

City of Austin Employees' Retirement System Executive Summary

	Capital Markets Review
• In December	the FOMC slowed the pace of policy

- In December, the FOMC slowed the pace of policy rate hikes with a 50 basis point increase.
- Tightening monetary policy and inflation are signaling increasing odds of a global recession in 2023.
- Global GDP growth forecasts by the OECD are 3.1% in 2022, with a decline to 2.2% expected in 2023.

Mark	cet Per	forman	ice		
	QTD	1 Year	3 Years	5 Years	10 Years
S&P 500 (Mkt Cap Wtd)	7.6	-18.1	7.7	9.4	12.6
Russell 2000	6.2	-20.4	3.1	4.1	9.0
MSCI EAFE (Net)	17.3	-14.5	0.9	1.5	4.7
MSCI Emg Mkts (Net)	9.7	-20.1	-2.7	-1.4	1.4
Bbrg US Agg Bond	1.9	-13.0	-2.7	0.0	1.1
Bbrg Cmdty (TR)	2.2	16.1	12.7	6.4	-1.3
NCREIF ODCE (Net)	-5.2	6.5	9.0	7.7	9.1

	Total Fund Performance											
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Total Fund	6.1	-15.6	-15.6	1.9	3.7	6.1	6.0	13.0	10.8	20.7	-5.9	16.6
Policy Benchmark	8.1	-17.3	-17.3	1.6	3.5	5.8	5.8	14.4	10.9	21.6	-6.8	16.0
Excess Return	-2.0	1.7	1.7	0.3	0.2	0.3	0.2	-1.4	-0.1	-0.9	0.9	0.6

	Total Fund Risk Metrics											
	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017		
Sharpe Ratio	-1.2	0.1	0.3	0.5	0.6	1.9	0.6	2.3	-0.9	7.8		
Standard Deviation	14.3	14.1	10.8	12.2	9.8	6.7	17.4	7.3	8.3	1.8		
Tracking Error	2.1	2.0	1.8	1.7	1.8	1.2	2.0	1.0	1.8	1.0		

Asset Clas	ss Pe	erforr	nand	е		
	QTD	CYTD	1 Year	3 Years	Since Incep	Inception Date
Total Fund	6.1	-15.6	-15.6	1.9	9.3	06/01/1982
Policy Benchmark	8.1	-17.3	-17.3	1.6	N/A	
Excess Return	-2.0	1.7	1.7	0.3	N/A	
US Equity	8.3	-18.4	-18.4	5.5	10.3	06/01/1988
US Equity Benchmark	7.0	-19.8	-19.8	7.0	10.3	
Excess Return	1.3	1.4	1.4	-1.5	0.0	
Developed Markets Equity	14.6	-19.6	-19.6	1.2	4.3	01/01/2008
Developed Market Equity Benchmark	16.2	-14.3	-14.3	1.3	1.8	
Excess Return	-1.6	-5.3	-5.3	-0.1	2.5	
Emerging Markets Equity	10.6	-23.6	-23.6	-4.9	0.3	03/01/2008
Emerging Market Equity Benchmark	9.7	-20.1	-20.1	-2.7	1.1	
Excess Return	0.9	-3.5	-3.5	-2.2	-0.8	
Real Estate Equity	-1.8	-9.4	-9.4	4.8	7.0	09/01/2004
Real Estate Equity Benchmark	5.2	-24.4	-24.4	-0.1	7.7	
Excess Return	-7.0	15.0	15.0	4.9	-0.7	
Infrastructure Equity	6.3	1.6	1.6	1.3	1.3	01/01/2020
Infrastructure Equity Benchmark	10.8	-1.0	-1.0	0.9	0.9	
Excess Return	-4.5	2.6	2.6	0.4	0.4	
Global Fixed Income	1.2	-14.7	-14.7	-3.8	5.0	02/01/1991
Global Fixed Income Benchmark	4.5	-16.2	-16.2	-4.5	4.7	
Excess Return	-3.3	1.5	1.5	0.7	0.3	
Asset Allocation	6.4	-14.7	-14.7	4.2	4.8	05/01/2020
Multi-Asset Benchmark	7.7	-17.3	-17.3	0.7	5.5	
Excess Return	-1.3	2.6	2.6	3.5	-0.7	
Commodities & Other	8.2	0.2	0.2	N/A	N/A	07/01/2017
Commodities & Other Benchmark	2.2	16.1	16.1	12.7	7.2	
Excess Return	6.0	-15.9	-15.9	N/A	N/A	

Performance Commentary

- The Total Fund returned 6.1% net of fees during the quarter, underperforming the Policy Benchmark which returned 8.1%.
- Developed Markets Equity was the best performing asset class on an absolute basis, net of fees, returning 14.6%. Commodities & Other had strong relative returns, outpacing its benchmark in Q4.

Asset Alloc	ation vs. Targe	et Allocation	
	Market Value (\$000)	Allocation (%)	Target (%)
US Equity	991,544	33.7	34.0
DM Equity	441,380	15.0	16.0
EM Equity	190,676	6.5	6.0
Real Estate Equity	315,914	10.7	10.0
Infrastructure Equity	150,898	5.1	5.0
Global Fixed Income	562,472	19.1	21.0
Asset Allocation	107,220	3.6	5.0
Commodities & Other	37,937	1.3	2.0
Cash & Equivalents	143,209	4.9	1.0
Total Fund	2,941,251	100.0	100.0

	Schedule of Investable Assets									
Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	% Return					
CYTD	3,538,734,335	-48,276,625	-549,206,551	2,941,251,159	-15.59					

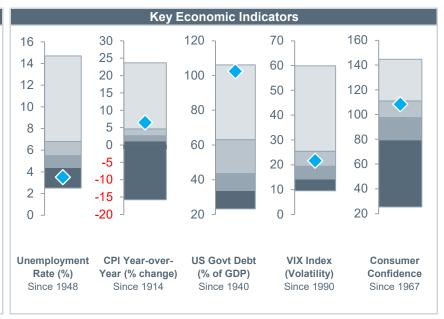


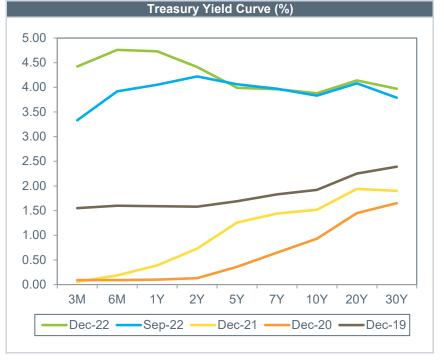
Bloomberg Cmdty (TR)

Fourth Quarter Economic Environment

In Q4, equity and fixed income markets delivered improved results while continuing to experience elevated volatility. However, positive quarterly returns came on the tail of a significantly negative year for many investors. Regarding economic conditions, the impact of tightening monetary policy and persistent inflation, combined with supply shocks and an energy crisis in Europe, are leading to increasing odds of a global recession in 2023. On a relatively positive note, recent data indicates that the inflationary environment is showing signs of abating. Notably, the US Consumer Price Index declined for a sixth straight month in December with a reading of 6.5%, the lowest level since October 2021. In December, the FOMC did slow the pace of policy rate hikes with a 50 basis point increase, following a series of four straight 75 basis point increases. Internationally, the war in Ukraine caused an energy price shock and trade tensions continue to test economic and political relationships across multiple regions. Within emerging markets, investor attention is focused on China with some pointing to signs of a softening stance toward pandemic restrictions as reason to be optimistic regarding the country's outlook. However, these views are countered with concerns over indications of social unrest and the consolidation of power around President Xi Jinping. With all this considered, global GDP growth forecasts continue to moderate with the OECD forecasting growth of 3.1% in 2022 with an expected decline

to 2.2% global GDP growth in 2	023.				
Economic Indicators	Dec-22	Sep-22	Dec-21	Dec-19	20 Yr
Federal Funds Rate (%)	4.33	3.08	0.07	1.55	1.30
Breakeven Infl 5 Yr (%)	2.38	2.16	2.91	1.70	1.92
Breakeven Infl 10 Yr (%)	2.30	2.15	2.59	1.79	2.08
CPI YoY (Headline) (%)	6.5 ▼	8.2	7.0	2.3	2.5
Unemployment Rate (%)	3.5 —	3.5	3.9	3.6	6.0
Real GDP YoY (%)	1.0 ▼	1.8	5.7	2.6	2.0
PMI - Manufacturing	48.4 ▼	50.9	58.8		53.7
USD Total Wtd Idx	121.51 ▼	127.64	115.37	114.67	103.33
WTI Crude Oil per Barrel (\$)	80.3	79.5		61.1	67.9
Gold Spot per Oz (\$)	1,824 ▲	1,661	1,829	1,517	1,160
Market Performance (%)	QTD	CYTD	1 Yr	5 Yr	10 Yr
Market Performance (%) S&P 500 (Cap Wtd)	QTD 7.56	CYTD -18.11	1 Yr -18.11	5 Yr 9.42	10 Yr 12.56
		-18.11			
S&P 500 (Cap Wtd)	7.56	-18.11	-18.11	9.42	12.56
S&P 500 (Cap Wtd) Russell 2000	7.56 6.23	-18.11 -20.44	-18.11 -20.44	9.42 4.13	12.56 9.01
S&P 500 (Cap Wtd) Russell 2000 MSCI EAFE (Net)	7.56 6.23 17.34	-18.11 -20.44 -14.45 -21.39	-18.11 -20.44 -14.45	9.42 4.13 1.54	12.56 9.01 4.67
S&P 500 (Cap Wtd) Russell 2000 MSCI EAFE (Net) MSCI EAFE SC (Net)	7.56 6.23 17.34 15.79	-18.11 -20.44 -14.45 -21.39	-18.11 -20.44 -14.45 -21.39	9.42 4.13 1.54 -0.05	12.56 9.01 4.67 6.21
S&P 500 (Cap Wtd) Russell 2000 MSCI EAFE (Net) MSCI EAFE SC (Net) MSCI Emg Mkts (Net)	7.56 6.23 17.34 15.79 9.70	-18.11 -20.44 -14.45 -21.39 -20.09	-18.11 -20.44 -14.45 -21.39 -20.09 -13.01	9.42 4.13 1.54 -0.05 -1.40	12.56 9.01 4.67 6.21 1.44
S&P 500 (Cap Wtd) Russell 2000 MSCI EAFE (Net) MSCI EAFE SC (Net) MSCI Emg Mkts (Net) Bloomberg US Agg Bond	7.56 6.23 17.34 15.79 9.70 1.87	-18.11 -20.44 -14.45 -21.39 -20.09 -13.01 1.46	-18.11 -20.44 -14.45 -21.39 -20.09 -13.01	9.42 4.13 1.54 -0.05 -1.40 0.02	12.56 9.01 4.67 6.21 1.44 1.06
S&P 500 (Cap Wtd) Russell 2000 MSCI EAFE (Net) MSCI EAFE SC (Net) MSCI Emg Mkts (Net) Bloomberg US Agg Bond ICE BofAML 3 Mo US T-Bill	7.56 6.23 17.34 15.79 9.70 1.87 0.84	-18.11 -20.44 -14.45 -21.39 -20.09 -13.01 1.46	-18.11 -20.44 -14.45 -21.39 -20.09 -13.01 1.46 7.47	9.42 4.13 1.54 -0.05 -1.40 0.02 1.26	12.56 9.01 4.67 6.21 1.44 1.06 0.76







16.09

16.09

6.44

2.22

-1.29

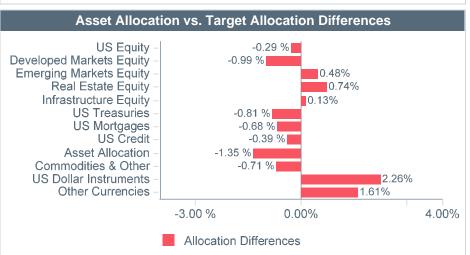
City of Austin Employees' Retirement System

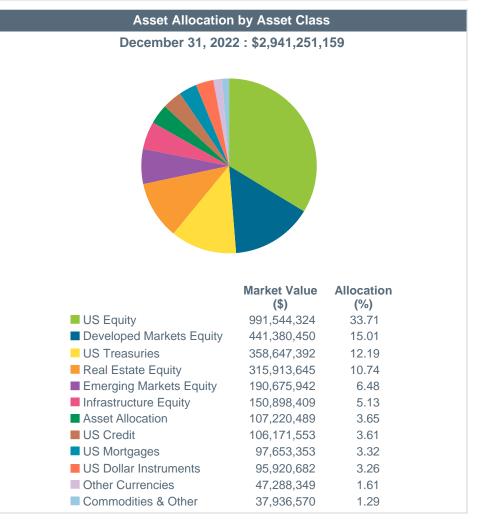
Composite: Total Fund

Asset Alloc. by Asset Class, Asset Alloc. vs. Target, and Schedule of Investable Assets

Schedule of Investable Assets									
Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	% Return				
CYTD	3,538,734,335	-48,276,625	-549,206,551	2,941,251,159	-15.59				
1 Year	3,538,734,335	-48,276,625	-549,206,551	2,941,251,159	-15.59				
3 Years	2,914,826,282	-143,247,798	169,672,675	2,941,251,159	1.86				

Asse	t Allocation vs.	Target Allo	cation		
	Market Value (\$)	Allocation (%)	Neutral (%)	Min. (%)	Max. (%)
Total Fund	2,941,251,159	100.00	100.00	-	-
US Equity	991,544,324	33.71	34.00	29.00	39.00
Developed Markets Equity	441,380,450	15.01	16.00	13.50	18.50
Emerging Markets Equity	190,675,942	6.48	6.00	4.00	10.50
Real Estate Equity	315,913,645	10.74	10.00	7.00	13.00
Infrastructure Equity	150,898,409	5.13	5.00	1.00	7.00
US Treasuries	358,647,392	12.19	13.00	11.00	21.00
US Mortgages	97,653,353	3.32	4.00	3.00	6.00
US Credit	106,171,553	3.61	4.00	2.50	7.00
Asset Allocation	107,220,489	3.65	5.00	3.50	7.50
Commodities & Other	37,936,570	1.29	2.00	1.00	5.00
US Dollar Instruments	95,920,682	3.26	1.00	0.00	5.00
Other Currencies	47,288,349	1.61	0.00	0.00	1.00





Performance shown is net of fees. Allocations shown may not sum up to 100% exactly due to rounding. Performance is annualized for periods greater than one year. Total Fund market value does not include \$463,724.97 in assets remaining at Northern Trust - representing accruals, cash, tax reclaims, and some assets that were restricted from being delivered due to a liquidation or pending corporate action.

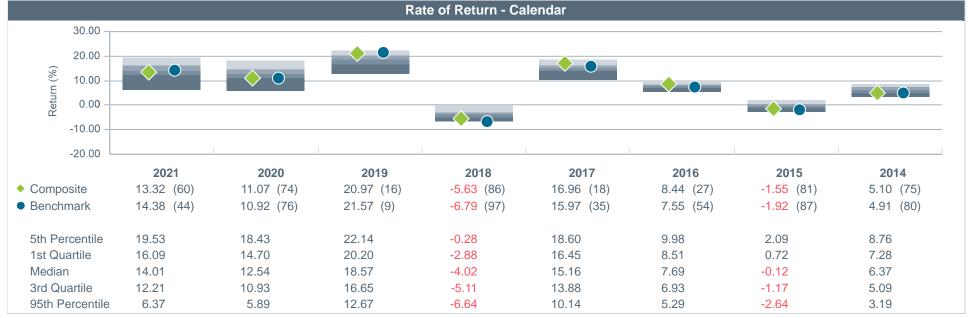


Composite: Total Fund

Benchmark: Policy Benchmark

Peer Group: All Public Plans - Total Fund



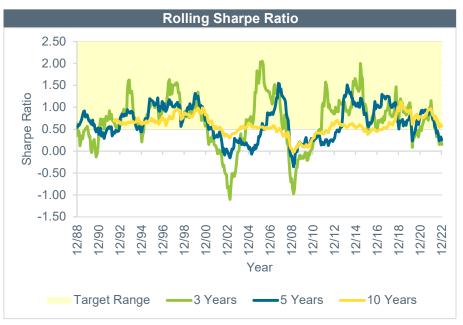


Performance shown is gross of fees and is annualized for periods greater than one year. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



Composite: Total Fund Rolling Risk Statistics (Net of Fees)









Performance shown is net of fees. Tracking Error and Info Ratio shown are relative to the Passive Benchmark.



Composite: Total Fund Asset Allocation & Performance - Net of Fees

	Allocatio	n				Rate of	Return (%)			
	Market Value (\$)	%	QTD	CYTD	1 Year	3 Years	5 Years	10 Years	Since Incep.	Inception Date
Total Fund	2,941,251,159	100.00	6.13	-15.59	-15.59	1.86	3.71	6.02	9.27	06/01/1982
Policy Benchmark			8.12	-17.32	-17.32	1.60	3.52	5.82	N/A	
Excess Return			-1.99	1.73	1.73	0.26	0.19	0.20	N/A	
Passive Benchmark			7.74	-17.33	-17.33	0.84	2.71	4.74	N/A	
Excess Return			-1.61	1.74	1.74	1.02	1.00	1.28	N/A	
Global Equity	1,623,600,716	55.20	10.19	-19.42	-19.42	2.82	4.42	7.72	8.64	06/01/1988
Global Equity Benchmark			9.84	-18.40	-18.40	3.89	4.96	7.94	N/A	
Excess Return			0.35	-1.02	-1.02	-1.07	-0.54	-0.22	N/A	
US Equity	991,544,324	33.71	8.33	-18.38	-18.38	5.54	7.51	10.99	10.33	06/01/1988
US Equity Benchmark			6.98	-19.85	-19.85	6.96	8.72	12.10	10.34	
Excess Return			1.35	1.47	1.47	-1.42	-1.21	-1.11	-0.01	
Developed Markets Equity	441,380,450	15.01	14.58	-19.65	-19.65	1.22	2.29	5.39	4.29	01/01/2008
Developed Market Equity Benchmark			16.18	-14.29	-14.29	1.27	1.79	4.59	1.84	
Excess Return			-1.60	-5.36	-5.36	-0.05	0.50	0.80	2.45	
Emerging Markets Equity	190,675,942	6.48	10.57	-23.64	-23.64	-4.95	-2.82	0.83	0.33	03/01/2008
Emerging Market Equity Benchmark			9.70	-20.09	-20.09	-2.69	-1.40	1.44	1.08	
Excess Return			0.87	-3.55	-3.55	-2.26	-1.42	-0.61	-0.75	
Real Assets	466,812,054	15.87	0.64	-6.06	-6.06	3.99	5.49	7.37	6.21	09/01/2004
Real Assets Benchmark			7.13	-16.90	-16.90	0.40	3.59	6.36	7.45	
Excess Return			-6.49	10.84	10.84	3.59	1.90	1.01	-1.24	
Real Estate Equity	315,913,645	10.74	-1.83	-9.41	-9.41	4.79	6.17	8.83	6.98	09/01/2004
Real Estate Equity Benchmark			5.24	-24.37	-24.37	-0.11	4.24	7.17	7.71	
Excess Return			-7.07	14.96	14.96	4.90	1.93	1.66	-0.73	
Infrastructure Equity	150,898,409	5.13	6.25	1.64	1.64	1.29	0.33	N/A	1.29	01/01/2020
Infrastructure Equity Benchmark			10.83	-0.99	-0.99	0.93	2.99	5.61	0.93	
Excess Return			-4.58	2.63	2.63	0.36	-2.66	N/A	0.36	

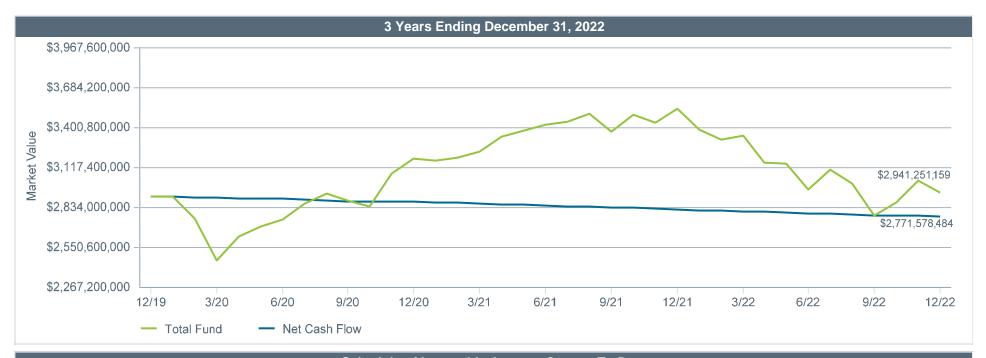


Composite: Total Fund Asset Allocation & Performance - Net of Fees

	Allocation	n			Rate of Return (%)					
	Market Value (\$)	%	QTD	CYTD	1 Year	3 Years	5 Years	10 Years	Since Incep.	Inception Date
Global Fixed Income	562,472,299	19.12	1.17	-14.73	-14.73	-3.82	-0.45	0.86	4.96	02/01/1991
Global Fixed Income Benchmark			4.55	-16.25	-16.25	-4.48	-1.38	0.35	4.72	
Excess Return			-3.38	1.52	1.52	0.66	0.93	0.51	0.24	
US Treasuries	358,647,392	12.19	0.47	-14.91	-14.91	-2.77	N/A	N/A	-0.62	05/01/2019
US Treasuries Benchmark			0.72	-12.46	-12.46	-2.62	-0.10	0.58	-0.85	
Excess Return			-0.25	-2.45	-2.45	-0.15	N/A	N/A	0.23	
US Mortgages	97,653,353	3.32	1.61	-11.94	-11.94	-3.29	N/A	N/A	-2.50	08/01/2019
US Mortgages Benchmark			2.14	-11.81	-11.81	-3.22	-0.53	0.74	-2.36	
Excess Return			-0.53	-0.13	-0.13	-0.07	N/A	N/A	-0.14	
US Credit	106,171,553	3.61	3.67	-16.46	-16.46	-2.87	N/A	N/A	-1.30	08/01/2019
US Credit Benchmark			3.44	-15.26	-15.26	-2.86	0.42	1.82	-1.52	
Excess Return			0.23	-1.20	-1.20	-0.01	N/A	N/A	0.22	
Multi-Asset	145,157,059	4.94	6.89	-11.43	-11.43	2.40	4.34	N/A	4.34	02/01/2014
Multi-Asset Benchmark			7.74	-17.33	-17.33	0.66	2.62	4.69	4.17	
Excess Return			-0.85	5.90	5.90	1.74	1.72	N/A	0.17	
Asset Allocation	107,220,489	3.65	6.45	-14.67	-14.67	4.24	N/A	N/A	4.78	05/01/2020
Multi-Asset Benchmark			7.74	-17.33	-17.33	0.66	2.62	4.69	5.50	
Excess Return			-1.29	2.66	2.66	3.58	N/A	N/A	-0.72	
Commodities & Other	37,936,570	1.29	8.17	0.24	0.24	N/A	N/A	N/A	4.41	04/01/2021
Commodities & Other Benchmark			2.22	16.09	16.09	12.65	6.44	-1.29	20.21	
Excess Return			5.95	-15.85	-15.85	N/A	N/A	N/A	-15.80	
Cash & Equivalents	143,209,032	4.87	0.70	1.68	1.68	0.71	1.19	N/A	1.17	07/01/2017
Cash & Equivalents Benchmark			0.89	1.52	1.52	0.70	1.22	0.73	1.21	
Excess Return			-0.19	0.16	0.16	0.01	-0.03	N/A	-0.04	
US Dollar Instruments	95,920,682	3.26	0.64	1.70	1.70	0.71	1.19	0.70	0.96	09/01/2015
Bloomberg US T-Bills 1-3 Mo Index			0.89	1.52	1.52	0.70	1.22	0.73	0.98	
Excess Return			-0.25	0.18	0.18	0.01	-0.03	-0.03	-0.02	
Other Currencies	47,288,349	1.61	0.91	1.67	1.67	N/A	N/A	N/A	1.54	12/01/2021
Bloomberg US T-Bills 1-3 Mo Index			0.89	1.52	1.52	0.70	1.22	0.73	1.41	
Excess Return			0.02	0.15	0.15	N/A	N/A	N/A	0.13	

Performance shown is net of fees and is annualized for periods greater than one year. Indices show N/A for since inception returns when the fund contains more history than the corresponding benchmark.





Schedule of Investable Assets - Quarter To Date						
Periods Ending	Beginning Market Value (\$)	Contributions (\$)	Withdrawals (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)
QTD	2,778,760,359	291,217,586	299,284,112	-8,066,526	170,557,326	2,941,251,159

Schedule of Investable Assets - Year To Date							
Periods Ending	Beginning Market Value (\$)	Contributions (\$)	Withdrawals (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	
CYTD	3,538,734,335	580,419,636	628,696,261	-48,276,625	-549,206,551	2,941,251,159	

Schedule of Investable Assets - 1 Year						
Periods Ending	Beginning Market Value (\$)	Contributions (\$)	Withdrawals (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)
1 Year	3,538,734,335	580,419,636	628,696,261	-48,276,625	-549,206,551	2,941,251,159

Schedule of Investable Assets - 3 Years							
Periods Ending	Beginning Market Value (\$)	Contributions (\$)	Withdrawals (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	
3 Years	2,914,826,282	3,874,962,319	4,018,210,117	-143,247,798	169,672,675	2,941,251,159	

Cash flows shown are net of fees. Net cash flow shown in the line chart represents the beginning market value, adjusted for cash flows. Contributions and withdrawals detail shown includes intra-portfolio cash flows.

