ILLINOIS POLICE OFFICERS' PENSION INVESTMENT FUND



May 2023 Statement Notes

Adjustment Line Item

- There is a new "Adjustment" line item on the report which will be used for restatements and transactions to true up equitable sharing of transitions costs.
- The May adjustments relate to pricing errors in the Emerging Market Debt (EMD) fund and two accounting restatements from State Street Bank and Trust.
- Please see the following pages for a detailed discussion regarding the May adjustments.

Asset Flows

New Asset Transfers	Cash Contributions	Cash Withdrawals
\$35.9 million	\$39.7 million	\$30.7 million

Expenses Paid

Administrative	Investment	Investment
Expenses	Expenses	Manager Fees
\$124,549.65	\$199,232.58	\$10,346.45

- Expenses are paid from the IPOPIF Pool and allocated proportionately by member value.
- Investment expenses exclude investment manager fees.

IPOPIF Investment Pool Details

Date	Units	Price/unit	Value
4/30/23	913,722,260.0869	\$9.970077	\$9,109,881,517.35
5/31/23	921,805,511.5989	\$9.836881	\$9,067,690,719.15

A spreadsheet with complete unit and expense detail history is linked on the <u>Article 3 Fund Reports page</u> as -<u>IPOPIF Trust Fund Unit Details</u>-

NAV and Receivable Calculations Under Development

The IPOPIF <u>Valuation and Cost Rule</u>, AR-2022-01, stipulates that the Net Asset Value (NAV) for each Participating Police Pension Fund will include a proportionate share of the IFA Loan and also receivables representing proportionate amounts due from late-transferring pension funds. These calculations are under development.

Resources

- Monthly statement overview: https://www.ipopif.org/reports/article-3-reports/
- Monthly financial reports: https://www.ipopif.org/reports/monthly-financial-reports/
- Monthly and quarterly investment reports: https://www.ipopif.org/reports/investment-reports/
- Meeting Calendar: https://www.ipopif.org/meetings/calendar/

ILLINOIS POLICE OFFICERS' PENSION INVESTMENT FUND



May 2023 Valuation Adjustments

Background

IPOPIF investment manager State Street Global Advisors (SSGA) used an incorrect pricing source for their Emerging Markets Debt (EMD) Fund from inception on June 28, 2022, through November 30, 2022. On December 9, 2022, SSGA restated the results of the EMD Fund's performance retroactively to June 28, 2022. As of November 30, 2022, IPOPIF's interest in the EMD Fund increased from \$448,713.144 to \$448,774,877, a change of \$61,733 or 0.014%. Correct pricing was incorporated in IPOPIF December results.

Impact on Article 3 Participating Police Pension Funds

While the ultimate change in value of the EMD Fund was small and positive on an aggregate basis, day-to-day price fluctuations created minor disparate impacts on all Article 3 Participating Police Pension Funds (PPFs). The impact on each PPF was dependent on the size and timing of the asset transfer into the target portfolio.

IPOPIF custodian, State Street Bank and Trust (SSBT), working with their reporting affiliate, Northeast Retirement Systems (NRS), conducted a day-by-day parallel reprocessing of all PPF accounting using corrected EMD pricing. As expected, the disparate impact related to EMD pricing is generally very small, on the order of 1 basis point (0.01%).

Unrelated Accounting Errors

During the accounting reprocessing, SSBT discovered an unrelated accounting error in the Transition Pool in September. This September accounting error was more narrowly focused than the EMD issue, but the impact was larger for affected PPFs. 12 PPFs that entered the Transition Pool on August 25th were overvalued by 13-30 basis points and 37 PPFs that entered the Transition Pool on September 14 were undervalued by approximately 6 basis points.

Another accounting error was identified in the December Transition Pool related to the overstatement of accrued income for a security transferred from a PPF account into the transition pool. The value of this PPF will be adjusted down by 13 basis points. Corrective actions have been implemented at SSGA, SSBT, and NRS to address process failures.

Valuation Adjustments

PPF valuations were adjusted, effective May 1, 2023, to correct for the EMD pricing issue and the unrelated accounting errors. This can be seen on the "Adjustment" line item in the IPOPIF pool and on the transactions (last) page of the May monthly report.

Summary of Valuation Adustments

Revaluation Impact on PPFs

	\$	%
median	-36	-0.0001%
mean	0	-0.0034%
max	76,466	0.0694%
min	-162,219	-0.2885%
stdev	18,006	0.0519%

PPF Impact distribution

i i i ilipact distribution					
from	to	#			
0.030%	0.070%	42			
0.010%	0.030%	82			
0.000%	0.010%	31			
-0.010%	0.000%	82			
-0.030%	-0.010%	75			
-0.100%	-0.030%	3			
-0.200%	-0.100%	4			
-0.300%	-0.200%	9			
Total PPFs	328				

Impact by Tranche

Tranche	change*
1	0.012%
2	0.012%
3	0.011%
4	0.007%
5	-0.014%
6	-0.080%
7	0.040%
8	-0.011%
9	-0.013%
10	0.008%
4 a	

^{*}Average Change

Additional Perspective

- The adjustment impact related to EMD pricing is very small. 113 PPFs are impacted by less than one basis point (0.01%). 157 PPFs will see an impact of 1-3 bps. In total, 270 PPFs are impacted by less than 3 bps.
- The adjustments net to zero. 155 PPFs have a positive adjustment and 173 PPFs have negative adjustment.
 - The positive adjustments total \$1,257,581.97 and range from 6 cents to \$76,465.99.
 - The negative adjustments also total \$1,257,581.97 and range from 1 cent to \$162,219.24.
- The larger adjustments are related to the accounting errors.
 - The largest negative dollar adjustment of \$162,219 equated to a 19 bp impact on a Tranche 6 (August) PPF with an adjusted value of \$83.5 million.
 - The largest negative impact of 29 bps was related to a \$22,804 adjustment on another Tranche 6 (August) PPF with an adjusted value of \$7.9 million.
 - The largest positive dollar adjustment of \$76,466 equated to a 7 bp (0.0656%) impact on a Tranche 7 (September) PPF with an adjusted value of \$\$116.6 million.
 - The largest positive impact of 0.0694% bps was related to a \$1,291 adjustment on another Tranche 7 (September) PPF with an adjusted value of \$1.9 million.



Market Value Summary:

	Current Period	Year to Date
Beginning Balance	\$29,148,348.14	\$28,347,163.55
Contributions	\$22,600.00	\$486,649.94
Withdrawals	(\$215,000.00)	(\$1,330,198.46)
Transfers In/Out	\$0.00	\$0.00
Income	\$21,809.22	\$79,160.97
Administrative Expense	(\$398.51)	(\$2,339.75)
Investment Expense	(\$637.47)	(\$6,273.21)
Investment Manager Fees	(\$33.11)	(\$1,058.37)
IFA Loan Repayment	\$0.00	(\$22,040.25)
Adjustment	(\$1,070.17)	(\$1,070.17)
Realized Gain/Loss	\$69.16	\$9,506.41
Unrealized Gain/Loss	(\$408,243.26)	\$1,007,943.34
Ending Balance	\$28,567,444.00	\$28,567,444.00

Performance Summary:

	MTD	QTD	YTD	One Year	Three Years	Five Years	Ten Years	Inception to Date	Participant Inception Date
Net of Fees:	(1.33%)	(0.45%)	3.84%	N/A	N/A	N/A	N/A	6.10%	06/24/2022

LAKE ZURICH POLICE PENSION FUND

Fund Name:

IPOPIF Pool

Month Ended: May 31, 2023



Market Value Summary:

	Current Period	Year to Date
Beginning Balance	\$29,148,348.14	\$28,345,213.03
Contributions	\$22,600.00	\$488,600.46
Withdrawals	(\$215,000.00)	(\$1,330,198.46)
Transfers In/Out	\$0.00	\$67.21
Income	\$21,809.22	\$79,092.72
Administrative Expense	(\$398.51)	(\$2,339.75)
Investment Expense	(\$637.47)	(\$6,273.21)
Investment Manager Fees	(\$33.11)	(\$1,058.37)
IFA Loan Repayment	\$0.00	(\$22,040.25)
Adjustment	(\$1,070.17)	(\$1,070.17)
Realized Gain/Loss	\$69.16	\$9,506.73
Unrealized Gain/Loss	(\$408,243.26)	\$1,007,944.06
Ending Balance	\$28,567,444.00	\$28,567,444.00

Unit Value Summary:

	Current Period	Year to Date
Beginning Units	2,923,582.978	2,988,782.016
Unit Purchases from Additions	2,297.426	50,688.377
Unit Sales from Withdrawals	(21,764.221)	(135,354.210)
Ending Units	2,904,116.183	2,904,116.183
Period Beginning Net Asset Value per Unit	\$9.970077	\$9.483855
Period Ending Net Asset Value per Unit	\$9.836881	\$9.836881

Performance Summary:

LAKE ZURICH POLICE PENSION FUND

	MTD	QTD	YTD	One Year	Three Years	Five Years	Ten Years	Inception to Date	Participant Inception Date
Net of Fees:	(1.33%)	(0.45%)	3.83%	N/A	N/A	N/A	N/A	5.04%	07/18/2022

Statement of Transaction Detail for the Month Ending 05/31/2023

LAKE ZURICH POLICE PENSION FUND

Trade Date	Settle Date	Description	Amount	Unit Value	Units
IPOPIF Pool					
05/01/2023	05/01/2023	Emerging Market Debt Adjustment	(1,070.17)	9.970076	(107.3382)
05/12/2023	05/15/2023	Redemptions	(215,000.00)	9.927560	(21,656.8825)
05/24/2023	05/25/2023	Contribution	22,600.00	9.837097	2,297.4258