5	6.25%
6	5.25%
7	4.25%
8 - 16	4.00%
17 - 32	3.75%
32+	3.50%

Marital Status	80% of Members are assumed to be married.
Spouse's Age	Males are assumed to be three years older than females.
Funding Method	Entry Age Normal Cost Method.
Actuarial Asset Method	Investment gains and losses are smoothed over a 5-year period. In the first year, 20% of the gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of the Market Value of Assets.
Funding Policy Amortization Method	The UAAL is amortized according to a Level Percentage of Payroll method over a period ending in 2041. The initial amortization amount is 100% of the Accrued Liability less the Actuarial Value of Assets.
Payroll Growth	3.50% per year.
Administrative Expenses	Expenses paid out of the fund other than investment-related expenses are assumed to be equal to those paid in the previous year.

Decrement Tables

% Terminating During the Year

Age	Rate
20	14.00%
25	10.40%
30	5.60%
35	3.10%
40	1.90%
45	1.50%
50	1.50%
56+	0.00%

% Becoming Disabled During the Year

Age	Rate
20	0.000%
25	0.030%
30	0.140%
35	0.260%
40	0.420%
45	0.590%
50	0.710%
55	0.900%
60	1.150%

% Retiring During the Year (Tier 1)

Age	Rate
50 - 51	15%
52 - 54	20%
55 - 64	25%
65 - 69	40%
70+	100%

% Retiring During the Year (Tier 2)

Age	Rate
50 - 54	5%
55	40%
56 - 64	25%
65 - 69	40%
70+	100%

Glen Ellyn Police Pension Board
535 Duane Street
Glen Ellyn, IL 60137

Meeting 10/20/2021 7:30 PM
Department: Finance
Department Head: Christina Coyle
Category: Report
Prepared By: Lori Thomas

AGENDA ITEM (ID # 2020-580)

DOC ID: 2020-580

Motion to Approve the Annual Report to the Village Board

Statement of the Issue:
Attached to this item is the Annual Report to the Village Board that is required to be approved by the Pension Board and submitted to the Village Board. The information contained in the report is a summary of the actuarial report.

Jason Franken from Foster & Foster will be in attendance at the meeting to present the actuarial report and answer any questions the Pension Board may have.

Analysis:
N/A

Budget Impact:
N/A

Action Requested:
Staff also requests that the Pension Board approve the annual report to be provided to the Village Board.

Attachments:

1. VOGE Police Municipal Compliance Report - December 31 2020
2. Glen Ellyn Police IPS 07_2017 - Executed

VILLAGE OF GLEN ELLYN, ILLINOIS
POLICE PENSION FUND

Municipal Compliance Report (40 ILCS 5/3-143, report by pension board)
For the Year Ended December 31, 2020

The Glen Ellyn Police Pension Board certifies to the Village Board on the condition of the Pension Fund at the end of its most recently completed fiscal year the following information:

1. The total assets of the fund in its custody at the end of the fiscal year and the current market value of those assets:

Total Assets	$35,656,781
Market Value	$35,656,781

2. The estimated receipts during the next succeeding fiscal year from deductions from the salaries of police officers and from other sources:

Estimated Receipts - Employee Contributions	$374,998
Estimated Receipts - All Other Sources	
Investment Earnings	N/A
Municipal Contributions	$2,058,218

3. The estimated amount required during the next succeeding fiscal year to (a) pay all pensions and other obligations provided in Article 3 of the Illinois Pension Code, and (b) to meet the annual requirements of the fund as provided in Sections 3-125 and 3-127:

(a) Pay all Pensions and Other Obligations	$1,981,581
(b) Annual Requirement of the Fund as Determined by:	
Illinois Department of Insurance	N/A
Private Actuary - Report Dated May 11, 2021 (Entry Age Normal)	$1,981,581
Private Actuary - Report Dated May 11, 2021 (PA096-1495)	$1,643,342

VILLAGE OF GLEN ELLYN, ILLINOIS
POLICE PENSION FUND

Municipal Compliance Report (40 ILCS 5/3-143, report by pension board)
For the Year Ended December 31, 2020

4. The total net income received from investment of assets along with the assumed investment return and actual investment return received by the fund during its most recently completed fiscal year compared to the total net income, assumed investment return, and actual investment return received during the preceding fiscal year:

	Current Fiscal Year	Preceding Fiscal Year
Net Income Received from Investment of Assets	$3,090,171	$4,394,123
Assumed Investment Return		
Illinois Department of Insurance - Actuarial Report	N/A	N/A
Private Actuary - Report Dated May 11, 2021	6.50%	6.50%
Actual Investment Return	7.23%	4.87%

5. The total number of active employees who are financially contributing to the fund:

Number of Active Members	39

6. The total amount that was disbursed in benefits during the fiscal year, including the number of and total amount disbursed to (i) annuitants in receipt of a regular retirement pension, (ii) recipients being paid a disability pension, and (iii) survivors and children in receipt of benefits:

		Number of	Total Amount Disbursed
(i)	Regular Retirement Pension	30	$2,110,939
(ii)	Disability Pension	2	$ 87,176
(iii)	Survivors and Child Benefits	5	$ 281,503

7. The funded ratio of the fund:

Illinois Division of Insurance - Actuarial Report	N/A	N/A
Private Actuary - Report Dated May 11, 2021	62.4%	59.2%

Municipal Compliance Report (40 ILCS 5/3-143, report by pension board)
For the Year Ended December 31, 2020

8. The unfunded liability carried by the fund, along with an actuarial explanation of the unfunded liability:

Unfunded Liability:	
Illinois Department of Insurance - Actuarial Report	N/A
Private Actuary - Report Dated May 15, 2020	$20,845,733

The accrued liability is the actuarial present value of the portion of the projected benefits that has been accrued as of the valuation date based upon the actuarial valuation method and the actuarial assumptions employed in the valuation. The unfunded accrued liability is the excess of the accrued liability over the actuarial value of assets.

9. The investment policy of the Pension Board under the statutory investment restrictions imposed on the fund.

Investment Policy - See Attached

CERTIFICATION OF MUNICIPAL POLICE
PENSION FUND COMPLIANCE REPORT

We, the undersigned Trustees of the Glen Ellyn Police Pension Fund, based upon information and belief, and to the best of our knowledge, certify pursuant to §5/3-134 of the Illinois Pension Code, that the preceding report is true and accurate.

____ President

____ Secretary

Dated: ________________________

Village of Glen Ellyn

535 Duane Street, Glen Ellyn, Illinois

GLEN ELLYN POLICE PENSION FUND INVESTMENT POLICY

I. Authority to manage the Village of Glen Ellyn's Police Pension Fund is derived from the Illinois Pension Code (40 ILCS 5/1-101 et seq. and 5/1A-101 et seq.) and other laws as may be applicable to investments under Article 3 of the Illinois Pension Code (40 ILCS 5/3-101 et seq.) and as such statutes may be amended hereafter. The plan is created for the plan participants and beneficiaries for the exclusive purpose of providing retirement and other benefits to plan participants and beneficiaries.

II. **Policy**:

The fundamental goal of the Glen Ellyn Police Pension Fund is to provide retirement benefits to plan participants. The Pension Fund Board of Trustees (Board) will invest fund assets solely in the interest of fund participants and beneficiaries for the exclusive purpose of providing retirement and other benefits to plan participants and beneficiaries. This investment policy applies to the assets of the Glen Ellyn Police Pension Fund.

III. **Prudence**:

The Board shall prudently oversee the plan assets for the sole benefit of the Fund's beneficiaries. Investments shall be made with care, skill, prudence and diligence, under the circumstances then prevailing, that a prudent person acting in like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims. That standard of prudence to be used shall be the prudent expert standard. Pension Fund Trustees acting in accordance with the investment policy and exercising due diligence shall be relieved of personal responsibility for an individual security's credit risk or market price changes, provided deviations from expectations are reported in a timely fashion and appropriate action is taken to control adverse developments.

IV. **Investment Philosophy**:

The Board believes that fund assets should be managed in a fashion that reflects the fund's unique assets and liabilities, incorporated accepted investment theory and empirical evidence. Specifically, the Board has adopted the following principles:

A. Asset allocation is the key determinant of return and, therefore, commitments to asset allocation targets will be maintained through a disciplined rebalancing program.
B. Diversification, both by and within asset classes, is the primary risk control element.
C. Passive and active management are suitable investment strategies, with passive management especially suitable in highly efficient markets.
D. Frequent trading is precluded as an acceptable investment strategy.

V. **Goals and Objectives**:

The goals and objectives of the Glen Ellyn Police Pension Fund are as follows:

A. To preserve the actuarial soundness of the plan in order to meet benefit obligations.
B. To achieve long-term (one or two market cycles) rates of return consistent with the actuarial earnings rate.
C. To prudently manage the inherent investment risks that are related to the achievement of investment goals.

VI. **Asset Allocation:**

Priority: The asset allocation decision is generally regarded as the most important decision to be made in the investment management process. To further the long-term goals and objectives set out in Section IV, the following asset allocation guidelines are established:

ASSET CLASS	TARGET	MINIMUM	MAXIMUM
Certificates of Deposit	0.0%	0.0%	7.0%
Int. Govt./Credit Fixed Income	35.0%	35.0%	45.0%
Total Fixed Income	**35.0%**	**35.0%**	**45.0%**
Large-Cap Value Equity	9.0%	5.0%	13.0%
Large-Cap Core Equity	9.0%	5.0%	13.0%
Mid-Cap Growth Equity	6.0%	3.0%	9.0%
Small-Cap Value Equity	6.0%	3.0%	9.0%
Total U.S. Equity	**30.0%**	**25.0%**	**35.0%**
Non-U.S. Large-Cap Equity	10.0%	5.0%	15.0%
Non-U.S. Small-Cap Equity	5.0%	2.0%	8.0%
Emerging Markets Equity	5.0%	2.0%	8.0%
Total International Equity	**20.0%**	**15.0%**	**25.0%**
Private Core Real Estate	10.0%	5.0%	10.0%
Total Real Estate	**10.0%**	**5.0%**	**10.0%**
Global Tactical	5.0%	0.0%	10.0%
Total Alternative Investments	**5.0%**	**0.0%**	**10.0%**
Total Cash	**0%**	**0%**	**10%**
TOTAL	**100%**		

Rebalancing Policy: The primary purpose of rebalancing is to ensure that the Fund adheres to its strategic asset allocation, which is the Fund's explicit statement of its investment approach. Secondly, historical analysis of portfolio returns when rebalancing is used indicates that rebalancing reduces volatility and may add modest value, in comparison to a similar portfolio that is not rebalanced.

Rebalancing will be carried out in a cost-effective manner. The fund will rebalance as follows:

A: If feasible, cash, as well as indexed investment strategies, will be used to maintain target allocations.

B: Securities will be liquidated from the over-funded asset classes until the target allocations are met.

The Glen Ellyn Police Pension Fund Board will review the portfolio annually for rebalancing and no more frequently than quarterly.

VII. **Target Rate of Return**

The Board has adopted a 6.5% target rate of return for the Glen Ellyn Police Pension Fund. In order to achieve that return, the Board maintains the following long-term nominal return targets for the following asset classes (with an inflation expectation of 2.25%):

Intermediate Govt./Credit Fixed Income = 2.5%
U.S. Large-Cap Value Equity = 7.3%
U.S. Large-Cap Core Equity = 7.1%
U.S. Mid-Cap Growth Equity = 7.5%
U.S. Small-Cap Value Equity = 8.2%
Non-U.S. Large-Cap Equity = 7.4%
Non-U.S. Small-Cap Equity = 8.1%
Emerging Markets Equity = 8.2%
Private Core Real Estate = 7.7%
Global Tactical = 4.1%

VIII. **Authorized and Suitable Investments**:

The fund may invest in any type of security allowed for within Illinois Pension Code (40 ILCS 5/1-113.2; 40 ILCS 5/1-113.3; 40 ILCS 5/1-113.4; and 40 ILCS 5/1-113.4a), as they may be amendment from time to time:

1) Interest bearing direct obligations of the United States of America.

2) Interest bearing obligations to the extent that they are fully guaranteed or insured as to payment of principle and interest by the United States of America.

3) Interest bearing bonds, notes, debentures, or other similar obligations of agencies of the United States of America. For the purposes of this Section, "agencies of the United States of America" includes: (i) the Federal National Mortgage Association; (ii) federal land banks, federal intermediate credit banks, federal farm credit banks, and any other entity authorized to issue direct debt obligations of the United States of America under the Farm Credit Acts of 1971 or amendments to that Act; (iii) federal home loan banks and the Federal Home Loan Mortgage Corporation; and (iv) any agency created by Act of Congress that is authorized to issue direct debt obligations of the United States of America.

4) Interest bearing savings accounts or certificates of deposit, issued by federally chartered banks or savings and loan associations, to the extent that the deposits are insured by agencies or instrumentalities of the federal government.

5) Interest bearing savings accounts or certificates of deposit, issued by State of Illinois chartered banks or savings and loan associations, to the extent that the deposits are insured by agencies or instrumentalities of the federal government.

6) Investments in credit unions, to the extent that the investments are insured by agencies or instrumentalities of the federal government.

7) Interest bearing bonds of the State of Illinois.

8) Pooled interest bearing accounts managed by the Illinois Public Treasurer's Investment Pool (Illinois Funds) in accordance with the Deposit of State Moneys Act and interest bearing funds or pooled accounts managed, operated, and administered by banks, subsidiaries of banks, or subsidiaries of bank holding companies in accordance with the laws of the State of Illinois.

9) Interest bearing bonds or tax anticipation warrants of any county, township, or municipal corporation of the State of Illinois.

10) Direct obligations of the State of Israel, subject to the conditions and limitations of item (5.1) of Section 1-113.

11) Money market mutual funds managed by investment companies that are registered under the federal Investment Company Act of 1940 and the Illinois Securities Law of 1953 and are diversified, open ended management investment companies; provided that the portfolio of the money market mutual fund is limited to the following: (i) bonds, notes certificates of indebtedness, treasury bills, or other securities that are guaranteed by the full faith and credit of the United States of America as to principal and interest; (ii) bonds, notes debentures, or other similar obligations of the United States of America or its agencies; and (iii) short term obligations of corporations organized in the United States with assets exceeding $400,000,000, provided that (A) the obligations mature no later than 180 days from the date of purchase, (B) at the time of purchase, the

obligations are rated by at least 2 standard national rating services at one of their 3 highest classifications, and (C) the obligations held by the mutual fund do not exceed 10% of the corporation's outstanding obligations.

12) General accounts of life insurance companies authorized to transact business in Illinois.

13) Any combination of the following, not to exceed 65% of the pension fund's net assets: (1) separate accounts that are managed by life insurance companies authorized to transact business in Illinois and are comprised of diversified portfolios consisting of common or preferred stocks, bonds, or money market instruments; (2) separate accounts that are managed by insurance companies authorized to transact business in Illinois, and are comprised of real estate or loans upon real estate secured by first or second mortgages and (3) Mutual Funds that meet the following requirements: (i) the mutual fund is managed by an investment company and registered under the Federal Investment Company Act of 1940 and registered under the Illinois Securities Law of 1953; (ii) the mutual fund has been in operation for at least 5 years; (iii) the mutual fund has total net assets of $250 million or more, and; (iv) the mutual fund is comprised of a diversified portfolio of common or preferred stocks, bonds, or money market instruments. (4) through an investment adviser, invest a portion of the assets in common and preferred stocks authorized for investments of trust funds under the laws of the State of Illinois. The stocks must meet all of the following requirements: (a) The common stocks are listed on a national securities exchange or board of trade (as defined in the Federal Securities Exchange Act of 1934 and set forth in Section 3.G of the Illinois Securities Law of 1953) or quoted in the National Association of Securities Dealers Automated Quotation System National Market System (NASDAQN MS), (b) The securities are of a corporation created or existing under the laws of the United States or any state, district, or territory thereof and the corporation has been in existence at least 5 years, (c) The corporation has not been in arrears on payment of dividends on its preferred stock during the preceding 5 years, (d) the market value of stock in any one corporation does not exceed 5 % of the cash and invested assets of the pension fund, and the investments in the stock of any one corporation do not exceed 5% of the total outstanding stock of that corporation, (e) the straight preferred stocks or convertible preferred stocks are issued or guaranteed by a corporation whose common stock qualifies for investment by the board, (f) the issuer of the stocks has been subject to the requirements of Section 12 of the federal Securities Exchange Act of 1934 and has been current with the filing requirements of Sections 13 and 14 of that Act during the preceding 3 years.

14) Corporate bonds managed through an investment advisor must meet all of the following requirements:

(1) The bonds must be rated as investment grade by one of the 2 largest rating services at the time of purchase.

(2) If subsequently downgraded below investment grade, the bonds must be liquidated from the portfolio by the managers within 90 days after being downgraded.

IX. Safekeeping and Custody

Securities will be held by one third party custodian designated by the treasurer and evidenced by safekeeping receipts. The treasurer shall be authorized to instruct security transactions and cash flow activity on behalf of the Glen Ellyn Police Pension Fund Board.

X. Performance Benchmarks

As a primary return target, the Glen Ellyn Police Pension Fund's asset allocation has been optimized to meet the 6.5% rate set forth by the Pension Board over full market cycles. The Board is cognizant that natural market volatility over shorter term measurement periods can cause the Fund's return to fluctuate around this absolute return target. As such, a customized blended benchmark has been established as a secondary and relative return target. This benchmark is constructed as a passive implementation of the Fund's target asset allocation. Further detail surrounding the underlying benchmarks used in the construction of this benchmark can be found in Addendum A.

XI. Investment Manager Performance Review and Evaluation

Performance reports generated by the Investment Consultant shall be compiled at least quarterly and communicated to the Trustees for review. The investment performance of total portfolios as well as asset class composite and individual managers will be measured against commonly accepted performance benchmarks. Consideration shall be given to the investment objectives, goals and guidelines as set forth in this statement of investment policy. The Trustees intend to evaluate the portfolio over at least a three to five year period, but reserve the right to terminate a manager for any reason, including the following:

A. Investment performance which is significantly less than anticipated given the discipline employed and the risk parameters established, or unacceptable justification for poor results.
B. Failure to adhere to any aspect of this statement of investment policy, including communication and presorting requirements.
C. Significant qualitative changes to the investment management organization(s).

Investment managers shall be reviewed regularly regarding performance, personnel, strategy, research capabilities, organizational and business matters, and other qualitative factors that may impact their ability to achieve the desired investment results.

The following terminology has been developed to facilitate efficient communication between the investment managers, investment consultant, and the Board. Each term signifies a particular status with the Fund and any conditions that may require improvement. In each case, communication is made only after consultation with the Board and staff.

	STATUS	DESCRIPTION
A.	*"In Compliance"*	The investment manager is acting in accordance with the Investment Policy Statement.
B.	*"Alert"*	The investment manager is notified of a problem in performance (usually related to a benchmark or volatility measure), a change in investment characteristics, an alteration in management style or key investment professionals, and/or any other irregularities.
C.	*"On Notice"*	The investment manager is notified of continued concern with one or more Alert issues. Failure to improve upon stated issues within a specific time frame justifies termination.
D.	*"Termination"*	The Board has decided to terminate the investment manager. The investment manager is notified and transition plans are in place.

XII. Reporting:

An investment report shall be regularly provided to the Police Pension Board. The report will include the following:

A. A listing of individual securities held at the end of the reporting period.
B. The percentage of the total portfolio which each type of investment represents.
C. The percentage of the total portfolio which each institution is holding.
D. Principal and type of investment by fund.

Operational Guidelines

Intermediate Govt./Credit Fixed Income Management – Separate Account

This document contains the guidelines and restrictions that apply to the intermediate government bond and mortgage manager of the Pension Fund (see addendum A).

Permissible Investments

1. The manager shall comply with all of the provisions of the Illinois Pension Code relating to Article 4 Pension Funds, specifically Sections 1-113.1, 1-113.2, 1-113.3, 1-113.4, and 1-113.4a relating to Permissible Investments (40 ILCS 5/1-113.2 et. seg.). In accord with the applicable portions of the Pension Code, above referenced, the manager may invest in the following fixed income securities:

    a) Investment Grade Corporate Bonds
    b) Treasury Bills
    c) Treasury Notes
    d) Government Agencies (This includes bonds issued by the Federal National Mortgage Association, Student Loan Marketing Association, federal land banks, federal intermediate credit banks, entities authorized to issue debt obligations of the United States of America under the Farm Credit Act of 1971, federal home loan banks, Federal Home Loan Mortgage Corporation, and any other agency created by Act of Congress that is authorized to issue direct obligations of the United States of America)
    e) Certificates of Deposit
    f) Investments in credit unions
    g) State of Illinois interest bearing_Bonds
    h) Illinois Public Treasurers Investment Pool
    i) Interest bearing Bonds and Tax Anticipant Warrants of any county, township, or municipal corporation of the State of Illinois
    j) State of Israel - Direct Obligations
    k) Money Markets Mutual Funds (See Section 1-113.2(11) for restrictions)

2. No single security should comprise more that 10% of the portfolio's overall allocation after accounting for price appreciation.

3. The average duration of the portfolio is not to vary more than +/-30% of the duration of the index (refer to Addendum A).

4. The manager may invest up to 10% of its portfolio in cash or cash equivalents.

Investment Objective

Over reasonable measurement periods (3 to 5 years), the portfolio's return net of fees should exceed the return of the appropriate benchmark index (see Addendum A).

Investment Guidelines for the Mutual or Commingled Fund Equity Managers

This document contains the guidelines and restrictions that apply to the equity manager(s) of the Pension Fund invested in commingled or mutual fund vehicles (see Addendum A).

Permissible Investments

1. These funds are governed by the guidelines and restrictions contained in their prospectuses or participation agreements.

Investment Objective

Over reasonable measurement periods (3 to 5 years), the portfolio's return net of fees should exceed the return of the respective benchmark indexes (refer to Addendum A).

Addendum A
Defining the Investment Professionals and Benchmark Indexes

ASSET CLASS	INVESTMENT MANAGER	BENCHMARK INDEX
CD Portfolio	Various	91 Day T-Bill
Int. Govt./Credit Fixed Income	Great Lakes Advisors	Bloomberg BarCap Int. Govt./Credit
U.S. Large-Cap Value Equity	Vanguard	Russell 1000 Value
U.S. Large-Cap Core Equity	Vanguard	S&P 500
U.S. Mid-Cap Growth Equity	Vanguard	CRSP US Mid Growth
U.S. Small-Cap Value Equity	TBD	Russell 2000 Value
Non-U.S. Large-Cap Equity	Vanguard	FTSE Developed ex US All-Cap
Non-U.S. Small-Cap Equity	Goldman Sachs	MSCI EAFE Small Cap
Emerging Markets Equity	DFA	MSCI Emerging Markets
Global Tactical	TBD	Bloomberg BarCap Int. Govt./Credit
Private Core Real Estate	Principal	NFI-ODCE

INVESTMENT PROFESSIONAL	SERVICE PROVIDER
Custodian	U.S. Bank
Investment Consultant	Marquette Associates

Addendum B – Board of Trustees Adoption of Policy

This Investment Policy Statement was adopted by the Board of Trustees of the Glen Ellyn Police Pension Fund on 7/19/2017.

Board of Trustees' Acknowledgments:

We have received this copy of the Pension Fund's Investment Policy. We have studied its provisions and believe that we can both abide by its restrictions and fulfill its goals and expectations over the timetables set forth in the Policy.

Name	Name
Trustee	Trustee - President
Title	Title
Name	Name
Trustee	
Title	Title
Name	Name
Trustee - Secretary	
Title	Title
Name	Name
Trustee	
Title	Title

Amended: July 19, 2017

Page

Addendum C – Investment Professional Adoption of Policy

Investment Professional's Acknowledgments:

We have received this copy of the Pension Fund's Investment Policy. We have studied its provisions and believe that we can both abide by its restrictions and fulfill its goals and expectations over the timetables set forth in the Policy.

MARQUETTE ASSOCIATES, INC
Firm Name

CHRISTOPHER CAPARELLI, CFA
Investment Professional Name

Investment Professional Signature

Glen Ellyn Police Pension Board
535 Duane Street
Glen Ellyn, IL 60137

Meeting 10/20/2021 7:30 PM
Department: Finance
Department Head: Christina Coyle
Category: Vouchers
Prepared By: Christina Coyle

AGENDA ITEM (ID # 2021-1071)

DOC ID: 2021-1071

Approve the expense vouchers in the amount of $476,674.88 and pension expenses in the amount of $637,164.75 for a total of $1,113,839.63

Statement of the Issue:
Please see the voucher packet attached.

Analysis:
N/A

Budget Impact:
N/A

Action Requested:
Approve the attached expenses.

Attachments:

1. Voucher Packet October 2021

POLICE PENSION FUND
APPROVAL OF VOUCHERS
For the meeting in October 2021

Expenses	Check Date:	Paid amount	
IPPFA (Conference Registration Monson)	9/1/2021	$ 435.00	
IPPFA (Conference Registration Terranova)	9/1/2021	$ 435.00	
US Bank (Custody Fee - July)	7/31/2021	$ 8,109.20	
US Bank (Custody Fee - August)	8/31/2021	$ 625.00	
Lauterbach & Amen (Benefit Calculation)	7/23/2021	$ 350.00	
Wheaton Police Pension Fund (Cusack Transfer - approved at previous meeting)	9/1/2021	$ 466,720.68	
		$ 476,674.88	
			$ 476,674.88

Pension Expenses	April	May	June	
Service Pensions	$ 180,160.20	$ 180,160.20	$ 180,160.20	
Duty Disability Pensions	$ 7,302.57	$ 7,302.57	$ 7,302.57	
Non-Duty Disability Pensions	$ -	$ -	$ -	
Surviving Spouse Pension	$ 24,925.48	$ 24,925.48	$ 24,925.48	
Total Payroll:	$ 212,388.25	$ 212,388.25	$ 212,388.25	
				$ 637,164.75
			Grand Total	$ 1,113,839.63

450-2

From: Julie Guy <julie.guy@ippfa.org>
Sent: Thursday, August 26, 2021 1:50 PM
To: Dale Fabianski
Subject: Registration Confirmed - 2021 IPPFA MidAmerican Pension Conference

IPPFA
PREPARE PROTECT EDUCATE INFORM

Dear Dale,

Please save this email for future reference.

Event: 2021 IPPFA MidAmerican Pension Conference

Total Registrants: 1

Time: 8:00 AM

Date: September 29, 2021

Location: Oak Brook Hills Resort and Conference Center

Address: 3500 Midwest Road, Oak Brook, Illinois, 60523, USA

Group Confirmation Number: LTNX2CJ8B8T
Group Registrant 0 (James Monson)
Confirmation Number: 2KNRSW5SFX8

James Monson

Order Date	Order Type	Item	Item Type	Amt Ordered	Amt Paid	Amt Due
26-Aug-2021 1:49 PM CT	Offline Charge	Virtual Registration	Admission Item	$435.00	$0.00	$435.00
				Amt Ordered	**Amt Paid**	**Amt Due**
			Total	$435.00	$0.00	$435.00

To view or modify the online registration for anyone in your group, Click here. You will be asked to enter your name and the group confirmation number shown above.

Sincerely,

Julie Guy
General Manager
Julie.guy@ippfa.org

CODE
9000 520600 435.00
APPROVAL
DATE
8-26-21

Dale Fabianski

From: Julie Guy <julie.guy@ippfa.org>
Sent: Thursday, August 26, 2021 3:28 PM
To: Dale Fabianski
Subject: Registration Confirmed - 2021 IPPFA MidAmerican Pension Conference

IPPFA
PREPARE PROTECT EDUCATE INFORM

Dear Dale,

Please save this email for future reference.

Event: 2021 IPPFA MidAmerican Pension Conference

Total Registrants: 1

Time: 8:00 AM

Date: September 29, 2021

Location: Oak Brook Hills Resort and Conference Center

Address: 3500 Midwest Road, Oak Brook, Illinois, 60523, USA

Group Confirmation Number: 8JNYHGSFGJ2
Group Registrant 0 (Anthony Terranova)
Confirmation Number: 26NZLMBS7C2

Anthony Terranova						
Order Date	**Order Type**	**Item**	**Item Type**	**Amt Ordered**	**Amt Paid**	**Amt Due**
26-Aug-2021 3:28 PM CT	Offline Charge	In-Person Registration	Admission Item	$435.00	$0.00	$435.00
				Amt Ordered	**Amt Paid**	**Amt Due**
			Total	$435.00	$0.00	$435.00

To view or modify the online registration for anyone in your group, Click here. You will be asked to enter your name and the group confirmation number shown above.

Sincerely,

Julie Guy
General Manager
Julie.guy@ippfa.org

If you no longer want to receive emails from Julie Guy, please Opt-Out.

powered by
cvent

9000

CODE	AMOUNT	APPROVAL	DATE
520600	435.00		8-26-21

GLEN ELLYN POLICE PENSION FUND
[redacted]

MARKET AND COST RECONCILIATION

	07/31/2021 MARKET	07/31/2021 BOOK VALUE
Beginning Market And Cost	**23,948,724.04**	**16,845,574.48**
Investment Activity		
Interest	3.43	3.43
Dividends	6,451.77	6,451.77
Change In Unrealized Gain/Loss	144,452.29	.00
Net Accrued Income (Current-Prior)	.83	.83
Total Investment Activity	**150,908.32**	**6,456.03**
Plan Expenses		
Trust Fees	- 625.00	- 625.00
Total Plan Expenses	**- 625.00**	**- 625.00**
Other Activity		
Transfers Out	- 190,000.00	- 190,000.00
Total Other Activity	**- 190,000.00**	**- 190,000.00**
Net Change In Market And Cost	**- 39,716.68**	**- 184,168.97**
Ending Market And Cost	**23,909,007.36**	**16,661,405.51**

GLEN ELLYN POLICE PENSION FUND
[redacted]

Period from August 1, 2021 to August 31, 2021

MARKET AND COST RECONCILIATION

	08/31/2021 MARKET	08/31/2021 BOOK VALUE
Beginning Market And Cost	**23,909,007.36**	**16,661,405.51**
Investment Activity		
Interest	4.26	4.26
Dividends	6,170.54	6,170.54
Change In Unrealized Gain/Loss	435,775.90	.00
Net Accrued Income (Current-Prior)	- 7,813.42	- 7,813.42
Total Investment Activity	**434,137.28**	**- 1,638.62**
Plan Expenses		
Trust Fees	- 625.00	- 625.00
Total Plan Expenses	**- 625.00**	**- 625.00**
Other Activity		
Transfers Out	- 190,000.00	- 190,000.00
Total Other Activity	**- 190,000.00**	**- 190,000.00**
Net Change In Market And Cost	**243,512.28**	**- 192,263.62**
Ending Market And Cost	**24,152,519.64**	**16,469,141.89**

Lauterbach & Amen, LLP

CERTIFIED PUBLIC ACCOUNTANTS

Glen Ellyn Police Pension Fund
535 Duane Street
Glen Ellyn, IL 60137

RECEIVED
JUL 22 2021

Invoice No: *56523*
Date: *06/18/2021*
Client No: *GLENELLYNPO*

SERVICE **AMOUNT**

For professional services rendered in connection with:

Benefit Calculation - Article 3 to SERS J. Bradley 350.00

Current Amount Due $ 350.00

CODE	AMOUNT	APPROVAL	DATE
90000-520830	350.00	CN	7/22/21

POLICE PENSION

668 NORTH RIVER ROAD * NAPERVILLE, ILLINOIS 60563
PHONE 630.393.1483 * FAX 630.393.2516
www.lauterbachamen.com

Lauterbach & Amen, LLP
CERTIFIED PUBLIC ACCOUNTANTS

668 N. RIVER ROAD • NAPERVILLE, ILLINOIS 60563
PHONE 630.393.1483 • FAX 630.393.2516
www.lauterbachamen.com

January 25, 2021

11752

RECEIVED
AUG 31 2021

Members of the Pension Fund Board
Glen Ellyn Police Pension Fund
Glen Ellyn, Illinois

RE: Transfer of Creditable Service for Ryan Cusack from Glen Ellyn Police Pension Fund to Wheaton Police Pension Fund

Members of the Pension Board of Trustees:

Thank you for providing the information requested for the potential transfer of creditable service from the Glen Ellyn Police Pension Fund to the Wheaton Police Pension Fund for Ryan Cusack.

Enclosed please find a signed Irrevocable Authorization and Agreement for this transfer. We respectfully request that the Glen Ellyn Police Pension Fund remit $466,720.68 to the Wheaton Police Pension Fund as referenced in the enclosed letter dated January 15, 2021. Remittance should be made payable to the WHEATON POLICE PENSION FUND and mailed to Lauterbach & Amen, LLP / Attn: Service Purchases / 668 N River Road / Naperville, IL 60563.

Please do not hesitate to contact me should you have any questions.

Cordially,

Anie Wascher

Anie Wascher
Lauterbach & Amen, LLP

approved by pension board @ 3/2/21 meeting

Encl.

CC: Wheaton Police Pension Fund

* Police Pension *

CODE	AMOUNT	APPROVAL	DATE
90000-521220	466,720.68	CN	8/30/21

Glen Ellyn Police Pension Board
535 Duane Street
Glen Ellyn, IL 60137

Meeting 10/20/2021 7:30 PM
Department: Finance
Department Head: Christina Coyle
Category: Personnel
Prepared By: Christina Coyle

AGENDA ITEM (ID # 2020-582)

DOC ID: 2020-582

Approval of Membership Changes / Transfers / Contribution Refunds

Statement of the Issue:
N/A

Analysis:
Membership Changes
Officer Stephen Miko left the police department effective August 2, 2021. He has not yet attained an age to retire and collect a pension.

Transfers
None.

Contribution Refunds
None.

Budget Impact:
N/A

Action Requested:
No action needed at this time.

Attachments:

Glen Ellyn Police Pension Board
535 Duane Street
Glen Ellyn, IL 60137

Meeting 10/20/2021 7:30 PM
Department: Finance
Department Head:
Category: Reminder
Prepared By:

AGENDA ITEM (ID # 2021-1520)

DOC ID: 2021-1520

Meetings in 2022: January 19, April 20, July 20, October 19

Statement of the Issue:

Analysis:

Budget Impact:

Action Requested:

Attachments: